GSI Evaluation

Willow Run Company Vehicle Operations (CVO)
Ypsilanti, Michigan

RACER
Revitalizing Auto Communities Environmental Response

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→ The Power of Commitment

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1. Introduction and Background

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), GHD has prepared this report for the Willow Run Company Vehicle Operations (CVO) property located in Ypsilanti, Michigan (Site). This report presents a groundwater surface water interface (GSI) evaluation associated with Site impacts to Willow Run Creek located along the northern boundary of the Site. The Site location is presented on Figure 1.

Due to historical fill and dumping activities at the Site, many environmental investigations have been completed to characterize and delineate the impacts within soils and groundwater. Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), inorganics, and polychlorinated biphenyls (PCBs) impacts within soils have been observed, while VOCs, primarily CVOCs (chlorinated volatile organic compounds), are predominantly the concern in groundwater at the Site. A number of Interim Response Actions (IRAs) and deed restrictions have been implemented at the Site to address these contaminants of concern and protect human health and the environment. However, the VOCs in groundwater, particularly vinyl chloride, remain a concern for off-Site migration into surface water as outlined in the 2016 Summary Report (GHD 2018).

In the spring of 2017, the water levels of Tyler Pond, located along the northern boundary of the Site, were lowered by other parties after removal of a non-functioning drainage valve in the dam below Tyler Road. Consequently, lower water levels may have changed hydrogeologic conditions, particularly with regard to the GSI pathway in addition to exposing additional accessible land adjacent to the former Tyler Pond (referred to as Willow Run Creek following decrease in water levels) at the northern boundary of the Site. The current conditions of Willow Run Creek compared to the prior footprint of Tyler Pond is presented on Figure 2.

Following the change in water levels, GHD performed four subsequent investigations from March 2018 through May 2019 at the Site to investigate the potential migration pathway along the northern boundary of the Site. The four investigations are summarized in Sections 1.1 through 1.4, and copies of the memorandums describing each investigation in detail can be found in Appendices A through D. The findings from the investigations were utilized to assess multiple lines of evidence associated with the GSI pathway and develop a conceptual site model (CSM) for the northern portion of the Site, as presented in this report. This report aims to demonstrate compliance with Michigan Department of Environment, Great Lakes, and Energy (EGLE), specifically, the conclusions of this report are supported by specific provisions of 1994 PA 451 as amended, the Natural Resources and Environmental Protection Act (NREPA), which allow one to conclude the GSI pathway has been adequately addressed through evaluation.

1.1 Willow Run Creek - Southern Bank Investigation – Spring 2018

In response to the change in conditions, GHD conducted a subsurface investigation in February and March 2018 in the former Tyler Pond area. The primary purpose of the subsurface investigation was to install monitoring wells between the existing monitoring wells and Willow Run Creek within the area that was previously part of Tyler Pond. The intent was to evaluate whether the impacted groundwater at the northern perimeter of the Site had migrated to the new location of Willow Run Creek. The secondary purpose of the investigation was to collect soil samples to further characterize the extent of impacts and GSI pathways at the northern property boundary.

Soil borings were completed at 13 locations along the Site perimeter near the edge of the current Willow Run Creek. No saturated sand/permeable soils were encountered in any of 13 locations therefore, no monitoring wells were installed. Based on the lack of a hydraulic connection between the CVOC impacted shallow sands present on Site and Willow Run Creek, the 13 soil boring locations documented that there was not a complete GSI pathway to the north of the Site (without groundwater, a GSI pathway does not exist).

Although groundwater was not encountered, soil samples were collected and analyzed for VOCs, SVOCs, total metals, and PCBs.

Soil samples exceeded the GSI Protection Criteria (GSIPC) for VOCs (GS-29-SB and GS-31-SB) and SVOCs (GS-24-SB and GS-26-SB), refer to Figures 2 and 3 in Appendix A for the soil boring locations. Following the soil exceedances, GHD recommended additional soil borings to further delineate the now exposed, impacted soil adjacent to Willow Run Creek.

1.2 Transducer Correlation Evaluation – Summer 2018

In July and August 2018, a transducer correlation evaluation was conducted at the Site to compare and contrast groundwater elevation changes in monitoring wells and surface water elevations at Willow Run Creek located north of the wells. Additionally, the effect of rainfall events on surface water and groundwater elevations was also considered. Measurements were recorded at three points in Willow Run Creek and at nine on Site monitoring wells between July 6th and August 17th, 2018. The data indicated local surface water and groundwater elevations are subject to strong daily cyclical patterns, the cause of which is unknown. A direct (simple) correlation between surface water elevation and groundwater elevation was not present in the wells, but the initial plotting of the data did show that the groundwater elevations at the wells was steadily decreasing over the course of the study. Removing the underlying trends from the data showed a general correlation between the groundwater elevations and the creek surface water elevation data; however, the de trended data groundwater elevation did not exhibit a response above the daily cyclical variation except where at least ½ inch of rainfall occurred. Ultimately, the daily cyclical variations and decreasing trend in groundwater elevations during the study period makes the transducer correlation evaluation results inconclusive. The Transducer Correlation Evaluation Memorandum is included as Appendix B.

1.3 Willow Run Creek - Additional Southern Bank Investigation – Delineation of SVOC and VOC Soil Impacts – September 2018

To delineate the VOC and SVOC soil impacts found during the February and March 2018 investigation, as described in Section 1.1, 17 additional borings were completed in September 2018 (GS-29-SB, GS-35 through GS-42 and SB-43-18 through SB-50-18). The boring locations are presented on Figures 2 and 3 in Appendix C. Soil samples collected from the VOC Delineation Area (Figure 2) were analyzed for VOCs and samples collected in the SVOC Delineation Area (Figure 3) were analyzed for SVOCs. Four small seeps were also characterized during the September 2018 investigation. The locations of the seeps are presented on Figure 4 in Appendix C. Seeps 1 and 2 were analyzed for VOCs and SVOCs, while Seeps 3 and 4 were only analyzed for VOCs due to limited sample volume.

No additional SVOC exceedances were found in the SVOC delineation borings. Soil samples from the VOC delineation borings exceeded Part 201 GSIPC for vinyl chloride, trichloroethene (TCE), and cis 1,2-dichloroethene. The water sampled from Seep 4, located in the VOC Delineation Area, exceeded the Part 201 GSI criteria for vinyl chloride. The water samples collected from Seep 2 exceeded the residential and nonresidential drinking water criteria for vinyl chloride but did not exceed the GSI criteria. Seeps 1 and 3 did not exceed criteria.

Given that exceedances were found in the VOC delineation borings as well as in the seeps, GHD recommended further delineation through additional soil borings. GHD also recommended interval sampling of the porewater adjacent to Willow Run Creek to assess mixing and/or attenuation.

1.4 Evaluation of Groundwater Surface Water Interface Pathway – Spring 2019

In April and May 2019, six additional soil borings (SB-51-19 through SB-56-19) were completed and two additional monitoring wells (MW-20I-19 and MW-21I-19) were installed to further delineate VOCs in soil/groundwater along the shoreline of Willow Run Creek and evaluate VOC impacts in the area north of the existing sheet pile wall. During the investigation, three groundwater samples were collected, one from the newly installed MW-21I-19 and two from

existing wells (MW-21S-18 and MW-20S-18). These three wells are located adjacent to the sheet pile wall, at the edge of former Tyler Pond. The newly installed well, MW-20I-19, did not produce enough water to collect a sample. In addition to the groundwater samples, three interval porewater samples were collected in the shallow shoreline, just below the water surface of Willow Run Creek to assess mixing and/or attenuation. All soil and groundwater samples collected were analyzed for VOCs. Refer to Figure 2 and 3 in Appendix D for the soil and groundwater sampling locations and results.

Four of the eight shallow soil borings contained exceedances of Part 201 GSIPC. Vinyl chloride, TCE, cis 1,2-dichloroethene, and total xylenes were the constituents that were found exceeding GSIPC. Two of the three groundwater samples exceeded the Part 201 GSI criteria for vinyl chloride and one exceeded the GSI criteria for cis 1,2-dichloroethene. One of three porewater locations, PW 01 19, exceeded the Part 201 GSI criteria for vinyl chloride and cis 1,2-dichloroethene.

1.5 Review of Historic Outfall Samples

In addition to the three recent subsurface investigations and the transducer correlation evaluation, a review of the historic outfall samples collected at the Site has also been performed. It is suspected that groundwater could be infiltrating the storm sewers and entering the surface water via the storm sewer outfalls. Currently, there are three outfalls, Outfall 11, 13, and 14 that collect storm water from the Site and drain into Willow Run Creek. The locations of the outfall samples are shown on Figure 3.

In December 2003, discharge from Outfall 11 was sampled under dry and wet conditions and analyzed for VOCs. Detections above reporting limits were found in both the dry and wet condition samples. The sample collected under dry conditions also exceeded the EGLE Part 201 GSI criteria for vinyl chloride.

In February 2016, discharge from the three storm sewer outfalls (Outfalls 11, 13, and 14) were sampled during dry conditions. Storm water samples were analyzed for VOCs. Low level VOCs were detected, but the EGLE Part 201 GSI criteria was not exceeded for any of the parameters. The results from the 2003 and 2016 sampling events are presented in Table 1.

Several IRAs were completed between 2003 and 2016, including the removal and rerouting of a large portion of a storm sewer as part of the VOC impacted soil and DNAPL removal that occurred in 2013 at Potential Area of Concern (PAOC) 18 (near sheet pile wall).

Low levels of VOCs have historically been detected in the outfalls that discharge into Willow Run Creek, indicating groundwater on Site is infiltrating the storm sewers. During the most recent sampling event in 2016, the outfall samples were detected at levels below GSI Criteria. Current sampling suggests that contaminated groundwater is not infiltrating the sewers and not a risk to Willow Run Creek.

1.6 Conclusion of Investigations

As discussed in Section 1.1, the hydrogeology investigated between the former Tyler Pond bank and the new Willow Run Creek bank indicates that there is not a complete GSI pathway to the north of the Site (without groundwater, a GSI pathway does not exist).

The recent three subsurface investigations horizontally and vertically delineated the SVOC soil impacts in the newly exposed area south of Willow Run Creek. The two SVOC GSIPC exceedances in soil occurred in the confining, non-water bearing clay layer at the Site. Since the GSI pathway is not complete, the SVOC GSIPC soil exceedances are not a risk to Willow Run Creek. No additional SVOC exceedances were found in the delineation borings, including in the two borings installed directly on the water's edge of Willow Run Creek. Groundwater samples in the SVOC Delineation Area (refer to Figure 3 in Attachment C) could not be collected, as water bearing units were not encountered in that portion of the Site. The two seep samples analyzed for SVOCs, SEEP-1 and SEEP-2, located in the northeast portion of the site, did not have detections above reporting limits.

VOC impacts to soil, upgradient groundwater, seep water, and porewater were found during the three subsurface investigations conducted on the area south of Willow Run Creek. These VOC impacts and the current hydrogeological conditions at the Site will be further discussed in the conceptual site model in Section 2. Additionally, GHD has opted to utilize mixing zone-based GSI criteria calculations to further analyze the risk the VOC exceedances pose to the nearby surface water body, Willow Run Creek. Those calculations are outlined in Section 3.

2. Conceptual Site Model

2.1 Hydrogeologic Setting

To display the hydrogeologic setting at the Site, a number of cross-sections were created. Figure 4 presents the Cross-Section Location Map for Site and Figures 5 through 12 present Cross-Sections A-A' through H-H'. As demonstrated in the cross-sections, the geology at the Site is variable, along the southern most Cross Section C-C' (Figure 7) the geology encountered in the uppermost 20 feet consists of a sandy fill unit with laterally discontinuous lenses and pockets of silt and clay. At the northern most east west Cross Section A-A' (Figure 5), which is located within the footprint of former Tyler Pond, the geology consists of clay with sparse laterally discontinuous lenses and pockets of silt and sand

The two deep wells at the Site, DMW 1 and DMW 2 (shown on Cross-Sections G-G' and H-H', Figures 11 and 12, respectively), indicate the confining clay layer is approximately 50 feet thick. The confining, non-water bearing clay layer is present across the Site and typically starts at an elevation of approximately 700 feet (Figure 7 – Cross-Section C-C'). The confining clay layer runs beneath and along the entire southern shoreline of Willow Run Creek, as seen in Cross Section A-A' (Figure 5) and Cross Sections D-D' through H-H' (Figures 8 through 12)

Following removal of a non-functioning drainage valve in the dam below Tyler Road, the surface water elevation of the former Tyler Pond (now referred to as Willow Run Creek) was lowered from 697 ft above mean sea level (AMSL) (surveyed May 5, 2016) to 685 feet AMSL (surveyed July 17, 2019). Due to this change in surface water elevation, the hydraulic connection between Site's groundwater and nearby surface water body, Willow Run Creek, is no longer complete. Refer to the Cross Sections D-D' through H-H' (Figures 8 through 12) for a depiction of the Site's current hydrogeology and the prior surface water elevation of Tyler Pond.

As shown on the cross sections, the sloped embankment towards Willow Run Creek typically begins with the sand fill layer at ground surface before transitioning to the confining clay unit prior to reaching the surface of Willow Run Creek. Because there is no longer a connection between the surface water and the water bearing sand fill unit (or any native saturated sand units) at the Site, the groundwater surface water pathway to Willow Run Creek is incomplete. As a result, contaminated porewater and contaminated soil directly adjacent and in contact with Willow Run Creek is the only complete pathway for contamination from the Site to enter the surface waters of Willow Run Creek.

2.2 Contaminants of Concern

Soils at the Site have historically been impacted by VOCs, SVOCs, PCBs and inorganics, but VOCs are the predominant constituents of concern. The most impacted areas are located along the northern fence line, both in the parking lot and along the former bank of Tyler Pond. These areas coincide with areas where buried debris has been identified.

Similar to the soils at the Site, elevated VOCs, SVOCs, metals and PCB have been found in groundwater, but VOCs, primarily CVOCs, are predominantly the concern in groundwater across the Site. SVOCs, PCBs and inorganics are present, but are not as widespread or at the same levels as the CVOCs.

2.3 Migration Pathway/Fate and Transport

The transport of the contaminated soil is limited by the Site's coverage. A majority of the Site is covered by either buildings or paved parking surface (asphalt or concrete). The non-paved area, namely the bank of the Willow Run Creek, is covered with grasses and thick brush.

A hydraulic divide exists across the central portion of the property, generally running parallel to Tyler Pond. Contaminated groundwater to the south/southwest of the hydraulic divide on Site has the potential to flow off Site to the south/southeast, while groundwater to the north/northeast of the divide flows towards Willow Run Creek. During the 2016 Site wide groundwater sampling event, concentrations of vinyl chloride were detected above the EGLE Part 201 GSI criteria in monitoring wells adjacent to the shoreline of Tyler Pond that was present at the time (GHD 2018). The GSI concerns from the 2016 sampling event and other historical groundwater sampling events lead to the recent investigations outlined in Section 1 and this GSI evaluation.

As outlined in Section 2.1, following the three recent subsurface investigations it was concluded that the groundwater flowing north towards Willow Run Creek no longer has a hydraulic connection to the surface water body. A handful of small seeps have been noted along the embankment of Willow Run Creek, but the dense vegetation present intercepts and minimizes the impact the seeps have on the nearby surface water body. In addition, as discussed in Section 1.6, three storm sewer outfalls that collect runoff at the Site drain into Willow Run Creek. Groundwater infiltrating into the storm sewers is another potential pathway for contamination to enter the surface water body. The most recent round of outfall sampling indicates groundwater infiltration into the storm sewers is occurring, but only minimally, as VOC levels in the discharge from the three outfalls was below GSI criteria.

2.4 Receptor Exposure Pathways

To limit use and exposure pathways to receptors at the Site, deed restrictions have been recorded on the property including:

– The land use is limited to non-residential.
– The installation of drinking water wells and groundwater extraction wells are prohibited with the exception for wells that are part of the EGLE or USEPA approved response activity.
– The treatment, storage, disposal, and release of any hazardous substance that would require a permit under RCRA or equivalent state law.
– Prior to constructing any new buildings, the property owner must assess for vapor intrusion.
– Alterations to the sub slab depressurization system (SSDS) beneath the existing building are restricted.
– Removal of any slabs, pavement or other impervious surface on the Site shall be approved in writing by RACER. Approval may be conditioned on certain actions, including replacement with an impervious cover.

Additionally, several Notices of Migrations (NOM) have been submitted to EGLE and neighboring properties due to elevated concentrations of VOCs in groundwater at the property boundary since 2003.

The risk posed by the contaminated groundwater to the nearby surface water body to the north, Willow Run Creek, is the remaining potential ecological receptor that has not been addressed by these restrictions at the Site. As outlined in this report, the risk is mitigated by the lack of hydraulic connection between the two. Additionally, mixing zone-based calculations will be explored to further evaluate the risk impacts in soil and groundwater have to Willow Run Creek.

3. Explanation of Mixing Zone-Based Calculations

The mixing zone calculations in this report will aim to approximate the Site specific GSI and GSIP criteria for the chemicals of concern in the soil and porewater directly along southern shoreline of Willow Run Creek. The criteria developed in the report should not be applied to contaminated groundwater contained south of the confining clay layer. The Site specific mixing zone-based GSI calculations outlined in this report are based off historically provided EGLE guidance material and current regulations, refer to Section 6 – References for additional details. Following this evaluation, a formal request for the calculation of mixing zone-based criteria at the Site will be submitted to EGLE. It is expected EGLE's calculated mixing zone-based criteria may vary from the values determined in this report, therefore sensitivity analysis calculations are also presented in this report.

3.1 Volumetric Flow (Qe)

The first step in determining the mixing zone-based criteria is calculating volumetric flow rate. The volumetric flow or groundwater discharge rate is calculated using Darcy's law and inputting the estimated hydraulic conductivity, hydraulic gradient, and cross-sectional area of the saturated zone of the contaminated plume identified at the Site. As previously stated, these calculations are only considering the volumetric flow for the porewater directly in contact with Willow Run Creek. The groundwater located in the sand unit south of the confining clay layer does not have a complete pathway to the surface water, refer to Section 2.1 for additional discussion. Table 2 presents the calculations, and an explanation of the input values is provided below.

$$Qe = K \times M \times W \times \frac{dH}{dL}$$

3.1.1 Hydraulic Conductivity (K)

The hydraulic conductivity of the clay soil directly adjacent to Willow Run Creek was estimated based on 2003 Conestoga Rovers & Associates, Inc. (CRA) investigation where soil samples were collected from the confining clay unit at several locations for geotechnical testing (CRA 2012). The typical vertical permeability/hydraulic conductivity of the confining clay unit ranged from 4.13x10-10 to 1.41x10-9 feet per second, with a geometric mean of 8.53x10-10 feet per second.

3.1.2 Groundwater Flow and Hydraulic Gradient (dH/dL)

Groundwater within the northern half of the Site flows north and northeast towards Willow Run Creek. As mentioned in Section 2.1, the groundwater flowing north does not have a complete pathway to the Willow Run Creek due to the confining clay layer present across the Site and the new surface water elevations of Willow Run Creek. Migration of contaminated porewater and soil directly in contact with Willow Run Creek is the only available pathway for water above GSI criteria to enter the surface water body.

For the purpose of this report and calculations, an approximated hydraulic gradient was calculated between the northernmost wells at Cross Sections D-D' through H-H' (Figure 5 through Figure 9) and Willow Run Creek. These calculated hydraulic gradients are much higher than what is anticipated for the porewater movement at the Site, but were utilized in the interest of developing conservative GSI mixing zone-based criteria for the Site. The resulting horizontal hydraulic gradient on the northern portion of the Site ranged from 0.12 to 0.29 with an average of 0.20.

3.1.3 Cross Section Area of Saturated Zone (MxW)

The cross section located closest to the groundwater/surface water interface is most relevant in determining the volumetric flow rate of impacted groundwater to the surface water. As previously stated, for the purposes of this report the impact of contaminated soil and porewater directly in contact with surface water along the shoreline of Willow Run is the only applicable GSI pathway of concern. The entire cross-sectional area for the soil borings and porewater samples that exceeded GSI/GSIPC criteria directly along the shoreline was approximated by taken the measured length between the first two soil sample locations below detection limit on either side of the VOC impacted area along Cross Section A-A' (GS 28 SB and GS 32 SB, approximately 475 feet of length) and multiplying it by the depth of Willow Run Creek. Refer to Figure 5 for Cross Section A-A' and Figure 13 for the sample locations within the VOC delineation area. The maximum depth of Willow Run Creek is approximately 2 feet near the south shoreline, but in the interest of maintaining conservative criteria, a depth of 5 feet was used in the calculations. Multiplying the length by depth resulted in an approximate cross-sectional area of 2,375 square feet. The extra few feet of depth provides a buffer should the water level observed at Willow Run Creek increase.

3.1.4 Sensitivity Analysis – Flow Rate Based on Variable Hydraulic Gradients and Hydraulic Conductivities

The change in volumetric flow rate as a result of entering different combinations of hydraulic gradient and hydraulic conductivity values from the ranges determined in the prior sections is presented on Table 2. As observed in the table, differences in hydraulic conductivity had a larger impact on the volumetric flow rate compared to changes in the hydraulic gradient for this Site.

3.2 Mixing Zone-Based Criteria Calculations

3.2.1 Wasteload Allocation Equation

The calculated volumetric flow rate was input to the Wasteload Allocation (WLA) equation defined under R 323.1209 to determine the mixing zone-based GSI criteria for the three VOCs: TCE, cis 1,2-dichloroethene and vinyl chloride. Mixing zone-based GSI criteria was only determined for VOCs with at least one porewater GSI criteria exceedance or GSIPC exceedance from soil samples collected along the shoreline of Willow Run Creek. While there was one soil sample that exceeded the GSIPC for total xylenes, the soil sample was not collected directly along the Willow Run Shoreline and is therefore not a risk to the nearby surface water body. An explanation of the additional input values for the WLA equation is presented on the attached Table 3.1. For mixing zone-based calculations, the final acute value (FAV) for aquatic life must not be exceeded unless EGLE determines it is acceptable (MDEQ 2018). For this report, the mixing zone-based criteria defaults to the FAV when the calculated WLA/GSI criteria is greater than the FAV values defined in Rule 57 Water Quality Values.

Table 3.1 presents the resulting mixing zone-based criteria when the volumetric flow rate is calculated from the average hydraulic conductivity and hydraulic gradient value. The use of the average values resulted in calculated mixing zone-based criteria that are significantly greater than the FAV, therefore all three values default to their respective FAVs.

3.2.2 Sensitivity Analyses Discharge Flow Rate (Volumetric flow)

The mixing zone GSI Criteria was recalculated for the range of discharge flow rate values determined for the Site in Table 2. The results are presented on Table 3.2. Even minor differences in hydraulic conductivity and hydraulic gradient resulted in large differences in the calculated mixing zone-based GSI criteria for TCE, cis 1,2-DCE, and vinyl chloride. In all cases, the resulting mixing zone-based criteria are significantly greater than the FAV, therefore all three values default to their respective FAVs.

3.2.3 Sensitivity Analyses - River Flow Rate

The mixing zone GSI criteria was initially calculated utilizing the harmonic mean for Willow Run Creek, which was reported as 0.1 cubic feet per second on EGLE's Low Flow Discharge Database. The value on the database was reported in 2014, it is expected that the low flow rate for Willow Run Creek has increased since the change in water levels, however, the historic value was used in the interest of developing conservative criteria. Utilizing a higher river flow rate would result in higher mixing zone-based calculated criteria. In addition to utilizing the historic harmonic mean, the GSI criteria was recalculated utilizing 50 percent and 10 percent of the harmonic mean. The results are presented on Table 3.3. In all cases, the resulting mixing zone-based criteria are significantly greater than the FAV, therefore all three values default to their respective FAVs.

3.2.4 Most Conservative

Utilizing the results of the prior two sensitivity analyses, the Mixing Zone GSI Criteria was recalculated with input that would result in the lowest or most conservative criteria for the Site. To achieve this, the largest volumetric flow rate (largest hydraulic conductivity and hydraulic gradient) and 10% of the harmonic mean river flow rate was input into the WLA equation. The results are presented on Table 3.4. For this case, the calculated GSI criteria for the three VOCs was still greater than their respective FAV, therefore all three values again default to their FAVs.

3.2.5 Soil Water Partitioning Value (SWPV)

The GSIPC was calculated using the SWPV formula provided by MDEQ RRD Operational Memorandum No. 1, dated March 2005. The SWPC calculations and input values are outlined in Table 4. For all three constituents, the FAV values was used as the mixing zone-based criteria since the calculated criteria were above the FAV as described in the prior sections. In addition to the SWPV formula, the GSIPC was also estimated using the 20X value, or by multiplying the calculated mixing zone-based GSI criteria by 20 (20X value). The multiplier of 20 comes from the dilution factor used in the toxicity characteristic leach procedure (MDEQ 2005). When both a SWPV and a 20X value are available, the higher of the two becomes the GSIPC (MDEQ 2016). For the three chemicals of concern, TCE, cis 1,2-DCE and vinyl chloride, the GSIPC defaulted to the 20X value.

4. Data Evaluation

4.1 Porewater, Seep, and Outfall Sample Results Compared to Calculated Criteria

The porewater, Seep 4, and historic outfall sample results are compared to the GSI Mixing Zone-Based Calculated Criteria on the attached Table 5. Seep 4 was the only seep located in the VOC delineation area. None of the water samples exceed the FAV values that the mixing zone-based criteria defaulted to for the three VOCs of concern. Refer to Figure 3 for the outfall sample locations and to Figure 13 for the locations of the porewater and seep samples.

4.2 Soil Sample Results Compared to Calculated GSIP Criteria

The soil sample results collected along or adjacent to the shoreline of Willow Run Creek are compared to the GSIP mixing zone-based calculated criteria on the attached Table 6. The results on Table 6 includes those samples collected between the bottom of the embankment slope and the edge of Willow Run Creek (refer to Figure 13). A majority of these sample results are not currently in direct contact with Willow Run Creek, but were still evaluated in the event water levels increase.

Of the 11 soil sampling locations in our area of concern, three exceeded the mixing zone-based GSIPC. The locations include GS-29-SB, GS-45, and GS-46. However, all soil samples with mixing zone-based GSIPC exceedances were collected from at least 3 feet below ground surface. Even if the surface water of Willow Run Creek is to rise, it is unlikely the water would come in direct contact with the soil impacted above criteria. No exceedances of the mixing zone-based GSIPC were observed in shallow (0-2 feet below ground surface) soil samples collected along the shoreline of Willow Run Creek.

5. Conclusion

The groundwater surface water interface between the water bearing units at the Site and Willow Run Creek to the north are no longer complete since the lowering of surface water levels. A non-water bearing confining clay layer was found in soil borings throughout the recently exposed land adjacent to Willow Run Creek, and without groundwater, a GSI pathway does not exist. However, in an effort to further explore the risk posed by the impacted soil and groundwater at the Site, mixing zone-based criteria calculations were completed to approximate the GSI and GSIP criteria for the chemicals of concern in the soil, which can be a GSI concern if it comes in contact with surface water, and porewater directly along the southern shoreline of Willow Run Creek. When the seep, outfall, and porewater results were compared to the mixing zone-based criteria, no exceedances were observed. When the soil results were compared to the mixing zone-based GSIPC, three locations had exceedances. The mixing zone-based GSIPC exceedances occurred in soil collected at a depth of at least 3 feet below ground surface, therefore, the exceedances are not currently in contact with the surface water at Willow Run Creek and are not likely to come in contact if water levels rise.

The conclusions of this report are also supported by specific provisions of 1994 PA 451 as amended, the Natural Resources and Environmental Protection Act (NREPA), which allow one to conclude the GSI pathway has been adequately addressed through evaluation. Specifically, the GSI pathway at the Site is considered not relevant under Section 324.20120e(3). Of particular relevance is the lack of hydraulic connection described under Section 324.20120e(3)(a) and the minimal mass of the substances of concern described under Section 324.20120e(3)(f). Additionally, even if a hydraulic pathway was present along the shoreline of Willow Run Creek, the substances of concern would not cause impacts requiring mitigation because per Section 324.20120e(1)(c) mixing zone-based criteria would not be exceeded, and per Section 324.20120e(14) venting groundwater has no effect or only a de minimis effect on Willow Run Creek.

The multiple lines of evidence presented in this report, including the current hydrogeologic conditions and the calculated mixing zone-based GSI and GSIP criteria demonstrate that the groundwater and soil exceedances at the northern boundary Site are not a risk to the nearby surface water body, Willow Run Creek, and thus do not require further action.

6. References

CRA, "Site Summary Report," Former General Motors Company Vehicle Operations Property, Ypsilanti, Michigan, January 2012.

GHD Services, "2016 Summary Report", Former Willow Run Company Vehicle Operations Area, Ypsilanti, Michigan, July 18, 2018.

Michigan EGLE, Rule 57 Surface Water Quality Values, Surface Water Assessment Section, dated February 2, 2020, accessed April 21, 2020.

MDEQ, Remediation and Redevelopment Division (RRD) Groundwater Surface Water Interface Pathway Compliance Options Resource Materials, dated April 23, 2018.

MDEQ, Remediation and Redevelopment Division (RRD) Operational Memo No. 1, Technical Support Document – Attachment 9, Part 201 Groundwater Protection Criteria, Part 213 Tier I Risk Based Screening Levels, dated March 2005.

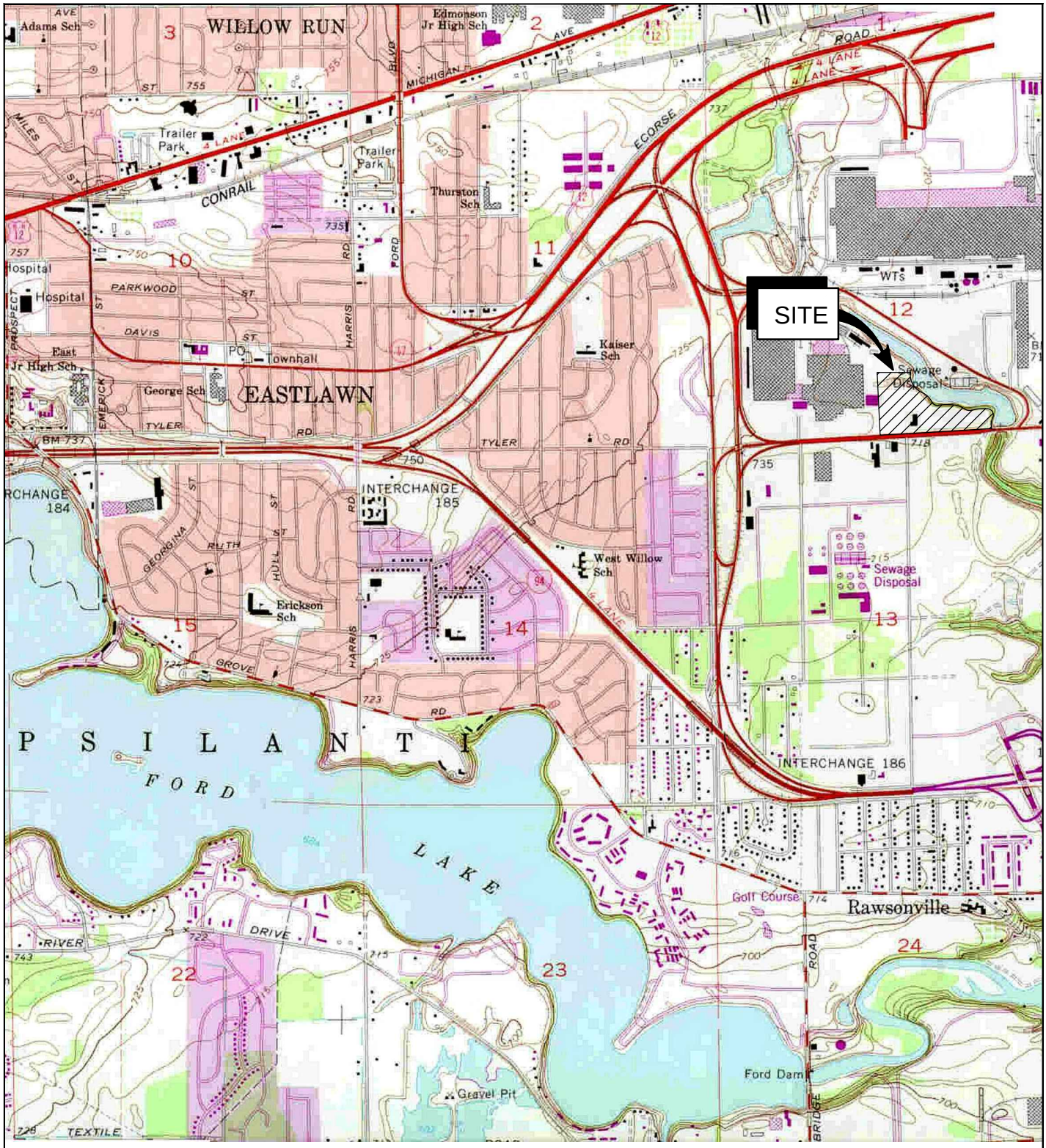
MDEQ, Remediation and Redevelopment Division (RRD) Operational Memorandum No.5, Groundwater Surface Water Interface Criteria, dated September 30, 2004, rescinded May 25, 2018.

MDEQ, Remediation and Redevelopment Division (RRD) Resource Materials, DRAFT Cleanup Criteria and Screening Levels Development and Application, dated June 2016.

MDEQ, Water Bureau, Water Resources Protection, Part 8 Water Quality Based Effluent Limit Development for Toxic Substances, R 323.1209 Development of wasteload allocations for toxic substances, dated January 13, 2006.

Natural Resources and Environmental Protection Act, Act 451 of 1994, as amended. Section 324.20120e Response activity providing for venting groundwater; definitions.

Figures



SOURCE: USGS QUADRANGLE MAP;
YPSILANTI EAST, MICHIGAN

0 1000 2000 ft

1" = 2000 ft

Coordinate System:
<INSERT HERE>

N

GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

Project No. **11223983**
Date **July 2021**

SITE LOCATION MAP

FIGURE 1

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\RPT-001\11223983-GHD-0000-RPT-EN-0101_DE-001.DWG
Plot Date: 30 July 2021 12:34 PM



SOURCE: BASE ON GOOGLE EARTH APRIL 2019

LEGEND

FORMER EDGE OF TYLER POND
(APPROXIMATE BASED ON GOOGLE EARTH APRIL 2016)

0 125 250 ft

1" = 250 ft

Coordinate System:
<INSERT HERE>

N

GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

WILLOW RUN CREEK
CURRENT CONDITIONS

Project No. **11223983**
Date **July 2021**

FIGURE 2

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\RPT-001\11223983-GHD-0000-RPT-EN-0102_DE-001.DWG
Plot Date: 30 July 2021 12:52 PM

LEGEND

- FENCE LINE
- SANITARY SEWER
- STORM SEWER
- WILLOW RUN CREEK SHORELINE
- BOTTOM OF SLOPE (SURVEYED 2-13-18)
- CB15 CATCH BASIN
- M.H. MANHOLE
- R.S. FENCE GATE POST
- OUTFALL #11 SAMPLING LOCATION
- GROUNDWATER FLOW DIRECTION

OUTFALL #11
OUTFALL #13
OUTFALL #14
WILLOW RUN CREEK
OVERPASS BRIDGE
SHEET PILE WALL
STM M.H.
CB 62
CB 64
CB4
C.B.
CB3
STM MH 2
SAN M.H.
STORM M.H.
SUMP
SHED MH1
CB9
CB8
CB
HAULAWAY BLDG.
GUARD SHACK
1FT RIM
STM MH 7
CB5
MH6
CB10
36" FORCE MAIN
16" FORCE MAIN (OLD)
SAN MH
M.H.
BELL M.H.
CB 11
CB-15
CB-12
CB16
STM MH 18
MH 17
CB 14
CB 13
72-INCH YCUA SEWER
TYLER POND OU
TYLER POND DAM*
TYLER ROAD
FONS LANDFILL
ST

0 60 120 ft
1" = 120 ft
Coordinate System: <INSERT HERE>

N

GHD

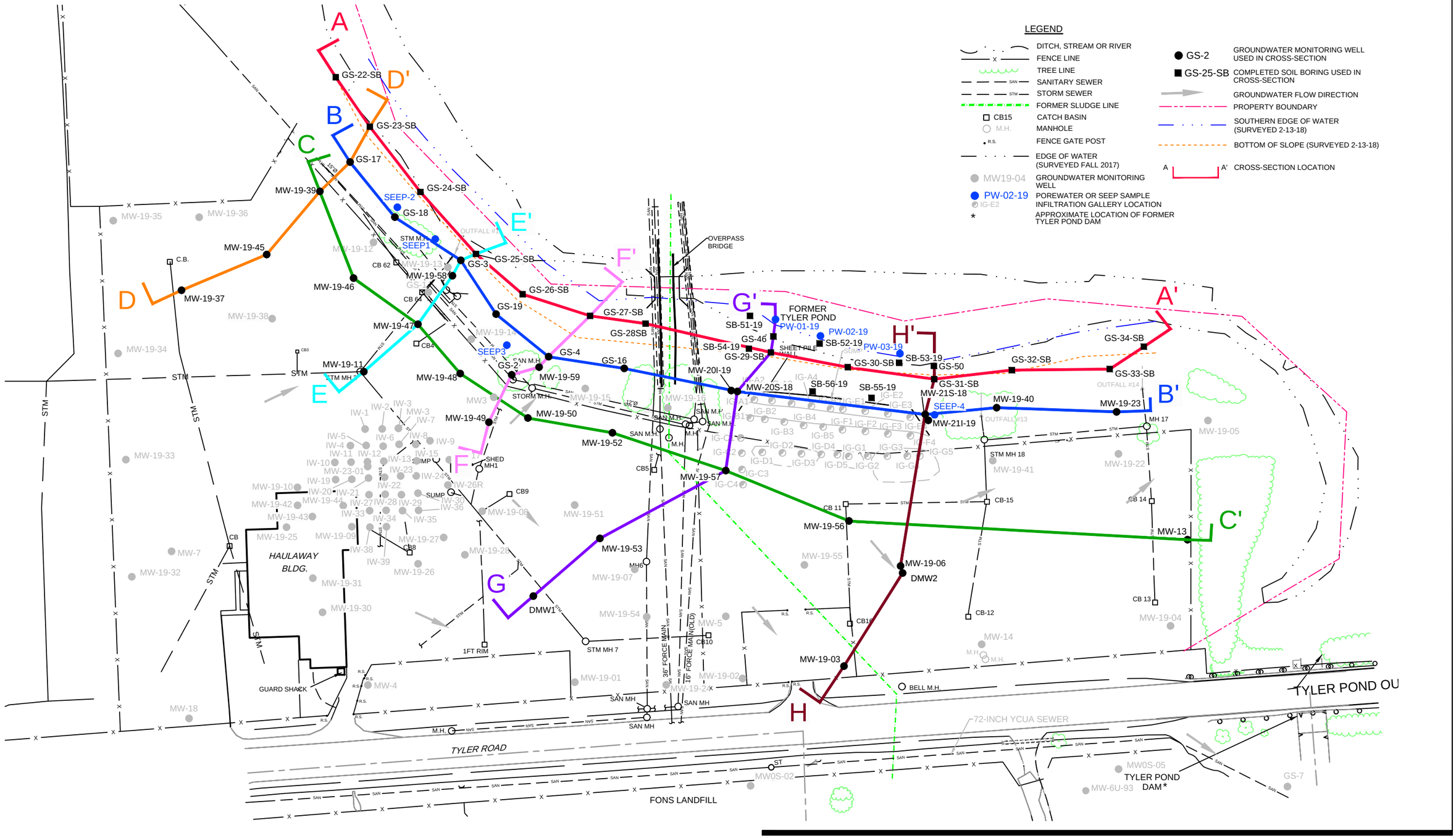
WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

OUTFALL LOCATION MAP

Project No. **11223983**
Date **July 2021**

FIGURE 3

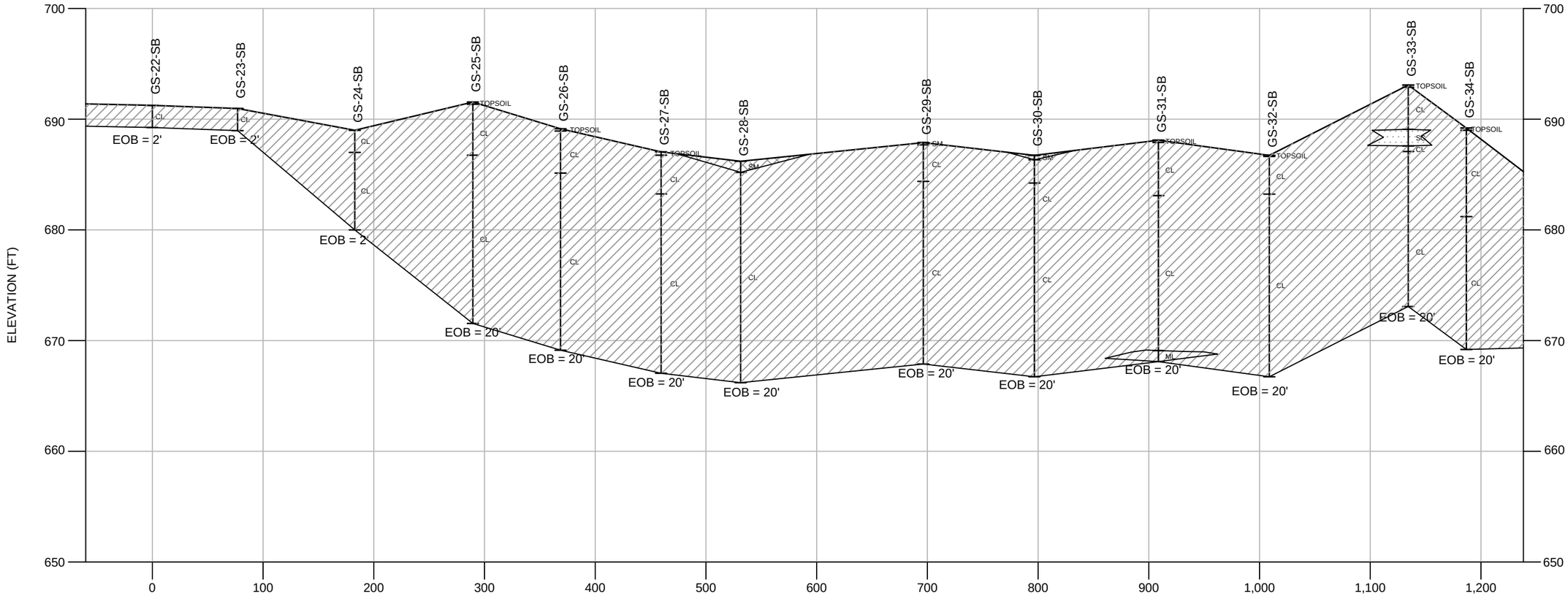
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Plot Date: 30 July 2021 1:02 PM

A
WEST

A'
EAST



GS-24R
-WELL ID
- GROUND
- WELL
EOB = END OF BORING

FILL
CH/CL - CLAY
MH/ML - SILT
SP/SC/SM/SANDY FILL - SAND
GP/GM - GRAVEL
OL - LOW PLACSTICITY ORGANICS
TOPSOIL
ASPHALT
CONCRETE

SCALE

HORIZONTAL - 1" = 100'
VERTICAL - 1" = 10'

HORIZONTAL
1" = 100 ft
0 50 100Ft
0 5 10Ft
1" = 10 ft
VERTICAL

GHD

WILLOW RUN COMPANY VEHICALE OPERATIONS
YPSILANTI, MICHIGAN

CROSS-SECTION A-A'

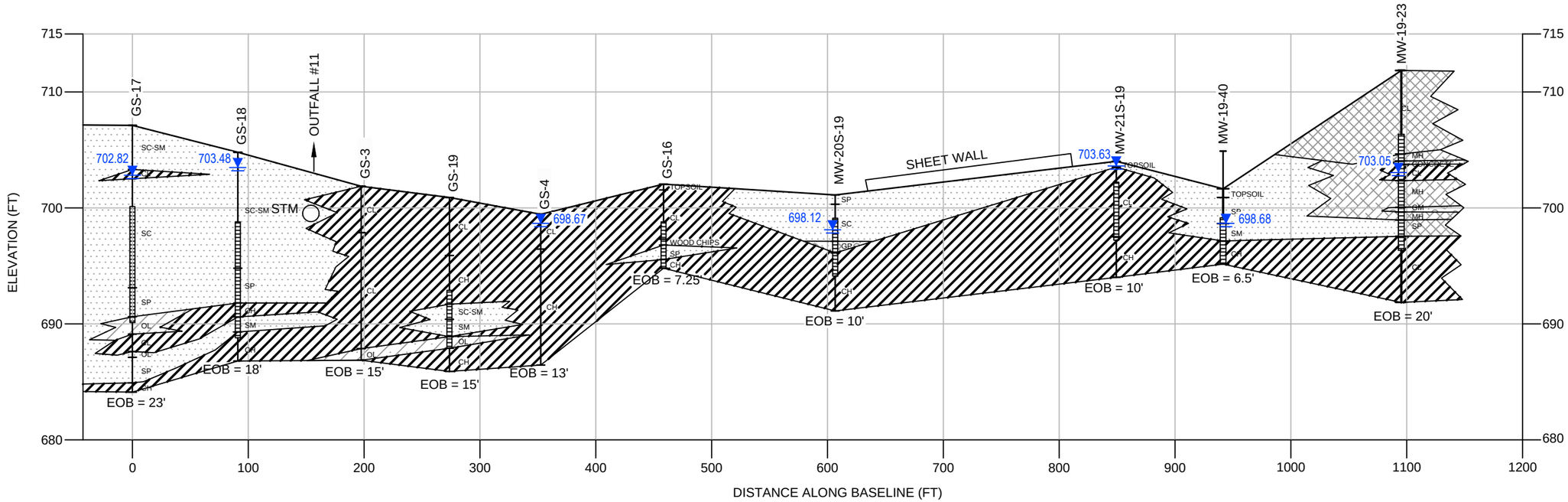
Project No. **11223983**
Date **July 2021**

FIGURE 5

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Plot Date: 30 July 2021 1:25 PM

B
WEST

B'
EAST



MW-19-39
- WELL ID
- GROUND
- GROUND WATER LEVEL (5/14/2018)
- SCREEN
- WELL

EOB = END OF BORING

- FILL
- CH/CL - CLAY
- MH/ML - SILT
- SP/SC/SM/SANDYFILL - SAND
- GP/GM - GRAVEL
- OL - LOW PLACSTICITY ORGANICS
- TOPSOIL
- ASPHALT
- CONCRETE

SCALE

HORIZONTAL - 1" = 100'
VERTICAL - 1" = 10'

HORIZONTAL
1" = 100 ft
0 50 100Ft
0 5 10Ft
1" = 10 ft
VERTICAL

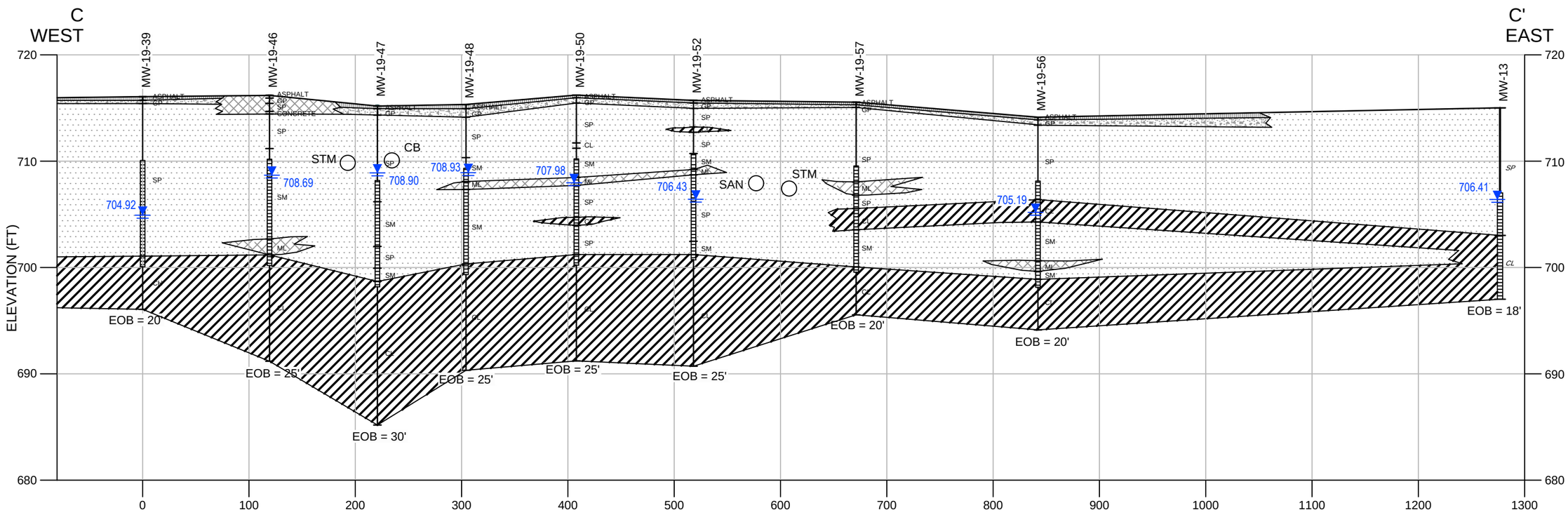
WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

CROSS-SECTION B-B'

Project No. **11223983**
Date **July 2021**

FIGURE 6

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\RPT-001\11223983-GHD-0000-RPT-EN-0106_DE-001.DWG
Plot Date: 30 July 2021 2:04 PM



MW-19-39
- WELL ID
- GROUND
- GROUND WATER LEVEL (5/14/2018)
- SCREEN
- WELL

EOB = END OF BORING

- FILL
- CH/CL - CLAY
- MH/ML - SILT
- SP/SC/SM/SANDY FILL - SAND
- GP/GM - GRAVEL
- OL - LOW PLACSTICITY ORGANICS
- TOPSOIL
- ASPHALT
- CONCRETE

SCALE

HORIZONTAL - 1" = 100'
VERTICAL - 1" = 10'

HORIZONTAL
1" = 100 ft
0 50 100Ft

0 5 10Ft
1" = 10 ft
VERTICAL

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

CROSS-SECTION C-C'

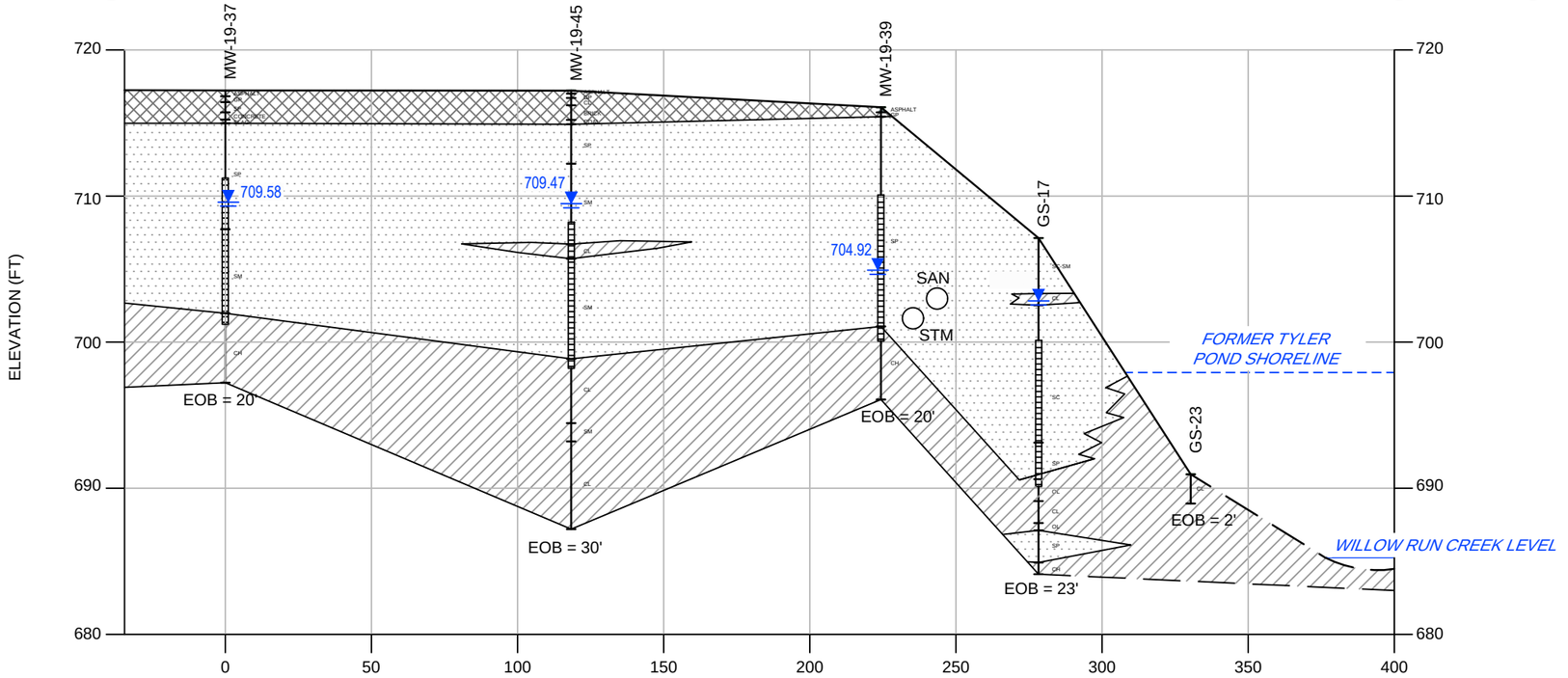
Project No. **11223983**
Date **July 2021**

FIGURE 7

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D
SOUTHWEST

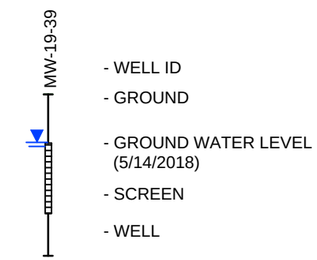
D'
NORTHEAST

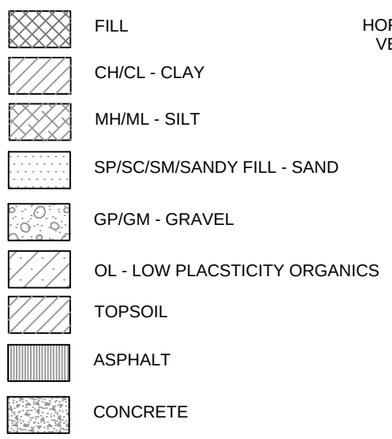


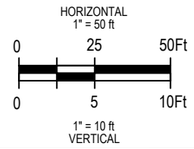
DISTANCE ALONG BASELINE (FT)

SCALE

HORIZONTAL - 1" = 50'
VERTICAL - 1" = 10'







GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

CROSS-SECTION D-D'

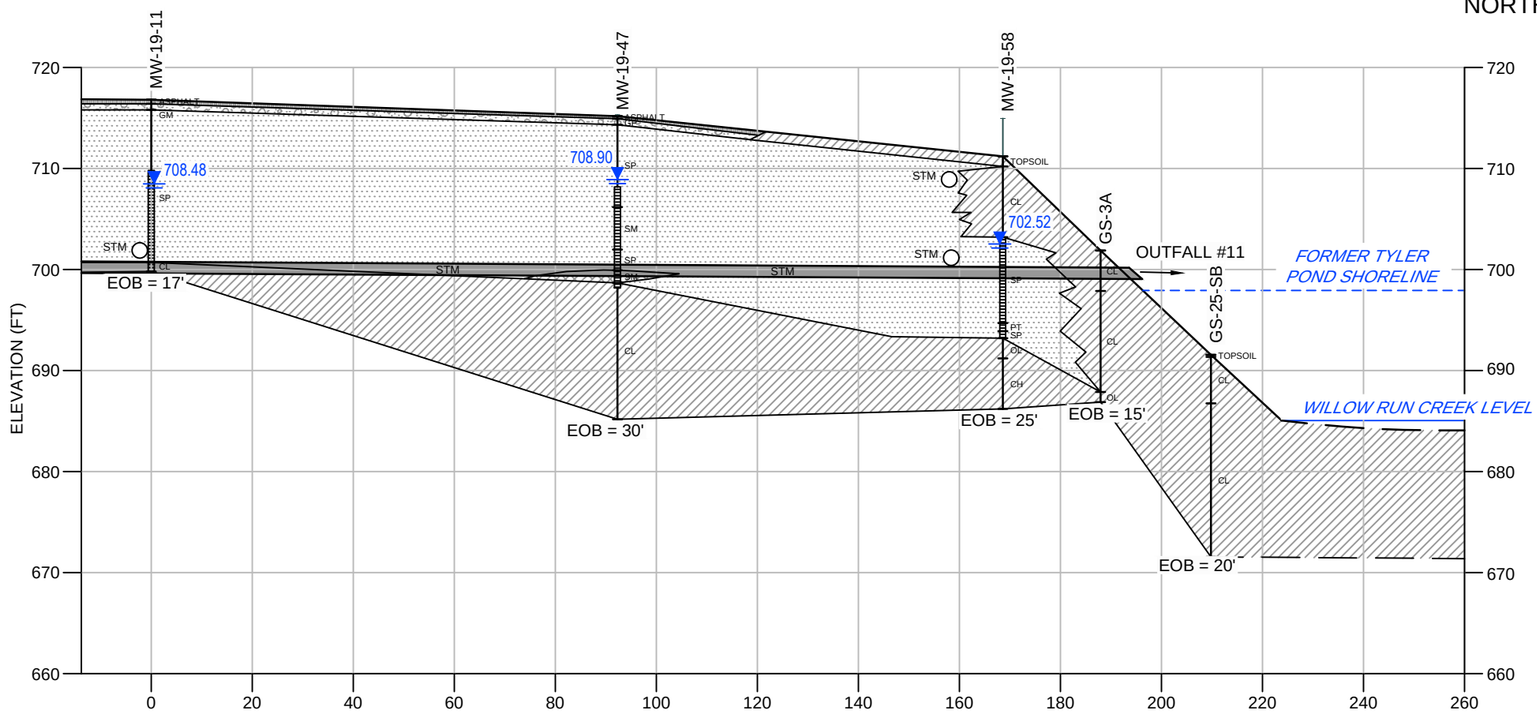
Project No. **11223983**
Date **July 2021**

FIGURE 8

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SOUTHEAST E

E' NORTHEAST



DISTANCE ALONG BASELINE (FT)

SCALE

HORIZONTAL - 1" = 30'
VERTICAL - 1" = 20'

MW-19-39
- WELL ID
- GROUND
- GROUND WATER LEVEL (5/14/2018)
- SCREEN
- WELL

EOB = END OF BORING

- FILL
- CH/CL - CLAY
- MH/ML - SILT
- SP/SC/SM/SANDY FILL - SAND
- GP/GM - GRAVEL
- OL - LOW PLACSTICITY ORGANICS
- TOPSOIL
- ASPHALT
- CONCRETE

HORIZONTAL
1" = 30 ft
0 15 30Ft

1" = 20 ft
VERTICAL
0 10 20Ft

GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

CROSS-SECTION E-E'

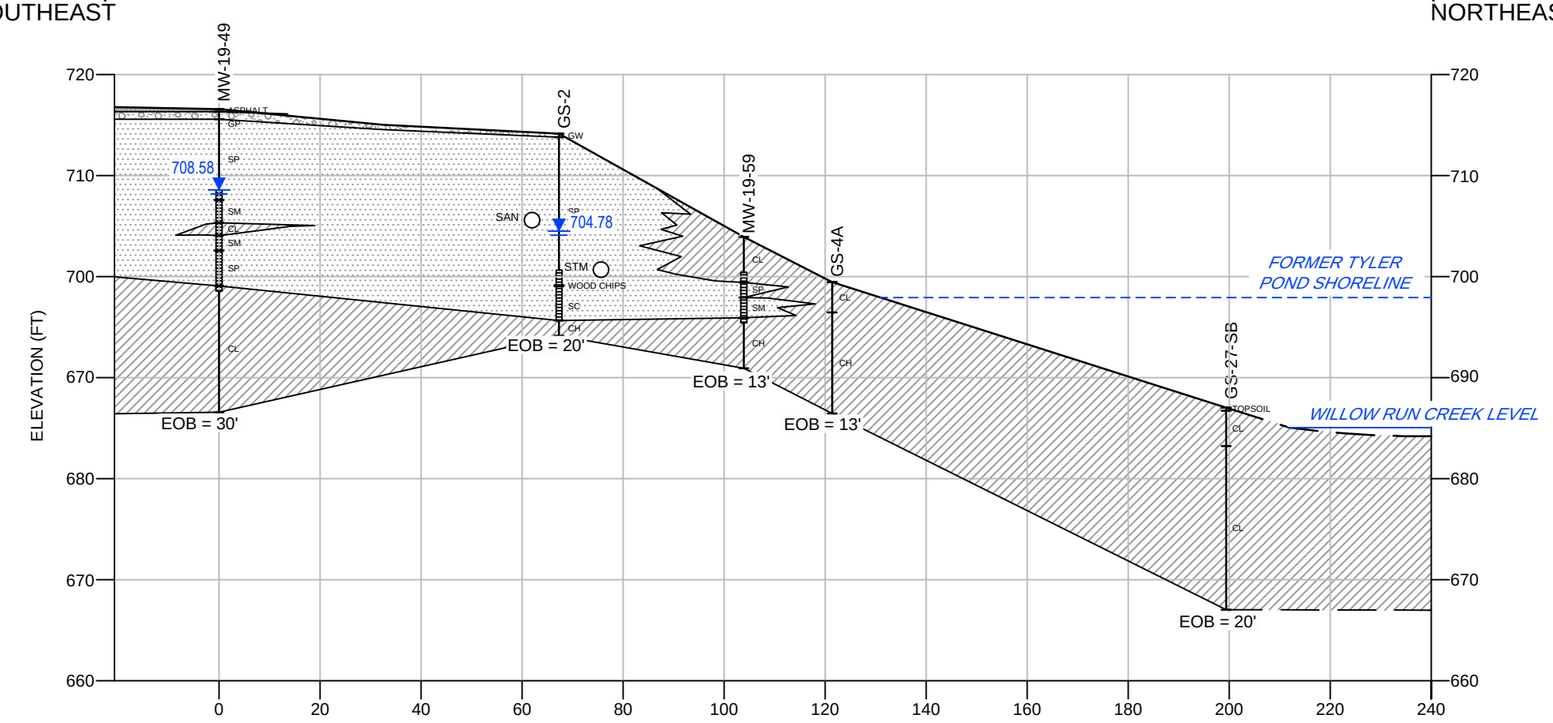
Project No. **11223983**
Date **July 2021**

FIGURE 9

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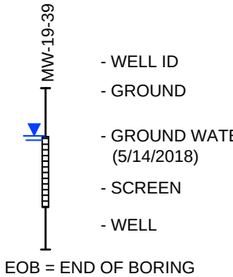
F
SOUTHEAST

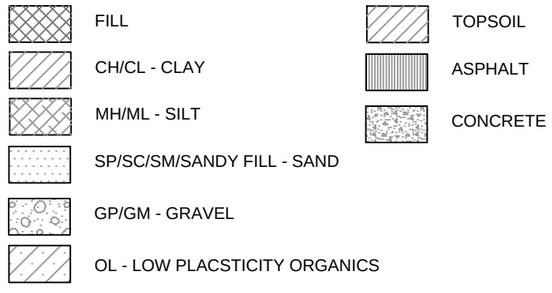
F'
NORTHEAST

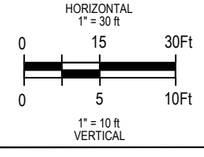


SCALE

HORIZONTAL - 1" = 30'
VERTICAL - 1" = 10'







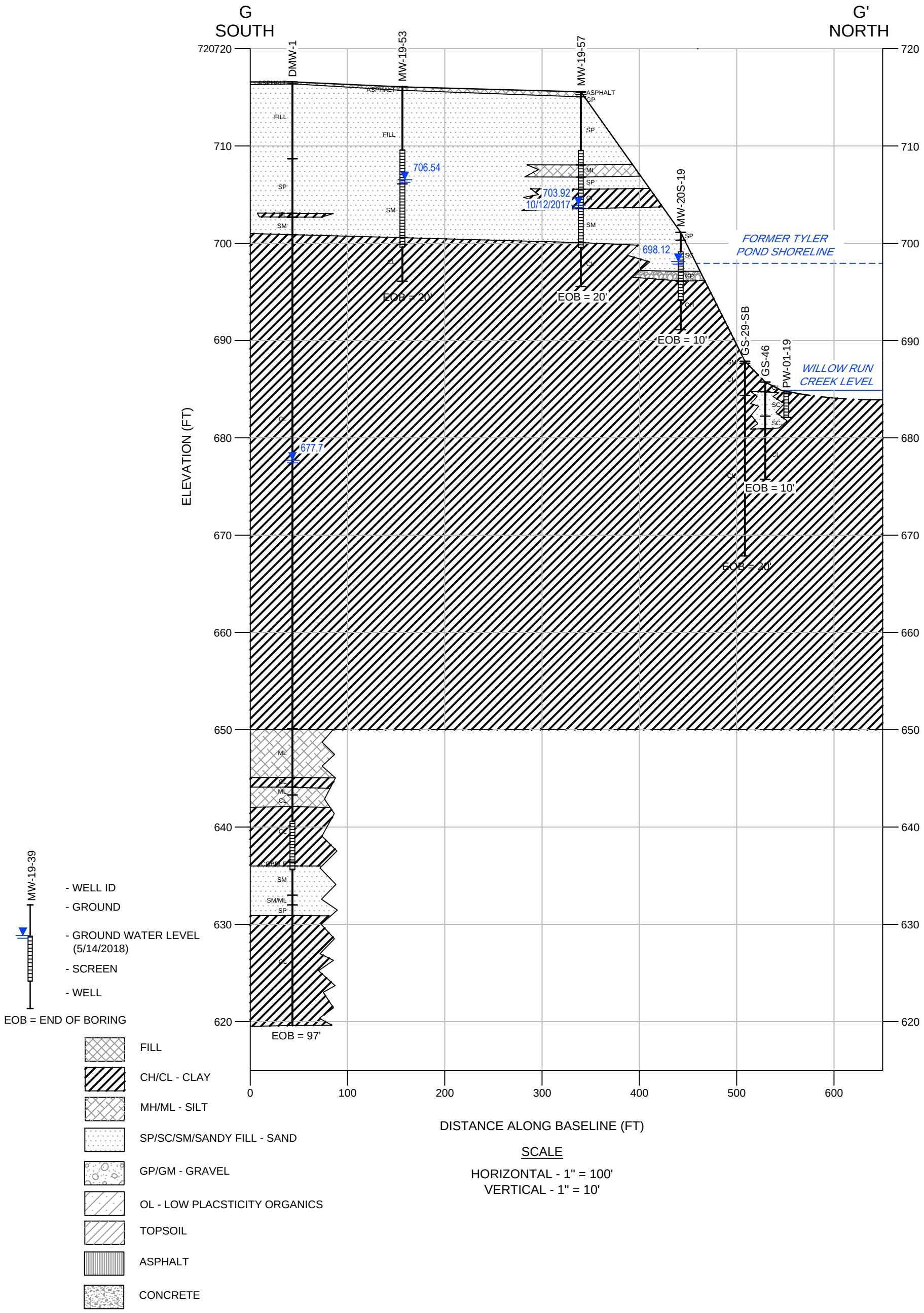
WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

CROSS-SECTION F-F'

Project No. **11223983**
Date **July 2021**

FIGURE 10

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\RPT-001\11223983-GHD-0000-RPT-EN-0105_DE-001.DWG
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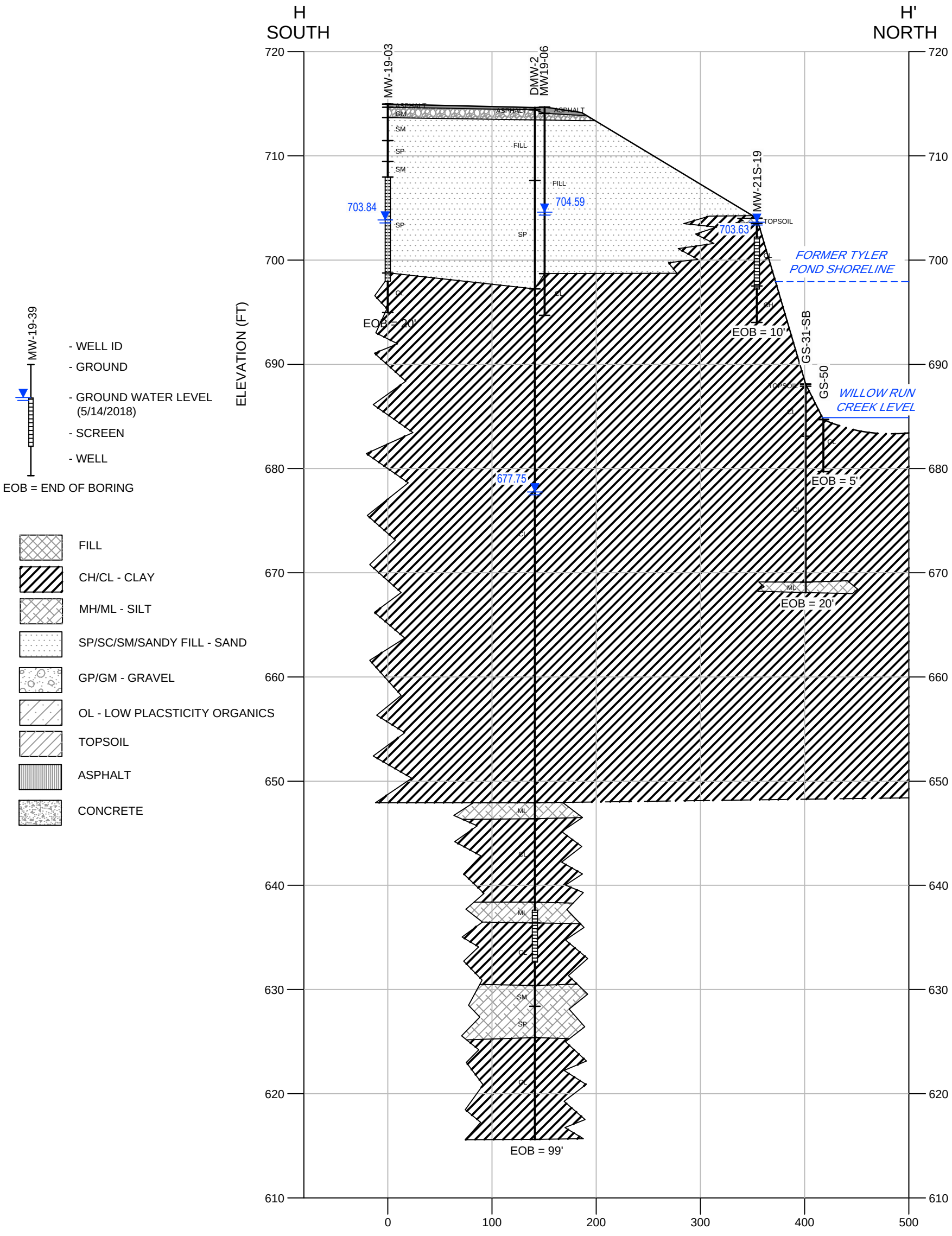
WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

Project No. **11223983**
Date **July 2021**

CROSS-SECTION G-G'

FIGURE 11

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\RPT-001\11223983-GHD-0000-RPT-EN-0106_DE-001.DWG
Plot Date: 30 July 2021 2:09 PM



SCALE

HORIZONTAL - 1" = 100'
VERTICAL - 1" = 10'

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

Project No. **11223983**
Date **July 2021**

CROSS-SECTION H-H'

FIGURE 12

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\RPT-001\11223983-GHD-0000-RPT-EN-0106_DE-001.DWG
Plot Date: 30 July 2021 2:17 PM

Tables

Table 1

Historic Outfall Sampling Results
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Sample Location:		EGLE Generic Groundwater Cleanup Criteria: Residential and Nonresidential[1]	OutFall #11	OutFall #11	OutFall #11	OutFall #13	OutFall #14
Sample Identification:		**Groundwater Surface Water Interface**	**GW-17303-120303-DCR-274**	**GW-17303-DCR-121003**	**SW-17303-021016-CB-012**	**SW-17303-021016-CB-013**	**SW-17303-021016-CB-014**
Sample Date:			**12/3/2003**	**12/10/2003**	**2/10/2016**	**2/10/2016**	**2/10/2016**
Sample Type:		**c**					
Sample Depth:			**-**	**-**	**-**	**-**	**-**
	Units						
Volatile Organic Compounds (VOCs)							
1,1,1-Trichloroethane	ug/L	89	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	78	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	330	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	740	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	130	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	99	100 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L		20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	5.7	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	13	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	360	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	230	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	28	20 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	17	20 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	2200	500 U	25 U	10 U	10 U	10 U
2-Hexanone	ug/L	ID	1000 U	50 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	ug/L	ID	1000 U	50 U	10 U	10 U	10 U
Acetone	ug/L	1700	500 U	25 U	10 U	10 U	10 U
Benzene	ug/L	200	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	ID	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	ID	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	ID	100 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L	38	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	25	4.9 J	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	1100	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	350	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	ID	20 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	620	500	3.7	1.5	11	0.82 J
cis-1,3-Dichloropropene	ug/L		20 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L		20 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	ID	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	ID	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	18	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L	28	100 U	5.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	ug/L		200 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L		20 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	7100	100 U	5.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	1500	100 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L	80	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	60	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	270	20 U	0.73 J	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1500	11 J	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L		20 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	200	40	0.44 J	0.43 J	3.9	0.38 J
Trichlorofluoromethane (CFC-11)	ug/L		20 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	ug/L	32	20 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	13	**390[c]**	3.5	0.65 J	1.1	1.0 U
Xylenes (total)	ug/L	49	40 U	2.0 U	2.0 U	2.0 U	2.0 U

Notes:

U - Not detected at the associated reporting limit.
J - Estimated concentration.

[1] EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

Table 2

Volumetric Flow Calculations
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Volumetric Flow Rate Calculation

$$Qe = K \times M \times W \times \frac{dH}{dL}$$

Where:
Qe = Volumetric Flow Rate in cubic feet per second (ft3/sec)
K = hydraulic conductivity in feet per second (ft/sec) (geometric mean = 8.53E-10 ft/sec)
M x W = saturated thickness in feet (ft) x length of saturated zone in feet (ft) = Cross Section Area (ft^2) (2,375 ft2)
dH/dL = hydraulic gradient in feet per foot (ft/ft) (average = 0.20 ft/ft)

Qe = 8.53E-10 ft/sec x 2375 ft2 x 0.2 ft/ft = 4.05E-07 ft^3/sec

Sensitivity Analysis - Volumetric Flow Rate (ft^3/sec) Based on Variations in Hydraulic Conductivity and Hydraulic Gradient

		Hydraulic Gradient (ft/ft)						
Hydraulic Conductivity (ft/sec)	*4.05E-07*	*0.12*	*0.16*	*0.2*	*0.24*	*0.26*	*0.28*	*0.29*
	4.13E-10	1.18E-07	1.57E-07	1.96E-07	2.35E-07	2.55E-07	2.75E-07	2.84E-07
	6.63E-10	1.89E-07	2.52E-07	3.15E-07	3.78E-07	4.09E-07	4.41E-07	4.57E-07
	9.12E-10	2.60E-07	3.47E-07	4.33E-07	5.20E-07	5.63E-07	6.06E-07	6.28E-07
	1.16E-09	3.31E-07	4.41E-07	5.51E-07	6.61E-07	7.16E-07	7.71E-07	7.99E-07
	1.41E-09	4.02E-07	5.36E-07	6.70E-07	8.04E-07	8.71E-07	9.38E-07	9.71E-07

Mixing Zone-Based Criteria Calculations
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Mixing Zone-Based Criteria Calculation

$$WLA = \frac{Zt(Qe+Qr)-(Qr)(Cr)}{Qe}$$

Where:

WLA = Wasteload Allocation (Mixing Zone Based Criteria (ug/L)) - equation defined under R 323.1207
Zt = water quality value developed for the toxic substance expressed as total or total recoverable (Part 201 GSI value)
Qe = effluent design flow, which is the annual average flow for groundwater venting to the river
Qr = flow of the receiving water allocated for mixing under R 323.1082. (River flow rate times percent eligible for mixing)
Cr = receiving water background concentration of the toxic substance developed under R 323.1207
River flow rates: harmonic mean = 0.1 ft3/s.

Table 3.1 - Mixing Zone Calculations - Mean Hydraulic Conductivity and Hydraulic Gradient

Constituent	*Qe (ft^3/s)*	*River Flow Rate (ft^3/s) (1)*	*Percent Eligible for Mixing*	*Qr (ft^3/s)*	*Cr (mg/L)*	*Zt GSI (ug/L) (2)*	*Mixing Zone Based Criteria, (WLA) (ug/L)*	*Final Acute Value FAV (µg/L)(3)*
TCE	4.05E-07	0.1	25.00%	0.025	0	200	12,340,547	**3,500**
cis-1,2-DCE	4.05E-07	0.1	25.00%	0.025	0	150	9,255,410	**2,800**
Vinyl Chloride	4.05E-07	0.1	25.00%	0.025	0	13	802,136	**17,000**

Table 3.2 - Mixing Zone Calculations - Sensitivity Analysis - Variations in Hydraulic Conductivity and Hydraulic Gradient

	A (ft2)	*K (ft/sec)*	*dH/dL (ft/ft)*	*Qe (ft^3/s)*	*Qr (ft^3/s)*	*TCE - Mixing Zone Based Criteria, (WLA) (µg/L)*	*cis-1,2-DCE - Mixing Zone Based Criteria, (WLA) (µg/L)*	*Vinyl Chloride - Mixing Zone Based Criteria, (WLA) (µg/L)*
Min K, Min dH/dL	2,375	4.13E-10	0.12	1.18E-07	0.025	42,479,279	31,859,459	2,761,153
Min K, Average dH/dL	2,375	4.13E-10	0.20	1.96E-07	0.025	25,487,647	19,115,736	1,656,697
Average K, Min dH/dL	2,375	8.53E-10	0.12	2.43E-07	0.025	20,567,445	15,425,583	1,336,884
Min K, Max dH/dL	2,375	4.13E-10	0.29	2.84E-07	0.025	17,577,750	13,183,312	1,142,554
Max K, Min dH/dL	2,375	1.41E-09	0.12	4.02E-07	0.025	12,442,654	9,331,990	808,772
Average K, Average dH/dL	2,375	8.53E-10	0.20	4.05E-07	0.025	12,340,547	9,255,410	802,136
Average K, Max dH/dL	2,375	8.53E-10	0.29	5.88E-07	0.025	8,510,784	6,383,088	553,201
Max K, Average dH/dL	2,375	1.41E-09	0.20	6.70E-07	0.025	7,465,672	5,599,254	485,269
Max K, Max dH/dL	2,375	1.41E-09	0.29	9.71E-07	0.025	5,148,802	3,861,601	334,672
				Final Acute Value FAV (µg/L)(3)		**3,500**	**2,800**	**17,000**

Note: For Table 3.2, Cr and Zt values kept same as those listed in Table 3.1

Mixing Zone-Based Criteria Calculations
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Mixing Zone-Based Criteria Calculation

$$WLA = \frac{Zt(Qe + Qr) - (Qr)(Cr)}{Qe}$$

Where:

WLA = Wasteload Allocation (Mixing Zone Based Criteria (ug/L)) - equation defined under R 323.1207
Zt = water quality value developed for the toxic substance expressed as total or total recoverable (Part 201 GSI value)
Qe = effluent design flow, which is the annual average flow for groundwater venting to the river
Qr = flow of the receiving water allocated for mixing under R 323.1082. (River flow rate times percent eligible for mixing)
Cr = receiving water background concentration of the toxic substance developed under R 323.1207
River flow rates: harmonic mean = 0.1 ft3/s.

Table 3.3 - Mixing Zone Calculations - Sensitivity Analysis - Variations in Creek Flow Rate

Basis for River Flow Rate	*River Flow Rate (ft^3/s)*	*Percent Eligible for Mixing*	*Qr (ft^3/s)*	*Qe (ft^3/s)*	*TCE - Mixing Zone Based Criteria, (WLA) (µg/L)*	*cis-1,2-DCE - Mixing Zone Based Criteria, (WLA) (µg/L)*	*Vinyl Chloride - Mixing Zone Based Criteria, (WLA) (µg/L)*
Harmonic Mean (1)	0.1	25.00%	0.0250	4.05E-07	12,340,547	9,255,410	802,136
50% of Harmonic Mean	0.05	25.00%	0.0125	4.05E-07	6,170,373	4,627,780	401,074
10% of Harmonic Mean	0.01	25.00%	0.0025	4.05E-07	1,234,235	925,676	80,225
			Final Acute Value FAV (µg/L)(3)		**3,500**	**2,800**	**17,000**

Note: For Table 3.3, Cr and Zt input values kept same as those listed in Table 3.1.

Table 3.4 - Mixing Zone Calculations- Most Conservative Criteria

	A (ft2)	*K (ft/sec)*	*dH/dL (ft/ft)*	*Qe (ft3/sec)*	*Qr (ft^3/s)*	*TCE - Mixing Zone Based Criteria, (WLA) (µg/L)*	*cis-1,2-DCE - Mixing Zone Based Criteria, (WLA) (µg/L)*	*Vinyl Chloride - Mixing Zone Based Criteria, (WLA) (µg/L)*
Max K, Max dH/dL, Min Qr	2,375	1.41E-09	0.29	9.71E-07	2.50E-03	515,060	386,295	33,479
				Final Acute Value FAV (µg/L)(3)		**3,500**	**2,800**	**17,000**

Note: For Table 3.4, Cr and Zt input values kept same as those listed in Table 3.1.

(1) Based on harmonic mean low flow discharge rate for Willow Run Creek (issued 6/3/2014), value provided on EGLE's Flood & Low Flow Discharge Reporting System.

(2) "Generic" GSI values: lowest of Rule 57 water quality values protective for chronic conditions

(3) The final acute value for aquatic life must not be exceeded when developing mixing zone-based GSI criteria, unless the MDEQ determines it is acceptable.
Mixing Zone Based Criteria defaults to FAV when calculated criteria exceeds FAV. (MDEQ, GSI Pathway Compliance Options, April 2018)

Table 4

Mixing-Zone Based GSI Protection Criteria Calculations
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

$$SWPV = Cw\left[Kd + \left(\frac{\theta w + (H' \times TAF \times \theta a)}{\rho b}\right)\right]$$

SWPV = Soil Water Partitioning Value (ug/kg)[1] (GSI Protection Criteria)
Cw = Target Soil Leachate Concentration (ug/L) (Target Water Criteria x 16)
Kd = Soil-Water Distribution Coefficient (L/kg)
Koc = Soil Organic Carbon-Water Partition Coefficient (L/kg)
Foc = 0.002 (Fraction of Organic Carbon in Soil) generic value
H' = Dimensionless Henry's Constant

HLC = Henry's Law Constant at 25°C
θw = 0.16 Lwater/Lair (Soil Water-Filled Porosity
θa = 0.09 Lair/Lsoil (Soil Water-Filled Porosity)
TAF = 0.50 (Temperature Adjustment Factor)
ρb = 1.5 kg/L (Dry Soil Bulk Density)

Note: Variable input determined based on MDEQ guidance [1]

Trichloroethene Mixing Zone Based GSIPC Calculation

Mixing Zone-Based GSI Criteria	=	3,500	See Table 2.1
Cw	=	56,000	=MZ GSI*16
Kd	=	0.12	=Koc x Foc
Koc	=	61	Chemical Specific Value
H'	=	0.40	=41*HLC
HLC	=	0.0099	Chemical Specific Value
SWPV	=	13,450	ug/kg
20*Mixing Zone GSI	=	70,000	ug/kg
Default GSIPC Criteria[2]	=	70,000	**ug/kg**

Cis-1,2-Dichloroethene Mixing Zone Based GSIPC Calculation

Mixing Zone-Based GSI Criteria	=	2,800	See Table 2.1
Cw	=	44,800	=MZ GSI*16
Kd	=	0.08	=Koc x Foc
Koc	=	39.6	Chemical Specific Value
H'	=	0.17	=41*HLC
HLC	=	0.00408	Chemical Specific Value
SWPV	=	8,552	ug/kg
20*Mixing Zone GSI	=	56,000	ug/kg
Default GSIPC Criteria[2]	=	56,000	**ug/kg**

Vinyl Chloride Mixing Zone Based GSIPC Calculation

Mixing Zone-Based GSI Criteria	=	17,000	See Table 2.1
Cw	=	272,000	=MZ GSI*16
Kd	=	0.04	=Koc x Foc
Koc	=	21.7	Chemical Specific Value
H'	=	1.14	=41*HLC
HLC	=	0.0278	Chemical Specific Value
SWPV	=	50,119	ug/kg
20*Mixing Zone GSIPC	=	340,000	ug/kg
Default GSIPC Criteria[2]	=	340,000	**ug/kg**

Notes:
GSIPC - Groundwater Surface Water Interface Protection Criteria
1 - SWPV equation obtained from March 2005 Michigan Department of Environmental Quality RRD Operational Memorandum No. 1 - Technical Support Document - Attachment 9

Table 5

Porewater, Seep, And Historical Outfall Analytical Results Compared To Mixing Zone-Based GSI Criteria
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Sample Location:		EGLE Generic Groundwater Cleanup Criteria: Residential and Nonresidential[1]			Mixing Zone-Based GSI Calculated Criteria[2]	PW-01-19	PW-01-19	PW-01-19	PW-02-19
Sample Identification:						PW-17303-050619-KT-001	PW-17303-050619-KT-002	PW-17303-050619-KT-003	PW-17303-050619-KT-004
Sample Date:		Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface		5/6/2019	5/6/2019	5/6/2019	5/6/2019
Sample Type:									
Sample Depth:		a	b	c		(0.5) ft BGS	(1.5) ft BGS	(2.5) ft BGS	(0.5) ft BGS
	Units								
Volatile Organic Compounds (VOCs)									
cis-1,2-Dichloroethene	ug/L	70	70	620	2,800	7.2	**1400[abc]**	**1800[abc]**	1.7
Trichloroethene	ug/L	5	5	200	3,500	1.0 U	**7.8 J[ab]**	**36 J[ab]**	0.15 J
Vinyl chloride	ug/L	2	2	13	17,000	**37[abc]**	**1800[abc]**	**2100[abc]**	1.9

Notes:

[1] EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

[2] Mixing Zone Based Criteria defaulted to the FAV for all calculated criteria presented on Tables 2.1 through 2.4. The final acute value for aquatic life must not be exceeded when developing mixing zone-based GSI criteria, unless the MDEQ determines it is acceptable (MDEQ, GSI Pathway Compliance Options, April 2018)

U - Not detected at the associated reporting limit.

J - Estimated concentration.

37[abc] - boxed cell denotes exceedance of cleanup criteria screening level identified by superscript.
-shaded boxed cell denotes exceedance of calculated Mixing-Zone Based GSI Criteria

Table 5

Porewater, Seep, And Historical Outfall Analytical Results Compared To Mixing Zone-Based GSI Criteria
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Sample Location:		PW-03-19	SEEP-4	SEEP-4	OutFall #11	OutFall #11	OutFall #11	OutFall #13	OutFall #14
Sample Identification:		PW-17303-050619-KT-006	W-17303-091418-DA-004	W-17303-091418-DA-005	GW-17303-120303-DCR-274	GW-17303-DCR-121003	SW-17303-021016-CB-012	SW-17303-021016-CB-013	SW-17303-021016-CB-014
Sample Date:		5/6/2019	9/14/2018	9/14/2018	12/3/2003	12/10/2003	2/10/2016	2/10/2016	2/10/2016
Sample Type:				Duplicate	Dry Weather	Wet Weather	Dry Weather	Dry Weather	Dry Weather
Sample Depth:		(0.5) ft BGS			-	-	-	-	-
	Units								
Volatile Organic Compounds (VOCs)									
cis-1,2-Dichloroethene	ug/L	0.89 J	15 J	7.3 J	**500[ab]**	3.7	1.5	11	0.82 J
Trichloroethene	ug/L	1.0 U	1.0 U	1.0 U	**40[ab]**	0.44 J	0.43 J	3.9	0.38 J
Vinyl chloride	ug/L	1.6	**16 J[abc]**	**8.1 J[ab]**	**390[abc]**	**3.5[ab]**	0.65 J	1.1	1.0 U

Notes:

(1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

(2) Mixing Zone Based Criteria defaulted to the FAV for all calculated criteria presented on Tables 2.1 through 2.4. The final acute value for aquatic life must not be exceeded when developing mixing zone-based GSI criteria, unless the MDEQ determines it is acceptable (MDEQ, GSI Pathway Compliance Options, April 2018)

U - Not detected at the associated reporting limit.

J - Estimated concentration.

37[abc] - boxed cell denotes exceedance of cleanu

-shaded boxed cell denotes exceedance of

Table 6

Select Soil Sampling Analytical Results Compared to Mixing Zone Based GSIPC
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Sample Location:								GS-29-SB	GS-29-SB	GS-29-SB	GS-29-SB	GS-29-SB	GS-30-SB	GS-30-SB	GS-32-SB
Sample Identification:		**EGLE Generic Groundwater Cleanup Criteria: Residential and Nonresidential[1]**						S-17303-091318-DA-021	SO-17303-022618-DS-010	SO-17303-022618-DS-011	SO-17303-022618-DS-013	SO-17303-022618-DS-012	SO-17303-022618-DS-014	SO-17303-022618-DS-015	SO-17303-022718-DS-019
Sample Date:							Mixing Zone-Based GSIP Calculated Criteria[2]	9/13/2018	2/26/2018	2/26/2018	2/26/2018	2/26/2018	2/26/2018	2/26/2018	2/27/2018
Sample Depth:		Drinking Water Protection	Nonresidential Drinking Water Protection	Groundwater Surface Water Interface Protection	Direct Contact	Nonresidential Direct Contact		(8-10) ft BGS	(0-2) ft BGS	(0-2) ft BGS	(3-5) ft BGS	(5-7.5) ft BGS	(0-2.5) ft BGS	(2.5-5) ft BGS	(0-2) ft BGS
Sample Type:										Duplicate					
Parameters	**Units**	**b**	**c**	**d**	**o**	**p**									
Volatile Organic Compounds (VOCs)															
cis-1,2-Dichloroethene	ug/kg	1400	1400	12000	2500000	8000000	56,000	970	46 UJ	**8400 J[bc]**	**250000[bcd]**	64	130 U	56 U	63 U
Trichloroethene	ug/kg	100	100	4000	110000	660000	70,000	**990[bc]**	46 U	**140[bc]**	**150000[bcdo]**	55 U	130 U	56 U	63 U
Vinyl chloride	ug/kg	40	40	260	3800	34000	340,000	44 U	37 UJ	**1100 J[bcd]**	**4500[bcdo]**	**1700[bcd]**	100 U	45 U	50 U

Notes:

[1] EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.46 and R 299.48., respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

[2]Mixing Zone Based GSIPC in Table 3 were calculated based on FAV values utilized for Mixing Zone-Based GSI criteria. The final acute value for aquatic life must not be exceeded when developing mixing zone-based GSI criteria, unless the MDEQ determines it is acceptable (MDEQ, GSI Pathway Compliance Options, April 2018)

U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.
R - Rejected.

37[abc] - boxed cell denotes exceedance of cleanup criteria screening level identified by superscript.
-shaded boxed cell denotes exceedance of calculated Mixing-Zone Based GSIP Criteria

Table 6

Select Soil Sampling Analytical Results Compared to Mixing Zone Based GSIPC
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Sample Location:		GS-32-SB	GS-43	GS-43	GS-43	GS-43	GS-45	GS-45	GS-45	GS-45	GS-46	GS-46	GS-46
Sample Identification:		**SO-17303-022718-DS-020**	**S-17303-091218-DA-013**	**S-17303-091218-DA-014**	**S-17303-091218-DA-015**	**S-17303-091218-DA-016**	**S-17303-091318-DA-027**	**S-17303-091318-DA-028**	**S-17303-091318-DA-029**	**S-17303-091318-DA-030**	**S-17303-091218-DA-017**	**S-17303-091218-DA-018**	**S-17303-091218-DA-019**
Sample Date:		**2/27/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**
Sample Depth:		**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**
Sample Type:													
Parameters	**Units**												
Volatile Organic Compounds (VOCs)													
cis-1,2-Dichloroethene	ug/kg	65 U	52 U	52 U	51 U	49 U	**2400[bc]**	**8900[bc]**	**90000[bcd]**	**45000[bcd]**	47 U	**45000[bcd]**	**120000[bcd]**
Trichloroethene	ug/kg	65 U	52 U	52 U	51 U	49 U	**420[bc]**	**1100[bc]**	**82000[bcd]**	**29000[bcd]**	47 U	**6300[bcd]**	**250000[bcdo]**
Vinyl chloride	ug/kg	52 U	41 U	42 U	41 U	39 U	**260[bc]**	**1600[bcd]**	**10000[bcdo]**	**4200[bcdo]**	38 U	**2300[bcd]**	4300 U

Table 6

Select Soil Sampling Analytical Results Compared to Mixing Zone Based GSIPC
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Sample Location:		GS-46	GS-50	GS-50	SB-51-19	SB-51-19	SB-51-19	SB-51-19	SB-52-19	SB-52-19	SB-52-19	SB-52-19	SB-52-19	SB-53-19
Sample Identification:		**S-17303-091218-DA-020**	**S-17303-091318-DA-033**	**S-17303-091318-DA-034**	**017303A-042919-DA-001**	**017303A-042919-DA-002**	**017303A-042919-DA-003**	**017303A-042919-DA-004**	**017303A-042919-DA-005**	**017303A-042919-DA-006**	**017303A-042919-DA-007**	**017303A-042919-DA-008**	**017303A-042919-DA-009**	**017303A-042919-DA-010**
Sample Date:		**9/12/2018**	**9/13/2018**	**9/13/2018**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**
Sample Depth:		**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**	**(12-14) ft BGS**	**(0-2) ft BGS**
Sample Type:														
Parameters	**Units**													
Volatile Organic Compounds (VOCs)														
cis-1,2-Dichloroethene	ug/kg	**63000**[bcd]	55	260	60 U	65 U	56 U	56 U	**13000**[bcd]	980	55 U	61	47 J	770
Trichloroethene	ug/kg	**9800**[bcd]	57	**740**[bc]	60 U	65 U	56 U	56 U	**6100**[bcd]	49 J	55 U	33 J	17 J	**530**[bc]
Vinyl chloride	ug/kg	**3000**[bcd]	43 U	39 U	48 U	52 U	45 U	45 U	**380**[bcd]	**230**[bc]	44 U	46 U	43 U	**41 J**[bc]

Table 6

Select Soil Sampling Analytical Results Compared to Mixing Zone Based GSIPC
RACER - Former General Motors Vehicle Operations Area
Ypsilanti, Michigan

Sample Location:		**SB-53-19**	**SB-53-19**	**SB-53-19**	**SB-54-19**	**SB-54-19**	**SB-54-19**	**SB-54-19**	**SB-54-19**	**SB-54-19**	**SB-54-19**
Sample Identification:		**017303A-042919-DA-011**	**017303A-042919-DA-012**	**017303A-042919-DA-013**	**SO-017303A-043019-DA-02**	**SO-017303A-043019-DA-02**	**SO-017303A-043019-DA-02**	**SO-017303A-043019-DA-02**	**SO-017303A-043019-DA-02**	**SO-017303A-043019-DA-02**	**SO-017303A-043019-DA-02**
Sample Date:		**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**
Sample Depth:		**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**	**(12-14) ft BGS**	**(15-17) ft BGS**	**(18-20) ft BGS**
Sample Type:											
Parameters	**Units**										
Volatile Organic Compounds (VOCs)											
cis-1,2-Dichloroethene	ug/kg	55 U	55 U	57 U	55 U	25 J	55 U	56 U	55 U	54 U	53 U
Trichloroethene	ug/kg	55 U	55 U	57 U	55 U	50 U	55 U	56 U	55 U	54 U	53 U
Vinyl chloride	ug/kg	44 U	44 U	45 U	44 U	40 U	44 U	45 U	44 U	43 U	42 U

Appendices

Appendix A

Willow Run Creek - Southern Bank Investigation – Spring 2018

Memorandum

August 11, 2021

To	Mr. Grant Trigger, RACER Trust		
Copy to	Tom Kinney, Beth Landale, Sam Belisle, Spencer Brower		
From	Kaitlyn Trestrail/mk/1	**Tel**	(248) 915 8801
Subject	Willow Run Creek - Southern Bank Investigation – Spring 2018 Willow Run Company Vehicle Operations (CVO) Ypsilanti, Michigan	**Project no.**	11223983

1. Introduction and Background

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), GHD has prepared this summary memo for the Willow Run Company Vehicle Operations (CVO) property located in Ypsilanti, Michigan (Site).

Due to historical fill and dumping activities at the Site, many environmental investigations have been completed to characterize and delineate the impacts within soils and groundwater. Volatile organic compounds (VOCs), semi volatile organic compounds (SVOCs), inorganics, and polychlorinated biphenyls (PCBs) impacts within soils have been observed, while VOCs, primarily chlorinated VOCs, are predominantly the concern in groundwater at the Site. A number of Interim Response Actions (IRAs) and Deed Restrictions have been implemented at the Site to address these contaminants of concern and protect human health and the environment. However, the VOCs in groundwater, particularly vinyl chloride, still remain a concern for off Site migration into nearby surface water body, Willow Run Creek (formerly Tyler Pond).

In the spring of 2017, Tyler Pond water levels were lowered by other parties as a result of removal of a nonfunctioning drainage valve in the dam below Tyler Road. Consequently, lower water levels may have changed hydrogeologic conditions, particularly with regard to groundwater surface water interface (GSI) pathways, as well as exposing additional accessible land adjacent to the former Tyler Pond (water body is now referred to as Willow Run Creek) at the northern boundary of the Site. The current conditions of Willow Run Creek compared to the former shoreline of Tyler Pond is presented on Figure 1.

In response to the change in conditions, GHD conducted a subsurface investigation in March 2018 on the land adjacent to Willow Run Creek to provide further understanding of the GSI pathways at the northern property boundary of the Site. The primary purpose of the subsurface investigation was to install monitoring wells between the existing monitoring wells and Willow Run Creek within the area that was previously part of Tyler Pond. The intent was to evaluate whether the impacted groundwater at the northern perimeter of the Site had migrated to the vicinity of new location of Willow Run Creek. The secondary purpose of the investigation was to collect soil samples to further characterize the extent of impacts and GSI pathways.

2. Scope of Work

Prior to conducting the subsurface investigation, GHD notified MissDig, Michigan's utility one call service, to arrange for public utility locating proximal to the investigation areas. Ground Penetrating Radar Systems, Inc. (GPRS) was retained by GHD to provide private utility locating services prior to conducting drilling activities on the property.

Due to the change in conditions, as described previously, a portion of Tyler Pond that was historically under water is now exposed as dry land. Between February 22 and March 5, 2018, GHD advanced a total of 13 soil borings (GS-22-SB through GS-34-SB) into the now exposed dry land, just south of the current southern edge of Willow Run Creek (surveyed February 13, 2018). Soil boring locations are shown on Figure 2. Ten borings (GS-25-SB through GS-34-SB) were completed using direct push technology (i.e., Geoprobe®) and three (GS-22-SB through GS-24-SB) were completed using hand/pneumatic augers. GS-24-SB was re drilled using the direct push technique to collect a second, deeper sample.

The ten soil borings completed using the Geoprobe® were advanced to a depth of 20 feet below ground surface (bgs). The three hand auger borings (GS-22-SB through GS-24-SB) were advanced to depths of 2 to 2.5 feet bgs. The redrill of GS-24-SB was advanced to 9 feet bgs. Soil samples were examined by GHD personnel for color, soil type, stratigraphy, banding, moisture, odor, visual and olfactory evidence of impact and screened for volatile vapors with a photoionization detector (PID). All soil samples were described and classified in general accordance with the Unified Soil Classification System (USCS).

The soil sample intervals were chosen to horizontally and vertically delineate impacts. The number of samples collected at each boring location and the sample intervals are summarized in Table 1 provided below:

Table 1 Soil Boring Summary

Boring Location	Number of Samples	Sample Intervals (Feet BGS)
GS-22-SB	1	1-2
GS-23-SB	1	1-2
GS-24-SB*	2	0-2.5, 2-5
GS-25-SB	2	0-2, 3-5
GS-26-SB	2	0-2, 3-5
GS-27-SB	2	0-2, 3-5
GS-28-SB	2	0-1, 1-2.5
GS-29-SB	4	0-2, 3-5, 5-7.5
GS-30-SB	2	0-2.5, 2.5-5
GS-31-SB	3	0-2.5, 6-7, 19-20
GS-32-SB	2	0-2, 3-5
GS-33-SB	3	0-2, 3-5, 6.5-7.5
GS-34-SB	2	0-2, 9-10
Footnotes (*) – location was re-drilled to collect deeper samples		

Soil types identified during the investigation included minor top soil near the surface, silty clay, sandy clay, and clayey sand. Clay was the predominant soil type and was found essentially throughout the depth of each boring. Water bearing soil units were not encountered during the investigation; therefore, permanent or temporary monitoring wells were not installed. Soil borings are presented as Attachment A. Soil samples were shipped under chain of custody protocols to TestAmerica Laboratories, Inc. (TestAmerica) in North Canton, Ohio on a normal turnaround time (TAT) and analyzed for total compound list (TCL) VOCs, SVOCs, total metals, and PCBs.

3. Analytical Results Summary

Results were compared to Michigan Department of Environment, Great Lakes, and Energy (EGLE) Generic cleanup criteria for residential and non-residential category pursuant to Part 201 of 1994 PA 451 as amended. Additionally, metal results were compared to lobe specific background concentrations calculated from the 2005 Michigan Background Soil Survey (MBSS) for clay in the Huron – Erie lobe pursuant to Michigan Legislature Section 324.20101(e) "Background Concentration" (ii)(B). Only metals that exceeded the both the 2005 MBSS values and a Michigan EGLE cleanup criteria are discussed in this memorandum.

The lobe specific background concentrations for metals were determined by taking the lesser of:

i. The uppermost value in the typical range of data for the hazardous substance in Table 1 of the 2005 Michigan Background Soil Survey.
ii. The 97.5 quantile for the soil type and glacial lobe area in which the hazardous substance is located.

A summary of the analytical data is presented in Attachment B. The TestAmerica analytical laboratory reports are provided in Attachment C. The VOC results are presented on Figure 3 and the SVOC results are presented on Figure 4.

3.1 Volatile Organic Compounds (VOCs)

VOC exceedances were found at two locations (GS-29-SB and GS-31-SB). The depths of the exceedances, the constituents showing exceedances, and the criteria exceeded are displayed in Table 2 below.

Table 2 VOC Exceedance Summary

Boring Location	Exceedance Intervals (FT BGS)	Volatile Organic Compounds	RDWP	NDWP	GSIP	DC
GS-29-SB	0-2	Cis-1,2-Dichloroethene	X	X		
		Trichloroethene	X	X		
		Vinyl Chloride	X	X	X	
	3-5	Cis-1,2-Dichloroethene	X	X	X	
		Trichloroethene	X	X	X	X
		Vinyl Chloride	X	X	X	X
	5-7.5	Vinyl Chloride	X	X	X	
GS-31-SB	0-2.5	Trichloroethene	X	X		

Footnotes
RDWP – Residential Drinking Water Protection
NDWP – Nonresidential Drinking Water Protection
GSIP – Groundwater Surface Water Interface Protection
DC – Direct Contact

3.2 Semi Volatile Organic Compounds (SVOCs)

SVOC exceedances were found at two locations (GS-24-SB and GS-26-SB). The depths of the exceedances, the constituents showing exceedances, and the criteria exceeded for are displayed in Table 3 below.

Table 3 SVOC Exceedance Summary

Boring Location	Exceedance Intervals (FT BGS)	Volatile Organic Compounds	RDWP	NDWP	GSIP	DC
GS-31-SB	0-2	Benzo(a)Pyrene				X
		Fluoranthene			X	

Boring Location	Exceedance Intervals (FT BGS)	Volatile Organic Compounds	RDWP	NDWP	GSIP	DC
GS-26-SB	0-2	Benzo(a)Pyrene				X
		Carbazole			X	
		Dibenzofuran			X	
		Fluoranthene			X	
		Napthalene			X	
		Phenathrene			X	

3.3 Metals

Exceedances for lead and selenium were found at GS-26-SB in the 0 2 feet bgs interval. Lead concentrations exceeded EGLEs Direct Contact Criteria and selenium exceeded EGLEs GSI criteria.

3.4 Polychlorinated Biphenols (PCBs)

PCB results were compared to EGLE Part 201 residential and nonresidential direct contact criteria. No exceedances were observed during this investigation.

4. Discussion and Recommendations

Results of the investigation show groundwater surface water interface protection criteria (GSIPC) exceedances included benzo(a)pyrene, carbazole, cis 1,2 dichloroethene, dibenzofuran, fluoranthene, naphthalene, phenathrene, trichlorethene, vinyl chloride. One boring location, GS-26-SB, exceeded EGLEs Part 201 DCC for lead and the GSIPC for selenium. However, given that metals inherently are not very mobile, along with the amount of vegetation in the area, it is unlikely that this contamination would mobilize into the nearby creek.

Based on the 13 soil borings completed (10 soil borings to 20 ft. bgs), no water bearing units were encountered, which renders the groundwater surface water interface (GSI) pathway incomplete (without groundwater, a GSI pathway does not exist). Given that the GSI pathway is not relevant, exceedances of GSIPC are not applicable.

Exceedances of the Part 201 drinking water protection criteria in soil were noted during the investigation. However, no water bearing, permeable materials were encountered during this investigation, which included soil borings reaching depths of 20 ft bgs.

As a result of exceedances being found for VOCs (GS-29-SB and GS-31-SB) and SVOCs (GS-24-SB and GS-26-SB), additional soil borings were recommended to further delineate impacted soil. This delineation and the rational is described in the Willow Run Creek - Additional Southern Bank Investigation – Delineation of SVOC and VOC Soil Impacts – September 2018 memorandum.

Please contact Kaitlyn Trestrail at (248) 915 8801 if you have any questions regarding the information presented in this report or require further information or clarification.

Regards,

Kaitlyn Trestrail

Kaitlyn Trestrail
Environmental Geologist

Figure 1 – Willow Run Creek Current Conditions
Figure 2 – Soil Boring Location Map
Figure 3 - Soil Boring Results - VOCs
Figure 4 - Soil Boring Results - SVOCs & Metals
Attachment A – Analytical Table Soil
Attachment B – Analytical Reports
Attachment C – Soil Boring Logs

Figures



SOURCE: BASE ON GOOGLE EARTH APRIL 2019

LEGEND

FORMER EDGE OF TYLER POND
(APPROXIMATE BASED ON GOOGLE EARTH APRIL 2016)

0 125 250 ft

1" = 250 ft

Coordinate System:
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GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

WILLOW RUN CREEK
CURRENT CONDITIONS

Project No. **11223983**
Date **July 2021**

FIGURE 1

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\MEM-184\11223983-GHD-0000-MEM-EN-0101_DE-184.dwg
Plot Date: 28 July 2021 11:33 AM

LEGEND

- DITCH, STREAM OR RIVER
- FENCE LINE
- TREE LINE
- SANITARY SEWER
- STORM SEWER
- FORMER SLUDGE LINE
- CB15 CATCH BASIN
- M.H. MANHOLE
- FENCE GATE POST
- EDGE OF WATER (SURVEYED FALL 2017)
- MW19-04 GROUNDWATER SAMPLING LOCATION
- MW8 GAUGING LOCATION
- IG-E2 INFILTRATION GALLERY LOCATION
- ★ APPROXIMATE LOCATION OF TYLER POND DAM
- OUTFALL #11 SAMPLING LOCATION
- GROUNDWATER FLOW DIRECTION
- PROPERTY BOUNDARY
- COMPLETED GS SOIL BORING
- SOUTHERN EDGE OF WATER (SURVEYED 2-13-18)
- BOTTOM OF SLOPE (SURVEYED 2-13-18)

GS-22-SB GS-23-SB GS-24-SB GS-25-SB GS-26-SB GS-27-SB GS-28-SB GS-29-SB GS-30-SB GS-31-SB GS-32-SB GS-33-SB GS-34-SB

BERM WATER LEVEL POINT

FORMER TYLER POND

OVERPASS BRIDGE

SHEET PILE WALL

HAULAWAY BLDG.

GUARD SHACK

TYLER ROAD

FONS LANDFILL

TYLER POND OUTLET STRUCTURE

72-INCH YCUA SEWER

TYLER POND DAM*

0 75 150 ft

1" = 150 ft

Coordinate System: <INSERT HERE>

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GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

SOIL BORING LOCATIONS
WILLOW RUN CREEK - SOUTHERN BANK
INVESTIGATION - SPRING 2018

Project No. **11223983**
Date **July 2021**

FIGURE 2

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Plot Date: 28 July 2021 11:44 AM

GS-22-SB	3/5/2018 (1-2) ft BGS ug/kg
VOCs	
cis-1,2-Dichloroethene	53 U
Trichloroethene	53 U
Vinyl chloride	42 U

GS-23-SB	3/5/2018 (1-2) ft BGS ug/kg
VOCs	
cis-1,2-Dichloroethene	51 U
Trichloroethene	51 U
Vinyl chloride	41 U

GS-25-SB	2/23/2018 (0-2) ft BGS ug/kg	2/23/2018 (3-5) ft BGS ug/kg
VOCs		
cis-1,2-Dichloroethene	52 U	51 U
Trichloroethene	52 U	51 U
Vinyl chloride	42 U	41 U

GS-26-SB	2/23/2018 (0-2) ft BGS ug/kg	2/23/2018 (3-5) ft BGS ug/kg
VOCs		
cis-1,2-Dichloroethene	55 U	52 U
Trichloroethene	55 U	52 U
Vinyl chloride	44 U	42 U

GS-27-SB	2/23/2018 (0-2) ft BGS ug/kg	2/23/2018 (3-5) ft BGS ug/kg
VOCs		
cis-1,2-Dichloroethene	59 U	54 U
Trichloroethene	59 U	54 U
Vinyl chloride	47 U	44 U

GS-28-SB	2/22/2018 (0-1) ft BGS ug/kg	2/22/2018 (1-2.5) ft BGS ug/kg
VOCs		
cis-1,2-Dichloroethene	52 U	52 U
Trichloroethene	52 U	52 U
Vinyl chloride	41 U	42 U

GS-24-SB	2/26/2018 (0-2) ft BGS ug/kg	3/5/2018 (2-5) ft BGS ug/kg
VOCs		
cis-1,2-Dichloroethene	87 U	56 U
Trichloroethene	87 U	56 U
Vinyl chloride	70 U	45 U

GS-29-SB	2/26/2018 (0-2) ft BGS ug/kg	2/26/2018 (3-5) ft BGS ug/kg	2/26/2018 (5-7.5) ft BGS ug/kg
VOCs			
cis-1,2-Dichloroethene	46 UJ/8400 J {BC}	250000 {BCD}	64
Trichloroethene	140 {BC}/46 U	150000 {BCDO}	55 U
Vinyl chloride	37 UJ/1100 J {BCD}	4500 {BCDO}	1700 {BCD}

GS-30-SB	2/26/2018 (0-2.5) ft BGS ug/kg	2/26/2018 (2.5-5) ft BGS ug/kg
VOCs		
cis-1,2-Dichloroethene	130 U	56 U
Trichloroethene	130 U	56 U
Vinyl chloride	100 U	45 U

GS-31-SB	2/27/2018 (0-2.5) ft BGS ug/kg	2/27/2018 (6-7) ft BGS ug/kg	2/27/2018 (19-20) ft BGS ug/kg
VOCs			
cis-1,2-Dichloroethene	90	58 U	52 U
Trichloroethene	190 {BC}	58 U	52 U
Vinyl chloride	40 U	46 U	41 U

GS-34-SB	2/28/2018 (0-2) ft BGS ug/kg	2/28/2018 (9-10) ft BGS ug/kg
VOCs		
cis-1,2-Dichloroethene	47 U	55 U
Trichloroethene	47 U	55 U
Vinyl chloride	37 U	44 U

GS-33-SB	2/28/2018 (0-2) ft BGS ug/kg	2/28/2018 (3-5) ft BGS ug/kg	2/28/2018 (6.5-7.5) ft BGS ug/kg
VOCs			
cis-1,2-Dichloroethene	58 U	63 U	55 U
Trichloroethene	58 U	63 U	55 U
Vinyl chloride	46 U	50 U	44 U

GS-32-SB	2/27/2018 (0-2) ft BGS ug/kg	2/27/2018 (3-5) ft BGS ug/kg
VOCs		
cis-1,2-Dichloroethene	63 U	65 U
Trichloroethene	63 U	65 U
Vinyl chloride	50 U	52 U

LEGEND

- DITCH, STREAM OR RIVER
- FENCE LINE
- TREE LINE
- SANITARY SEWER
- STORM SEWER
- FORMER SLUDGE LINE
- CB15 CATCH BASIN
- M.H. MANHOLE
- R.S. FENCE GATE POST
- EDGE OF WATER (SURVEYED FALL 2017)
- MW19-04 GROUNDWATER SAMPLING LOCATION
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- ★ APPROXIMATE LOCATION OF TYLER POND DAM
- OUTFALL #11 SAMPLING LOCATION
- GROUNDWATER FLOW DIRECTION
- PROPERTY BOUNDARY
- COMPLETED GS SOIL BORING
- SOUTHERN EDGE OF WATER (SURVEYED 2-13-18)
- BOTTOM OF SLOPE (SURVEYED 2-13-18)

EGLE Generic Cleanup Criteria: Residential and Nonresidential (1)					
	Background (2) Table 4-Clay Huron - Erie Lobe A	Drinking Water Protection B	Nonresidential Drinking Water Protection C	Groundwater Surface Water Interface Protection D	Direct Contact O	Nonresidential Direct Contact P
Volatile Organic Compounds (VOCs) (ug/kg)						
cis-1,2-Dichloroethene		1400	1400	12000	2500000	8000000
Trichloroethene		100	100	4000	110000	660000
Vinyl chloride		40	40	260	3800	34000

0 75 150 ft

1" = 150 ft

Coordinate System: <INSERT HERE>

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WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANT, MICHIGAN

SOIL BORING RESULTS - VOCs
WILLOW RUN CREEK - SOUTHERN BANK INVESTIGATION - SPRING 2018

Project No. 11223983
Date July 2021

FIGURE 3

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Plot Date: 28 July 2021 12:07 PM

GS-22-SB	3/5/2018 (1-2) ft BGS ug/kg
Metals	
Selenium	640
SVOCs	
Benzo(a)pyrene	490 J
Carbazole	1200 U
Dibenzofuran	1200 U
Fluoranthene	1100 J
Naphthalene	44 J
Phenanthrene	320 J

GS-23-SB	3/5/2018 (1-2) ft BGS ug/kg
Metals	
Selenium	610
SVOCs	
Benzo(a)pyrene	68 J
Carbazole	300 U
Dibenzofuran	25 J
Fluoranthene	140 J
Naphthalene	16 J
Phenanthrene	110 J

GS-24-SB	2/26/2018 (0-2) ft BGS ug/kg	3/5/2018 (2-5) ft BGS ug/kg
Metals		
Selenium	800	590
SVOCs		
Benzo(a)pyrene	2600 J {O}	200 J
Carbazole	2700 U	640 U
Dibenzofuran	82 J	26 J
Fluoranthene	5900 {D}	470 J
Naphthalene	410 J	640 U
Phenanthrene	1900 J	240 J

GS-25-SB	2/23/2018 (0-2) ft BGS ug/kg	2/23/2018 (3-5) ft BGS ug/kg
Metals		
Lead - coarse fraction	-	230000
Selenium	900	850
SVOCs		
Benzo(a)pyrene	100 J	230 J
Carbazole	300 U	600 U
Dibenzofuran	20 J	31 J
Fluoranthene	210 J	540 J
Naphthalene	14 J	21 J
Phenanthrene	170 J	290 J

GS-26-SB	2/23/2018 (0-2) ft BGS ug/kg	2/23/2018 (3-5) ft BGS ug/kg
Metals		
Lead - coarse fraction	520000 {O}	-
Selenium	1200 {D}	850
SVOCs		
Benzo(a)pyrene	6900 {O}	52 J
Carbazole	3000 J {D}	300 U
Dibenzofuran	2000 J {D}	19 J
Fluoranthene	22000 {D}	88 J
Naphthalene	3600 J {D}	24 J
Phenanthrene	19000 {D}	130 J

GS-27-SB	2/23/2018 (0-2) ft BGS ug/kg	2/23/2018 (3-5) ft BGS ug/kg
Metals		
Selenium	1000	740
SVOCs		
Benzo(a)pyrene	820	91 J
Carbazole	100 J	310 U
Dibenzofuran	37 J	15 J
Fluoranthene	1400	220 J
Naphthalene	31 J	12 J
Phenanthrene	580 J	160 J

GS-29-SB	2/26/2018 (0-2) ft BGS ug/kg	2/26/2018 (3-5) ft BGS ug/kg	2/26/2018 (5-7.5) ft BGS ug/kg
Metals			
Selenium	400/400	510	620
SVOCs			
Benzo(a)pyrene	55 J/36 J	310 U	310 U
Carbazole	300 U/300 U	310 U	310 U
Dibenzofuran	300 U/300 U	310 U	17 J
Fluoranthene	130 J/70 J	8.5 J	310 U
Naphthalene	300 U/6.3 J	14 J	26 J
Phenanthrene	40 J/72 J	45 J	57 J

GS-30-SB	2/26/2018 (0-2.5) ft BGS ug/kg	2/26/2018 (2.5-5) ft BGS ug/kg
Metals		
Selenium	510	550
SVOCs		
Benzo(a)pyrene	360 J	310 U
Carbazole	1300 U	310 U
Dibenzofuran	34 J	310 U
Fluoranthene	860 J	310 U
Naphthalene	71 J	310 U
Phenanthrene	370 J	50 J

GS-34-SB	2/28/2018 (0-2) ft BGS ug/kg	2/28/2018 (9-10) ft BGS ug/kg
Metals		
Selenium	770	610
SVOCs		
Benzo(a)pyrene	550 J	6.3 J
Carbazole	99 J	310 U
Dibenzofuran	48 J	21 J
Fluoranthene	1300	7.6 J
Naphthalene	41 J	22 J
Phenanthrene	610 J	66 J

GS-33-SB	2/28/2018 (0-2) ft BGS ug/kg	2/28/2018 (3-5) ft BGS ug/kg	2/28/2018 (6.5-7.5) ft BGS ug/kg
Metals			
Selenium	690	550	570
SVOCs			
Benzo(a)pyrene	43 J	340 U	310 U
Carbazole	330 U	340 U	310 U
Dibenzofuran	26 J	340 U	18 J
Fluoranthene	110 J	340 U	4.0 J
Naphthalene	38 J	340 U	9.9 J
Phenanthrene	170 J	340 U	72 J

GS-28-SB	2/22/2018 (0-1) ft BGS ug/kg	2/22/2018 (1-2.5) ft BGS ug/kg
Metals		
Selenium	840	930
SVOCs		
Benzo(a)pyrene	60 J	44 J
Carbazole	300 U	300 U
Dibenzofuran	24 J	23 J
Fluoranthene	86 J	53 J
Naphthalene	28 J	22 J
Phenanthrene	130 J	120 J

GS-31-SB	2/27/2018 (0-2.5) ft BGS ug/kg	2/27/2018 (6-7) ft BGS ug/kg	2/27/2018 (19-20) ft BGS ug/kg
Metals			
Selenium	440	650	540
SVOCs			
Benzo(a)pyrene	1700 J	320 U	310 U
Carbazole	3000 U	320 U	310 U
Dibenzofuran	3000 U	320 U	310 U
Fluoranthene	3100	320 U	310 U
Naphthalene	3000 U	320 U	310 U
Phenanthrene	500 J	48 J	11 J

GS-32-SB	2/27/2018 (0-2) ft BGS ug/kg	2/27/2018 (3-5) ft BGS ug/kg
Metals		
Selenium	640	530
SVOCs		
Benzo(a)pyrene	160 J	350 U
Carbazole	320 U	350 U
Dibenzofuran	10 J	350 U
Fluoranthene	340	7.9 J
Naphthalene	8.3 J	350 U
Phenanthrene	140 J	6.2 J

EGLE Generic Cleanup Criteria: Residential and Nonresidential (1)	Background (2)	Drinking Water Protection	Nonresidential Drinking Water Protection	Groundwater Surface Water Interface Protection	Direct Contact	Nonresidential Direct Contact
Table 4-Clay						
Huron - Erie Lobe						
A		B	C	D	O	P
Semi-Volatile Organic Compounds (SVOCs) (ug/kg)						
Benzo(a)pyrene		NLL	NLL	NLL	2000	8000
Carbazole		9400	39000	1100	530000	2400000
Dibenzofuran		ID	ID	1700	ID	ID
Fluoranthene		730000	730000	5500	46000000	130000000
Naphthalene		35000	100000	730	16000000	52000000
Phenanthrene		56000	160000	2100	1600000	5200000
Metals (ug/kg)						
Lead - coarse fraction		700000	700000	10600000	400000	900000
Selenium	1000	4000	4000	400	2600000	9600000

LEGEND

- DITCH, STREAM OR RIVER
- FENCE LINE
- TREE LINE
- SANITARY SEWER
- STORM SEWER
- FORMER SLUDGE LINE
- CB15 CATCH BASIN
- M.H. MANHOLE
- FENCE GATE POST
- EDGE OF WATER (SURVEYED FALL 2017)
- MW19-04 GROUNDWATER SAMPLING LOCATION
- MW8 GAUGING LOCATION
- IG-E2 INFILTRATION GALLERY LOCATION
- APPROXIMATE LOCATION OF TYLER POND DAM
- OUTFALL #11 SAMPLING LOCATION
- GROUNDWATER FLOW DIRECTION
- PROPERTY BOUNDARY
- COMPLETED GS SOIL BORING
- SOUTHERN EDGE OF WATER (SURVEYED 2-13-18)
- BOTTOM OF SLOPE (SURVEYED 2-13-18)

0 75 150 ft

1" = 150 ft

Coordinate System: <INSERT HERE>

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GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

SOIL BORING RESULTS - SVOCs & METALS
WILLOW RUN CREEK - SOUTHERN BANK
INVESTIGATION - SPRING 2018

Project No. **11223983**
Date **July 2021**

FIGURE 4

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\MEM-184\11223983-GHD-0000-MEM-EN-0104_DE-184.dwg
Plot Date: 28 July 2021 12:01 PM

Attachments

Attachment A

Analytical Table - Soil

Soil Sampling Analytical Results
RACER - Commercial Vehicle Operations (CVO)
Ypsilanti, Michigan

Sample Location:								GS-22-SB	GS-23-SB	GS-24-SB	GS-24-SB	GS-25-SB	GS-25-SB	GS-26-SB	GS-26-SB
Sample Identification:		**EGLE Generic Cleanup Criteria: Residential and Nonresidential** [1]						**SO-17303-030518-DA-028**	**SO-17303-030518-DA-027**	**SO-17303-022618-DS-009**	**SO-17303-030518-DA-026**	**SO-17303-022318-DS-007**	**SO-17303-022318-DS-008**	**SO-17303-022318-DS-005**	**SO-17303-022318-DS-006**
Sample Date:		Background [2]	Drinking	Nonresidential Drinking	Groundwater	Direct	Nonresidential Direct	**3/5/2018**	**3/5/2018**	**2/26/2018**	**3/5/2018**	**2/23/2018**	**2/23/2018**	**2/23/2018**	**2/23/2018**
Sample Depth:		Table 4-Clay	Water	Water	Surface Water	Contact	Contact	**(1-2) ft BGS**	**(1-2) ft BGS**	**(0-2) ft BGS**	**(2-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**
Sample Type:		Huron - Erie Lobe	Protection	Protection	Interface Protection										
Parameters	**Units**	a	b	c	d	o	p								
Volatile Organic Compounds (VOCs)															
1,1,1-Trichloroethane	ug/kg		4000	4000	1800	500000000	1000000000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
1,1,2,2-Tetrachloroethane	ug/kg		170	700	1600	53000	240000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
1,1,2-Trichloroethane	ug/kg		100	100	6600	180000	840000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
1,1-Dichloroethane	ug/kg		18000	50000	15000	27000000	87000000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
1,1-Dichloroethene	ug/kg		140	140	2600	200000	660000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
1,2,4-Trichlorobenzene	ug/kg		4200	4200	5900	990000	5800000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg		10	10	ID	4400000	20000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg		20	20	110	92	430	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
1,2-Dichlorobenzene	ug/kg		14000	14000	280	19000000	63000000	110 U	100 U	170 U	110 U	100 U	100 U	110 U	100 U
1,2-Dichloroethane	ug/kg		100	100	7200	91000	420000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
1,2-Dichloropropane	ug/kg		100	100	4600	140000	660000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
1,3-Dichlorobenzene	ug/kg		170	480	680	200000	660000	110 U	100 U	170 U	110 U	100 U	100 U	110 U	100 U
1,4-Dichlorobenzene	ug/kg		1700	1700	360	400000	1900000	110 U	100 U	170 U	110 U	100 U	100 U	110 U	100 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg		260000	760000	44000	120000000	700000000	790 U	770 U	1300 U	840 U	790 U	770 U	830 U	780 U
2-Hexanone	ug/kg		20000	58000	ID	32000000	100000000	2600 U	2600 U	4300 U	2800 U	2600 U	2600 U	2800 U	2600 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	ug/kg		36000	100000	ID	56000000	180000000	2600 U	2600 U	4300 U	2800 U	2600 U	2600 U	2800 U	2600 U
Acetone	ug/kg		15000	42000	34000	23000000	73000000	790 U	770 U	1300 U	840 U	790 U	770 U	830 U	780 U
Benzene	ug/kg		100	100	4000	180000	840000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Bromodichloromethane	ug/kg		1600	1600	ID	110000	490000	110 U	100 U	170 U	110 U	100 U	100 U	110 U	100 U
Bromoform	ug/kg		1600	1600	ID	820000	3800000	110 U	100 U	170 U	110 U	100 U	100 U	110 U	100 U
Bromomethane (Methyl bromide)	ug/kg		200	580	100	320000	1000000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
Carbon disulfide	ug/kg		16000	46000	ID	7200000	43000000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
Carbon tetrachloride	ug/kg		100	100	760	96000	440000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Chlorobenzene	ug/kg		2000	2000	500	4300000	14000000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Chloroethane	ug/kg		8600	34000	22000	2600000	12000000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
Chloroform (Trichloromethane)	ug/kg		1600	1600	7000	1200000	5500000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Chloromethane (Methyl chloride)	ug/kg		5200	22000	ID	1600000	7400000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
cis-1,2-Dichloroethene	ug/kg		1400	1400	12000	2500000	8000000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
cis-1,3-Dichloropropene	ug/kg							53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Cyclohexane	ug/kg							1300 U	1200 U	2100 U	1300 U	1300 U	1200 U	1300 U	1200 U
Dibromochloromethane	ug/kg		1600	1600	ID	110000	500000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Dichlorodifluoromethane (CFC-12)	ug/kg		95000	270000	ID	52000000	170000000	110 U	100 U	170 U	110 U	100 U	100 U	110 U	100 U
Ethylbenzene	ug/kg		1500	1500	360	22000000	71000000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Isopropyl benzene	ug/kg		91000	260000	3200	25000000	80000000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
Methyl acetate	ug/kg							1300 U	1200 U	190 J	1300 U	1300 U	1200 U	120 J	1200 U
Methyl cyclohexane	ug/kg							51 J	1200 U	2100 U	81 J	1300 U	1200 U	1300 U	82 J
Methyl tert butyl ether (MTBE)	ug/kg		800	800	140000	1500000	7100000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
Methylene chloride	ug/kg		100	100	30000	1300000	5800000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
Styrene	ug/kg		2700	2700	2100	400000	1900000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Tetrachloroethene	ug/kg		100	100	1200	200000	930000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Toluene	ug/kg		16000	16000	5400	50000000	160000000	110 U	100 U	170 U	110 U	100 U	100 U	110 U	100 U
trans-1,2-Dichloroethene	ug/kg		2000	2000	30000	3800000	12000000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
trans-1,3-Dichloropropene	ug/kg							53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Trichloroethene	ug/kg		100	100	4000	110000	660000	53 U	51 U	87 U	56 U	52 U	51 U	55 U	52 U
Trichlorofluoromethane (CFC-11)	ug/kg		52000	150000		79000000	260000000	110 U	100 U	170 U	110 U	100 U	100 U	110 U	100 U
Trifluorotrichloroethane (CFC-113)	ug/kg		9000000	9000000	1700	1000000000	1000000000	260 U	260 U	430 U	280 U	260 U	260 U	280 U	260 U
Vinyl chloride	ug/kg		40	40	260	3800	34000	42 U	41 U	70 U	45 U	42 U	41 U	44 U	42 U
Xylenes (total)	ug/kg		5600	5600	980	410000000	1000000000	160 U	150 U	260 U	170 U	160 U	150 U	170 U	160 U

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Sample Type:		Huron - Erie Lobe	Protection	Protection	Interface Protection										
Parameters	**Units**	a	b	c	d	o	p								
Semi-Volatile Organic Compounds (SVOCs)															
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl)	ug/kg							1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2,4,5-Trichlorophenol	ug/kg		39000	110000		23000000	73000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2,4,6-Trichlorophenol	ug/kg		2400	9400	330	710000	3300000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2,4-Dichlorophenol	ug/kg		1500	4200	330	660000	3900000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2,4-Dimethylphenol	ug/kg		7400	20000	7600	11000000	36000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2,4-Dinitrophenol	ug/kg							700 U	170 U	1500 U	360 U	170 U	340 U	3500 U	170 U
2,4-Dinitrotoluene	ug/kg		430	640		48000	220000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2,6-Dinitrotoluene	ug/kg							1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2-Chloronaphthalene	ug/kg		620000	1800000		56000000	180000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2-Chlorophenol	ug/kg		900	2600	360	1400000	4500000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2-Methylnaphthalene	ug/kg		57000	170000	4200	8100000	26000000	80 J	50 J	230 J	65 J	49 J	49 J	1200 J	81 J
2-Methylphenol	ug/kg		7400	20000	1000	11000000	36000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
2-Nitroaniline	ug/kg							940 U	230 U	2000 U	480 U	230 U	460 U	4700 U	230 U
2-Nitrophenol	ug/kg		400	1200	ID	630000	2000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
3&4-Methylphenol	ug/kg		7400	20000	1000	11000000	36000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
3,3'-Dichlorobenzidine	ug/kg		2000	2000	2000	6600	30000	7500 U	1800 U	16000 U	3900 U	1800 U	3700 U	38000 U	1800 U
3-Nitroaniline	ug/kg							940 U	230 U	2000 U	480 U	230 U	460 U	4700 U	230 U
4,6-Dinitro-2-methylphenol	ug/kg		830	830		79000	260000	700 U	170 U	1500 U	360 U	170 U	340 U	3500 U	170 U
4-Bromophenyl phenyl ether	ug/kg							1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
4-Chloro-3-methylphenol	ug/kg		5800	16000	280	4500000	15000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
4-Chloroaniline	ug/kg							940 U	230 U	2000 U	480 U	230 U	460 U	4700 U	230 U
4-Chlorophenyl phenyl ether	ug/kg							1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
4-Nitroaniline	ug/kg							940 U	230 U	2000 U	480 U	230 U	460 U	4700 U	230 U
4-Nitrophenol	ug/kg							1500 U	380 U	3300 U	800 U	380 U	750 U	7800 U	380 U
Acenaphthene	ug/kg		300000	880000	8700	41000000	130000000	36 J	21 J	120 J	37 J	15 J	32 J	4700 J	14 J
Acenaphthylene	ug/kg		5900	17000	ID	1600000	5200000	1200 U	300 U	41 J	640 U	300 U	7.8 J	6200 U	4.3 J
Acetophenone	ug/kg		30000	88000	ID	47000000	150000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Anthracene	ug/kg		41000	41000	ID	230000000	730000000	63 J	16 J	280 J	31 J	19 J	53 J	5300 J	11 J
Atrazine	ug/kg		60	60	150	71000	330000	190 U	46 U	400 U	96 U	46 U	91 U	940 U	45 U
Benzaldehyde	ug/kg							1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Benzo(a)anthracene	ug/kg		NLL	NLL	NLL	20000	80000	310 J	48 J	1700 J	140 J	66 J	180 J	7500	27 J
Benzo(a)pyrene	ug/kg		NLL	NLL	NLL	2000	8000	490 J	68 J	**2600 J[o]**	200 J	100 J	230 J	**6900[o]**	52 J
Benzo(b)fluoranthene	ug/kg		NLL	NLL	NLL	20000	80000	910 J	98 J	4700	390 J	130 J	320 J	9700	61 J
Benzo(g,h,i)perylene	ug/kg		NLL	NLL	NLL	2500000	7000000	340 J	58 J	1900 J	130 J	52 J	120 J	3000 J	37 J
Benzo(k)fluoranthene	ug/kg		NLL	NLL	NLL	200000	800000	300 J	43 J	1900 J	130 J	48 J	100 J	2900 J	24 J
Biphenyl (1,1-Biphenyl)	ug/kg							1200 U	10 J	2700 U	640 U	12 J	11 J	310 J	14 J
bis(2-Chloroethoxy)methane	ug/kg							1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
bis(2-Chloroethyl)ether	ug/kg		100	170	100	13000	58000	370 U	91 U	810 U	190 U	92 U	180 U	1900 U	91 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg		NLL	NLL	NLL	2800000	12000000	390 J	86 J	930 J	240 J	300 U	600 U	6200 U	300 U
Butyl benzylphthalate (BBP)	ug/kg		2200000	5600000	120000	36000000	120000000	150 J	300 U	280 J	640 U	300 U	600 U	6200 U	300 U
Caprolactam	ug/kg		120000	340000		53000000	310000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Carbazole	ug/kg		9400	39000	1100	530000	2400000	1200 U	300 U	2700 U	640 U	300 U	600 U	**3000 J[d]**	300 U
Chrysene	ug/kg		NLL	NLL	NLL	2000000	8000000	490 J	86 J	2900	260 J	97 J	230 J	6800	61 J
Dibenz(a,h)anthracene	ug/kg		NLL	NLL	NLL	2000	8000	160 J	33 J	2700 U	73 J	35 J	72 J	1300 J	300 U
Dibenzofuran	ug/kg		ID	ID	1700	ID	ID	1200 U	25 J	82 J	26 J	20 J	31 J	**2000 J[d]**	19 J
Diethyl phthalate	ug/kg		110000	320000	2200	170000000	550000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Dimethyl phthalate	ug/kg		1500000	4200000		1000000000	1000000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Di-n-butylphthalate (DBP)	ug/kg		960000	2700000	11000	27000000	87000000	1200 U	300 U	2700 U	640 U	27 J	600 U	6200 U	44 J
Di-n-octyl phthalate (DnOP)	ug/kg		100000000	290000000	ID	6900000	20000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Fluoranthene	ug/kg		730000	730000	5500	46000000	130000000	1100 J	140 J	**5900[d]**	470 J	210 J	540 J	**22000[d]**	88 J
Fluorene	ug/kg		390000	890000	5300	27000000	87000000	26 J	19 J	190 J	37 J	16 J	34 J	3200 J	14 J
Hexachlorobenzene	ug/kg		1800	1800	350	8900	37000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Hexachlorobutadiene	ug/kg		26000	72000	91	100000	470000	190 U	46 U	400 U	96 U	46 U	91 U	940 U	45 U
Hexachlorocyclopentadiene	ug/kg		320000	320000	ID	2300000	6700000	1200 U	300 U	R	640 U	300 U	R	6200 U	300 U
Hexachloroethane	ug/kg		430	1200	1800	230000	730000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Indeno(1,2,3-cd)pyrene	ug/kg		NLL	NLL	NLL	20000	80000	330 J	51 J	1700 J	140 J	46 J	120 J	2900 J	27 J
Isophorone	ug/kg		15000	62000	26000	4800000	22000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Naphthalene	ug/kg		35000	100000	730	16000000	52000000	44 J	16 J	410 J	640 U	14 J	21 J	**3600 J[d]**	24 J
Nitrobenzene	ug/kg		330	330	3600	100000	340000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
N-Nitrosodi-n-propylamine	ug/kg		330	330		1200	5400	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
N-Nitrosodiphenylamine	ug/kg		5400	22000		1700000	7800000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Pentachlorophenol	ug/kg		22	22	26500	90000	320000	700 U	170 U	1500 U	360 U	170 U	340 U	3500 U	170 U
Phenanthrene	ug/kg		56000	160000	2100	1600000	5200000	320 J	110 J	1900 J	240 J	170 J	290 J	**19000[d]**	130 J
Phenol	ug/kg		88000	260000	9000	40000000	230000000	1200 U	300 U	2700 U	640 U	300 U	600 U	6200 U	300 U
Pyrene	ug/kg		480000	480000	ID	29000000	84000000	900 J	120 J	4800	400 J	150 J	370 J	14000	70 J

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Sample Depth:		Table 4-Clay	Water	Water	Surface Water	Contact	Contact	**(1-2) ft BGS**	**(1-2) ft BGS**	**(0-2) ft BGS**	**(2-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**
Sample Type:		Huron - Erie Lobe	Protection	Protection	Interface Protection										
Parameters	**Units**	a	b	c	d	o	p								
Metals															
Antimony	ug/kg		4300	4300	94000	180000	670000	320 J	300 J	640 J	220 J	210 J	710 J	740 J	180 J
Arsenic	ug/kg	27700	4600	4600	4600	7600	37000	5300	5700	6500	6700	6500	6800	6200	8600
Barium	ug/kg	220000	1300000	1300000	1250000	37000000	130000000	44000	49000	71000	60000	56000	76000	75000	56000
Beryllium	ug/kg	1800	51000	51000	948000	410000	1600000	260	360	350	430	460	450	420	450
Cadmium	ug/kg	2500	6000	6000	7320	550000	2100000	810	280	1100	380	480	1100	1900	330
Chromium	ug/kg	55000	1000000000	1000000000	6620000000	790000000	1000000000	12000	11000	17000	17000	13000	17000	15000	13000
Cobalt	ug/kg	12000	800	2000	2000	2600000	9000000	5100	7300	4300	8700	7700	7700	7200	8700
Copper	ug/kg	48200	5800000	5800000	167000	20000000	73000000	19000	16000	27000	18000	20000	22000	19000	20000
Lead	ug/kg	30300	700000	700000	10600000	400000	900000	33000	11000	56000	18000	21000	--	--	16000
Lead - coarse fraction	ug/kg		700000	700000	10600000	400000	900000	--	--	--	--	--	230000	**520000[o]**	--
Lead - fine fraction	ug/kg		700000	700000	10600000	400000	900000	--	--	--	--	--	200000	130000	--
Lead - total (calculated by fine/coarse fraction)	ug/kg		700000	700000	10600000	400000	900000	--	--	--	--	--	220000	360000	--
Manganese	ug/kg	767000	1000	1000	130000	25000000	90000000	290000	310000	390000	340000	350000	310000	320000	330000
Mercury	ug/kg	600	1700	1700	50	160000	580000	20 J	43 U	59 J	42 U	46 U	27 J	22 J	47 U
Nickel	ug/kg	39000	100000	100000	166000	40000000	150000000	15000	22000	14000	27000	23000	23000	21000	26000
Selenium	ug/kg	1000	4000	4000	400	2600000	9600000	640	610	800	590	900	850	**1200[d]**	850
Silver	ug/kg	1900	4500	13000	100	2500000	9000000	94	45 J	150	53 J	58 J	130	78 J	54 J
Thallium	ug/kg		2300	2300	4200	35000	130000	240	380	250	380	370	360	310	370
Vanadium	ug/kg		72000	990000	430000	750000	5500000	15000	16000	14000	20000	17000	18000	16000	18000
Zinc	ug/kg	75000	2400000	5000000	377000	170000000	630000000	110000 J	46000 J	250000	63000 J	78000	84000	120000	63000
PCBs															
Aroclor-1016 (PCB-1016)	ug/kg		NLL	NLL	NLL	4000	16000	55 U	56 U	75 U	58 U	56 U	56 U	59 U	55 U
Aroclor-1221 (PCB-1221)	ug/kg		NLL	NLL	NLL	4000	16000	55 U	56 U	75 U	58 U	56 U	56 U	59 U	55 U
Aroclor-1232 (PCB-1232)	ug/kg		NLL	NLL	NLL	4000	16000	55 U	56 U	75 U	58 U	56 U	56 U	59 U	55 U
Aroclor-1242 (PCB-1242)	ug/kg		NLL	NLL	NLL	4000	16000	55 U	56 U	75 U	58 U	56 U	56 U	59 U	55 U
Aroclor-1248 (PCB-1248)	ug/kg		NLL	NLL	NLL	4000	16000	55 U	56 U	110	58 U	470 J	300 J	65 J	62 J
Aroclor-1254 (PCB-1254)	ug/kg		NLL	NLL	NLL	4000	16000	55 U	56 U	75 U	36 J	56 U	56 U	59 U	55 U
Aroclor-1260 (PCB-1260)	ug/kg		NLL	NLL	NLL	4000	16000	48 J	51 J	98 J	58 U	410 J	200 J	120 J	55 U
Total PCBs	ug/kg		NLL	NLL	NLL	4000	16000	48 J	51 J	208 J	36 J	880 J	500 J	185 J	62 J

Notes:

[1] EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.46 and R 299.48, respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

[2] EGLE - EGLE, Remediation and Redevelopment Division, Soil Background and Use of the 2005 Michigan Background Soil Survey, Table 4-Clay, Huron-Erie Lobe, September 2019.

U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.
R - Rejected.

37[abc] - boxed cell denotes exceedance of cleanup criteria screening level identified by superscript.

Soil Sampling Analytical Results
RACER - Commercial Vehicle Operations (CVO)
Ypsilanti, Michigan

Sample Location:		GS-27-SB	GS-27-SB	GS-28-SB	GS-28-SB	GS-29-SB	GS-29-SB	GS-29-SB	GS-29-SB	GS-30-SB	GS-30-SB	GS-31-SB	GS-31-SB
Sample Identification:		**SO-17303-022318-DS-003**	**SO-17303-022318-DS-004**	**SO-17303-022218-DS-001**	**SO-17303-022218-DS-002**	**SO-17303-022618-DS-010**	**SO-17303-022618-DS-011**	**SO-17303-022618-DS-013**	**SO-17303-022618-DS-012**	**SO-17303-022618-DS-014**	**SO-17303-022618-DS-015**	**SO-17303-022718-DS-016**	**SO-17303-022718-DS-017**
Sample Date:		**2/23/2018**	**2/23/2018**	**2/22/2018**	**2/22/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/27/2018**	**2/27/2018**
Sample Depth:		**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-1) ft BGS**	**(1-2.5) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7.5) ft BGS**	**(0-2.5) ft BGS**	**(2.5-5) ft BGS**	**(0-2.5) ft BGS**	**(6-7) ft BGS**
Sample Type:							**Duplicate**						
Parameters	**Units**												
Volatile Organic Compounds (VOCs)													
1,1,1-Trichloroethane	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
1,1,2,2-Tetrachloroethane	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
1,1,2-Trichloroethane	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
1,1-Dichloroethane	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
1,1-Dichloroethene	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
1,2,4-Trichlorobenzene	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
1,2-Dichlorobenzene	ug/kg	120 U	110 U	100 U	100 U	93 U	200 U	11000 U	110 U	250 U	110 U	100 U	120 U
1,2-Dichloroethane	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
1,2-Dichloropropane	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
1,3-Dichlorobenzene	ug/kg	120 U	110 U	100 U	100 U	93 U	200 U	11000 U	110 U	250 U	110 U	100 U	120 U
1,4-Dichlorobenzene	ug/kg	120 U	110 U	100 U	100 U	93 U	200 U	11000 U	110 U	250 U	110 U	100 U	120 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	890 U	820 U	780 U	780 U	690 U	1500 U	79000 U	820 U	1900 U	840 U	760 U	860 U
2-Hexanone	ug/kg	3000 U	2700 U	2600 U	2600 U	2300 U	5100 U	260000 U	2700 U	6300 U	2800 U	2500 U	2900 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	ug/kg	3000 U	2700 U	2600 U	2600 U	2300 U	5100 U	260000 U	2700 U	6300 U	2800 U	2500 U	2900 U
Acetone	ug/kg	890 U	820 U	780 U	780 U	690 U	1500 U	79000 U	820 U	1900 U	840 U	760 U	860 U
Benzene	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Bromodichloromethane	ug/kg	120 U	110 U	100 U	100 U	93 U	200 U	11000 U	110 U	250 U	110 U	100 U	120 U
Bromoform	ug/kg	120 U	110 U	100 U	100 U	93 U	200 U	11000 U	110 U	250 U	110 U	100 U	120 U
Bromomethane (Methyl bromide)	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
Carbon disulfide	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
Carbon tetrachloride	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Chlorobenzene	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Chloroethane	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
Chloroform (Trichloromethane)	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Chloromethane (Methyl chloride)	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
cis-1,2-Dichloroethene	ug/kg	59 U	54 U	52 U	52 U	46 UJ	**8400 J[bc]**	**250000[bcd]**	64	130 U	56 U	90	58 U
cis-1,3-Dichloropropene	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Cyclohexane	ug/kg	1400 U	1300 U	1200 U	1300 U	1100 U	2400 U	130000 U	1300 U	3000 U	1300 U	1200 U	1400 U
Dibromochloromethane	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Dichlorodifluoromethane (CFC-12)	ug/kg	120 U	110 U	100 U	100 U	93 U	200 U	11000 U	110 U	250 U	110 U	100 U	120 U
Ethylbenzene	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Isopropyl benzene	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
Methyl acetate	ug/kg	220 J	1300 U	1200 U	1300 U	1100 U	2400 U	130000 U	1300 U	310 J	1300 U	1200 U	1400 U
Methyl cyclohexane	ug/kg	1400 U	1300 U	52 J	110 J	1100 U	2400 U	130000 U	1300 U	3000 U	1300 U	1200 U	1400 U
Methyl tert butyl ether (MTBE)	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
Methylene chloride	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
Styrene	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Tetrachloroethene	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Toluene	ug/kg	120 U	110 U	100 U	100 U	93 U	200 U	11000 U	110 U	250 U	110 U	100 U	120 U
trans-1,2-Dichloroethene	ug/kg	59 U	54 U	52 U	52 U	46 U	220	5300 U	55 U	130 U	56 U	51 U	58 U
trans-1,3-Dichloropropene	ug/kg	59 U	54 U	52 U	52 U	46 U	100 U	5300 U	55 U	130 U	56 U	51 U	58 U
Trichloroethene	ug/kg	59 U	54 U	52 U	52 U	46 U	**140[bc]**	**150000[bcdo]**	55 U	130 U	56 U	**190[bc]**	58 U
Trichlorofluoromethane (CFC-11)	ug/kg	120 U	110 U	100 U	100 U	93 U	200 U	11000 U	110 U	250 U	110 U	100 U	120 U
Trifluorotrichloroethane (CFC-113)	ug/kg	300 U	270 U	260 U	260 U	230 U	510 U	26000 U	270 U	630 U	280 U	250 U	290 U
Vinyl chloride	ug/kg	47 U	44 U	41 U	42 U	37 UJ	**1100 J[bcd]**	**4500[bcdo]**	**1700[bcd]**	100 U	45 U	40 U	46 U
Xylenes (total)	ug/kg	180 U	160 U	160 U	160 U	140 U	310 U	16000 U	160 U	380 U	170 U	150 U	170 U

Soil Sampling Analytical Results
RACER - Commercial Vehicle Operations (CVO)
Ypsilanti, Michigan

Sample Location:		GS-27-SB	GS-27-SB	GS-28-SB	GS-28-SB	GS-29-SB	GS-29-SB	GS-29-SB	GS-29-SB	GS-30-SB	GS-30-SB	GS-31-SB	GS-31-SB
Sample Identification:		**SO-17303-022318-DS-003**	**SO-17303-022318-DS-004**	**SO-17303-022218-DS-001**	**SO-17303-022218-DS-002**	**SO-17303-022618-DS-010**	**SO-17303-022618-DS-011**	**SO-17303-022618-DS-013**	**SO-17303-022618-DS-012**	**SO-17303-022618-DS-014**	**SO-17303-022618-DS-015**	**SO-17303-022718-DS-016**	**SO-17303-022718-DS-017**
Sample Date:		**2/23/2018**	**2/23/2018**	**2/22/2018**	**2/22/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/27/2018**	**2/27/2018**
Sample Depth:		**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-1) ft BGS**	**(1-2.5) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7.5) ft BGS**	**(0-2.5) ft BGS**	**(2.5-5) ft BGS**	**(0-2.5) ft BGS**	**(6-7) ft BGS**
Sample Type:							**Duplicate**						
Parameters	**Units**												
Semi-Volatile Organic Compounds (SVOCs)													
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl)	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2,4,5-Trichlorophenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2,4,6-Trichlorophenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2,4-Dichlorophenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2,4-Dimethylphenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2,4-Dinitrophenol	ug/kg	460 U	170 U	170 U	170 U	170 U	170 U	180 U	180 U	760 U	180 U	1700 U	180 U
2,4-Dinitrotoluene	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2,6-Dinitrotoluene	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2-Chloronaphthalene	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2-Chlorophenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2-Methylnaphthalene	ug/kg	40 J	32 J	100 J	94 J	15 J	5.4 J	17 J	80 J	93 J	41 J	3000 U	23 J
2-Methylphenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
2-Nitroaniline	ug/kg	610 U	230 U	230 U	230 U	230 U	230 U	240 U	240 U	1000 U	240 U	2300 U	240 U
2-Nitrophenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
3&4-Methylphenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
3,3'-Dichlorobenzidine	ug/kg	4900 U	1900 U	1800 U	1800 U	1800 U	1800 U	1900 U	1900 U	8100 U	1900 U	18000 U	1900 U
3-Nitroaniline	ug/kg	610 U	230 U	230 U	230 U	230 U	230 U	240 U	240 U	1000 U	240 U	2300 U	240 U
4,6-Dinitro-2-methylphenol	ug/kg	460 U	170 U	170 U	170 U	170 U	170 U	180 U	180 U	760 U	180 U	1700 U	180 U
4-Bromophenyl phenyl ether	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
4-Chloro-3-methylphenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
4-Chloroaniline	ug/kg	610 U	230 U	230 U	230 U	230 U	230 U	240 U	240 U	1000 U	240 U	2300 U	240 U
4-Chlorophenyl phenyl ether	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
4-Nitroaniline	ug/kg	610 U	230 U	230 U	230 U	230 U	230 U	240 U	240 U	1000 U	240 U	2300 U	240 U
4-Nitrophenol	ug/kg	1000 U	380 U	370 U	380 U	370 U	370 U	390 U	390 U	1700 U	390 U	3800 U	400 U
Acenaphthene	ug/kg	48 J	14 J	300 U	8.3 J	300 U	300 U	310 U	310 U	41 J	310 U	3000 U	320 U
Acenaphthylene	ug/kg	28 J	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Acetophenone	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Anthracene	ug/kg	92 J	36 J	300 U	300 U	11 J	7.0 J	310 U	310 U	1300 U	310 U	190 J	320 U
Atrazine	ug/kg	120 U	47 U	45 U	46 U	45 U	45 U	47 U	47 U	200 U	48 U	460 U	48 U
Benzaldehyde	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Benzo(a)anthracene	ug/kg	470 J	78 J	35 J	20 J	45 J	30 J	310 U	310 U	250 J	310 U	1500 J	320 U
Benzo(a)pyrene	ug/kg	820	91 J	60 J	44 J	55 J	36 J	310 U	310 U	360 J	310 U	1700 J	320 U
Benzo(b)fluoranthene	ug/kg	1500	110 J	74 J	49 J	89 J	64 J	310 U	310 U	720 J	310 U	2800 J	320 U
Benzo(g,h,i)perylene	ug/kg	590 J	57 J	42 J	35 J	56 J	45 J	25 J	26 J	270 J	21 J	1100 J	23 J
Benzo(k)fluoranthene	ug/kg	540 J	46 J	23 J	20 J	42 J	23 J	310 U	310 U	260 J	310 U	1200 J	320 U
Biphenyl (1,1-Biphenyl)	ug/kg	810 U	4.6 J	18 J	16 J	300 U	300 U	310 U	8.7 J	1300 U	310 U	3000 U	320 U
bis(2-Chloroethoxy)methane	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
bis(2-Chloroethyl)ether	ug/kg	240 U	93 U	91 U	91 U	91 U	90 U	94 U	95 U	400 U	95 U	910 U	96 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg	810 U	310 U	300 U	300 U	49 J	35 J	45 J	310 U	330 J	37 J	470 J	36 J
Butyl benzylphthalate (BBP)	ug/kg	140 J	310 U	300 U	300 U	30 J	45 J	310 U	310 U	1300 U	310 U	280 J	320 U
Caprolactam	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Carbazole	ug/kg	100 J	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Chrysene	ug/kg	790 J	90 J	57 J	48 J	65 J	44 J	310 U	17 J	460 J	310 U	2000 J	16 J
Dibenz(a,h)anthracene	ug/kg	200 J	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	220 J	320 U
Dibenzofuran	ug/kg	37 J	15 J	24 J	23 J	300 U	300 U	310 U	17 J	34 J	310 U	3000 U	320 U
Diethyl phthalate	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Dimethyl phthalate	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Di-n-butylphthalate (DBP)	ug/kg	810 U	27 J	34 J	30 J	25 J	25 J	26 J	25 J	1300 U	25 J	3000 U	27 J
Di-n-octyl phthalate (DnOP)	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Fluoranthene	ug/kg	1400	220 J	86 J	53 J	130 J	70 J	8.5 J	310 U	860 J	310 U	3100	320 U
Fluorene	ug/kg	53 J	18 J	15 J	9.5 J	7.4 J	300 U	310 U	310 U	53 J	310 U	3000 U	320 U
Hexachlorobenzene	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Hexachlorobutadiene	ug/kg	120 U	47 U	45 U	46 U	45 U	45 U	47 U	47 U	200 U	48 U	460 U	48 U
Hexachlorocyclopentadiene	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Hexachloroethane	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Indeno(1,2,3-cd)pyrene	ug/kg	580 J	44 J	29 J	23 J	41 J	30 J	310 U	310 U	260 J	310 U	960 J	320 U
Isophorone	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Naphthalene	ug/kg	31 J	12 J	28 J	22 J	6.3 J	300 U	14 J	26 J	71 J	310 U	3000 U	320 U
Nitrobenzene	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
N-Nitrosodi-n-propylamine	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
N-Nitrosodiphenylamine	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Pentachlorophenol	ug/kg	460 U	170 U	170 U	170 U	170 U	170 U	180 U	180 U	760 U	180 U	1700 U	180 U
Phenanthrene	ug/kg	580 J	160 J	130 J	120 J	72 J	40 J	45 J	57 J	370 J	50 J	500 J	48 J
Phenol	ug/kg	810 U	310 U	300 U	300 U	300 U	300 U	310 U	310 U	1300 U	310 U	3000 U	320 U
Pyrene	ug/kg	1100	150 J	77 J	47 J	110 J	68 J	23 J	16 J	710 J	17 J	2700 J	19 J

Soil Sampling Analytical Results
RACER - Commercial Vehicle Operations (CVO)
Ypsilanti, Michigan

Sample Location:		GS-27-SB	GS-27-SB	GS-28-SB	GS-28-SB	GS-29-SB	GS-29-SB	GS-29-SB	GS-29-SB	GS-30-SB	GS-30-SB	GS-31-SB	GS-31-SB
Sample Identification:		**SO-17303-022318-DS-003**	**SO-17303-022318-DS-004**	**SO-17303-022218-DS-001**	**SO-17303-022218-DS-002**	**SO-17303-022618-DS-010**	**SO-17303-022618-DS-011**	**SO-17303-022618-DS-013**	**SO-17303-022618-DS-012**	**SO-17303-022618-DS-014**	**SO-17303-022618-DS-015**	**SO-17303-022718-DS-016**	**SO-17303-022718-DS-017**
Sample Date:		**2/23/2018**	**2/23/2018**	**2/22/2018**	**2/22/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/26/2018**	**2/27/2018**	**2/27/2018**
Sample Depth:		**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-1) ft BGS**	**(1-2.5) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7.5) ft BGS**	**(0-2.5) ft BGS**	**(2.5-5) ft BGS**	**(0-2.5) ft BGS**	**(6-7) ft BGS**
Sample Type:							**Duplicate**						
Parameters	**Units**												
Metals													
Antimony	ug/kg	310 J	170 UJ	280 J	310 J	320 J	280 J	130 J	170 UJ	170 J	150 J	170 J	130 J
Arsenic	ug/kg	6100	4900	6400	7500	5100	6600	7300	5600	7800	17000	4200	5500
Barium	ug/kg	75000	44000	50000	61000	26000	27000	54000	100000	47000	74000	36000	62000
Beryllium	ug/kg	410	460	410	470	270	240	540	560	390	590	280	570
Cadmium	ug/kg	820	260	620	320	200	250	210	250	420	190	390	280
Chromium	ug/kg	18000	13000	11000	13000	8400	11000	16000	16000	14000	15000	11000	18000
Cobalt	ug/kg	5800	7800	7000	8200	4200	4300	9500	9800	6000	8100	4100	10000
Copper	ug/kg	25000	16000	18000	20000	12000	18000	18000	19000	12000	15000	13000	19000
Lead	ug/kg	43000	8300	16000	14000	8500	13000	11000	9300	11000	9200	15000	11000
Lead - coarse fraction	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--
Lead - fine fraction	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	ug/kg	390000	340000	300000	360000	210000	220000	390000	350000	250000	320000	260000	320000
Mercury	ug/kg	51 J	42 U	46 U	49 U	40 U	41 U	43 U	47 U	33 J	19 J	21 J	23 J
Nickel	ug/kg	17000	23000	21000	24000	12000	14000	29000	29000	17000	26000	13000	30000
Selenium	ug/kg	1000	740	840	930	400	400	510	620	510	550	440	650
Silver	ug/kg	130	36 J	45 J	48 J	36 J	48 J	44 J	45 J	110	40 J	89	51 J
Thallium	ug/kg	260	280	320	410	160	180	280	350	210	230	160	310
Vanadium	ug/kg	17000	19000	17000	18000	16000	13000	24000	24000	16000	23000	13000	26000
Zinc	ug/kg	180000	46000	54000	60000	32000	44000	54000	51000	51000	54000	64000	55000
PCBs													
Aroclor-1016 (PCB-1016)	ug/kg	61 U	59 U	56 U	59 U	54 U	59 U	59 U	58 U	60 U	60 U	57 U	60 U
Aroclor-1221 (PCB-1221)	ug/kg	61 U	59 U	56 U	59 U	54 U	59 U	59 U	58 U	60 U	60 U	57 U	60 U
Aroclor-1232 (PCB-1232)	ug/kg	61 U	59 U	56 U	59 U	54 U	59 U	59 U	58 U	60 U	60 U	57 U	60 U
Aroclor-1242 (PCB-1242)	ug/kg	61 U	620 J	56 U	59 U	54 U	59 U	59 U	58 U	60 U	60 U	49 J	60 U
Aroclor-1248 (PCB-1248)	ug/kg	61 U	59 U	56 U	59 U	54 U	59 U	59 U	58 U	150 J	60 U	57 U	60 U
Aroclor-1254 (PCB-1254)	ug/kg	49 J	420 J	26 J	59 U	54 U	59 U	59 U	58 U	60 U	60 U	150	60 U
Aroclor-1260 (PCB-1260)	ug/kg	61 U	59 U	56 U	59 U	48 J	130 J	59 U	58 U	92 J	60 U	57 U	60 U
Total PCBs	ug/kg	49 J	1040 J	26 J	59 U	48 J	130 J	59 U	58 U	242 J	60 U	199 J	60 U

Soil Sampling Analytical Results
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Sample Location:		GS-31-SB	GS-32-SB	GS-32-SB	GS-33-SB	GS-33-SB	GS-33-SB	GS-34-SB	GS-34-SB
Sample Identification:		**SO-17303-022718-DS-018**	**SO-17303-022718-DS-019**	**SO-17303-022718-DS-020**	**SO-17303-022818-DS-023**	**SO-17303-022818-DS-024**	**SO-17303-022818-DS-025**	**SO-17303-022818-DS-021**	**SO-17303-022818-DS-022**
Sample Date:		**2/27/2018**	**2/27/2018**	**2/27/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**
Sample Depth:		**(19-20) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6.5-7.5) ft BGS**	**(0-2) ft BGS**	**(9-10) ft BGS**
Sample Type:									
Parameters	**Units**								
Volatile Organic Compounds (VOCs)									
1,1,1-Trichloroethane	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
1,1,2,2-Tetrachloroethane	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
1,1,2-Trichloroethane	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
1,1-Dichloroethane	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
1,1-Dichloroethene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
1,2,4-Trichlorobenzene	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
1,2-Dichlorobenzene	ug/kg	100 U	130 U	130 U	120 U	130 U	110 U	93 U	110 U
1,2-Dichloroethane	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
1,2-Dichloropropane	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
1,3-Dichlorobenzene	ug/kg	100 U	130 U	130 U	120 U	130 U	110 U	93 U	110 U
1,4-Dichlorobenzene	ug/kg	100 U	130 U	130 U	120 U	130 U	110 U	93 U	110 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	780 U	940 U	970 U	870 U	950 U	820 U	700 U	830 U
2-Hexanone	ug/kg	2600 U	3100 U	3200 U	2900 U	3200 U	2700 U	2300 U	2800 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	ug/kg	2600 U	3100 U	3200 U	2900 U	3200 U	2700 U	2300 U	2800 U
Acetone	ug/kg	780 U	940 U	970 U	870 U	950 U	820 U	700 U	830 U
Benzene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Bromodichloromethane	ug/kg	100 U	130 U	130 U	120 U	130 U	110 U	93 U	110 U
Bromoform	ug/kg	100 U	130 U	130 U	120 U	130 U	110 U	93 U	110 U
Bromomethane (Methyl bromide)	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
Carbon disulfide	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
Carbon tetrachloride	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Chlorobenzene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Chloroethane	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
Chloroform (Trichloromethane)	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Chloromethane (Methyl chloride)	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
cis-1,2-Dichloroethene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
cis-1,3-Dichloropropene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Cyclohexane	ug/kg	1200 U	1500 U	1600 U	1400 U	1500 U	1300 U	1100 U	1300 U
Dibromochloromethane	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Dichlorodifluoromethane (CFC-12)	ug/kg	100 U	130 U	130 U	120 U	130 U	110 U	93 U	110 U
Ethylbenzene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Isopropyl benzene	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
Methyl acetate	ug/kg	1200 U	160 J	1600 U	200 J	170 J	1300 U	360 J	1300 U
Methyl cyclohexane	ug/kg	1200 U	1500 U	1600 U	1400 U	1500 U	1300 U	1100 U	1300 U
Methyl tert butyl ether (MTBE)	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
Methylene chloride	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
Styrene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Tetrachloroethene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Toluene	ug/kg	100 U	130 U	130 U	120 U	130 U	110 U	93 U	110 U
trans-1,2-Dichloroethene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
trans-1,3-Dichloropropene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Trichloroethene	ug/kg	52 U	63 U	65 U	58 U	63 U	55 U	47 U	55 U
Trichlorofluoromethane (CFC-11)	ug/kg	100 U	130 U	130 U	120 U	130 U	110 U	93 U	110 U
Trifluorotrichloroethane (CFC-113)	ug/kg	260 U	310 U	320 U	290 U	320 U	270 U	230 U	280 U
Vinyl chloride	ug/kg	41 U	50 U	52 U	46 U	50 U	44 U	37 U	44 U
Xylenes (total)	ug/kg	160 U	190 U	190 U	170 U	190 U	160 U	140 U	170 U

Soil Sampling Analytical Results
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Sample Location:		GS-31-SB	GS-32-SB	GS-32-SB	GS-33-SB	GS-33-SB	GS-33-SB	GS-34-SB	GS-34-SB
Sample Identification:		**SO-17303-022718-DS-018**	**SO-17303-022718-DS-019**	**SO-17303-022718-DS-020**	**SO-17303-022818-DS-023**	**SO-17303-022818-DS-024**	**SO-17303-022818-DS-025**	**SO-17303-022818-DS-021**	**SO-17303-022818-DS-022**
Sample Date:		**2/27/2018**	**2/27/2018**	**2/27/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**
Sample Depth:		**(19-20) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6.5-7.5) ft BGS**	**(0-2) ft BGS**	**(9-10) ft BGS**
Sample Type:									
Parameters	**Units**								
Semi-Volatile Organic Compounds (SVOCs)									
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl)	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2,4,5-Trichlorophenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2,4,6-Trichlorophenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2,4-Dichlorophenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2,4-Dimethylphenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2,4-Dinitrophenol	ug/kg	170 U	180 U	200 U	190 U	190 U	180 U	430 U	180 U
2,4-Dinitrotoluene	ug/kg	310 U	320 U	350 U	28 J	340 U	310 U	750 U	310 U
2,6-Dinitrotoluene	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2-Chloronaphthalene	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2-Chlorophenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2-Methylnaphthalene	ug/kg	310 U	16 J	350 U	120 J	340 U	30 J	120 J	75 J
2-Methylphenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
2-Nitroaniline	ug/kg	230 U	250 U	260 U	250 U	260 U	230 U	570 U	240 U
2-Nitrophenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
3&4-Methylphenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
3,3'-Dichlorobenzidine	ug/kg	1900 U	2000 U	2100 U	2000 U	2100 U	1900 U	4500 U	1900 U
3-Nitroaniline	ug/kg	230 U	250 U	260 U	250 U	260 U	230 U	570 U	240 U
4,6-Dinitro-2-methylphenol	ug/kg	170 U	180 U	200 U	190 U	190 U	180 U	430 U	180 U
4-Bromophenyl phenyl ether	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
4-Chloro-3-methylphenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
4-Chloroaniline	ug/kg	230 U	250 U	260 U	250 U	260 U	230 U	570 U	240 U
4-Chlorophenyl phenyl ether	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
4-Nitroaniline	ug/kg	230 U	250 U	260 U	250 U	260 U	230 U	570 U	240 U
4-Nitrophenol	ug/kg	380 U	400 U	430 U	410 U	420 U	390 U	940 U	390 U
Acenaphthene	ug/kg	310 U	320 U	350 U	15 J	340 U	310 U	68 J	310 U
Acenaphthylene	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Acetophenone	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Anthracene	ug/kg	310 U	22 J	350 U	14 J	340 U	310 U	97 J	5.5 J
Atrazine	ug/kg	46 U	49 U	52 U	50 U	51 U	47 U	110 U	47 U
Benzaldehyde	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Benzo(a)anthracene	ug/kg	310 U	110 J	350 U	34 J	340 U	310 U	400 J	310 U
Benzo(a)pyrene	ug/kg	310 U	160 J	350 U	43 J	340 U	310 U	550 J	6.3 J
Benzo(b)fluoranthene	ug/kg	310 U	300 J	11 J	78 J	4.9 J	8.9 J	940	12 J
Benzo(g,h,i)perylene	ug/kg	310 U	120 J	350 U	35 J	340 U	16 J	370 J	20 J
Benzo(k)fluoranthene	ug/kg	310 U	130 J	350 U	31 J	340 U	310 U	370 J	310 U
Biphenyl (1,1-Biphenyl)	ug/kg	310 U	320 U	350 U	20 J	340 U	7.5 J	21 J	11 J
bis(2-Chloroethoxy)methane	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
bis(2-Chloroethyl)ether	ug/kg	93 U	98 U	100 U	100 U	100 U	93 U	230 U	95 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg	29 J	100 J	36 J	33 J	340 U	310 U	110 J	310 U
Butyl benzylphthalate (BBP)	ug/kg	310 U	49 J	350 U	330 U	340 U	310 U	750 U	310 U
Caprolactam	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Carbazole	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	99 J	310 U
Chrysene	ug/kg	310 U	190 J	12 J	82 J	340 U	20 J	630 J	19 J
Dibenz(a,h)anthracene	ug/kg	310 U	320 U	350 U	7.1 J	340 U	310 U	87 J	310 U
Dibenzofuran	ug/kg	310 U	10 J	350 U	26 J	340 U	18 J	48 J	21 J
Diethyl phthalate	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Dimethyl phthalate	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Di-n-butylphthalate (DBP)	ug/kg	310 U	35 J	27 J	330 U	340 U	310 U	750 U	310 U
Di-n-octyl phthalate (DnOP)	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Fluoranthene	ug/kg	310 U	340	7.9 J	110 J	340 U	4.0 J	1300	7.6 J
Fluorene	ug/kg	310 U	15 J	350 U	16 J	340 U	10 J	57 J	10 J
Hexachlorobenzene	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Hexachlorobutadiene	ug/kg	46 U	49 U	52 U	50 U	51 U	47 U	110 U	47 U
Hexachlorocyclopentadiene	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Hexachloroethane	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Indeno(1,2,3-cd)pyrene	ug/kg	310 U	110 J	350 U	20 J	340 U	310 U	330 J	310 U
Isophorone	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Naphthalene	ug/kg	310 U	8.3 J	350 U	38 J	340 U	9.9 J	41 J	22 J
Nitrobenzene	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
N-Nitrosodi-n-propylamine	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
N-Nitrosodiphenylamine	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Pentachlorophenol	ug/kg	170 U	180 U	200 U	190 U	190 U	180 U	430 U	180 U
Phenanthrene	ug/kg	11 J	140 J	6.2 J	170 J	340 U	72 J	610 J	66 J
Phenol	ug/kg	310 U	320 U	350 U	330 U	340 U	310 U	750 U	310 U
Pyrene	ug/kg	310 U	290 J	8.6 J	110 J	8.7 J	22 J	1300	20 J

Soil Sampling Analytical Results
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Sample Location:		**GS-31-SB**	**GS-32-SB**	**GS-32-SB**	**GS-33-SB**	**GS-33-SB**	**GS-33-SB**	**GS-34-SB**	**GS-34-SB**
Sample Identification:		**SO-17303-022718-DS-018**	**SO-17303-022718-DS-019**	**SO-17303-022718-DS-020**	**SO-17303-022818-DS-023**	**SO-17303-022818-DS-024**	**SO-17303-022818-DS-025**	**SO-17303-022818-DS-021**	**SO-17303-022818-DS-022**
Sample Date:		**2/27/2018**	**2/27/2018**	**2/27/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**	**2/28/2018**
Sample Depth:		**(19-20) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6.5-7.5) ft BGS**	**(0-2) ft BGS**	**(9-10) ft BGS**
Sample Type:									
Parameters	**Units**								
Metals									
Antimony	ug/kg	210 J	270 J	180 UJ	140 J	200 U	160 U	160 J	190 U
Arsenic	ug/kg	8400	5300	5200	7800	5000	10000	7400	6600
Barium	ug/kg	12000	54000	37000	67000	53000	61000	57000	59000
Beryllium	ug/kg	190	320	430	420	430	520	420	530
Cadmium	ug/kg	550	730	130	350	310	310	560	290
Chromium	ug/kg	5100	15000	14000	15000	15000	16000	15000	17000
Cobalt	ug/kg	3600	4300	7000	9200	8000	10000	8900	10000
Copper	ug/kg	15000	21000	12000	25000	20000	19000	25000	20000
Lead	ug/kg	6700	32000	9500	11000	9600	9000	19000	9300
Lead - coarse fraction	ug/kg	--	--	--	--	--	--	--	--
Lead - fine fraction	ug/kg	--	--	--	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	ug/kg	--	--	--	--	--	--	--	--
Manganese	ug/kg	250000	300000	150000	350000	150000	350000	350000	370000
Mercury	ug/kg	44 U	28 J	25 J	58 U	58 U	44 U	45 U	50 U
Nickel	ug/kg	12000	13000	18000	28000	24000	31000	26000	31000
Selenium	ug/kg	540	640	530	690	550	570	770	610
Silver	ug/kg	36 J	120	26 J	60 J	40 J	41 J	94	44 J
Thallium	ug/kg	310	180	290	410	280	490	390	390
Vanadium	ug/kg	11000	14000	20000	19000	22000	24000	19000	24000
Zinc	ug/kg	58000	160000	48000	57000	51000	56000	120000	61000
PCBs									
Aroclor-1016 (PCB-1016)	ug/kg	57 U	62 U	67 U	62 U	310 U	58 U	59 U	60 U
Aroclor-1221 (PCB-1221)	ug/kg	57 U	62 U	67 U	62 U	310 U	58 U	59 U	60 U
Aroclor-1232 (PCB-1232)	ug/kg	57 U	62 U	67 U	62 U	310 U	58 U	59 U	60 U
Aroclor-1242 (PCB-1242)	ug/kg	57 U	48 J	67 U	85	230 J	58 U	59 U	60 U
Aroclor-1248 (PCB-1248)	ug/kg	57 U	62 U	67 U	62 U	310 U	58 U	59 U	60 U
Aroclor-1254 (PCB-1254)	ug/kg	57 U	180	67 U	200	680	58 U	59 U	60 U
Aroclor-1260 (PCB-1260)	ug/kg	57 U	62 U	67 U	62 U	310 U	58 U	59 U	60 U
Total PCBs	ug/kg	57 U	228 J	67 U	285	910 J	58 U	59 U	60 U

Attachment B

Analytical Reports



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-91909-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
3/26/2018 3:28:03 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-91909-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-91909-1

Comments
Fractionated lead: results reported on an as-is basis after air drying. There is no moisture correction.

Receipt
The samples were received on 2/24/2018 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.3º C.

GC/MS VOA
Method(s) 8260B: The method blank for analytical batch 240-316351 contained Methylene chloride above the reporting limit (RL). This compound is considered a common laboratory contaminant. The associated sample(s) was not re-extracted and/or re-analyzed because the concentration of the common lab contaminant in the method blank was less than 5 times the RL.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-316351 recovered outside control limits for multiple analytes: These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C: The following samples were diluted due to the nature of the sample matrix: SO-17303-022318-DS-003 (240-91909-4), SO-17303-022318-DS-008 (240-91909-9), (240-91909-D-9-D MS) and (240-91909-D-9-E MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8082A: Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SO-17303-022218-DS-001 (240-91909-2) and SO-17303-022318-DS-003 (240-91909-4). These results have been reported and qualified.

Method(s) 8082A: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering, other environmental processes and/or contributions from the presence of multiple Aroclors, resulting in overlapping PCB patterns, the PCBs in the samples do not directly match any of the laboratory's Aroclor standards used for instrument calibration: SO-17303-022218-DS-001 (240-91909-2), SO-17303-022218-DS-002 (240-91909-3), SO-17303-022318-DS-003 (240-91909-4), SO-17303-022318-DS-004 (240-91909-5) and SO-17303-022318-DS-006 (240-91909-7). The samples have been quantified and reported using the best overall Aroclor/standard pattern match. Due to the reasons stated above there is increased quantitative uncertainty associated with this result.

Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-022218-DS-001 (240-91909-2), SO-17303-022218-DS-002 (240-91909-3) and SO-17303-022318-DS-003 (240-91909-4). 3468462, 3154251, 3361890.

Method(s) 8082A: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering, other environmental processes and/or contributions from the presence of multiple Aroclors, resulting in overlapping PCB patterns, the PCBs in the samples do not directly match any of the laboratory's Aroclor standards used for instrument calibration: SO-17303-022318-DS-005 (240-91909-6), SO-17303-022318-DS-007 (240-91909-8) and SO-17303-022318-DS-008 (240-91909-9). The samples have been quantified and reported using the best overall Aroclor/standard pattern match. Due to the reasons stated above there is increased quantitative uncertainty associated with this result.

Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-022318-DS-005 (240-91909-6) and SO-17303-022318-DS-007 (240-91909-8). 3468462, 3154251, 3361890.

Job ID: 240-91909-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: Some requested practical quantitation limits (PQLs) fall below the laboratory's verified standard quantitation limit. The continuing calibration blanks and method blanks may not support the lower PQL.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-91909-1	TB-17303-022018	Water	02/20/18 00:00	02/24/18 09:15
240-91909-2	SO-17303-022218-DS-001	Solid	02/22/18 10:30	02/24/18 09:15
240-91909-3	SO-17303-022218-DS-002	Solid	02/22/18 10:40	02/24/18 09:15
240-91909-4	SO-17303-022318-DS-003	Solid	02/23/18 09:15	02/24/18 09:15
240-91909-5	SO-17303-022318-DS-004	Solid	02/23/18 09:20	02/24/18 09:15
240-91909-6	SO-17303-022318-DS-005	Solid	02/23/18 10:15	02/24/18 09:15
240-91909-7	SO-17303-022318-DS-006	Solid	02/23/18 10:20	02/24/18 09:15
240-91909-8	SO-17303-022318-DS-007	Solid	02/23/18 13:15	02/24/18 09:15
240-91909-9	SO-17303-022318-DS-008	Solid	02/23/18 13:20	02/24/18 09:15

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Client Sample ID: TB-17303-022018 — Lab Sample ID: 240-91909-1

No Detections.

Client Sample ID: SO-17303-022218-DS-001 — Lab Sample ID: 240-91909-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	52	J	1200	48	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	18	J	300	4.0	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	100	J	300	0.57	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	35	J	300	0.71	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	60	J	300	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	74	J	300	0.67	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	42	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	23	J	300	0.77	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	150	J B	300	22	ug/Kg	1	☼	8270C	Total/NA
Chrysene	57	J	300	1.2	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	24	J	300	0.75	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	34	J	300	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	86	J	300	0.62	ug/Kg	1	☼	8270C	Total/NA
Fluorene	15	J	300	0.60	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	29	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	28	J	300	0.93	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	130	J	300	0.83	ug/Kg	1	☼	8270C	Total/NA
Pyrene	77	J	300	0.50	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1254	26	J	56	26	ug/Kg	1	☼	8082A	Total/NA
Barium	50		0.67	0.30	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.13	0.045	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.62		0.067	0.040	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.33	0.17	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.67	0.13	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.67	0.20	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.67	0.26	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.67	0.20	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.7	1.1	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.28	F1	0.13	0.10	mg/Kg	2	☼	6020	Total/NA
Arsenic	6.4		0.067	0.050	mg/Kg	2	☼	6020	Total/NA
Lead	16		0.17	0.052	mg/Kg	2	☼	6020	Total/NA
Selenium	0.84		0.13	0.10	mg/Kg	2	☼	6020	Total/NA
Thallium	0.32		0.067	0.040	mg/Kg	2	☼	6020	Total/NA
Vanadium	17		0.67	0.19	mg/Kg	2	☼	6020	Total/NA
Silver	0.045	J	0.067	0.018	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022218-DS-002 — Lab Sample ID: 240-91909-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	110	J	1300	48	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	16	J	300	4.0	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	94	J	300	0.57	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	8.3	J	300	0.87	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	20	J	300	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	44	J	300	0.73	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	49	J	300	0.67	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	35	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample ID: SO-17303-022218-DS-002 (Continued) — Lab Sample ID: 240-91909-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	20	J	300	0.78	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	65	J B	300	22	ug/Kg	1	☼	8270C	Total/NA
Chrysene	48	J	300	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	23	J	300	0.75	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	30	J	300	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	53	J	300	0.63	ug/Kg	1	☼	8270C	Total/NA
Fluorene	9.5	J	300	0.61	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	23	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	22	J	300	0.94	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	120	J	300	0.83	ug/Kg	1	☼	8270C	Total/NA
Pyrene	47	J	300	0.50	ug/Kg	1	☼	8270C	Total/NA
Barium	61		0.91	0.41	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.18	0.061	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.32		0.091	0.054	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.2		0.45	0.23	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.91	0.17	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.91	0.27	mg/Kg	1	☼	6010B	Total/NA
Manganese	360	B	0.91	0.35	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.91	0.26	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		2.3	1.5	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.31		0.18	0.14	mg/Kg	2	☼	6020	Total/NA
Arsenic	7.5		0.091	0.068	mg/Kg	2	☼	6020	Total/NA
Lead	14		0.23	0.071	mg/Kg	2	☼	6020	Total/NA
Selenium	0.93		0.18	0.14	mg/Kg	2	☼	6020	Total/NA
Thallium	0.41		0.091	0.054	mg/Kg	2	☼	6020	Total/NA
Vanadium	18		0.91	0.26	mg/Kg	2	☼	6020	Total/NA
Silver	0.048	J	0.091	0.025	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022318-DS-003 — Lab Sample ID: 240-91909-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	220	J	1400	110	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	40	J	810	1.5	ug/Kg	2.5	☼	8270C	Total/NA
Acenaphthene	48	J	810	2.3	ug/Kg	2.5	☼	8270C	Total/NA
Acenaphthylene	28	J	810	1.1	ug/Kg	2.5	☼	8270C	Total/NA
Anthracene	92	J	810	2.4	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]anthracene	470	J	810	1.9	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]pyrene	820		810	2.0	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[b]fluoranthene	1500		810	1.8	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[g,h,i]perylene	590	J	810	1.1	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[k]fluoranthene	540	J	810	2.1	ug/Kg	2.5	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	320	J B	810	58	ug/Kg	2.5	☼	8270C	Total/NA
Butyl benzyl phthalate	140	J	810	31	ug/Kg	2.5	☼	8270C	Total/NA
Carbazole	100	J	810	83	ug/Kg	2.5	☼	8270C	Total/NA
Chrysene	790	J	810	3.4	ug/Kg	2.5	☼	8270C	Total/NA
Dibenz(a,h)anthracene	200	J	810	2.0	ug/Kg	2.5	☼	8270C	Total/NA
Dibenzofuran	37	J	810	2.0	ug/Kg	2.5	☼	8270C	Total/NA
Fluoranthene	1400		810	1.7	ug/Kg	2.5	☼	8270C	Total/NA
Fluorene	53	J	810	1.6	ug/Kg	2.5	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	580	J	810	1.1	ug/Kg	2.5	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022318-DS-003 (Continued) — Lab Sample ID: 240-91909-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	31	J	810	2.5	ug/Kg	2.5	☼	8270C	Total/NA
Phenanthrene	580	J	810	2.2	ug/Kg	2.5	☼	8270C	Total/NA
Pyrene	1100		810	1.3	ug/Kg	2.5	☼	8270C	Total/NA
Aroclor-1254	49	J	61	28	ug/Kg	1	☼	8082A	Total/NA
Barium	75		0.79	0.36	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.16	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.82		0.079	0.047	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.8		0.40	0.20	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.79	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.79	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	390	B	0.79	0.31	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.79	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	180		2.0	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.31		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Arsenic	6.1		0.079	0.059	mg/Kg	2	☼	6020	Total/NA
Lead	43		0.20	0.062	mg/Kg	2	☼	6020	Total/NA
Selenium	1.0		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.26		0.079	0.047	mg/Kg	2	☼	6020	Total/NA
Vanadium	17		0.79	0.23	mg/Kg	2	☼	6020	Total/NA
Silver	0.13		0.079	0.022	mg/Kg	2	☼	6020	Total/NA
Mercury	0.051	J	0.059	0.027	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-022318-DS-004 — Lab Sample ID: 240-91909-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	4.6	J	310	4.1	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	32	J	310	0.58	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	14	J	310	0.89	ug/Kg	1	☼	8270C	Total/NA
Anthracene	36	J	310	0.91	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	78	J	310	0.73	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	91	J	310	0.75	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	110	J	310	0.69	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	57	J	310	0.41	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	46	J	310	0.79	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	47	J B	310	22	ug/Kg	1	☼	8270C	Total/NA
Chrysene	90	J	310	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	15	J	310	0.77	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	27	J	310	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	220	J	310	0.64	ug/Kg	1	☼	8270C	Total/NA
Fluorene	18	J	310	0.62	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	44	J	310	0.41	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	12	J	310	0.96	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	160	J	310	0.85	ug/Kg	1	☼	8270C	Total/NA
Pyrene	150	J	310	0.51	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1242	620		59	22	ug/Kg	1	☼	8082A	Total/NA
Aroclor-1254	420		59	27	ug/Kg	1	☼	8082A	Total/NA
Barium	44		0.86	0.39	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.17	0.058	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26		0.086	0.051	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.8		0.43	0.21	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022318-DS-004 (Continued) — Lab Sample ID: 240-91909-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	13		0.86	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.86	0.25	mg/Kg	1	☼	6010B	Total/NA
Manganese	340	B	0.86	0.33	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.86	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		2.1	1.5	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.9		0.086	0.064	mg/Kg	2	☼	6020	Total/NA
Lead	8.3		0.21	0.067	mg/Kg	2	☼	6020	Total/NA
Selenium	0.74		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Thallium	0.28		0.086	0.051	mg/Kg	2	☼	6020	Total/NA
Vanadium	19		0.86	0.25	mg/Kg	2	☼	6020	Total/NA
Silver	0.036	J	0.086	0.024	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022318-DS-005 — Lab Sample ID: 240-91909-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	120	J	1300	100	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	310	J	6200	82	ug/Kg	20	☼	8270C	Total/NA
2-Methylnaphthalene	1200	J	6200	12	ug/Kg	20	☼	8270C	Total/NA
Acenaphthene	4700	J	6200	18	ug/Kg	20	☼	8270C	Total/NA
Anthracene	5300	J	6200	18	ug/Kg	20	☼	8270C	Total/NA
Benzo[a]anthracene	7500		6200	15	ug/Kg	20	☼	8270C	Total/NA
Benzo[a]pyrene	6900		6200	15	ug/Kg	20	☼	8270C	Total/NA
Benzo[b]fluoranthene	9700		6200	14	ug/Kg	20	☼	8270C	Total/NA
Benzo[g,h,i]perylene	3000	J	6200	8.2	ug/Kg	20	☼	8270C	Total/NA
Benzo[k]fluoranthene	2900	J	6200	16	ug/Kg	20	☼	8270C	Total/NA
Carbazole	3000	J	6200	630	ug/Kg	20	☼	8270C	Total/NA
Chrysene	6800		6200	26	ug/Kg	20	☼	8270C	Total/NA
Dibenz(a,h)anthracene	1300	J	6200	16	ug/Kg	20	☼	8270C	Total/NA
Dibenzofuran	2000	J	6200	16	ug/Kg	20	☼	8270C	Total/NA
Fluoranthene	22000		6200	13	ug/Kg	20	☼	8270C	Total/NA
Fluorene	3200	J	6200	12	ug/Kg	20	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	2900	J	6200	8.2	ug/Kg	20	☼	8270C	Total/NA
Naphthalene	3600	J	6200	19	ug/Kg	20	☼	8270C	Total/NA
Phenanthrene	19000		6200	17	ug/Kg	20	☼	8270C	Total/NA
Pyrene	14000		6200	10	ug/Kg	20	☼	8270C	Total/NA
Aroclor-1248	65		59	28	ug/Kg	1	☼	8082A	Total/NA
Aroclor-1260	120		59	26	ug/Kg	1	☼	8082A	Total/NA
Lead (coarse particulate matter)	520		0.95	0.27	mg/Kg	1		6010B	Fractionated
Lead (fine particulate matter)	130		0.85	0.24	mg/Kg	1		6010B	Fractionated
Lead	360		0.91	0.26	mg/Kg	1		6010B	Fractionated
Barium	75		0.83	0.37	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.17	0.056	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.9		0.083	0.050	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.2		0.41	0.21	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.83	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.83	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.83	0.32	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.83	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		2.1	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.74		0.17	0.13	mg/Kg	2	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022318-DS-005 (Continued) — Lab Sample ID: 240-91909-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.2		0.083	0.062	mg/Kg	2	☼	6020	Total/NA
Selenium	1.2		0.17	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.31		0.083	0.050	mg/Kg	2	☼	6020	Total/NA
Vanadium	16		0.83	0.24	mg/Kg	2	☼	6020	Total/NA
Silver	0.078	J	0.083	0.023	mg/Kg	2	☼	6020	Total/NA
Mercury	0.022	J	0.048	0.022	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-022318-DS-006 — Lab Sample ID: 240-91909-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	82	J	1200	48	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	14	J	300	4.0	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	81	J	300	0.57	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	14	J	300	0.86	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	4.3	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Anthracene	11	J	300	0.89	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	27	J	300	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	52	J	300	0.73	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	61	J	300	0.67	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	37	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	24	J	300	0.77	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	61	J B	300	22	ug/Kg	1	☼	8270C	Total/NA
Chrysene	61	J	300	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	19	J	300	0.75	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	44	J	300	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	88	J	300	0.63	ug/Kg	1	☼	8270C	Total/NA
Fluorene	14	J	300	0.60	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	27	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	24	J	300	0.93	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	130	J	300	0.83	ug/Kg	1	☼	8270C	Total/NA
Pyrene	70	J	300	0.50	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1248	62		55	26	ug/Kg	1	☼	8082A	Total/NA
Barium	56		0.70	0.32	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.14	0.047	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.33		0.070	0.042	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.7		0.35	0.18	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.70	0.13	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.70	0.21	mg/Kg	1	☼	6010B	Total/NA
Manganese	330	B	0.70	0.27	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.70	0.20	mg/Kg	1	☼	6010B	Total/NA
Zinc	63		1.8	1.2	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.18		0.14	0.11	mg/Kg	2	☼	6020	Total/NA
Arsenic	8.6		0.070	0.053	mg/Kg	2	☼	6020	Total/NA
Lead	16		0.18	0.055	mg/Kg	2	☼	6020	Total/NA
Selenium	0.85		0.14	0.11	mg/Kg	2	☼	6020	Total/NA
Thallium	0.37		0.070	0.042	mg/Kg	2	☼	6020	Total/NA
Vanadium	18		0.70	0.20	mg/Kg	2	☼	6020	Total/NA
Silver	0.054	J	0.070	0.019	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022318-DS-007 — Lab Sample ID: 240-91909-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022318-DS-007 (Continued) — Lab Sample ID: 240-91909-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	12	J	300	4.0	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	49	J	300	0.58	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	15	J	300	0.88	ug/Kg	1	☼	8270C	Total/NA
Anthracene	19	J	300	0.90	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	66	J	300	0.73	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	100	J	300	0.74	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	130	J	300	0.68	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	52	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	48	J	300	0.78	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	59	J B	300	22	ug/Kg	1	☼	8270C	Total/NA
Chrysene	97	J	300	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	35	J	300	0.76	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	20	J	300	0.76	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	27	J	300	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	210	J	300	0.63	ug/Kg	1	☼	8270C	Total/NA
Fluorene	16	J	300	0.61	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	46	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	14	J	300	0.95	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	170	J	300	0.84	ug/Kg	1	☼	8270C	Total/NA
Pyrene	150	J	300	0.51	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1248	470		56	27	ug/Kg	1	☼	8082A	Total/NA
Aroclor-1260	410	p	56	25	ug/Kg	1	☼	8082A	Total/NA
Barium	56		0.83	0.38	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.17	0.056	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.48		0.083	0.050	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.7		0.42	0.21	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.83	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.83	0.25	mg/Kg	1	☼	6010B	Total/NA
Manganese	350	B	0.83	0.32	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.83	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	78		2.1	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.21		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Arsenic	6.5		0.083	0.063	mg/Kg	2	☼	6020	Total/NA
Lead	21		0.21	0.065	mg/Kg	2	☼	6020	Total/NA
Selenium	0.90		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Thallium	0.37		0.083	0.050	mg/Kg	2	☼	6020	Total/NA
Vanadium	17		0.83	0.24	mg/Kg	2	☼	6020	Total/NA
Silver	0.058	J	0.083	0.023	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022318-DS-008 — Lab Sample ID: 240-91909-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	11	J	600	8.0	ug/Kg	2	☼	8270C	Total/NA
2-Methylnaphthalene	49	J	600	1.1	ug/Kg	2	☼	8270C	Total/NA
Acenaphthene	32	J	600	1.7	ug/Kg	2	☼	8270C	Total/NA
Acenaphthylene	7.8	J	600	0.80	ug/Kg	2	☼	8270C	Total/NA
Anthracene	53	J	600	1.8	ug/Kg	2	☼	8270C	Total/NA
Benzo[a]anthracene	180	J	600	1.4	ug/Kg	2	☼	8270C	Total/NA
Benzo[a]pyrene	230	J	600	1.5	ug/Kg	2	☼	8270C	Total/NA
Benzo[b]fluoranthene	320	J	600	1.3	ug/Kg	2	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022318-DS-008 (Continued)

Lab Sample ID: 240-91909-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	120	J	600	0.80	ug/Kg	2	☼	8270C	Total/NA
Benzo[k]fluoranthene	100	J	600	1.6	ug/Kg	2	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	100	J B	600	43	ug/Kg	2	☼	8270C	Total/NA
Chrysene	230	J	600	2.5	ug/Kg	2	☼	8270C	Total/NA
Dibenz(a,h)anthracene	72	J	600	1.5	ug/Kg	2	☼	8270C	Total/NA
Dibenzofuran	31	J	600	1.5	ug/Kg	2	☼	8270C	Total/NA
Fluoranthene	540	J	600	1.3	ug/Kg	2	☼	8270C	Total/NA
Fluorene	34	J	600	1.2	ug/Kg	2	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	120	J	600	0.80	ug/Kg	2	☼	8270C	Total/NA
Naphthalene	21	J	600	1.9	ug/Kg	2	☼	8270C	Total/NA
Phenanthrene	290	J	600	1.7	ug/Kg	2	☼	8270C	Total/NA
Pyrene	370	J	600	1.0	ug/Kg	2	☼	8270C	Total/NA
Aroclor-1248	300		56	27	ug/Kg	1	☼	8082A	Total/NA
Aroclor-1260	200		56	25	ug/Kg	1	☼	8082A	Total/NA
Lead (coarse particulate matter)	230		0.85	0.24	mg/Kg	1		6010B	Fractionated
Lead (fine particulate matter)	200		0.96	0.27	mg/Kg	1		6010B	Fractionated
Lead	220		0.89	0.25	mg/Kg	1		6010B	Fractionated
Barium	76		0.73	0.33	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.45		0.15	0.049	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.1		0.073	0.044	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.7		0.36	0.18	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.73	0.14	mg/Kg	1	☼	6010B	Total/NA
Copper	22		0.73	0.21	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.73	0.28	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.73	0.21	mg/Kg	1	☼	6010B	Total/NA
Zinc	84		1.8	1.2	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.71		0.15	0.11	mg/Kg	2	☼	6020	Total/NA
Arsenic	6.8		0.073	0.054	mg/Kg	2	☼	6020	Total/NA
Selenium	0.85		0.15	0.11	mg/Kg	2	☼	6020	Total/NA
Thallium	0.36		0.073	0.044	mg/Kg	2	☼	6020	Total/NA
Vanadium	18		0.73	0.21	mg/Kg	2	☼	6020	Total/NA
Silver	0.13		0.073	0.020	mg/Kg	2	☼	6020	Total/NA
Mercury	0.027	J	0.048	0.022	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
6010B	Lead	SW846	TAL CAN
6010B	Metals (ICP) - Calculated	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17303-022018
Date Collected: 02/20/18 00:00
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			02/27/18 23:03	1
Benzene	1.0	U	1.0	0.28	ug/L			02/27/18 23:03	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			02/27/18 23:03	1
Bromoform	1.0	U	1.0	0.43	ug/L			02/27/18 23:03	1
Bromomethane	1.0	U *	1.0	0.42	ug/L			02/27/18 23:03	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			02/27/18 23:03	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			02/27/18 23:03	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			02/27/18 23:03	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			02/27/18 23:03	1
Chloroethane	1.0	U	1.0	0.41	ug/L			02/27/18 23:03	1
Chloroform	1.0	U	1.0	0.31	ug/L			02/27/18 23:03	1
Chloromethane	1.0	U	1.0	0.43	ug/L			02/27/18 23:03	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			02/27/18 23:03	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/27/18 23:03	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			02/27/18 23:03	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			02/27/18 23:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			02/27/18 23:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			02/27/18 23:03	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			02/27/18 23:03	1
2-Hexanone	10	U	10	1.2	ug/L			02/27/18 23:03	1
Methylene Chloride	5.0	U *	5.0	0.53	ug/L			02/27/18 23:03	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			02/27/18 23:03	1
Styrene	1.0	U	1.0	0.23	ug/L			02/27/18 23:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			02/27/18 23:03	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			02/27/18 23:03	1
Toluene	1.0	U	1.0	0.23	ug/L			02/27/18 23:03	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			02/27/18 23:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/27/18 23:03	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			02/27/18 23:03	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			02/27/18 23:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			02/27/18 23:03	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			02/27/18 23:03	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			02/27/18 23:03	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			02/27/18 23:03	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			02/27/18 23:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/27/18 23:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			02/27/18 23:03	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			02/27/18 23:03	1
Methyl acetate	10	U	10	1.4	ug/L			02/27/18 23:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			02/27/18 23:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	1.0	0.41	ug/L			02/27/18 23:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			02/27/18 23:03	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			02/27/18 23:03	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			02/27/18 23:03	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			02/27/18 23:03	1
Trichlorofluoromethane	1.0	U *	1.0	0.50	ug/L			02/27/18 23:03	1
Dibromochloromethane	1.0	U *	1.0	0.25	ug/L			02/27/18 23:03	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			02/27/18 23:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		61 - 138		02/27/18 23:03	1
4-Bromofluorobenzene (Surr)	75		69 - 120		02/27/18 23:03	1
Toluene-d8 (Surr)	79		73 - 120		02/27/18 23:03	1
Dibromofluoromethane (Surr)	106		69 - 124		02/27/18 23:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022218-DS-001
Date Collected: 02/22/18 10:30
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-2
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	780	U	780	130	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Benzene	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Bromoform	100	U	100	30	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Bromomethane	260	U	260	36	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
2-Butanone (MEK)	780	U	780	65	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Carbon disulfide	260	U	260	23	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Carbon tetrachloride	52	U	52	35	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Chlorobenzene	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Chloroethane	260	U	260	36	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Chloroform	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Chloromethane	260	U	260	23	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,1-Dichloroethane	52	U	52	40	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,2-Dichloroethane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,1-Dichloroethene	52	U	52	47	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,2-Dichloropropane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
cis-1,3-Dichloropropene	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
trans-1,3-Dichloropropene	52	U	52	19	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Ethylbenzene	52	U	52	45	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Methylene Chloride	260	U	260	84	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	52	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Styrene	52	U	52	13	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,1,2,2-Tetrachloroethane	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Tetrachloroethene	52	U	52	27	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Toluene	100	U	100	31	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Trichloroethene	52	U	52	48	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Xylenes, Total	160	U	160	36	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,1,1-Trichloroethane	52	U	52	36	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,1,2-Trichloroethane	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Cyclohexane	1200	U	1200	39	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,2-Dibromo-3-Chloropropane	260	U	260	62	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
cis-1,2-Dichloroethene	52	U	52	45	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
trans-1,2-Dichloroethene	52	U	52	45	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Isopropylbenzene	260	U	260	44	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Methyl acetate	1200	U	1200	97	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Methyl tert-butyl ether	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,2,4-Trichlorobenzene	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,3-Dichlorobenzene	100	U	100	49	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Trichlorofluoromethane	100	U	100	44	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Dibromochloromethane	52	U	52	44	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1
Methylcyclohexane	**52**	**J**	1200	48	ug/Kg	☼	03/01/18 21:57	03/04/18 12:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		64 - 144	03/01/18 21:57	03/04/18 12:48	1
4-Bromofluorobenzene (Surr)	74		58 - 142	03/01/18 21:57	03/04/18 12:48	1
Toluene-d8 (Surr)	84		61 - 137	03/01/18 21:57	03/04/18 12:48	1
Dibromofluoromethane (Surr)	81		31 - 155	03/01/18 21:57	03/04/18 12:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022218-DS-002
Date Collected: 02/22/18 10:40
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-3
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	780	U	780	130	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Benzene	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Bromoform	100	U	100	30	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Bromomethane	260	U	260	37	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
2-Butanone (MEK)	780	U	780	65	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Carbon disulfide	260	U	260	24	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Carbon tetrachloride	52	U	52	35	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Chlorobenzene	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Chloroethane	260	U	260	37	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Chloroform	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Chloromethane	260	U	260	24	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,1-Dichloroethane	52	U	52	40	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,2-Dichloroethane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,1-Dichloroethene	52	U	52	47	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,2-Dichloropropane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
cis-1,3-Dichloropropene	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
trans-1,3-Dichloropropene	52	U	52	20	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Ethylbenzene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Methylene Chloride	260	U	260	85	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	52	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Styrene	52	U	52	13	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,1,2,2-Tetrachloroethane	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Tetrachloroethene	52	U	52	27	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Toluene	100	U	100	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Trichloroethene	52	U	52	48	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Vinyl chloride	42	U	42	22	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,1,1-Trichloroethane	52	U	52	37	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,1,2-Trichloroethane	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Cyclohexane	1300	U	1300	39	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,2-Dibromo-3-Chloropropane	260	U	260	63	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Dichlorodifluoromethane	100	U	100	29	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
cis-1,2-Dichloroethene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
trans-1,2-Dichloroethene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Isopropylbenzene	260	U	260	44	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Methyl acetate	1300	U	1300	98	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Methyl tert-butyl ether	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,2,4-Trichlorobenzene	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,2-Dichlorobenzene	100	U	100	24	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,3-Dichlorobenzene	100	U	100	50	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Trichlorofluoromethane	100	U	100	44	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Dibromochloromethane	52	U	52	44	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1
Methylcyclohexane	**110**	**J**	1300	48	ug/Kg	☼	03/01/18 21:57	03/04/18 13:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		64 - 144	03/01/18 21:57	03/04/18 13:11	1
4-Bromofluorobenzene (Surr)	68		58 - 142	03/01/18 21:57	03/04/18 13:11	1
Toluene-d8 (Surr)	82		61 - 137	03/01/18 21:57	03/04/18 13:11	1
Dibromofluoromethane (Surr)	82		31 - 155	03/01/18 21:57	03/04/18 13:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-003
Date Collected: 02/23/18 09:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-4
Matrix: Solid
Percent Solids: 80.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	890	U	890	140	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Benzene	59	U	59	35	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Bromodichloromethane	120	U	120	27	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Bromoform	120	U	120	34	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Bromomethane	300	U	300	41	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
2-Butanone (MEK)	890	U	890	74	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Carbon disulfide	300	U	300	27	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Carbon tetrachloride	59	U	59	40	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Chlorobenzene	59	U	59	44	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Chloroethane	300	U	300	41	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Chloroform	59	U	59	35	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Chloromethane	300	U	300	27	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,1-Dichloroethane	59	U	59	46	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,2-Dichloroethane	59	U	59	44	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,1-Dichloroethene	59	U	59	53	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,2-Dichloropropane	59	U	59	44	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
cis-1,3-Dichloropropene	59	U	59	34	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
trans-1,3-Dichloropropene	59	U	59	22	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Ethylbenzene	59	U	59	52	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
2-Hexanone	3000	U	3000	130	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Methylene Chloride	300	U	300	96	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
4-Methyl-2-pentanone (MIBK)	3000	U	3000	59	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Styrene	59	U	59	15	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,1,2,2-Tetrachloroethane	59	U	59	35	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Tetrachloroethene	59	U	59	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Toluene	120	U	120	35	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Trichloroethene	59	U	59	55	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Vinyl chloride	47	U	47	25	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Xylenes, Total	180	U	180	41	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,1,1-Trichloroethane	59	U	59	41	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,1,2-Trichloroethane	59	U	59	34	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Cyclohexane	1400	U	1400	44	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,2-Dibromo-3-Chloropropane	300	U	300	71	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,2-Dibromoethane	300	U	300	34	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Dichlorodifluoromethane	120	U	120	32	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
cis-1,2-Dichloroethene	59	U	59	52	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
trans-1,2-Dichloroethene	59	U	59	52	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Isopropylbenzene	300	U	300	50	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Methyl acetate	**220**	**J**	1400	110	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Methyl tert-butyl ether	300	U	300	38	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	300	U	300	34	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,2,4-Trichlorobenzene	300	U	300	38	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,2-Dichlorobenzene	120	U	120	27	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,3-Dichlorobenzene	120	U	120	56	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
1,4-Dichlorobenzene	120	U	120	40	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Trichlorofluoromethane	120	U	120	50	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Dibromochloromethane	59	U	59	50	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1
Methylcyclohexane	1400	U	1400	55	ug/Kg	☼	03/01/18 21:57	03/04/18 13:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		64 - 144	03/01/18 21:57	03/04/18 13:34	1
4-Bromofluorobenzene (Surr)	75		58 - 142	03/01/18 21:57	03/04/18 13:34	1
Toluene-d8 (Surr)	87		61 - 137	03/01/18 21:57	03/04/18 13:34	1
Dibromofluoromethane (Surr)	84		31 - 155	03/01/18 21:57	03/04/18 13:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-004
Date Collected: 02/23/18 09:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-5
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	820	U	820	130	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Benzene	54	U	54	33	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Bromodichloromethane	110	U	110	24	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Bromoform	110	U	110	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Bromomethane	270	U	270	38	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
2-Butanone (MEK)	820	U	820	68	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Carbon disulfide	270	U	270	24	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Carbon tetrachloride	54	U	54	37	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Chlorobenzene	54	U	54	41	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Chloroethane	270	U	270	38	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Chloroform	54	U	54	33	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Chloromethane	270	U	270	24	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,1-Dichloroethane	54	U	54	42	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,2-Dichloroethane	54	U	54	41	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,1-Dichloroethene	54	U	54	49	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,2-Dichloropropane	54	U	54	41	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
cis-1,3-Dichloropropene	54	U	54	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
trans-1,3-Dichloropropene	54	U	54	20	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Ethylbenzene	54	U	54	48	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
2-Hexanone	2700	U	2700	120	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Methylene Chloride	270	U	270	88	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	54	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Styrene	54	U	54	14	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,1,2,2-Tetrachloroethane	54	U	54	33	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Tetrachloroethene	54	U	54	29	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Toluene	110	U	110	33	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Trichloroethene	54	U	54	50	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Vinyl chloride	44	U	44	23	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Xylenes, Total	160	U	160	38	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,1,1-Trichloroethane	54	U	54	38	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,1,2-Trichloroethane	54	U	54	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Cyclohexane	1300	U	1300	41	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,2-Dibromo-3-Chloropropane	270	U	270	65	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,2-Dibromoethane	270	U	270	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Dichlorodifluoromethane	110	U	110	30	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
cis-1,2-Dichloroethene	54	U	54	48	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
trans-1,2-Dichloroethene	54	U	54	48	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Isopropylbenzene	270	U	270	46	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Methyl acetate	1300	U	1300	100	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Methyl tert-butyl ether	270	U	270	35	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	31	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,2,4-Trichlorobenzene	270	U	270	35	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,2-Dichlorobenzene	110	U	110	24	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,3-Dichlorobenzene	110	U	110	52	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
1,4-Dichlorobenzene	110	U	110	37	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Trichlorofluoromethane	110	U	110	46	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Dibromochloromethane	54	U	54	46	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1
Methylcyclohexane	1300	U	1300	50	ug/Kg	☼	03/01/18 21:57	03/04/18 13:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		64 - 144	03/01/18 21:57	03/04/18 13:58	1
4-Bromofluorobenzene (Surr)	82		58 - 142	03/01/18 21:57	03/04/18 13:58	1
Toluene-d8 (Surr)	91		61 - 137	03/01/18 21:57	03/04/18 13:58	1
Dibromofluoromethane (Surr)	91		31 - 155	03/01/18 21:57	03/04/18 13:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	830	U	830	130	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Benzene	55	U	55	33	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Bromoform	110	U	110	32	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Bromomethane	280	U	280	39	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
2-Butanone (MEK)	830	U	830	69	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Carbon disulfide	280	U	280	25	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Carbon tetrachloride	55	U	55	37	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Chlorobenzene	55	U	55	41	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Chloroethane	280	U	280	39	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Chloroform	55	U	55	33	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Chloromethane	280	U	280	25	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,1-Dichloroethane	55	U	55	43	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,2-Dichloroethane	55	U	55	41	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,1-Dichloroethene	55	U	55	50	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,2-Dichloropropane	55	U	55	41	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
cis-1,3-Dichloropropene	55	U	55	32	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
trans-1,3-Dichloropropene	55	U	55	21	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Ethylbenzene	55	U	55	48	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
2-Hexanone	2800	U	2800	120	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Methylene Chloride	280	U	280	90	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	55	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Styrene	55	U	55	14	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,1,2,2-Tetrachloroethane	55	U	55	33	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Tetrachloroethene	55	U	55	29	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Toluene	110	U	110	33	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Trichloroethene	55	U	55	51	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Vinyl chloride	44	U	44	23	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Xylenes, Total	170	U	170	39	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,1,1-Trichloroethane	55	U	55	39	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,1,2-Trichloroethane	55	U	55	32	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Cyclohexane	1300	U	1300	41	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,2-Dibromo-3-Chloropropane	280	U	280	66	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,2-Dibromoethane	280	U	280	32	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Dichlorodifluoromethane	110	U	110	30	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
cis-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
trans-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Isopropylbenzene	280	U	280	47	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Methyl acetate	**120**	**J**	1300	100	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Methyl tert-butyl ether	280	U	280	36	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	32	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,2,4-Trichlorobenzene	280	U	280	36	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,3-Dichlorobenzene	110	U	110	52	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
1,4-Dichlorobenzene	110	U	110	37	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Trichlorofluoromethane	110	U	110	47	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Dibromochloromethane	55	U	55	47	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1
Methylcyclohexane	1300	U	1300	51	ug/Kg	☼	03/01/18 21:57	03/04/18 14:22	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		64 - 144	03/01/18 21:57	03/04/18 14:22	1
4-Bromofluorobenzene (Surr)	72		58 - 142	03/01/18 21:57	03/04/18 14:22	1
Toluene-d8 (Surr)	83		61 - 137	03/01/18 21:57	03/04/18 14:22	1
Dibromofluoromethane (Surr)	79		31 - 155	03/01/18 21:57	03/04/18 14:22	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-006
Date Collected: 02/23/18 10:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-7
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	780	U	780	130	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Benzene	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Bromoform	100	U	100	30	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Bromomethane	260	U	260	36	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
2-Butanone (MEK)	780	U	780	65	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Carbon disulfide	260	U	260	23	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Carbon tetrachloride	52	U	52	35	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Chlorobenzene	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Chloroethane	260	U	260	36	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Chloroform	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Chloromethane	260	U	260	23	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,1-Dichloroethane	52	U	52	40	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,2-Dichloroethane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,1-Dichloroethene	52	U	52	47	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,2-Dichloropropane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
cis-1,3-Dichloropropene	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
trans-1,3-Dichloropropene	52	U	52	20	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Ethylbenzene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Methylene Chloride	260	U	260	85	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	52	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Styrene	52	U	52	13	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,1,2,2-Tetrachloroethane	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Tetrachloroethene	52	U	52	27	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Toluene	100	U	100	31	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Trichloroethene	52	U	52	48	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Vinyl chloride	42	U	42	22	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Xylenes, Total	160	U	160	36	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,1,1-Trichloroethane	52	U	52	36	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,1,2-Trichloroethane	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Cyclohexane	1200	U	1200	39	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,2-Dibromo-3-Chloropropane	260	U	260	62	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Dichlorodifluoromethane	100	U	100	29	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
cis-1,2-Dichloroethene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
trans-1,2-Dichloroethene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Isopropylbenzene	260	U	260	44	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Methyl acetate	1200	U	1200	98	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Methyl tert-butyl ether	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,2,4-Trichlorobenzene	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,3-Dichlorobenzene	100	U	100	49	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Trichlorofluoromethane	100	U	100	44	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Dibromochloromethane	52	U	52	44	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1
Methylcyclohexane	**82**	**J**	1200	48	ug/Kg	☼	03/01/18 21:57	03/04/18 14:45	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		64 - 144	03/01/18 21:57	03/04/18 14:45	1
4-Bromofluorobenzene (Surr)	78		58 - 142	03/01/18 21:57	03/04/18 14:45	1
Toluene-d8 (Surr)	90		61 - 137	03/01/18 21:57	03/04/18 14:45	1
Dibromofluoromethane (Surr)	88		31 - 155	03/01/18 21:57	03/04/18 14:45	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-007
Date Collected: 02/23/18 13:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-8
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	790	U	790	130	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Benzene	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Bromoform	100	U	100	30	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Bromomethane	260	U	260	37	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
2-Butanone (MEK)	790	U	790	66	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Carbon disulfide	260	U	260	24	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Carbon tetrachloride	52	U	52	35	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Chlorobenzene	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Chloroethane	260	U	260	37	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Chloroform	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Chloromethane	260	U	260	24	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,1-Dichloroethane	52	U	52	41	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,2-Dichloroethane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,1-Dichloroethene	52	U	52	47	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,2-Dichloropropane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
cis-1,3-Dichloropropene	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
trans-1,3-Dichloropropene	52	U	52	20	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Ethylbenzene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Methylene Chloride	260	U	260	85	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	52	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Styrene	52	U	52	13	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,1,2,2-Tetrachloroethane	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Tetrachloroethene	52	U	52	28	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Toluene	100	U	100	31	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Trichloroethene	52	U	52	49	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Vinyl chloride	42	U	42	22	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,1,1-Trichloroethane	52	U	52	37	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,1,2-Trichloroethane	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Cyclohexane	1300	U	1300	39	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,2-Dibromo-3-Chloropropane	260	U	260	63	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Dichlorodifluoromethane	100	U	100	29	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
cis-1,2-Dichloroethene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
trans-1,2-Dichloroethene	52	U	52	46	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Isopropylbenzene	260	U	260	45	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Methyl acetate	1300	U	1300	98	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Methyl tert-butyl ether	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,2,4-Trichlorobenzene	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,2-Dichlorobenzene	100	U	100	24	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,3-Dichlorobenzene	100	U	100	50	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Trichlorofluoromethane	100	U	100	45	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Dibromochloromethane	52	U	52	45	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1
Methylcyclohexane	1300	U	1300	49	ug/Kg	☼	03/01/18 21:57	03/04/18 15:08	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		64 - 144	03/01/18 21:57	03/04/18 15:08	1
4-Bromofluorobenzene (Surr)	84		58 - 142	03/01/18 21:57	03/04/18 15:08	1
Toluene-d8 (Surr)	97		61 - 137	03/01/18 21:57	03/04/18 15:08	1
Dibromofluoromethane (Surr)	92		31 - 155	03/01/18 21:57	03/04/18 15:08	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	770	U	770	120	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Benzene	51	U	51	31	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Bromoform	100	U	100	29	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Bromomethane	260	U	260	36	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
2-Butanone (MEK)	770	U	770	64	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Carbon disulfide	260	U	260	23	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Carbon tetrachloride	51	U	51	35	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Chlorobenzene	51	U	51	38	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Chloroethane	260	U	260	36	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Chloroform	51	U	51	31	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Chloromethane	260	U	260	23	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,1-Dichloroethane	51	U	51	40	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,2-Dichloroethane	51	U	51	38	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,1-Dichloroethene	51	U	51	46	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,2-Dichloropropane	51	U	51	38	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
cis-1,3-Dichloropropene	51	U	51	29	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
trans-1,3-Dichloropropene	51	U	51	19	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Ethylbenzene	51	U	51	45	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Methylene Chloride	260	U	260	83	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	51	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Styrene	51	U	51	13	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,1,2,2-Tetrachloroethane	51	U	51	31	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Tetrachloroethene	51	U	51	27	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Toluene	100	U	100	31	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Trichloroethene	51	U	51	47	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Xylenes, Total	150	U	150	36	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,1,1-Trichloroethane	51	U	51	36	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,1,2-Trichloroethane	51	U	51	29	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Cyclohexane	1200	U	1200	38	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,2-Dibromo-3-Chloropropane	260	U	260	61	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,2-Dibromoethane	260	U	260	29	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
cis-1,2-Dichloroethene	51	U	51	45	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
trans-1,2-Dichloroethene	51	U	51	45	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Isopropylbenzene	260	U	260	44	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Methyl acetate	1200	U	1200	96	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Methyl tert-butyl ether	260	U	260	33	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	29	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,2,4-Trichlorobenzene	260	U	260	33	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,3-Dichlorobenzene	100	U	100	49	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Trichlorofluoromethane	100	U	100	44	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Dibromochloromethane	51	U	51	44	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1
Methylcyclohexane	1200	U	1200	47	ug/Kg	☼	03/01/18 21:57	03/04/18 15:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 144	03/01/18 21:57	03/04/18 15:31	1
4-Bromofluorobenzene (Surr)	85		58 - 142	03/01/18 21:57	03/04/18 15:31	1
Toluene-d8 (Surr)	100		61 - 137	03/01/18 21:57	03/04/18 15:31	1
Dibromofluoromethane (Surr)	92		31 - 155	03/01/18 21:57	03/04/18 15:31	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022218-DS-001
Date Collected: 02/22/18 10:30
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-2
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**18**	**J**	300	4.0	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2,4-Dinitrotoluene	300	U	300	19	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2-Chloronaphthalene	300	U	300	0.51	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2-Chlorophenol	300	U	300	9.3	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2-Methylnaphthalene	**100**	**J**	300	0.57	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2-Methylphenol	300	U	300	12	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
2-Nitrophenol	300	U	300	9.4	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
4,6-Dinitro-2-methylphenol	170	U	170	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
4-Chloroaniline	230	U	230	19	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
4-Nitroaniline	230	U	230	29	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
4-Nitrophenol	370	U	370	19	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Acenaphthene	300	U	300	0.86	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Acenaphthylene	300	U	300	0.40	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Acetophenone	300	U	300	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Anthracene	300	U	300	0.88	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Atrazine	45	U	45	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Benzo[a]anthracene	**35**	**J**	300	0.71	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Benzo[a]pyrene	**60**	**J**	300	0.72	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Benzo[b]fluoranthene	**74**	**J**	300	0.67	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Benzo[g,h,i]perylene	**42**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Benzo[k]fluoranthene	**23**	**J**	300	0.77	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Bis(2-chloroethyl)ether	91	U	91	2.3	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Bis(2-ethylhexyl) phthalate	**150**	**J B**	300	22	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Caprolactam	300	U	300	42	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Carbazole	300	U	300	31	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Chrysene	**57**	**J**	300	1.2	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Dibenz(a,h)anthracene	300	U	300	0.75	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Dibenzofuran	**24**	**J**	300	0.75	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Di-n-butyl phthalate	**34**	**J**	300	17	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Di-n-octyl phthalate	300	U	300	8.9	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Fluoranthene	**86**	**J**	300	0.62	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022218-DS-001
Date Collected: 02/22/18 10:30
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-2
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**15**	**J**	300	0.60	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Hexachlorobutadiene	45	U	45	6.3	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Hexachlorocyclopentadiene	300	U	300	9.2	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Indeno[1,2,3-cd]pyrene	**29**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Isophorone	300	U	300	15	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Naphthalene	**28**	**J**	300	0.93	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
N-Nitrosodi-n-propylamine	300	U	300	7.1	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Phenol	300	U	300	8.3	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Phenanthrene	**130**	**J**	300	0.83	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
Pyrene	**77**	**J**	300	0.50	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	02/28/18 11:05	03/05/18 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*32 - 120*	*02/28/18 11:05*	*03/05/18 16:22*	*1*
2-Fluorophenol (Surr)	*75*		*29 - 120*	*02/28/18 11:05*	*03/05/18 16:22*	*1*
2,4,6-Tribromophenol (Surr)	*54*		*10 - 120*	*02/28/18 11:05*	*03/05/18 16:22*	*1*
Nitrobenzene-d5 (Surr)	*84*		*30 - 120*	*02/28/18 11:05*	*03/05/18 16:22*	*1*
Phenol-d5 (Surr)	*81*		*29 - 120*	*02/28/18 11:05*	*03/05/18 16:22*	*1*
Terphenyl-d14 (Surr)	*76*		*41 - 120*	*02/28/18 11:05*	*03/05/18 16:22*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022218-DS-002
Date Collected: 02/22/18 10:40
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-3
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**16**	**J**	300	4.0	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2,4,5-Trichlorophenol	300	U	300	29	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2,4-Dinitrotoluene	300	U	300	19	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2-Chloronaphthalene	300	U	300	0.51	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2-Chlorophenol	300	U	300	9.4	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2-Methylnaphthalene	**94**	**J**	300	0.57	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2-Methylphenol	300	U	300	13	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
2-Nitrophenol	300	U	300	9.5	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
3,3'-Dichlorobenzidine	1800	U	1800	21	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
4,6-Dinitro-2-methylphenol	170	U	170	11	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
4-Chloroaniline	230	U	230	19	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
4-Nitrophenol	380	U	380	19	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Acenaphthene	**8.3**	**J**	300	0.87	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Acenaphthylene	300	U	300	0.40	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Acetophenone	300	U	300	11	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Anthracene	300	U	300	0.89	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Atrazine	46	U	46	10	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Benzo[a]anthracene	**20**	**J**	300	0.72	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Benzo[a]pyrene	**44**	**J**	300	0.73	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Benzo[b]fluoranthene	**49**	**J**	300	0.67	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Benzo[g,h,i]perylene	**35**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Benzo[k]fluoranthene	**20**	**J**	300	0.78	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Bis(2-chloroethyl)ether	91	U	91	2.3	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Bis(2-ethylhexyl) phthalate	**65**	**J B**	300	22	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Caprolactam	300	U	300	42	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Carbazole	300	U	300	31	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Chrysene	**48**	**J**	300	1.3	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Dibenz(a,h)anthracene	300	U	300	0.75	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Dibenzofuran	**23**	**J**	300	0.75	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Di-n-butyl phthalate	**30**	**J**	300	17	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Di-n-octyl phthalate	300	U	300	9.0	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Fluoranthene	**53**	**J**	300	0.63	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022218-DS-002
Date Collected: 02/22/18 10:40
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-3
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**9.5**	**J**	300	0.61	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Hexachlorobutadiene	46	U	46	6.4	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Hexachlorocyclopentadiene	300	U	300	9.3	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Indeno[1,2,3-cd]pyrene	**23**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Isophorone	300	U	300	15	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Naphthalene	**22**	**J**	300	0.94	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
N-Nitrosodi-n-propylamine	300	U	300	7.2	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Phenol	300	U	300	8.3	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Phenanthrene	**120**	**J**	300	0.83	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
Pyrene	**47**	**J**	300	0.50	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	02/28/18 11:05	03/05/18 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*32 - 120*	*02/28/18 11:05*	*03/05/18 15:59*	*1*
2-Fluorophenol (Surr)	*61*		*29 - 120*	*02/28/18 11:05*	*03/05/18 15:59*	*1*
2,4,6-Tribromophenol (Surr)	*42*		*10 - 120*	*02/28/18 11:05*	*03/05/18 15:59*	*1*
Nitrobenzene-d5 (Surr)	*69*		*30 - 120*	*02/28/18 11:05*	*03/05/18 15:59*	*1*
Phenol-d5 (Surr)	*69*		*29 - 120*	*02/28/18 11:05*	*03/05/18 15:59*	*1*
Terphenyl-d14 (Surr)	*70*		*41 - 120*	*02/28/18 11:05*	*03/05/18 15:59*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-003
Date Collected: 02/23/18 09:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-4
Matrix: Solid
Percent Solids: 80.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	810	U	810	11	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2,2'-oxybis[1-chloropropane]	810	U	810	29	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2,4,5-Trichlorophenol	810	U	810	76	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2,4,6-Trichlorophenol	810	U	810	27	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2,4-Dichlorophenol	810	U	810	61	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2,4-Dimethylphenol	810	U	810	61	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2,4-Dinitrophenol	460	U	460	64	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2,4-Dinitrotoluene	810	U	810	52	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2,6-Dinitrotoluene	810	U	810	64	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2-Chloronaphthalene	810	U	810	1.4	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2-Chlorophenol	810	U	810	25	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2-Methylnaphthalene	**40**	**J**	810	1.5	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2-Methylphenol	810	U	810	34	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2-Nitroaniline	610	U	610	28	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
2-Nitrophenol	810	U	810	25	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
3,3'-Dichlorobenzidine	4900	U	4900	55	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
3-Nitroaniline	610	U	610	49	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
4,6-Dinitro-2-methylphenol	460	U	460	28	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
4-Bromophenyl phenyl ether	810	U	810	40	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
4-Chloro-3-methylphenol	810	U	810	64	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
4-Chloroaniline	610	U	610	52	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
4-Chlorophenyl phenyl ether	810	U	810	40	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
4-Nitroaniline	610	U	610	80	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
4-Nitrophenol	1000	U	1000	52	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Acenaphthene	**48**	**J**	810	2.3	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Acenaphthylene	**28**	**J**	810	1.1	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Acetophenone	810	U	810	28	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Anthracene	**92**	**J**	810	2.4	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Atrazine	120	U	120	28	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Benzaldehyde	810	U	810	37	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Benzo[a]anthracene	**470**	**J**	810	1.9	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Benzo[a]pyrene	**820**		810	2.0	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Benzo[b]fluoranthene	**1500**		810	1.8	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Benzo[g,h,i]perylene	**590**	**J**	810	1.1	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Benzo[k]fluoranthene	**540**	**J**	810	2.1	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Bis(2-chloroethoxy)methane	810	U	810	67	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Bis(2-chloroethyl)ether	240	U	240	6.1	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Bis(2-ethylhexyl) phthalate	**320**	**J B**	810	58	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Butyl benzyl phthalate	**140**	**J**	810	31	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Caprolactam	810	U	810	110	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Carbazole	**100**	**J**	810	83	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Chrysene	**790**	**J**	810	3.4	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Dibenz(a,h)anthracene	**200**	**J**	810	2.0	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Dibenzofuran	**37**	**J**	810	2.0	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Diethyl phthalate	810	U	810	49	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Dimethyl phthalate	810	U	810	52	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Di-n-butyl phthalate	810	U	810	46	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Di-n-octyl phthalate	810	U	810	24	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Fluoranthene	**1400**		810	1.7	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022318-DS-003
Date Collected: 02/23/18 09:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-4
Matrix: Solid
Percent Solids: 80.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**53**	**J**	810	1.6	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Hexachlorobenzene	810	U	810	6.4	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Hexachlorobutadiene	120	U	120	17	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Hexachlorocyclopentadiene	810	U	810	25	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Hexachloroethane	810	U	810	28	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Indeno[1,2,3-cd]pyrene	**580**	**J**	810	1.1	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Isophorone	810	U	810	40	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Naphthalene	**31**	**J**	810	2.5	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Nitrobenzene	810	U	810	6.7	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
N-Nitrosodi-n-propylamine	810	U	810	19	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
N-Nitrosodiphenylamine	810	U	810	64	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Pentachlorophenol	460	U	460	28	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Phenol	810	U	810	22	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Phenanthrene	**580**	**J**	810	2.2	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
Pyrene	**1100**		810	1.3	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5
3 & 4 Methylphenol	810	U	810	61	ug/Kg	☼	02/28/18 11:05	03/05/18 19:27	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*32 - 120*	*02/28/18 11:05*	*03/05/18 19:27*	*2.5*
2-Fluorophenol (Surr)	*65*		*29 - 120*	*02/28/18 11:05*	*03/05/18 19:27*	*2.5*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 120*	*02/28/18 11:05*	*03/05/18 19:27*	*2.5*
Nitrobenzene-d5 (Surr)	*61*		*30 - 120*	*02/28/18 11:05*	*03/05/18 19:27*	*2.5*
Phenol-d5 (Surr)	*65*		*29 - 120*	*02/28/18 11:05*	*03/05/18 19:27*	*2.5*
Terphenyl-d14 (Surr)	*56*		*41 - 120*	*02/28/18 11:05*	*03/05/18 19:27*	*2.5*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-004
Date Collected: 02/23/18 09:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-5
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**4.6**	**J**	310	4.1	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2,2'-oxybis[1-chloropropane]	310	U	310	11	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2,4,5-Trichlorophenol	310	U	310	29	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2,4,6-Trichlorophenol	310	U	310	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2,4-Dichlorophenol	310	U	310	23	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2,4-Dimethylphenol	310	U	310	23	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2,4-Dinitrotoluene	310	U	310	20	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2,6-Dinitrotoluene	310	U	310	24	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2-Chloronaphthalene	310	U	310	0.52	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2-Chlorophenol	310	U	310	9.6	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2-Methylnaphthalene	**32**	**J**	310	0.58	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2-Methylphenol	310	U	310	13	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2-Nitroaniline	230	U	230	11	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
2-Nitrophenol	310	U	310	9.7	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
3,3'-Dichlorobenzidine	1900	U	1900	21	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
3-Nitroaniline	230	U	230	19	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
4,6-Dinitro-2-methylphenol	170	U	170	11	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
4-Bromophenyl phenyl ether	310	U	310	15	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
4-Chloro-3-methylphenol	310	U	310	24	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
4-Chloroaniline	230	U	230	20	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
4-Chlorophenyl phenyl ether	310	U	310	15	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
4-Nitrophenol	380	U	380	20	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Acenaphthene	**14**	**J**	310	0.89	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Acenaphthylene	310	U	310	0.41	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Acetophenone	310	U	310	11	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Anthracene	**36**	**J**	310	0.91	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Atrazine	47	U	47	11	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Benzaldehyde	310	U	310	14	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Benzo[a]anthracene	**78**	**J**	310	0.73	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Benzo[a]pyrene	**91**	**J**	310	0.75	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Benzo[b]fluoranthene	**110**	**J**	310	0.69	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Benzo[g,h,i]perylene	**57**	**J**	310	0.41	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Benzo[k]fluoranthene	**46**	**J**	310	0.79	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Bis(2-chloroethoxy)methane	310	U	310	26	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Bis(2-chloroethyl)ether	93	U	93	2.3	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Bis(2-ethylhexyl) phthalate	**47**	**J B**	310	22	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Butyl benzyl phthalate	310	U	310	12	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Caprolactam	310	U	310	43	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Carbazole	310	U	310	31	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Chrysene	**90**	**J**	310	1.3	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Dibenz(a,h)anthracene	310	U	310	0.77	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Dibenzofuran	**15**	**J**	310	0.77	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Diethyl phthalate	310	U	310	19	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Dimethyl phthalate	310	U	310	20	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Di-n-butyl phthalate	**27**	**J**	310	17	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Di-n-octyl phthalate	310	U	310	9.2	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Fluoranthene	**220**	**J**	310	0.64	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022318-DS-004
Date Collected: 02/23/18 09:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-5
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**18**	**J**	310	0.62	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Hexachlorobenzene	310	U	310	2.4	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Hexachlorobutadiene	47	U	47	6.5	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Hexachlorocyclopentadiene	310	U	310	9.4	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Hexachloroethane	310	U	310	10	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Indeno[1,2,3-cd]pyrene	**44**	**J**	310	0.41	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Isophorone	310	U	310	15	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Naphthalene	**12**	**J**	310	0.96	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Nitrobenzene	310	U	310	2.6	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
N-Nitrosodi-n-propylamine	310	U	310	7.3	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
N-Nitrosodiphenylamine	310	U	310	24	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Pentachlorophenol	170	U	170	11	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Phenol	310	U	310	8.5	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Phenanthrene	**160**	**J**	310	0.85	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
Pyrene	**150**	**J**	310	0.51	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1
3 & 4 Methylphenol	310	U	310	23	ug/Kg	☼	02/28/18 11:05	03/05/18 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*32 - 120*	*02/28/18 11:05*	*03/05/18 16:45*	*1*
2-Fluorophenol (Surr)	*66*		*29 - 120*	*02/28/18 11:05*	*03/05/18 16:45*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*10 - 120*	*02/28/18 11:05*	*03/05/18 16:45*	*1*
Nitrobenzene-d5 (Surr)	*65*		*30 - 120*	*02/28/18 11:05*	*03/05/18 16:45*	*1*
Phenol-d5 (Surr)	*69*		*29 - 120*	*02/28/18 11:05*	*03/05/18 16:45*	*1*
Terphenyl-d14 (Surr)	*71*		*41 - 120*	*02/28/18 11:05*	*03/05/18 16:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**310**	**J**	6200	82	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2,2'-oxybis[1-chloropropane]	6200	U	6200	220	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2,4,5-Trichlorophenol	6200	U	6200	590	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2,4,6-Trichlorophenol	6200	U	6200	210	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2,4-Dichlorophenol	6200	U	6200	470	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2,4-Dimethylphenol	6200	U	6200	470	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2,4-Dinitrophenol	3500	U	3500	490	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2,4-Dinitrotoluene	6200	U	6200	400	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2,6-Dinitrotoluene	6200	U	6200	490	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2-Chloronaphthalene	6200	U	6200	11	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2-Chlorophenol	6200	U	6200	190	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2-Methylnaphthalene	**1200**	**J**	6200	12	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2-Methylphenol	6200	U	6200	260	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2-Nitroaniline	4700	U	4700	210	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
2-Nitrophenol	6200	U	6200	190	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
3,3'-Dichlorobenzidine	38000	U	38000	420	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
3-Nitroaniline	4700	U	4700	380	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
4,6-Dinitro-2-methylphenol	3500	U	3500	220	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
4-Bromophenyl phenyl ether	6200	U	6200	310	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
4-Chloro-3-methylphenol	6200	U	6200	490	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
4-Chloroaniline	4700	U	4700	400	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
4-Chlorophenyl phenyl ether	6200	U	6200	310	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
4-Nitroaniline	4700	U	4700	610	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
4-Nitrophenol	7800	U	7800	400	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Acenaphthene	**4700**	**J**	6200	18	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Acenaphthylene	6200	U	6200	8.2	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Acetophenone	6200	U	6200	220	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Anthracene	**5300**	**J**	6200	18	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Atrazine	940	U	940	210	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Benzaldehyde	6200	U	6200	280	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Benzo[a]anthracene	**7500**		6200	15	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Benzo[a]pyrene	**6900**		6200	15	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Benzo[b]fluoranthene	**9700**		6200	14	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Benzo[g,h,i]perylene	**3000**	**J**	6200	8.2	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Benzo[k]fluoranthene	**2900**	**J**	6200	16	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Bis(2-chloroethoxy)methane	6200	U	6200	520	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Bis(2-chloroethyl)ether	1900	U	1900	47	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Bis(2-ethylhexyl) phthalate	6200	U	6200	450	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Butyl benzyl phthalate	6200	U	6200	230	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Caprolactam	6200	U	6200	870	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Carbazole	**3000**	**J**	6200	630	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Chrysene	**6800**		6200	26	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Dibenz(a,h)anthracene	**1300**	**J**	6200	16	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Dibenzofuran	**2000**	**J**	6200	16	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Diethyl phthalate	6200	U	6200	380	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Dimethyl phthalate	6200	U	6200	400	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Di-n-butyl phthalate	6200	U	6200	350	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Di-n-octyl phthalate	6200	U	6200	190	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Fluoranthene	**22000**		6200	13	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**3200**	**J**	6200	12	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Hexachlorobenzene	6200	U	6200	49	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Hexachlorobutadiene	940	U	940	130	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Hexachlorocyclopentadiene	6200	U	6200	190	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Hexachloroethane	6200	U	6200	210	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Indeno[1,2,3-cd]pyrene	**2900**	**J**	6200	8.2	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Isophorone	6200	U	6200	310	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Naphthalene	**3600**	**J**	6200	19	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Nitrobenzene	6200	U	6200	52	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
N-Nitrosodi-n-propylamine	6200	U	6200	150	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
N-Nitrosodiphenylamine	6200	U	6200	490	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Pentachlorophenol	3500	U	3500	210	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Phenol	6200	U	6200	170	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Phenanthrene	**19000**		6200	17	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
Pyrene	**14000**		6200	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20
3 & 4 Methylphenol	6200	U	6200	470	ug/Kg	☼	02/28/18 11:18	03/05/18 17:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*83*		*32 - 120*	*02/28/18 11:18*	*03/05/18 17:54*	*20*
2-Fluorophenol (Surr)	*75*		*29 - 120*	*02/28/18 11:18*	*03/05/18 17:54*	*20*
2,4,6-Tribromophenol (Surr)	*53*		*10 - 120*	*02/28/18 11:18*	*03/05/18 17:54*	*20*
Nitrobenzene-d5 (Surr)	*84*		*30 - 120*	*02/28/18 11:18*	*03/05/18 17:54*	*20*
Phenol-d5 (Surr)	*82*		*29 - 120*	*02/28/18 11:18*	*03/05/18 17:54*	*20*
Terphenyl-d14 (Surr)	*81*		*41 - 120*	*02/28/18 11:18*	*03/05/18 17:54*	*20*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-006
Date Collected: 02/23/18 10:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-7
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**14**	**J**	300	4.0	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2,4-Dinitrotoluene	300	U	300	19	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2-Chloronaphthalene	300	U	300	0.51	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2-Chlorophenol	300	U	300	9.3	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2-Methylnaphthalene	**81**	**J**	300	0.57	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2-Methylphenol	300	U	300	13	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
2-Nitrophenol	300	U	300	9.4	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
4,6-Dinitro-2-methylphenol	170	U	170	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
4-Chloroaniline	230	U	230	19	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
4-Nitrophenol	380	U	380	19	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Acenaphthene	**14**	**J**	300	0.86	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Acenaphthylene	**4.3**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Acetophenone	300	U	300	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Anthracene	**11**	**J**	300	0.89	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Atrazine	45	U	45	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Benzo[a]anthracene	**27**	**J**	300	0.72	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Benzo[a]pyrene	**52**	**J**	300	0.73	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Benzo[b]fluoranthene	**61**	**J**	300	0.67	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Benzo[g,h,i]perylene	**37**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Benzo[k]fluoranthene	**24**	**J**	300	0.77	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Bis(2-chloroethyl)ether	91	U	91	2.3	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Bis(2-ethylhexyl) phthalate	**61**	**J B**	300	22	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Caprolactam	300	U	300	42	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Carbazole	300	U	300	31	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Chrysene	**61**	**J**	300	1.3	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Dibenz(a,h)anthracene	300	U	300	0.75	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Dibenzofuran	**19**	**J**	300	0.75	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Di-n-butyl phthalate	**44**	**J**	300	17	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Di-n-octyl phthalate	300	U	300	9.0	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Fluoranthene	**88**	**J**	300	0.63	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022318-DS-006
Date Collected: 02/23/18 10:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-7
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**14**	**J**	300	0.60	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Hexachlorobutadiene	45	U	45	6.4	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Hexachlorocyclopentadiene	300	U	300	9.2	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Indeno[1,2,3-cd]pyrene	**27**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Isophorone	300	U	300	15	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Naphthalene	**24**	**J**	300	0.93	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
N-Nitrosodi-n-propylamine	300	U	300	7.2	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Phenol	300	U	300	8.3	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Phenanthrene	**130**	**J**	300	0.83	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
Pyrene	**70**	**J**	300	0.50	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	02/28/18 11:18	03/05/18 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*32 - 120*	*02/28/18 11:18*	*03/05/18 17:08*	*1*
2-Fluorophenol (Surr)	*66*		*29 - 120*	*02/28/18 11:18*	*03/05/18 17:08*	*1*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 120*	*02/28/18 11:18*	*03/05/18 17:08*	*1*
Nitrobenzene-d5 (Surr)	*74*		*30 - 120*	*02/28/18 11:18*	*03/05/18 17:08*	*1*
Phenol-d5 (Surr)	*71*		*29 - 120*	*02/28/18 11:18*	*03/05/18 17:08*	*1*
Terphenyl-d14 (Surr)	*68*		*41 - 120*	*02/28/18 11:18*	*03/05/18 17:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-007
Date Collected: 02/23/18 13:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-8
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**12**	**J**	300	4.0	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2,4,5-Trichlorophenol	300	U	300	29	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2,4-Dinitrotoluene	300	U	300	20	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2-Chloronaphthalene	300	U	300	0.52	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2-Chlorophenol	300	U	300	9.5	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2-Methylnaphthalene	**49**	**J**	300	0.58	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2-Methylphenol	300	U	300	13	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
2-Nitrophenol	300	U	300	9.6	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
3,3'-Dichlorobenzidine	1800	U	1800	21	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
4,6-Dinitro-2-methylphenol	170	U	170	11	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
4-Chloroaniline	230	U	230	20	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
4-Nitrophenol	380	U	380	20	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Acenaphthene	**15**	**J**	300	0.88	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Acenaphthylene	300	U	300	0.40	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Acetophenone	300	U	300	11	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Anthracene	**19**	**J**	300	0.90	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Atrazine	46	U	46	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Benzo[a]anthracene	**66**	**J**	300	0.73	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Benzo[a]pyrene	**100**	**J**	300	0.74	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Benzo[b]fluoranthene	**130**	**J**	300	0.68	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Benzo[g,h,i]perylene	**52**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Benzo[k]fluoranthene	**48**	**J**	300	0.78	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Bis(2-chloroethyl)ether	92	U	92	2.3	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Bis(2-ethylhexyl) phthalate	**59**	**J B**	300	22	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Butyl benzyl phthalate	300	U	300	12	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Caprolactam	300	U	300	43	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Carbazole	300	U	300	31	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Chrysene	**97**	**J**	300	1.3	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Dibenz(a,h)anthracene	**35**	**J**	300	0.76	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Dibenzofuran	**20**	**J**	300	0.76	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Dimethyl phthalate	300	U	300	20	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Di-n-butyl phthalate	**27**	**J**	300	17	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Di-n-octyl phthalate	300	U	300	9.1	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Fluoranthene	**210**	**J**	300	0.63	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022318-DS-007
Date Collected: 02/23/18 13:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-8
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**16**	**J**	300	0.61	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Hexachlorobutadiene	46	U	46	6.5	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Hexachlorocyclopentadiene	300	U	300	9.3	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Indeno[1,2,3-cd]pyrene	**46**	**J**	300	0.40	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Isophorone	300	U	300	15	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Naphthalene	**14**	**J**	300	0.95	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
N-Nitrosodi-n-propylamine	300	U	300	7.3	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Phenol	300	U	300	8.4	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Phenanthrene	**170**	**J**	300	0.84	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
Pyrene	**150**	**J**	300	0.51	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	02/28/18 11:18	03/05/18 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*32 - 120*	*02/28/18 11:18*	*03/05/18 17:31*	*1*
2-Fluorophenol (Surr)	*57*		*29 - 120*	*02/28/18 11:18*	*03/05/18 17:31*	*1*
2,4,6-Tribromophenol (Surr)	*36*		*10 - 120*	*02/28/18 11:18*	*03/05/18 17:31*	*1*
Nitrobenzene-d5 (Surr)	*60*		*30 - 120*	*02/28/18 11:18*	*03/05/18 17:31*	*1*
Phenol-d5 (Surr)	*61*		*29 - 120*	*02/28/18 11:18*	*03/05/18 17:31*	*1*
Terphenyl-d14 (Surr)	*61*		*41 - 120*	*02/28/18 11:18*	*03/05/18 17:31*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**11**	**J**	600	8.0	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2,2'-oxybis[1-chloropropane]	600	U	600	22	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2,4,5-Trichlorophenol	600	U	600	57	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2,4,6-Trichlorophenol	600	U	600	20	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2,4-Dichlorophenol	600	U	600	46	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2,4-Dimethylphenol	600	U	600	46	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2,4-Dinitrophenol	340	U	340	48	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2,4-Dinitrotoluene	600	U	600	39	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2,6-Dinitrotoluene	600	U	600	48	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2-Chloronaphthalene	600	U	600	1.0	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2-Chlorophenol	600	U	600	19	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2-Methylnaphthalene	**49**	**J**	600	1.1	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2-Methylphenol	600	U	600	25	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2-Nitroaniline	460	U	460	21	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
2-Nitrophenol	600	U	600	19	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
3,3'-Dichlorobenzidine	3700	U	3700	41	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
3-Nitroaniline	460	U	460	37	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
4,6-Dinitro-2-methylphenol	340	U	340	21	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
4-Bromophenyl phenyl ether	600	U	600	30	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
4-Chloro-3-methylphenol	600	U	600	48	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
4-Chloroaniline	460	U	460	39	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
4-Chlorophenyl phenyl ether	600	U	600	30	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
4-Nitroaniline	460	U	460	59	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
4-Nitrophenol	750	U	750	39	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Acenaphthene	**32**	**J**	600	1.7	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Acenaphthylene	**7.8**	**J**	600	0.80	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Acetophenone	600	U	600	21	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Anthracene	**53**	**J**	600	1.8	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Atrazine	91	U	91	21	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Benzaldehyde	600	U	600	27	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Benzo[a]anthracene	**180**	**J**	600	1.4	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Benzo[a]pyrene	**230**	**J**	600	1.5	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Benzo[b]fluoranthene	**320**	**J**	600	1.3	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Benzo[g,h,i]perylene	**120**	**J**	600	0.80	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Benzo[k]fluoranthene	**100**	**J**	600	1.6	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Bis(2-chloroethoxy)methane	600	U	600	50	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Bis(2-chloroethyl)ether	180	U	180	4.6	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Bis(2-ethylhexyl) phthalate	**100**	**J B**	600	43	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Butyl benzyl phthalate	600	U	600	23	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Caprolactam	600	U	600	84	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Carbazole	600	U	600	62	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Chrysene	**230**	**J**	600	2.5	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Dibenz(a,h)anthracene	**72**	**J**	600	1.5	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Dibenzofuran	**31**	**J**	600	1.5	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Diethyl phthalate	600	U	600	37	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Dimethyl phthalate	600	U	600	39	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Di-n-butyl phthalate	600	U	600	34	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Di-n-octyl phthalate	600	U	600	18	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Fluoranthene	**540**	**J**	600	1.3	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**34**	**J**	600	1.2	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Hexachlorobenzene	600	U	600	4.8	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Hexachlorobutadiene	91	U	91	13	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Hexachlorocyclopentadiene	600	U F1	600	18	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Hexachloroethane	600	U	600	21	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Indeno[1,2,3-cd]pyrene	**120**	**J**	600	0.80	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Isophorone	600	U	600	30	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Naphthalene	**21**	**J**	600	1.9	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Nitrobenzene	600	U	600	5.0	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
N-Nitrosodi-n-propylamine	600	U	600	14	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
N-Nitrosodiphenylamine	600	U	600	48	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Pentachlorophenol	340	U	340	21	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Phenol	600	U	600	17	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Phenanthrene	**290**	**J**	600	1.7	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
Pyrene	**370**	**J**	600	1.0	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2
3 & 4 Methylphenol	600	U	600	46	ug/Kg	☼	02/28/18 11:18	03/05/18 18:17	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*32 - 120*	*02/28/18 11:18*	*03/05/18 18:17*	*2*
2-Fluorophenol (Surr)	*50*		*29 - 120*	*02/28/18 11:18*	*03/05/18 18:17*	*2*
2,4,6-Tribromophenol (Surr)	*28*		*10 - 120*	*02/28/18 11:18*	*03/05/18 18:17*	*2*
Nitrobenzene-d5 (Surr)	*49*		*30 - 120*	*02/28/18 11:18*	*03/05/18 18:17*	*2*
Phenol-d5 (Surr)	*52*		*29 - 120*	*02/28/18 11:18*	*03/05/18 18:17*	*2*
Terphenyl-d14 (Surr)	*50*		*41 - 120*	*02/28/18 11:18*	*03/05/18 18:17*	*2*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022218-DS-001
Date Collected: 02/22/18 10:30
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-2
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	56	U	56	25	ug/Kg	☼	02/28/18 09:29	03/01/18 22:18	1
Aroclor-1221	56	U	56	27	ug/Kg	☼	02/28/18 09:29	03/01/18 22:18	1
Aroclor-1232	56	U	56	26	ug/Kg	☼	02/28/18 09:29	03/01/18 22:18	1
Aroclor-1242	56	U	56	21	ug/Kg	☼	02/28/18 09:29	03/01/18 22:18	1
Aroclor-1248	56	U	56	27	ug/Kg	☼	02/28/18 09:29	03/01/18 22:18	1
Aroclor-1254	**26**	**J**	56	26	ug/Kg	☼	02/28/18 09:29	03/01/18 22:18	1
Aroclor-1260	56	U	56	25	ug/Kg	☼	02/28/18 09:29	03/01/18 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*14 - 128*	*02/28/18 09:29*	*03/01/18 22:18*	*1*
DCB Decachlorobiphenyl	*136*	*X*	*10 - 132*	*02/28/18 09:29*	*03/01/18 22:18*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022218-DS-002
Date Collected: 02/22/18 10:40
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-3
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	59	U	59	26	ug/Kg	☼	02/28/18 09:29	03/01/18 22:37	1
Aroclor-1221	59	U	59	28	ug/Kg	☼	02/28/18 09:29	03/01/18 22:37	1
Aroclor-1232	59	U	59	27	ug/Kg	☼	02/28/18 09:29	03/01/18 22:37	1
Aroclor-1242	59	U	59	22	ug/Kg	☼	02/28/18 09:29	03/01/18 22:37	1
Aroclor-1248	59	U	59	28	ug/Kg	☼	02/28/18 09:29	03/01/18 22:37	1
Aroclor-1254	59	U	59	27	ug/Kg	☼	02/28/18 09:29	03/01/18 22:37	1
Aroclor-1260	59	U	59	26	ug/Kg	☼	02/28/18 09:29	03/01/18 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*14 - 128*	*02/28/18 09:29*	*03/01/18 22:37*	*1*
DCB Decachlorobiphenyl	*127*		*10 - 132*	*02/28/18 09:29*	*03/01/18 22:37*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022318-DS-003
Date Collected: 02/23/18 09:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-4
Matrix: Solid
Percent Solids: 80.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	61	U	61	27	ug/Kg	☼	02/28/18 09:29	03/01/18 22:56	1
Aroclor-1221	61	U	61	29	ug/Kg	☼	02/28/18 09:29	03/01/18 22:56	1
Aroclor-1232	61	U	61	28	ug/Kg	☼	02/28/18 09:29	03/01/18 22:56	1
Aroclor-1242	61	U	61	23	ug/Kg	☼	02/28/18 09:29	03/01/18 22:56	1
Aroclor-1248	61	U	61	29	ug/Kg	☼	02/28/18 09:29	03/01/18 22:56	1
Aroclor-1254	**49**	**J**	61	28	ug/Kg	☼	02/28/18 09:29	03/01/18 22:56	1
Aroclor-1260	61	U	61	27	ug/Kg	☼	02/28/18 09:29	03/01/18 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*14 - 128*	*02/28/18 09:29*	*03/01/18 22:56*	*1*
DCB Decachlorobiphenyl	*135*	*X*	*10 - 132*	*02/28/18 09:29*	*03/01/18 22:56*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022318-DS-004
Date Collected: 02/23/18 09:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-5
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	59	U	59	26	ug/Kg	☼	02/28/18 09:29	03/01/18 23:15	1
Aroclor-1221	59	U	59	28	ug/Kg	☼	02/28/18 09:29	03/01/18 23:15	1
Aroclor-1232	59	U	59	27	ug/Kg	☼	02/28/18 09:29	03/01/18 23:15	1
Aroclor-1242	**620**		59	22	ug/Kg	☼	02/28/18 09:29	03/01/18 23:15	1
Aroclor-1248	59	U	59	28	ug/Kg	☼	02/28/18 09:29	03/01/18 23:15	1
Aroclor-1254	**420**		59	27	ug/Kg	☼	02/28/18 09:29	03/01/18 23:15	1
Aroclor-1260	59	U	59	26	ug/Kg	☼	02/28/18 09:29	03/01/18 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*102*		*14 - 128*	*02/28/18 09:29*	*03/01/18 23:15*	*1*
DCB Decachlorobiphenyl	*119*		*10 - 132*	*02/28/18 09:29*	*03/01/18 23:15*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	59	U	59	26	ug/Kg	☼	02/28/18 09:29	03/02/18 12:19	1
Aroclor-1221	59	U	59	28	ug/Kg	☼	02/28/18 09:29	03/02/18 12:19	1
Aroclor-1232	59	U	59	27	ug/Kg	☼	02/28/18 09:29	03/02/18 12:19	1
Aroclor-1242	59	U	59	22	ug/Kg	☼	02/28/18 09:29	03/02/18 12:19	1
Aroclor-1248	**65**		59	28	ug/Kg	☼	02/28/18 09:29	03/02/18 12:19	1
Aroclor-1254	59	U	59	27	ug/Kg	☼	02/28/18 09:29	03/02/18 12:19	1
Aroclor-1260	**120**		59	26	ug/Kg	☼	02/28/18 09:29	03/02/18 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*14 - 128*	*02/28/18 09:29*	*03/02/18 12:19*	*1*
DCB Decachlorobiphenyl	*110*		*10 - 132*	*02/28/18 09:29*	*03/02/18 12:19*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022318-DS-006
Date Collected: 02/23/18 10:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-7
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	55	U	55	24	ug/Kg	☼	02/28/18 09:29	03/01/18 23:53	1
Aroclor-1221	55	U	55	26	ug/Kg	☼	02/28/18 09:29	03/01/18 23:53	1
Aroclor-1232	55	U	55	25	ug/Kg	☼	02/28/18 09:29	03/01/18 23:53	1
Aroclor-1242	55	U	55	21	ug/Kg	☼	02/28/18 09:29	03/01/18 23:53	1
Aroclor-1248	**62**		55	26	ug/Kg	☼	02/28/18 09:29	03/01/18 23:53	1
Aroclor-1254	55	U	55	25	ug/Kg	☼	02/28/18 09:29	03/01/18 23:53	1
Aroclor-1260	55	U	55	24	ug/Kg	☼	02/28/18 09:29	03/01/18 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*14 - 128*	*02/28/18 09:29*	*03/01/18 23:53*	*1*
DCB Decachlorobiphenyl	*113*		*10 - 132*	*02/28/18 09:29*	*03/01/18 23:53*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022318-DS-007
Date Collected: 02/23/18 13:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-8
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	56	U	56	25	ug/Kg	☼	02/28/18 09:29	03/02/18 12:39	1
Aroclor-1221	56	U	56	27	ug/Kg	☼	02/28/18 09:29	03/02/18 12:39	1
Aroclor-1232	56	U	56	26	ug/Kg	☼	02/28/18 09:29	03/02/18 12:39	1
Aroclor-1242	56	U	56	21	ug/Kg	☼	02/28/18 09:29	03/02/18 12:39	1
Aroclor-1248	**470**		56	27	ug/Kg	☼	02/28/18 09:29	03/02/18 12:39	1
Aroclor-1254	56	U	56	26	ug/Kg	☼	02/28/18 09:29	03/02/18 12:39	1
Aroclor-1260	**410**	**p**	56	25	ug/Kg	☼	02/28/18 09:29	03/02/18 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*02/28/18 09:29*	*03/02/18 12:39*	*1*
DCB Decachlorobiphenyl	*101*	*p*	*10 - 132*	*02/28/18 09:29*	*03/02/18 12:39*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	56	U	56	25	ug/Kg	☼	02/28/18 09:29	03/02/18 12:58	1
Aroclor-1221	56	U	56	27	ug/Kg	☼	02/28/18 09:29	03/02/18 12:58	1
Aroclor-1232	56	U	56	26	ug/Kg	☼	02/28/18 09:29	03/02/18 12:58	1
Aroclor-1242	56	U	56	21	ug/Kg	☼	02/28/18 09:29	03/02/18 12:58	1
Aroclor-1248	**300**		56	27	ug/Kg	☼	02/28/18 09:29	03/02/18 12:58	1
Aroclor-1254	56	U	56	26	ug/Kg	☼	02/28/18 09:29	03/02/18 12:58	1
Aroclor-1260	**200**		56	25	ug/Kg	☼	02/28/18 09:29	03/02/18 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*104*		*14 - 128*	*02/28/18 09:29*	*03/02/18 12:58*	*1*
DCB Decachlorobiphenyl	*105*		*10 - 132*	*02/28/18 09:29*	*03/02/18 12:58*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Lead - Fractionated

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (coarse particulate matter)	520		0.95	0.27	mg/Kg		03/21/18 14:00	03/22/18 21:58	1
Lead (fine particulate matter)	130		0.85	0.24	mg/Kg		03/21/18 14:00	03/22/18 22:07	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Lead - Fractionated

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (coarse particulate matter)	230		0.85	0.24	mg/Kg		03/21/18 14:00	03/22/18 22:21	1
Lead (fine particulate matter)	200		0.96	0.27	mg/Kg		03/21/18 14:00	03/22/18 22:02	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP) - Calculated - Fractionated

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	360		0.91	0.26	mg/Kg			03/26/18 13:49	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP) - Calculated - Fractionated

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	220		0.89	0.25	mg/Kg			03/26/18 13:49	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022218-DS-001
Date Collected: 02/22/18 10:30
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-2
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	50		0.67	0.30	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1
Beryllium	0.41		0.13	0.045	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1
Cadmium	0.62		0.067	0.040	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1
Cobalt	7.0		0.33	0.17	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1
Chromium	11		0.67	0.13	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1
Copper	18		0.67	0.20	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1
Manganese	300	B	0.67	0.26	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1
Nickel	21		0.67	0.20	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1
Zinc	54		1.7	1.1	mg/Kg	☼	02/28/18 14:00	03/05/18 20:50	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022218-DS-002
Date Collected: 02/22/18 10:40
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-3
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	61		0.91	0.41	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1
Beryllium	0.47		0.18	0.061	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1
Cadmium	0.32		0.091	0.054	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1
Cobalt	8.2		0.45	0.23	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1
Chromium	13		0.91	0.17	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1
Copper	20		0.91	0.27	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1
Manganese	360	B	0.91	0.35	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1
Nickel	24		0.91	0.26	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1
Zinc	60		2.3	1.5	mg/Kg	☼	02/28/18 14:00	03/05/18 21:13	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022318-DS-003
Date Collected: 02/23/18 09:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-4
Matrix: Solid
Percent Solids: 80.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	75		0.79	0.36	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1
Beryllium	0.41		0.16	0.053	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1
Cadmium	0.82		0.079	0.047	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1
Cobalt	5.8		0.40	0.20	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1
Chromium	18		0.79	0.15	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1
Copper	25		0.79	0.23	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1
Manganese	390	B	0.79	0.31	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1
Nickel	17		0.79	0.23	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1
Zinc	180		2.0	1.4	mg/Kg	☼	02/28/18 14:00	03/05/18 21:18	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022318-DS-004
Date Collected: 02/23/18 09:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-5
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	44		0.86	0.39	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1
Beryllium	0.46		0.17	0.058	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1
Cadmium	0.26		0.086	0.051	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1
Cobalt	7.8		0.43	0.21	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1
Chromium	13		0.86	0.16	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1
Copper	16		0.86	0.25	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1
Manganese	340	B	0.86	0.33	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1
Nickel	23		0.86	0.25	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1
Zinc	46		2.1	1.5	mg/Kg	☼	02/28/18 14:00	03/05/18 21:32	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	75		0.83	0.37	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1
Beryllium	0.42		0.17	0.056	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1
Cadmium	1.9		0.083	0.050	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1
Cobalt	7.2		0.41	0.21	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1
Chromium	15		0.83	0.16	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1
Copper	19		0.83	0.24	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1
Manganese	320	B	0.83	0.32	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1
Nickel	21		0.83	0.24	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1
Zinc	120		2.1	1.4	mg/Kg	☼	02/28/18 14:00	03/05/18 21:36	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022318-DS-006
Date Collected: 02/23/18 10:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-7
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	56		0.70	0.32	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1
Beryllium	0.45		0.14	0.047	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1
Cadmium	0.33		0.070	0.042	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1
Cobalt	8.7		0.35	0.18	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1
Chromium	13		0.70	0.13	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1
Copper	20		0.70	0.21	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1
Manganese	330	B	0.70	0.27	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1
Nickel	26		0.70	0.20	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1
Zinc	63		1.8	1.2	mg/Kg	☼	02/28/18 14:00	03/05/18 21:41	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022318-DS-007
Date Collected: 02/23/18 13:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-8
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	56		0.83	0.38	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1
Beryllium	0.46		0.17	0.056	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1
Cadmium	0.48		0.083	0.050	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1
Cobalt	7.7		0.42	0.21	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1
Chromium	13		0.83	0.16	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1
Copper	20		0.83	0.25	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1
Manganese	350	B	0.83	0.32	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1
Nickel	23		0.83	0.24	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1
Zinc	78		2.1	1.4	mg/Kg	☼	02/28/18 14:00	03/05/18 21:46	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	76		0.73	0.33	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1
Beryllium	0.45		0.15	0.049	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1
Cadmium	1.1		0.073	0.044	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1
Cobalt	7.7		0.36	0.18	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1
Chromium	17		0.73	0.14	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1
Copper	22		0.73	0.21	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1
Manganese	310	B	0.73	0.28	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1
Nickel	23		0.73	0.21	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1
Zinc	84		1.8	1.2	mg/Kg	☼	02/28/18 14:00	03/05/18 21:50	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022218-DS-001
Date Collected: 02/22/18 10:30
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-2
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	F1	0.13	0.10	mg/Kg	☼	02/28/18 14:00	03/01/18 16:41	2
Arsenic	6.4		0.067	0.050	mg/Kg	☼	02/28/18 14:00	03/01/18 16:41	2
Lead	16		0.17	0.052	mg/Kg	☼	02/28/18 14:00	03/01/18 16:41	2
Selenium	0.84		0.13	0.10	mg/Kg	☼	02/28/18 14:00	03/01/18 16:41	2
Thallium	0.32		0.067	0.040	mg/Kg	☼	02/28/18 14:00	03/01/18 16:41	2
Vanadium	17		0.67	0.19	mg/Kg	☼	02/28/18 14:00	03/01/18 16:41	2
Silver	0.045	J	0.067	0.018	mg/Kg	☼	02/28/18 14:00	03/01/18 16:41	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022218-DS-002
Date Collected: 02/22/18 10:40
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-3
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31		0.18	0.14	mg/Kg	☼	02/28/18 14:00	03/01/18 17:03	2
Arsenic	7.5		0.091	0.068	mg/Kg	☼	02/28/18 14:00	03/01/18 17:03	2
Lead	14		0.23	0.071	mg/Kg	☼	02/28/18 14:00	03/01/18 17:03	2
Selenium	0.93		0.18	0.14	mg/Kg	☼	02/28/18 14:00	03/01/18 17:03	2
Thallium	0.41		0.091	0.054	mg/Kg	☼	02/28/18 14:00	03/01/18 17:03	2
Vanadium	18		0.91	0.26	mg/Kg	☼	02/28/18 14:00	03/01/18 17:03	2
Silver	0.048	J	0.091	0.025	mg/Kg	☼	02/28/18 14:00	03/01/18 17:03	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022318-DS-003
Date Collected: 02/23/18 09:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-4
Matrix: Solid
Percent Solids: 80.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31		0.16	0.12	mg/Kg	☼	02/28/18 14:00	03/01/18 17:07	2
Arsenic	6.1		0.079	0.059	mg/Kg	☼	02/28/18 14:00	03/01/18 17:07	2
Lead	43		0.20	0.062	mg/Kg	☼	02/28/18 14:00	03/01/18 17:07	2
Selenium	1.0		0.16	0.12	mg/Kg	☼	02/28/18 14:00	03/01/18 17:07	2
Thallium	0.26		0.079	0.047	mg/Kg	☼	02/28/18 14:00	03/01/18 17:07	2
Vanadium	17		0.79	0.23	mg/Kg	☼	02/28/18 14:00	03/01/18 17:07	2
Silver	0.13		0.079	0.022	mg/Kg	☼	02/28/18 14:00	03/01/18 17:07	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022318-DS-004
Date Collected: 02/23/18 09:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-5
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.17	U	0.17	0.13	mg/Kg	☼	02/28/18 14:00	03/01/18 17:12	2
Arsenic	**4.9**		0.086	0.064	mg/Kg	☼	02/28/18 14:00	03/01/18 17:12	2
Lead	**8.3**		0.21	0.067	mg/Kg	☼	02/28/18 14:00	03/01/18 17:12	2
Selenium	**0.74**		0.17	0.13	mg/Kg	☼	02/28/18 14:00	03/01/18 17:12	2
Thallium	**0.28**		0.086	0.051	mg/Kg	☼	02/28/18 14:00	03/01/18 17:12	2
Vanadium	**19**		0.86	0.25	mg/Kg	☼	02/28/18 14:00	03/01/18 17:12	2
Silver	**0.036**	**J**	0.086	0.024	mg/Kg	☼	02/28/18 14:00	03/01/18 17:12	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74		0.17	0.13	mg/Kg	☼	02/28/18 14:00	03/01/18 17:25	2
Arsenic	6.2		0.083	0.062	mg/Kg	☼	02/28/18 14:00	03/01/18 17:25	2
Selenium	1.2		0.17	0.12	mg/Kg	☼	02/28/18 14:00	03/01/18 17:25	2
Thallium	0.31		0.083	0.050	mg/Kg	☼	02/28/18 14:00	03/01/18 17:25	2
Vanadium	16		0.83	0.24	mg/Kg	☼	02/28/18 14:00	03/01/18 17:25	2
Silver	0.078	J	0.083	0.023	mg/Kg	☼	02/28/18 14:00	03/01/18 17:25	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022318-DS-006
Date Collected: 02/23/18 10:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-7
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.18		0.14	0.11	mg/Kg	☼	02/28/18 14:00	03/01/18 17:30	2
Arsenic	8.6		0.070	0.053	mg/Kg	☼	02/28/18 14:00	03/01/18 17:30	2
Lead	16		0.18	0.055	mg/Kg	☼	02/28/18 14:00	03/01/18 17:30	2
Selenium	0.85		0.14	0.11	mg/Kg	☼	02/28/18 14:00	03/01/18 17:30	2
Thallium	0.37		0.070	0.042	mg/Kg	☼	02/28/18 14:00	03/01/18 17:30	2
Vanadium	18		0.70	0.20	mg/Kg	☼	02/28/18 14:00	03/01/18 17:30	2
Silver	0.054	J	0.070	0.019	mg/Kg	☼	02/28/18 14:00	03/01/18 17:30	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022318-DS-007
Date Collected: 02/23/18 13:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-8
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.21		0.17	0.13	mg/Kg	☼	02/28/18 14:00	03/01/18 17:34	2
Arsenic	6.5		0.083	0.063	mg/Kg	☼	02/28/18 14:00	03/01/18 17:34	2
Lead	21		0.21	0.065	mg/Kg	☼	02/28/18 14:00	03/01/18 17:34	2
Selenium	0.90		0.17	0.13	mg/Kg	☼	02/28/18 14:00	03/01/18 17:34	2
Thallium	0.37		0.083	0.050	mg/Kg	☼	02/28/18 14:00	03/01/18 17:34	2
Vanadium	17		0.83	0.24	mg/Kg	☼	02/28/18 14:00	03/01/18 17:34	2
Silver	0.058	J	0.083	0.023	mg/Kg	☼	02/28/18 14:00	03/01/18 17:34	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.71		0.15	0.11	mg/Kg	☼	02/28/18 14:00	03/01/18 17:39	2
Arsenic	6.8		0.073	0.054	mg/Kg	☼	02/28/18 14:00	03/01/18 17:39	2
Selenium	0.85		0.15	0.11	mg/Kg	☼	02/28/18 14:00	03/01/18 17:39	2
Thallium	0.36		0.073	0.044	mg/Kg	☼	02/28/18 14:00	03/01/18 17:39	2
Vanadium	18		0.73	0.21	mg/Kg	☼	02/28/18 14:00	03/01/18 17:39	2
Silver	0.13		0.073	0.020	mg/Kg	☼	02/28/18 14:00	03/01/18 17:39	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022218-DS-001
Date Collected: 02/22/18 10:30
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-2
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046	U	0.046	0.021	mg/Kg	☼	02/28/18 16:00	03/02/18 16:33	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022218-DS-002
Date Collected: 02/22/18 10:40
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-3
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049	U	0.049	0.022	mg/Kg	☼	02/28/18 16:00	03/02/18 16:40	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022318-DS-003
Date Collected: 02/23/18 09:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-4
Matrix: Solid
Percent Solids: 80.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051	J	0.059	0.027	mg/Kg	☼	02/28/18 16:00	03/02/18 16:44	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022318-DS-004
Date Collected: 02/23/18 09:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-5
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042	U	0.042	0.019	mg/Kg	☼	02/28/18 16:00	03/02/18 16:47	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	J	0.048	0.022	mg/Kg	☼	02/28/18 16:00	03/02/18 16:49	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022318-DS-006
Date Collected: 02/23/18 10:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-7
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047	U	0.047	0.021	mg/Kg	☼	02/28/18 16:00	03/02/18 16:51	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022318-DS-007
Date Collected: 02/23/18 13:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-8
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046	U	0.046	0.021	mg/Kg	☼	02/28/18 16:00	03/02/18 16:53	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	J	0.048	0.022	mg/Kg	☼	02/28/18 16:00	03/02/18 16:59	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

General Chemistry

Client Sample ID: SO-17303-022218-DS-001
Date Collected: 02/22/18 10:30
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-2
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.2		0.1	0.1	%			02/27/18 11:27	1
Percent Moisture	12.8		0.1	0.1	%			02/27/18 11:27	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

General Chemistry

Client Sample ID: SO-17303-022218-DS-002
Date Collected: 02/22/18 10:40
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-3
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.6		0.1	0.1	%			02/27/18 11:27	1
Percent Moisture	13.4		0.1	0.1	%			02/27/18 11:27	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

General Chemistry

Client Sample ID: SO-17303-022318-DS-003
Date Collected: 02/23/18 09:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-4
Matrix: Solid
Percent Solids: 80.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80.9		0.1	0.1	%			02/27/18 11:27	1
Percent Moisture	19.1		0.1	0.1	%			02/27/18 11:27	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

General Chemistry

Client Sample ID: SO-17303-022318-DS-004
Date Collected: 02/23/18 09:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-5
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.8		0.1	0.1	%			02/27/18 11:27	1
Percent Moisture	15.2		0.1	0.1	%			02/27/18 11:27	1

General Chemistry

Client Sample ID: SO-17303-022318-DS-005
Date Collected: 02/23/18 10:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-6
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.0		0.1	0.1	%			02/27/18 11:27	1
Percent Moisture	16.0		0.1	0.1	%			02/27/18 11:27	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

General Chemistry

Client Sample ID: SO-17303-022318-DS-006
Date Collected: 02/23/18 10:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-7
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.8		0.1	0.1	%			02/27/18 11:27	1
Percent Moisture	13.2		0.1	0.1	%			02/27/18 11:27	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

General Chemistry

Client Sample ID: SO-17303-022318-DS-007
Date Collected: 02/23/18 13:15
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-8
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.4		0.1	0.1	%			02/27/18 11:27	1
Percent Moisture	13.6		0.1	0.1	%			02/27/18 11:27	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

General Chemistry

Client Sample ID: SO-17303-022318-DS-008
Date Collected: 02/23/18 13:20
Date Received: 02/24/18 09:15

Lab Sample ID: 240-91909-9
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.6		0.1	0.1	%			02/27/18 11:27	1
Percent Moisture	12.4		0.1	0.1	%			02/27/18 11:27	1

GC/MS VOA

Analysis Batch: 316351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-1	TB-17303-022018	Total/NA	Water	8260B	
MB 240-316351/6	Method Blank	Total/NA	Water	8260B	
LCS 240-316351/4	Lab Control Sample	Total/NA	Water	8260B	

Prep Batch: 316784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	5035	
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	5035	
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	5035	
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	5035	
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	5035	
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	5035	
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	5035	
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	5035	
MB 240-316784/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-316784/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 317015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	8260B	316784
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	8260B	316784
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	8260B	316784
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	8260B	316784
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	8260B	316784
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	8260B	316784
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	8260B	316784
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	8260B	316784
MB 240-316784/1-A	Method Blank	Total/NA	Solid	8260B	316784
LCS 240-316784/2-A	Lab Control Sample	Total/NA	Solid	8260B	316784

GC/MS Semi VOA

Prep Batch: 316538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	3540C	
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	3540C	
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	3540C	
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	3540C	
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	3540C	
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	3540C	
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	3540C	
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	3540C	
MB 240-316538/20-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-316538/21-A	Lab Control Sample	Total/NA	Solid	3540C	
240-91909-9 MS	SO-17303-022318-DS-008	Total/NA	Solid	3540C	
240-91909-9 MSD	SO-17303-022318-DS-008	Total/NA	Solid	3540C	

Analysis Batch: 317067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	8270C	316538

GC/MS Semi VOA (Continued)

Analysis Batch: 317067 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	8270C	316538
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	8270C	316538
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	8270C	316538
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	8270C	316538
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	8270C	316538
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	8270C	316538
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	8270C	316538
MB 240-316538/20-A	Method Blank	Total/NA	Solid	8270C	316538
LCS 240-316538/21-A	Lab Control Sample	Total/NA	Solid	8270C	316538
240-91909-9 MS	SO-17303-022318-DS-008	Total/NA	Solid	8270C	316538
240-91909-9 MSD	SO-17303-022318-DS-008	Total/NA	Solid	8270C	316538

GC Semi VOA

Prep Batch: 316504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	3540C	
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	3540C	
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	3540C	
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	3540C	
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	3540C	
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	3540C	
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	3540C	
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	3540C	
MB 240-316504/22-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-316504/23-A	Lab Control Sample	Total/NA	Solid	3540C	
240-91909-9 MS	SO-17303-022318-DS-008	Total/NA	Solid	3540C	
240-91909-9 MSD	SO-17303-022318-DS-008	Total/NA	Solid	3540C	

Analysis Batch: 316751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	8082A	316504
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	8082A	316504
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	8082A	316504
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	8082A	316504
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	8082A	316504
MB 240-316504/22-A	Method Blank	Total/NA	Solid	8082A	316504
LCS 240-316504/23-A	Lab Control Sample	Total/NA	Solid	8082A	316504

Analysis Batch: 316791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	8082A	316504
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	8082A	316504
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	8082A	316504
240-91909-9 MS	SO-17303-022318-DS-008	Total/NA	Solid	8082A	316504
240-91909-9 MSD	SO-17303-022318-DS-008	Total/NA	Solid	8082A	316504

Metals

Prep Batch: 316516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	3050B	
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	3050B	
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	3050B	
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	3050B	
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	3050B	
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	3050B	
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	3050B	
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	3050B	
MB 240-316516/1-A	Method Blank	Total/NA	Solid	3050B	
MB 240-316516/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 240-316516/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-316516/3-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
240-91909-2 MS	SO-17303-022218-DS-001	Total/NA	Solid	3050B	
240-91909-2 MS	SO-17303-022218-DS-001	Total/NA	Solid	3050B	
240-91909-2 MSD	SO-17303-022218-DS-001	Total/NA	Solid	3050B	
240-91909-2 MSD	SO-17303-022218-DS-001	Total/NA	Solid	3050B	

Prep Batch: 316536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	7471A	
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	7471A	
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	7471A	
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	7471A	
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	7471A	
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	7471A	
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	7471A	
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	7471A	
MB 240-316536/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 240-316536/2-A	Lab Control Sample	Total/NA	Solid	7471A	
240-91909-2 MS	SO-17303-022218-DS-001	Total/NA	Solid	7471A	
240-91909-2 MSD	SO-17303-022218-DS-001	Total/NA	Solid	7471A	

Analysis Batch: 316837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	6020	316516
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	6020	316516
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	6020	316516
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	6020	316516
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	6020	316516
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	6020	316516
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	6020	316516
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	6020	316516
MB 240-316516/1-A ^2	Method Blank	Total/NA	Solid	6020	316516
LCS 240-316516/3-A ^2	Lab Control Sample	Total/NA	Solid	6020	316516
240-91909-2 MS	SO-17303-022218-DS-001	Total/NA	Solid	6020	316516
240-91909-2 MSD	SO-17303-022218-DS-001	Total/NA	Solid	6020	316516

Analysis Batch: 316926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	7471A	316536
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	7471A	316536

Metals (Continued)

Analysis Batch: 316926 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	7471A	316536
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	7471A	316536
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	7471A	316536
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	7471A	316536
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	7471A	316536
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	7471A	316536
MB 240-316536/1-A	Method Blank	Total/NA	Solid	7471A	316536
LCS 240-316536/2-A	Lab Control Sample	Total/NA	Solid	7471A	316536
240-91909-2 MS	SO-17303-022218-DS-001	Total/NA	Solid	7471A	316536
240-91909-2 MSD	SO-17303-022218-DS-001	Total/NA	Solid	7471A	316536

Analysis Batch: 317239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	6010B	316516
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	6010B	316516
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	6010B	316516
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	6010B	316516
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	6010B	316516
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	6010B	316516
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	6010B	316516
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	6010B	316516
MB 240-316516/1-A	Method Blank	Total/NA	Solid	6010B	316516
LCS 240-316516/2-A	Lab Control Sample	Total/NA	Solid	6010B	316516
240-91909-2 MS	SO-17303-022218-DS-001	Total/NA	Solid	6010B	316516
240-91909-2 MSD	SO-17303-022218-DS-001	Total/NA	Solid	6010B	316516

Cleanup Batch: 318956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-6	SO-17303-022318-DS-005	Fractionated	Solid	Fractionation	
240-91909-9	SO-17303-022318-DS-008	Fractionated	Solid	Fractionation	

Cleanup Batch: 318957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-6	SO-17303-022318-DS-005	Fractionated	Solid	Fractionation	
240-91909-9	SO-17303-022318-DS-008	Fractionated	Solid	Fractionation	

Prep Batch: 319461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-6	SO-17303-022318-DS-005	Fractionated	Solid	3050B	318956
240-91909-6	SO-17303-022318-DS-005	Fractionated	Solid	3050B	318957
240-91909-9	SO-17303-022318-DS-008	Fractionated	Solid	3050B	318957
240-91909-9	SO-17303-022318-DS-008	Fractionated	Solid	3050B	318956
MB 240-319461/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 240-319461/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 319709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-6	SO-17303-022318-DS-005	Fractionated	Solid	6010B	319461
240-91909-6	SO-17303-022318-DS-005	Fractionated	Solid	6010B	319461
240-91909-9	SO-17303-022318-DS-008	Fractionated	Solid	6010B	319461
240-91909-9	SO-17303-022318-DS-008	Fractionated	Solid	6010B	319461

Metals (Continued)

Analysis Batch: 319709 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-319461/1-A	Method Blank	Total/NA	Solid	6010B	319461
LCS 240-319461/2-A	Lab Control Sample	Total/NA	Solid	6010B	319461

Analysis Batch: 320116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-6	SO-17303-022318-DS-005	Fractionated	Solid	6010B	
240-91909-9	SO-17303-022318-DS-008	Fractionated	Solid	6010B	

General Chemistry

Analysis Batch: 316344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-91909-2	SO-17303-022218-DS-001	Total/NA	Solid	Moisture	
240-91909-3	SO-17303-022218-DS-002	Total/NA	Solid	Moisture	
240-91909-4	SO-17303-022318-DS-003	Total/NA	Solid	Moisture	
240-91909-5	SO-17303-022318-DS-004	Total/NA	Solid	Moisture	
240-91909-6	SO-17303-022318-DS-005	Total/NA	Solid	Moisture	
240-91909-7	SO-17303-022318-DS-006	Total/NA	Solid	Moisture	
240-91909-8	SO-17303-022318-DS-007	Total/NA	Solid	Moisture	
240-91909-9	SO-17303-022318-DS-008	Total/NA	Solid	Moisture	
240-91909-5 DU	SO-17303-022318-DS-004	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-316351/6
Matrix: Water
Analysis Batch: 316351

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			02/27/18 14:55	1
Benzene	1.0	U	1.0	0.28	ug/L			02/27/18 14:55	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			02/27/18 14:55	1
Bromoform	1.0	U	1.0	0.43	ug/L			02/27/18 14:55	1
Bromomethane	1.0	U	1.0	0.42	ug/L			02/27/18 14:55	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			02/27/18 14:55	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			02/27/18 14:55	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			02/27/18 14:55	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			02/27/18 14:55	1
Chloroethane	1.0	U	1.0	0.41	ug/L			02/27/18 14:55	1
Chloroform	1.0	U	1.0	0.31	ug/L			02/27/18 14:55	1
Chloromethane	1.0	U	1.0	0.43	ug/L			02/27/18 14:55	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			02/27/18 14:55	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/27/18 14:55	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			02/27/18 14:55	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			02/27/18 14:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			02/27/18 14:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			02/27/18 14:55	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			02/27/18 14:55	1
2-Hexanone	10	U	10	1.2	ug/L			02/27/18 14:55	1
Methylene Chloride	1.70	J	5.0	0.53	ug/L			02/27/18 14:55	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			02/27/18 14:55	1
Styrene	1.0	U	1.0	0.23	ug/L			02/27/18 14:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			02/27/18 14:55	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			02/27/18 14:55	1
Toluene	1.0	U	1.0	0.23	ug/L			02/27/18 14:55	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			02/27/18 14:55	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/27/18 14:55	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			02/27/18 14:55	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			02/27/18 14:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			02/27/18 14:55	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			02/27/18 14:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			02/27/18 14:55	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			02/27/18 14:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			02/27/18 14:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/27/18 14:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			02/27/18 14:55	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			02/27/18 14:55	1
Methyl acetate	10	U	10	1.4	ug/L			02/27/18 14:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			02/27/18 14:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			02/27/18 14:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			02/27/18 14:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			02/27/18 14:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			02/27/18 14:55	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			02/27/18 14:55	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			02/27/18 14:55	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			02/27/18 14:55	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			02/27/18 14:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		61 - 138		02/27/18 14:55	1
4-Bromofluorobenzene (Surr)	79		69 - 120		02/27/18 14:55	1
Toluene-d8 (Surr)	78		73 - 120		02/27/18 14:55	1
Dibromofluoromethane (Surr)	100		69 - 124		02/27/18 14:55	1

Lab Sample ID: LCS 240-316351/4
Matrix: Water
Analysis Batch: 316351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	23.2		ug/L		116	35 - 131
Benzene	10.0	10.8		ug/L		108	79 - 120
Bromodichloromethane	10.0	11.8		ug/L		118	79 - 125
Bromoform	10.0	12.9		ug/L		129	55 - 145
Bromomethane	10.0	18.1	*	ug/L		181	17 - 158
2-Butanone (MEK)	20.0	26.9		ug/L		134	43 - 149
Carbon disulfide	10.0	11.9		ug/L		119	49 - 141
Carbon tetrachloride	10.0	14.1		ug/L		141	55 - 171
Chlorobenzene	10.0	11.1		ug/L		111	80 - 120
Chloroethane	10.0	13.4		ug/L		134	10 - 149
Chloroform	10.0	11.4		ug/L		114	80 - 120
Chloromethane	10.0	9.87		ug/L		99	59 - 124
1,1-Dichloroethane	10.0	11.2		ug/L		112	74 - 120
1,2-Dichloroethane	10.0	11.0		ug/L		110	68 - 133
1,1-Dichloroethene	10.0	11.5		ug/L		115	65 - 127
1,2-Dichloropropane	10.0	11.5		ug/L		115	78 - 127
cis-1,3-Dichloropropene	10.0	10.3		ug/L		103	75 - 120
trans-1,3-Dichloropropene	10.0	9.53		ug/L		95	67 - 120
Ethylbenzene	10.0	10.9		ug/L		109	80 - 120
2-Hexanone	20.0	21.0		ug/L		105	28 - 169
Methylene Chloride	10.0	14.4	*	ug/L		144	64 - 140
4-Methyl-2-pentanone (MIBK)	20.0	19.8		ug/L		99	53 - 144
Styrene	10.0	11.5		ug/L		115	80 - 121
1,1,2,2-Tetrachloroethane	10.0	9.37		ug/L		94	58 - 122
Tetrachloroethene	10.0	12.2		ug/L		122	80 - 122
Toluene	10.0	10.7		ug/L		107	78 - 120
Trichloroethene	10.0	11.9		ug/L		119	76 - 124
Vinyl chloride	10.0	10.5		ug/L		105	65 - 124
Xylenes, Total	20.0	21.3		ug/L		107	80 - 120
1,1,1-Trichloroethane	10.0	12.1		ug/L		121	64 - 147
1,1,2-Trichloroethane	10.0	11.4		ug/L		114	76 - 121
Cyclohexane	10.0	13.5		ug/L		135	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	10.2		ug/L		102	50 - 130
1,2-Dibromoethane	10.0	11.0		ug/L		110	80 - 120
Dichlorodifluoromethane	10.0	13.6		ug/L		136	42 - 141
cis-1,2-Dichloroethene	10.0	11.3		ug/L		113	77 - 120
trans-1,2-Dichloroethene	10.0	12.0		ug/L		120	74 - 124
Isopropylbenzene	10.0	10.8		ug/L		108	80 - 128
Methyl acetate	20.0	23.8		ug/L		119	63 - 137
Methyl tert-butyl ether	10.0	8.36		ug/L		84	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	15.0	*	ug/L		150	65 - 144
1,2,4-Trichlorobenzene	10.0	9.44		ug/L		94	34 - 141
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-316351/4
Matrix: Water
Analysis Batch: 316351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	80 - 120
1,4-Dichlorobenzene	10.0	9.86		ug/L		99	80 - 120
Trichlorofluoromethane	10.0	18.5	*	ug/L		185	27 - 176
Dibromochloromethane	10.0	13.1	*	ug/L		131	64 - 129
Methylcyclohexane	10.0	10.9		ug/L		109	63 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 138*
4-Bromofluorobenzene (Surr)	*94*		*69 - 120*
Toluene-d8 (Surr)	*85*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*69 - 124*

Lab Sample ID: MB 240-316784/1-A
Matrix: Solid
Analysis Batch: 317015

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	97	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Benzene	40	U	40	24	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Bromodichloromethane	80	U	80	18	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Bromoform	80	U	80	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Bromomethane	200	U	200	28	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
2-Butanone (MEK)	600	U	600	50	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Carbon disulfide	200	U	200	18	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Carbon tetrachloride	40	U	40	27	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Chlorobenzene	40	U	40	30	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Chloroethane	200	U	200	28	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Chloroform	40	U	40	24	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Chloromethane	200	U	200	18	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1-Dichloroethane	40	U	40	31	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dichloroethane	40	U	40	30	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1-Dichloroethene	40	U	40	36	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dichloropropane	40	U	40	30	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
cis-1,3-Dichloropropene	40	U	40	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
trans-1,3-Dichloropropene	40	U	40	15	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Ethylbenzene	40	U	40	35	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
2-Hexanone	2000	U	2000	86	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Methylene Chloride	200	U	200	65	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	40	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Styrene	40	U	40	10	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1,2,2-Tetrachloroethane	40	U	40	24	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Tetrachloroethene	40	U	40	21	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Toluene	80	U	80	24	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Trichloroethene	40	U	40	37	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Vinyl chloride	32	U	32	17	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Xylenes, Total	120	U	120	28	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1,1-Trichloroethane	40	U	40	28	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1,2-Trichloroethane	40	U	40	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-316784/1-A
Matrix: Solid
Analysis Batch: 317015

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	960	U	960	30	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dibromo-3-Chloropropane	200	U	200	48	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dibromoethane	200	U	200	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Dichlorodifluoromethane	80	U	80	22	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
cis-1,2-Dichloroethene	40	U	40	35	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
trans-1,2-Dichloroethene	40	U	40	35	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Isopropylbenzene	200	U	200	34	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Methyl acetate	960	U	960	75	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Methyl tert-butyl ether	200	U	200	26	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2,4-Trichlorobenzene	200	U	200	26	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dichlorobenzene	80	U	80	18	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,3-Dichlorobenzene	80	U	80	38	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,4-Dichlorobenzene	80	U	80	27	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Trichlorofluoromethane	80	U	80	34	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Dibromochloromethane	40	U	40	34	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Methylcyclohexane	960	U	960	37	ug/Kg		03/01/18 21:57	03/04/18 12:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*64 - 144*	*03/01/18 21:57*	*03/04/18 12:01*	*1*
4-Bromofluorobenzene (Surr)	*76*		*58 - 142*	*03/01/18 21:57*	*03/04/18 12:01*	*1*
Toluene-d8 (Surr)	*86*		*61 - 137*	*03/01/18 21:57*	*03/04/18 12:01*	*1*
Dibromofluoromethane (Surr)	*80*		*31 - 155*	*03/01/18 21:57*	*03/04/18 12:01*	*1*

Lab Sample ID: LCS 240-316784/2-A
Matrix: Solid
Analysis Batch: 317015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	930		ug/Kg		46	24 - 125
Benzene	1000	1010		ug/Kg		101	77 - 120
Bromodichloromethane	1000	896		ug/Kg		90	61 - 132
Bromoform	1000	718		ug/Kg		72	40 - 140
Bromomethane	1000	780		ug/Kg		78	10 - 153
2-Butanone (MEK)	2000	2000		ug/Kg		100	51 - 120
Carbon disulfide	1000	632		ug/Kg		63	17 - 163
Carbon tetrachloride	1000	908		ug/Kg		91	43 - 144
Chlorobenzene	1000	996		ug/Kg		100	76 - 120
Chloroethane	1000	797		ug/Kg		80	10 - 166
Chloroform	1000	1030		ug/Kg		103	74 - 120
Chloromethane	1000	851		ug/Kg		85	41 - 124
1,1-Dichloroethane	1000	935		ug/Kg		94	72 - 120
1,2-Dichloroethane	1000	1000		ug/Kg		100	71 - 120
1,1-Dichloroethene	1000	822		ug/Kg		82	58 - 130
1,2-Dichloropropane	1000	1010		ug/Kg		101	78 - 122
cis-1,3-Dichloropropene	1000	1010		ug/Kg		101	66 - 126
trans-1,3-Dichloropropene	1000	833		ug/Kg		83	55 - 121
Ethylbenzene	1000	969		ug/Kg		97	76 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-316784/2-A
Matrix: Solid
Analysis Batch: 317015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	2000	1980	J	ug/Kg		99	52 - 129
Methylene Chloride	1000	821		ug/Kg		82	64 - 126
4-Methyl-2-pentanone (MIBK)	2000	2050		ug/Kg		103	65 - 131
Styrene	1000	1010		ug/Kg		101	80 - 120
1,1,2,2-Tetrachloroethane	1000	988		ug/Kg		99	78 - 120
Tetrachloroethene	1000	959		ug/Kg		96	68 - 122
Toluene	1000	979		ug/Kg		98	74 - 120
Trichloroethene	1000	1030		ug/Kg		103	73 - 123
Vinyl chloride	1000	952		ug/Kg		95	49 - 131
Xylenes, Total	2000	2030		ug/Kg		102	78 - 120
1,1,1-Trichloroethane	1000	929		ug/Kg		93	60 - 136
1,1,2-Trichloroethane	1000	1050		ug/Kg		105	80 - 120
Cyclohexane	1000	788	J	ug/Kg		79	66 - 129
1,2-Dibromo-3-Chloropropane	1000	824		ug/Kg		82	40 - 133
1,2-Dibromoethane	1000	1020		ug/Kg		102	80 - 120
Dichlorodifluoromethane	1000	703		ug/Kg		70	15 - 127
cis-1,2-Dichloroethene	1000	1040		ug/Kg		104	78 - 120
trans-1,2-Dichloroethene	1000	915		ug/Kg		91	74 - 124
Isopropylbenzene	1000	934		ug/Kg		93	76 - 124
Methyl acetate	2000	1530		ug/Kg		77	63 - 126
Methyl tert-butyl ether	1000	1090		ug/Kg		109	68 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	736		ug/Kg		74	64 - 125
1,2,4-Trichlorobenzene	1000	839		ug/Kg		84	60 - 124
1,2-Dichlorobenzene	1000	942		ug/Kg		94	75 - 120
1,3-Dichlorobenzene	1000	921		ug/Kg		92	72 - 120
1,4-Dichlorobenzene	1000	921		ug/Kg		92	71 - 120
Trichlorofluoromethane	1000	785		ug/Kg		79	28 - 152
Dibromochloromethane	1000	817		ug/Kg		82	46 - 125
Methylcyclohexane	1000	714	J	ug/Kg		71	71 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*64 - 144*
4-Bromofluorobenzene (Surr)	*83*		*58 - 142*
Toluene-d8 (Surr)	*92*		*61 - 137*
Dibromofluoromethane (Surr)	*98*		*31 - 155*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-316538/20-A
Matrix: Solid
Analysis Batch: 317067

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	3.5	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2,4,6-Trichlorophenol	260	U	260	8.9	ug/Kg		02/28/18 11:18	03/05/18 10:35	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-316538/20-A
Matrix: Solid
Analysis Batch: 317067

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	260	U	260	20	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2,4-Dinitrophenol	150	U	150	21	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2,4-Dinitrotoluene	260	U	260	17	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2-Chloronaphthalene	260	U	260	0.45	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2-Chlorophenol	260	U	260	8.2	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2-Methylnaphthalene	260	U	260	0.50	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2-Methylphenol	260	U	260	11	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
2-Nitrophenol	260	U	260	8.3	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
3,3'-Dichlorobenzidine	1600	U	1600	18	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
3-Nitroaniline	200	U	200	16	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
4-Bromophenyl phenyl ether	260	U	260	13	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
4-Chloroaniline	200	U	200	17	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
4-Chlorophenyl phenyl ether	260	U	260	13	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
4-Nitroaniline	200	U	200	26	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
4-Nitrophenol	330	U	330	17	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Acenaphthene	260	U	260	0.76	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Acenaphthylene	260	U	260	0.35	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Acetophenone	260	U	260	9.2	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Anthracene	260	U	260	0.78	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Atrazine	40	U	40	9.1	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Benzaldehyde	260	U	260	12	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Benzo[a]anthracene	260	U	260	0.63	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Benzo[a]pyrene	260	U	260	0.64	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Benzo[b]fluoranthene	260	U	260	0.59	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Benzo[g,h,i]perylene	260	U	260	0.35	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Benzo[k]fluoranthene	260	U	260	0.68	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Bis(2-ethylhexyl) phthalate	30.7	J	260	19	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Caprolactam	260	U	260	37	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Carbazole	260	U	260	27	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Chrysene	260	U	260	1.1	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Dibenz(a,h)anthracene	260	U	260	0.66	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Dibenzofuran	260	U	260	0.66	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Diethyl phthalate	260	U	260	16	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Dimethyl phthalate	260	U	260	17	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Di-n-butyl phthalate	260	U	260	15	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Di-n-octyl phthalate	260	U	260	7.9	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Fluoranthene	260	U	260	0.55	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Fluorene	260	U	260	0.53	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Hexachlorobutadiene	40	U	40	5.6	ug/Kg		02/28/18 11:18	03/05/18 10:35	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-316538/20-A
Matrix: Solid
Analysis Batch: 317067

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	260	U	260	8.1	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Hexachloroethane	260	U	260	9.0	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Indeno[1,2,3-cd]pyrene	260	U	260	0.35	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Isophorone	260	U	260	13	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Naphthalene	260	U	260	0.82	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Nitrobenzene	260	U	260	2.2	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
N-Nitrosodi-n-propylamine	260	U	260	6.3	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Phenol	260	U	260	7.3	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Phenanthrene	260	U	260	0.73	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
Pyrene	260	U	260	0.44	ug/Kg		02/28/18 11:18	03/05/18 10:35	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		02/28/18 11:18	03/05/18 10:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*32 - 120*	*02/28/18 11:18*	*03/05/18 10:35*	*1*
2-Fluorophenol (Surr)	*70*		*29 - 120*	*02/28/18 11:18*	*03/05/18 10:35*	*1*
2,4,6-Tribromophenol (Surr)	*33*		*10 - 120*	*02/28/18 11:18*	*03/05/18 10:35*	*1*
Nitrobenzene-d5 (Surr)	*70*		*30 - 120*	*02/28/18 11:18*	*03/05/18 10:35*	*1*
Phenol-d5 (Surr)	*69*		*29 - 120*	*02/28/18 11:18*	*03/05/18 10:35*	*1*
Terphenyl-d14 (Surr)	*71*		*41 - 120*	*02/28/18 11:18*	*03/05/18 10:35*	*1*

Lab Sample ID: LCS 240-316538/21-A
Matrix: Solid
Analysis Batch: 317067

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	492		ug/Kg		74	48 - 120
2,2'-oxybis[1-chloropropane]	667	467		ug/Kg		70	37 - 120
2,4,5-Trichlorophenol	667	504		ug/Kg		76	34 - 120
2,4,6-Trichlorophenol	667	473		ug/Kg		71	19 - 120
2,4-Dichlorophenol	667	475		ug/Kg		71	48 - 120
2,4-Dimethylphenol	667	327		ug/Kg		49	37 - 120
2,4-Dinitrophenol	1330	515		ug/Kg		39	10 - 120
2,4-Dinitrotoluene	667	505		ug/Kg		76	53 - 120
2,6-Dinitrotoluene	667	511		ug/Kg		77	54 - 120
2-Chloronaphthalene	667	494		ug/Kg		74	49 - 120
2-Chlorophenol	667	485		ug/Kg		73	50 - 120
2-Methylnaphthalene	667	479		ug/Kg		72	49 - 120
2-Methylphenol	667	467		ug/Kg		70	49 - 120
2-Nitroaniline	667	544		ug/Kg		82	46 - 120
2-Nitrophenol	667	446		ug/Kg		67	46 - 120
3,3'-Dichlorobenzidine	1330	783	J	ug/Kg		59	40 - 120
3-Nitroaniline	667	487		ug/Kg		73	48 - 120
4,6-Dinitro-2-methylphenol	1330	757		ug/Kg		57	18 - 120
4-Bromophenyl phenyl ether	667	470		ug/Kg		70	51 - 120
4-Chloro-3-methylphenol	667	486		ug/Kg		73	47 - 120
4-Chloroaniline	667	396		ug/Kg		59	37 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-316538/21-A
Matrix: Solid
Analysis Batch: 317067

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorophenyl phenyl ether	667	502		ug/Kg		75	49 - 120
4-Nitroaniline	667	542		ug/Kg		81	49 - 120
4-Nitrophenol	1330	993		ug/Kg		74	42 - 120
Acenaphthene	667	484		ug/Kg		73	48 - 120
Acenaphthylene	667	514		ug/Kg		77	46 - 120
Acetophenone	667	438		ug/Kg		66	46 - 120
Anthracene	667	507		ug/Kg		76	51 - 120
Atrazine	1330	1010		ug/Kg		76	57 - 120
Benzaldehyde	1330	1010		ug/Kg		76	48 - 120
Benzo[a]anthracene	667	481		ug/Kg		72	53 - 120
Benzo[a]pyrene	667	483		ug/Kg		72	50 - 120
Benzo[b]fluoranthene	667	539		ug/Kg		81	48 - 120
Benzo[g,h,i]perylene	667	491		ug/Kg		74	50 - 120
Benzo[k]fluoranthene	667	505		ug/Kg		76	51 - 120
Bis(2-chloroethoxy)methane	667	488		ug/Kg		73	50 - 120
Bis(2-chloroethyl)ether	667	475		ug/Kg		71	48 - 120
Bis(2-ethylhexyl) phthalate	667	485		ug/Kg		73	52 - 120
Butyl benzyl phthalate	667	483		ug/Kg		72	53 - 120
Caprolactam	1330	1100		ug/Kg		83	59 - 120
Carbazole	667	508		ug/Kg		76	56 - 120
Chrysene	667	460		ug/Kg		69	54 - 120
Dibenz(a,h)anthracene	667	487		ug/Kg		73	48 - 120
Dibenzofuran	667	500		ug/Kg		75	49 - 120
Diethyl phthalate	667	537		ug/Kg		81	52 - 120
Dimethyl phthalate	667	518		ug/Kg		78	53 - 120
Di-n-butyl phthalate	667	502		ug/Kg		75	56 - 120
Di-n-octyl phthalate	667	575		ug/Kg		86	42 - 120
Fluoranthene	667	509		ug/Kg		76	53 - 120
Fluorene	667	517		ug/Kg		78	50 - 120
Hexachlorobenzene	667	461		ug/Kg		69	46 - 120
Hexachlorobutadiene	667	437		ug/Kg		66	44 - 120
Hexachlorocyclopentadiene	667	324		ug/Kg		49	14 - 120
Hexachloroethane	667	436		ug/Kg		65	45 - 120
Indeno[1,2,3-cd]pyrene	667	499		ug/Kg		75	49 - 120
Isophorone	667	489		ug/Kg		73	47 - 120
Naphthalene	667	461		ug/Kg		69	48 - 120
Nitrobenzene	667	475		ug/Kg		71	48 - 120
N-Nitrosodi-n-propylamine	667	487		ug/Kg		73	49 - 120
N-Nitrosodiphenylamine	667	493		ug/Kg		74	53 - 120
Pentachlorophenol	1330	615		ug/Kg		46	14 - 120
Phenol	667	520		ug/Kg		78	49 - 120
Phenanthrene	667	467		ug/Kg		70	52 - 120
Pyrene	667	479		ug/Kg		72	55 - 120
3 & 4 Methylphenol	667	459		ug/Kg		69	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*32 - 120*
2-Fluorophenol (Surr)	*74*		*29 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-316538/21-A
Matrix: Solid
Analysis Batch: 317067

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316538

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*71*		*10 - 120*
Nitrobenzene-d5 (Surr)	*77*		*30 - 120*
Phenol-d5 (Surr)	*74*		*29 - 120*
Terphenyl-d14 (Surr)	*76*		*41 - 120*

Lab Sample ID: 240-91909-9 MS
Matrix: Solid
Analysis Batch: 317067

Client Sample ID: SO-17303-022318-DS-008
Prep Type: Total/NA
Prep Batch: 316538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	11	J	750	524	J	ug/Kg	☼	68	33 - 120
2,2'-oxybis[1-chloropropane]	600	U	750	473	J	ug/Kg	☼	63	26 - 120
2,4,5-Trichlorophenol	600	U	750	478	J	ug/Kg	☼	64	20 - 120
2,4,6-Trichlorophenol	600	U	750	460	J	ug/Kg	☼	61	19 - 120
2,4-Dichlorophenol	600	U	750	552	J	ug/Kg	☼	74	32 - 120
2,4-Dimethylphenol	600	U	750	521	J	ug/Kg	☼	69	28 - 120
2,4-Dinitrophenol	340	U	1500	318	J	ug/Kg	☼	21	10 - 120
2,4-Dinitrotoluene	600	U	750	519	J	ug/Kg	☼	69	38 - 120
2,6-Dinitrotoluene	600	U	750	522	J	ug/Kg	☼	70	43 - 120
2-Chloronaphthalene	600	U	750	517	J	ug/Kg	☼	69	35 - 120
2-Chlorophenol	600	U	750	483	J	ug/Kg	☼	64	30 - 120
2-Methylnaphthalene	49	J	750	580	J	ug/Kg	☼	71	31 - 120
2-Methylphenol	600	U	750	528	J	ug/Kg	☼	70	31 - 120
2-Nitroaniline	460	U	750	576		ug/Kg	☼	77	29 - 120
2-Nitrophenol	600	U	750	470	J	ug/Kg	☼	63	26 - 120
3,3'-Dichlorobenzidine	3700	U	1500	877	J	ug/Kg	☼	58	10 - 120
3-Nitroaniline	460	U	750	504		ug/Kg	☼	67	21 - 120
4,6-Dinitro-2-methylphenol	340	U	1500	231	J	ug/Kg	☼	15	10 - 120
4-Bromophenyl phenyl ether	600	U	750	522	J	ug/Kg	☼	70	44 - 120
4-Chloro-3-methylphenol	600	U	750	585	J	ug/Kg	☼	78	31 - 120
4-Chloroaniline	460	U	750	385	J	ug/Kg	☼	51	15 - 120
4-Chlorophenyl phenyl ether	600	U	750	525	J	ug/Kg	☼	70	41 - 120
4-Nitroaniline	460	U	750	574		ug/Kg	☼	76	23 - 120
4-Nitrophenol	750	U	1500	946		ug/Kg	☼	63	32 - 120
Acenaphthene	32	J	750	563	J	ug/Kg	☼	71	36 - 120
Acenaphthylene	7.8	J	750	547	J	ug/Kg	☼	72	35 - 120
Acetophenone	600	U	750	462	J	ug/Kg	☼	62	31 - 120
Anthracene	53	J	750	652		ug/Kg	☼	80	42 - 120
Atrazine	91	U	1500	1080		ug/Kg	☼	72	41 - 120
Benzaldehyde	600	U	1500	985		ug/Kg	☼	66	28 - 120
Benzo[a]anthracene	180	J	750	752		ug/Kg	☼	77	35 - 120
Benzo[a]pyrene	230	J	750	754		ug/Kg	☼	70	33 - 120
Benzo[b]fluoranthene	320	J	750	920		ug/Kg	☼	79	26 - 120
Benzo[g,h,i]perylene	120	J	750	525	J	ug/Kg	☼	54	16 - 120
Benzo[k]fluoranthene	100	J	750	634		ug/Kg	☼	71	33 - 120
Bis(2-chloroethoxy)methane	600	U	750	497	J	ug/Kg	☼	66	36 - 120
Bis(2-chloroethyl)ether	180	U	750	461		ug/Kg	☼	61	33 - 120
Bis(2-ethylhexyl) phthalate	100	J B	750	622		ug/Kg	☼	70	40 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-91909-9 MS — **Client Sample ID: SO-17303-022318-DS-008**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 317067 — **Prep Batch: 316538**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	600	U	750	604		ug/Kg	☼	80	46 - 120
Caprolactam	600	U	1500	1270		ug/Kg	☼	85	33 - 128
Carbazole	600	U	750	604		ug/Kg	☼	81	35 - 120
Chrysene	230	J	750	743		ug/Kg	☼	69	33 - 120
Dibenz(a,h)anthracene	72	J	750	520	J	ug/Kg	☼	60	30 - 120
Dibenzofuran	31	J	750	556	J	ug/Kg	☼	70	37 - 120
Diethyl phthalate	600	U	750	566	J	ug/Kg	☼	76	44 - 120
Dimethyl phthalate	600	U	750	541	J	ug/Kg	☼	72	42 - 120
Di-n-butyl phthalate	600	U	750	573	J	ug/Kg	☼	76	45 - 120
Di-n-octyl phthalate	600	U	750	737		ug/Kg	☼	98	35 - 120
Fluoranthene	540	J	750	1190		ug/Kg	☼	87	26 - 121
Fluorene	34	J	750	606		ug/Kg	☼	76	36 - 120
Hexachlorobenzene	600	U	750	473	J	ug/Kg	☼	63	36 - 120
Hexachlorobutadiene	91	U	750	425		ug/Kg	☼	57	31 - 120
Hexachlorocyclopentadiene	600	U F1	750	590	U F1	ug/Kg	☼	0	10 - 120
Hexachloroethane	600	U	750	261	J	ug/Kg	☼	35	15 - 120
Indeno[1,2,3-cd]pyrene	120	J	750	593		ug/Kg	☼	64	24 - 120
Isophorone	600	U	750	520	J	ug/Kg	☼	69	34 - 120
Naphthalene	21	J	750	497	J	ug/Kg	☼	63	29 - 120
Nitrobenzene	600	U	750	463	J	ug/Kg	☼	62	33 - 120
N-Nitrosodi-n-propylamine	600	U	750	534	J	ug/Kg	☼	71	32 - 120
N-Nitrosodiphenylamine	600	U	750	624		ug/Kg	☼	83	29 - 120
Pentachlorophenol	340	U	1500	380		ug/Kg	☼	25	10 - 120
Phenol	600	U	750	539	J	ug/Kg	☼	72	21 - 120
Phenanthrene	290	J	750	925		ug/Kg	☼	85	28 - 120
Pyrene	370	J	750	928		ug/Kg	☼	74	28 - 120
3 & 4 Methylphenol	600	U	750	516	J	ug/Kg	☼	69	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*69*		*32 - 120*
2-Fluorophenol (Surr)	*63*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 120*
Nitrobenzene-d5 (Surr)	*70*		*30 - 120*
Phenol-d5 (Surr)	*68*		*29 - 120*
Terphenyl-d14 (Surr)	*66*		*41 - 120*

Lab Sample ID: 240-91909-9 MSD — **Client Sample ID: SO-17303-022318-DS-008**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 317067 — **Prep Batch: 316538**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	11	J	753	491	J	ug/Kg	☼	64	33 - 120	6	33
2,2'-oxybis[1-chloropropane]	600	U	753	448	J	ug/Kg	☼	59	26 - 120	6	31
2,4,5-Trichlorophenol	600	U	753	452	J	ug/Kg	☼	60	20 - 120	6	38
2,4,6-Trichlorophenol	600	U	753	443	J	ug/Kg	☼	59	19 - 120	4	36
2,4-Dichlorophenol	600	U	753	497	J	ug/Kg	☼	66	32 - 120	10	32
2,4-Dimethylphenol	600	U	753	457	J	ug/Kg	☼	61	28 - 120	13	35
2,4-Dinitrophenol	340	U	1510	310	J	ug/Kg	☼	21	10 - 120	2	40

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-91909-9 MSD | **Client Sample ID: SO-17303-022318-DS-008**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 317067 | **Prep Batch: 316538**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	600	U	753	479	J	ug/Kg	☼	64	38 - 120	8	27
2,6-Dinitrotoluene	600	U	753	498	J	ug/Kg	☼	66	43 - 120	5	31
2-Chloronaphthalene	600	U	753	478	J	ug/Kg	☼	63	35 - 120	8	30
2-Chlorophenol	600	U	753	465	J	ug/Kg	☼	62	30 - 120	4	37
2-Methylnaphthalene	49	J	753	534	J	ug/Kg	☼	64	31 - 120	8	33
2-Methylphenol	600	U	753	487	J	ug/Kg	☼	65	31 - 120	8	36
2-Nitroaniline	460	U	753	560		ug/Kg	☼	74	29 - 120	3	31
2-Nitrophenol	600	U	753	429	J	ug/Kg	☼	57	26 - 120	9	38
3,3'-Dichlorobenzidine	3700	U	1510	923	J	ug/Kg	☼	61	10 - 120	5	40
3-Nitroaniline	460	U	753	532		ug/Kg	☼	71	21 - 120	5	40
4,6-Dinitro-2-methylphenol	340	U	1510	210	J	ug/Kg	☼	14	10 - 120	10	40
4-Bromophenyl phenyl ether	600	U	753	474	J	ug/Kg	☼	63	44 - 120	10	40
4-Chloro-3-methylphenol	600	U	753	516	J	ug/Kg	☼	68	31 - 120	13	25
4-Chloroaniline	460	U	753	404	J	ug/Kg	☼	54	15 - 120	5	36
4-Chlorophenyl phenyl ether	600	U	753	506	J	ug/Kg	☼	67	41 - 120	4	40
4-Nitroaniline	460	U	753	529		ug/Kg	☼	70	23 - 120	8	40
4-Nitrophenol	750	U	1510	795		ug/Kg	☼	53	32 - 120	17	31
Acenaphthene	32	J	753	519	J	ug/Kg	☼	65	36 - 120	8	28
Acenaphthylene	7.8	J	753	524	J	ug/Kg	☼	69	35 - 120	4	26
Acetophenone	600	U	753	436	J	ug/Kg	☼	58	31 - 120	6	40
Anthracene	53	J	753	545	J	ug/Kg	☼	65	42 - 120	18	32
Atrazine	91	U	1510	1030		ug/Kg	☼	69	41 - 120	4	26
Benzaldehyde	600	U	1510	980		ug/Kg	☼	65	28 - 120	1	40
Benzo[a]anthracene	180	J	753	628		ug/Kg	☼	60	35 - 120	18	40
Benzo[a]pyrene	230	J	753	676		ug/Kg	☼	60	33 - 120	11	40
Benzo[b]fluoranthene	320	J	753	798		ug/Kg	☼	63	26 - 120	14	40
Benzo[g,h,i]perylene	120	J	753	451	J	ug/Kg	☼	44	16 - 120	15	40
Benzo[k]fluoranthene	100	J	753	575	J	ug/Kg	☼	62	33 - 120	10	40
Bis(2-chloroethoxy)methane	600	U	753	459	J	ug/Kg	☼	61	36 - 120	8	33
Bis(2-chloroethyl)ether	180	U	753	452		ug/Kg	☼	60	33 - 120	2	36
Bis(2-ethylhexyl) phthalate	100	J B	753	577	J	ug/Kg	☼	63	40 - 120	7	28
Butyl benzyl phthalate	600	U	753	548	J	ug/Kg	☼	73	46 - 120	10	39
Caprolactam	600	U	1510	1120		ug/Kg	☼	74	33 - 128	13	40
Carbazole	600	U	753	528	J	ug/Kg	☼	70	35 - 120	13	34
Chrysene	230	J	753	623		ug/Kg	☼	53	33 - 120	18	40
Dibenz(a,h)anthracene	72	J	753	461	J	ug/Kg	☼	52	30 - 120	12	40
Dibenzofuran	31	J	753	518	J	ug/Kg	☼	65	37 - 120	7	28
Diethyl phthalate	600	U	753	535	J	ug/Kg	☼	71	44 - 120	6	26
Dimethyl phthalate	600	U	753	507	J	ug/Kg	☼	67	42 - 120	6	35
Di-n-butyl phthalate	600	U	753	537	J	ug/Kg	☼	71	45 - 120	7	28
Di-n-octyl phthalate	600	U	753	709		ug/Kg	☼	94	35 - 120	4	33
Fluoranthene	540	J	753	914		ug/Kg	☼	50	26 - 121	26	40
Fluorene	34	J	753	538	J	ug/Kg	☼	67	36 - 120	12	28
Hexachlorobenzene	600	U	753	439	J	ug/Kg	☼	58	36 - 120	8	25
Hexachlorobutadiene	91	U	753	392		ug/Kg	☼	52	31 - 120	8	35
Hexachlorocyclopentadiene	600	U F1	753	600	U F1	ug/Kg	☼	0	10 - 120	NC	40
Hexachloroethane	600	U	753	251	J	ug/Kg	☼	33	15 - 120	4	40
Indeno[1,2,3-cd]pyrene	120	J	753	519	J	ug/Kg	☼	53	24 - 120	13	40

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-91909-9 MSD
Matrix: Solid
Analysis Batch: 317067

Client Sample ID: SO-17303-022318-DS-008
Prep Type: Total/NA
Prep Batch: 316538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isophorone	600	U	753	491	J	ug/Kg	☼	65	34 - 120	6	32
Naphthalene	21	J	753	456	J	ug/Kg	☼	58	29 - 120	9	34
Nitrobenzene	600	U	753	457	J	ug/Kg	☼	61	33 - 120	1	40
N-Nitrosodi-n-propylamine	600	U	753	506	J	ug/Kg	☼	67	32 - 120	5	32
N-Nitrosodiphenylamine	600	U	753	562	J	ug/Kg	☼	75	29 - 120	11	30
Pentachlorophenol	340	U	1510	341		ug/Kg	☼	23	10 - 120	11	40
Phenol	600	U	753	504	J	ug/Kg	☼	67	21 - 120	7	40
Phenanthrene	290	J	753	674		ug/Kg	☼	51	28 - 120	31	40
Pyrene	370	J	753	736		ug/Kg	☼	49	28 - 120	23	40
3 & 4 Methylphenol	600	U	753	481	J	ug/Kg	☼	64	33 - 120	7	29

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*64*		*32 - 120*
2-Fluorophenol (Surr)	*59*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 120*
Nitrobenzene-d5 (Surr)	*65*		*30 - 120*
Phenol-d5 (Surr)	*64*		*29 - 120*
Terphenyl-d14 (Surr)	*61*		*41 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-316504/22-A
Matrix: Solid
Analysis Batch: 316751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		02/28/18 09:29	03/02/18 00:31	1
Aroclor-1221	50	U	50	24	ug/Kg		02/28/18 09:29	03/02/18 00:31	1
Aroclor-1232	50	U	50	23	ug/Kg		02/28/18 09:29	03/02/18 00:31	1
Aroclor-1242	50	U	50	19	ug/Kg		02/28/18 09:29	03/02/18 00:31	1
Aroclor-1248	50	U	50	24	ug/Kg		02/28/18 09:29	03/02/18 00:31	1
Aroclor-1254	50	U	50	23	ug/Kg		02/28/18 09:29	03/02/18 00:31	1
Aroclor-1260	50	U	50	22	ug/Kg		02/28/18 09:29	03/02/18 00:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*14 - 128*	*02/28/18 09:29*	*03/02/18 00:31*	*1*
DCB Decachlorobiphenyl	*118*		*10 - 132*	*02/28/18 09:29*	*03/02/18 00:31*	*1*

Lab Sample ID: LCS 240-316504/23-A
Matrix: Solid
Analysis Batch: 316751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	667		ug/Kg		67	47 - 120
Aroclor-1260	1000	780		ug/Kg		78	46 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-316504/23-A
Matrix: Solid
Analysis Batch: 316751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316504

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*67*		*14 - 128*
DCB Decachlorobiphenyl	*89*		*10 - 132*

Lab Sample ID: 240-91909-9 MS
Matrix: Solid
Analysis Batch: 316791

Client Sample ID: SO-17303-022318-DS-008
Prep Type: Total/NA
Prep Batch: 316504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	56	U	1180	825		ug/Kg	☼	70	31 - 120
Aroclor-1260	200		1180	1170		ug/Kg	☼	83	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*94*		*14 - 128*
DCB Decachlorobiphenyl	*132*		*10 - 132*

Lab Sample ID: 240-91909-9 MSD
Matrix: Solid
Analysis Batch: 316791

Client Sample ID: SO-17303-022318-DS-008
Prep Type: Total/NA
Prep Batch: 316504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	56	U	1160	888		ug/Kg	☼	77	31 - 120	2	30
Aroclor-1260	200		1160	1380		ug/Kg	☼	103	21 - 122	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*14 - 128*
DCB Decachlorobiphenyl	*106*		*10 - 132*

Method: 6010B - Lead

Lab Sample ID: MB 240-319461/1-A
Matrix: Solid
Analysis Batch: 319709

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 319461

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (coarse particulate matter)	1.0	U	1.0	0.28	mg/Kg		03/21/18 14:00	03/22/18 16:15	1
Lead (fine particulate matter)	1.0	U	1.0	0.28	mg/Kg		03/21/18 14:00	03/22/18 16:15	1

Lab Sample ID: LCS 240-319461/2-A
Matrix: Solid
Analysis Batch: 319709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 319461

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead (coarse particulate matter)	50.0	50.0		mg/Kg		100	80 - 120
Lead (fine particulate matter)	50.0	50.0		mg/Kg		100	80 - 120

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-316516/1-A
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80	U	0.80	0.36	mg/Kg		02/28/18 14:00	03/05/18 20:41	1
Beryllium	0.16	U	0.16	0.054	mg/Kg		02/28/18 14:00	03/05/18 20:41	1
Cadmium	0.080	U	0.080	0.048	mg/Kg		02/28/18 14:00	03/05/18 20:41	1
Cobalt	0.40	U	0.40	0.20	mg/Kg		02/28/18 14:00	03/05/18 20:41	1
Chromium	0.80	U	0.80	0.15	mg/Kg		02/28/18 14:00	03/05/18 20:41	1
Copper	0.80	U	0.80	0.24	mg/Kg		02/28/18 14:00	03/05/18 20:41	1
Manganese	0.446	J	0.80	0.31	mg/Kg		02/28/18 14:00	03/05/18 20:41	1
Nickel	0.80	U	0.80	0.23	mg/Kg		02/28/18 14:00	03/05/18 20:41	1
Zinc	2.0	U	2.0	1.4	mg/Kg		02/28/18 14:00	03/05/18 20:41	1

Lab Sample ID: LCS 240-316516/2-A
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	190		mg/Kg		95	80 - 120
Beryllium	5.00	5.21		mg/Kg		104	80 - 120
Cadmium	5.00	4.72		mg/Kg		94	80 - 120
Cobalt	50.0	46.2		mg/Kg		92	80 - 120
Chromium	20.0	19.1		mg/Kg		96	80 - 120
Copper	25.0	24.8		mg/Kg		99	80 - 120
Manganese	50.0	50.6		mg/Kg		101	80 - 120
Nickel	50.0	46.6		mg/Kg		93	80 - 120
Zinc	50.0	47.0		mg/Kg		94	80 - 120

Lab Sample ID: 240-91909-2 MS
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: SO-17303-022218-DS-001
Prep Type: Total/NA
Prep Batch: 316516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	50		191	212		mg/Kg	☼	85	75 - 125
Beryllium	0.41		4.78	4.81		mg/Kg	☼	92	75 - 125
Cadmium	0.62		4.78	4.39		mg/Kg	☼	79	75 - 125
Cobalt	7.0		47.8	51.8		mg/Kg	☼	94	75 - 125
Chromium	11		19.1	28.6		mg/Kg	☼	90	75 - 125
Copper	18		23.9	39.6		mg/Kg	☼	89	75 - 125
Manganese	300	B	47.8	376	4	mg/Kg	☼	155	75 - 125
Nickel	21		47.8	66.8		mg/Kg	☼	97	75 - 125
Zinc	54		47.8	101		mg/Kg	☼	97	75 - 125

Lab Sample ID: 240-91909-2 MSD
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: SO-17303-022218-DS-001
Prep Type: Total/NA
Prep Batch: 316516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	50		191	214		mg/Kg	☼	86	75 - 125	1	20
Beryllium	0.41		4.78	4.78		mg/Kg	☼	92	75 - 125	0	20
Cadmium	0.62		4.78	4.43		mg/Kg	☼	80	75 - 125	1	20
Cobalt	7.0		47.8	52.3		mg/Kg	☼	95	75 - 125	1	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-91909-2 MSD
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: SO-17303-022218-DS-001
Prep Type: Total/NA
Prep Batch: 316516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	11		19.1	29.2		mg/Kg	☼	94	75 - 125	2	20
Copper	18		23.9	41.8		mg/Kg	☼	98	75 - 125	5	20
Manganese	300	B	47.8	363	4	mg/Kg	☼	128	75 - 125	4	20
Nickel	21		47.8	67.9		mg/Kg	☼	99	75 - 125	2	20
Zinc	54		47.8	98.0		mg/Kg	☼	92	75 - 125	3	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-316516/1-A ^2
Matrix: Solid
Analysis Batch: 316837

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	U	0.16	0.13	mg/Kg		02/28/18 14:00	03/01/18 16:32	2
Arsenic	0.080	U	0.080	0.060	mg/Kg		02/28/18 14:00	03/01/18 16:32	2
Lead	0.20	U	0.20	0.062	mg/Kg		02/28/18 14:00	03/01/18 16:32	2
Selenium	0.16	U	0.16	0.12	mg/Kg		02/28/18 14:00	03/01/18 16:32	2
Thallium	0.080	U	0.080	0.048	mg/Kg		02/28/18 14:00	03/01/18 16:32	2
Vanadium	0.80	U	0.80	0.23	mg/Kg		02/28/18 14:00	03/01/18 16:32	2
Silver	0.080	U	0.080	0.022	mg/Kg		02/28/18 14:00	03/01/18 16:32	2

Lab Sample ID: LCS 240-316516/3-A ^2
Matrix: Solid
Analysis Batch: 316837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	9.28		mg/Kg		93	80 - 120
Arsenic	100	91.2		mg/Kg		91	80 - 120
Lead	100	102		mg/Kg		102	80 - 120
Selenium	100	87.1		mg/Kg		87	80 - 120
Thallium	25.0	24.5		mg/Kg		98	80 - 120
Vanadium	100	99.1		mg/Kg		99	80 - 120
Silver	10.0	9.45		mg/Kg		94	80 - 120

Lab Sample ID: 240-91909-2 MS
Matrix: Solid
Analysis Batch: 316837

Client Sample ID: SO-17303-022218-DS-001
Prep Type: Total/NA
Prep Batch: 316516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.28	F1	10.9	5.22	F1	mg/Kg	☼	45	75 - 125
Arsenic	6.4		109	107		mg/Kg	☼	93	75 - 125
Lead	16		109	115		mg/Kg	☼	91	75 - 125
Selenium	0.84		109	91.7		mg/Kg	☼	83	75 - 125
Thallium	0.32		27.3	25.3		mg/Kg	☼	91	75 - 125
Vanadium	17		109	131		mg/Kg	☼	105	75 - 125
Silver	0.045	J	10.9	9.93		mg/Kg	☼	91	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-91909-2 MSD — **Client Sample ID: SO-17303-022218-DS-001**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 316837 — **Prep Batch: 316516**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.28	F1	10.9	4.26	F1	mg/Kg	☼	36	75 - 125	20	20
Arsenic	6.4		109	106		mg/Kg	☼	91	75 - 125	1	20
Lead	16		109	115		mg/Kg	☼	90	75 - 125	0	20
Selenium	0.84		109	90.4		mg/Kg	☼	82	75 - 125	1	20
Thallium	0.32		27.3	25.5		mg/Kg	☼	92	75 - 125	1	20
Vanadium	17		109	132		mg/Kg	☼	106	75 - 125	1	20
Silver	0.045	J	10.9	9.89		mg/Kg	☼	90	75 - 125	0	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-316536/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 316926 — **Prep Batch: 316536**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.018	mg/Kg		02/28/18 16:00	03/02/18 16:26	1

Lab Sample ID: LCS 240-316536/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 316926 — **Prep Batch: 316536**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.777		mg/Kg		93	80 - 120

Lab Sample ID: 240-91909-2 MS — **Client Sample ID: SO-17303-022218-DS-001**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 316926 — **Prep Batch: 316536**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.046	U	0.205	0.212		mg/Kg	☼	103	80 - 120

Lab Sample ID: 240-91909-2 MSD — **Client Sample ID: SO-17303-022218-DS-001**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 316926 — **Prep Batch: 316536**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.046	U	0.205	0.208		mg/Kg	☼	102	80 - 120	2	20

Method: Moisture - Percent Moisture

Lab Sample ID: 240-91909-5 DU — **Client Sample ID: SO-17303-022318-DS-004**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 316344

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	84.8		84.0		%		1	20
Percent Moisture	15.2		16.0		%		5	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-144)	(58-142)	(61-137)	(31-155)
240-91909-2	SO-17303-022218-DS-001	81	74	84	81
240-91909-3	SO-17303-022218-DS-002	77	68	82	82
240-91909-4	SO-17303-022318-DS-003	80	75	87	84
240-91909-5	SO-17303-022318-DS-004	91	82	91	91
240-91909-6	SO-17303-022318-DS-005	74	72	83	79
240-91909-7	SO-17303-022318-DS-006	90	78	90	88
240-91909-8	SO-17303-022318-DS-007	91	84	97	92
240-91909-9	SO-17303-022318-DS-008	96	85	100	92
LCS 240-316784/2-A	Lab Control Sample	81	83	92	98
MB 240-316784/1-A	Method Blank	82	76	86	80

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)
240-91909-1	TB-17303-022018	97	75	79	106
LCS 240-316351/4	Lab Control Sample	80	94	85	95
MB 240-316351/6	Method Blank	83	79	78	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(10-120)	(30-120)	(29-120)	(41-120)
240-91909-2	SO-17303-022218-DS-001	76	75	54	84	81	76
240-91909-3	SO-17303-022218-DS-002	67	61	42	69	69	70
240-91909-4	SO-17303-022318-DS-003	60	65	46	61	65	56
240-91909-5	SO-17303-022318-DS-004	67	66	39	65	69	71
240-91909-6	SO-17303-022318-DS-005	83	75	53	84	82	81
240-91909-7	SO-17303-022318-DS-006	65	66	47	74	71	68
240-91909-8	SO-17303-022318-DS-007	60	57	36	60	61	61
240-91909-9	SO-17303-022318-DS-008	52	50	28	49	52	50
240-91909-9 MS	SO-17303-022318-DS-008	69	63	47	70	68	66
240-91909-9 MSD	SO-17303-022318-DS-008	64	59	47	65	64	61
LCS 240-316538/21-A	Lab Control Sample	74	74	71	77	74	76

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		FBP	2FP	TBP	NBZ	PHL	TPHL		
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(10-120)	(30-120)	(29-120)	(41-120)		
MB 240-316538/20-A	Method Blank	69	70	33	70	69	71		

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TCX2	DCBP2						
Lab Sample ID	Client Sample ID	(14-128)	(10-132)						
240-91909-2	SO-17303-022218-DS-001	87	136 X						
240-91909-3	SO-17303-022218-DS-002	76	127						
240-91909-4	SO-17303-022318-DS-003	89	135 X						
240-91909-5	SO-17303-022318-DS-004	102	119						
240-91909-6	SO-17303-022318-DS-005	78	110						
240-91909-7	SO-17303-022318-DS-006	79	113						
240-91909-8	SO-17303-022318-DS-007	77	101 p						
240-91909-9	SO-17303-022318-DS-008	104	105						
240-91909-9 MS	SO-17303-022318-DS-008	94	132						
240-91909-9 MSD	SO-17303-022318-DS-008	82	106						
LCS 240-316504/23-A	Lab Control Sample	67	89						
MB 240-316504/22-A	Method Blank	68	118						

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Client Sample ID: TB-17303-022018
Lab Sample ID: 240-91909-1
Date Collected: 02/20/18 00:00
Matrix: Water
Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	316351	02/27/18 23:03	LRW	TAL CAN

Client Sample ID: SO-17303-022218-DS-001
Lab Sample ID: 240-91909-2
Date Collected: 02/22/18 10:30
Matrix: Solid
Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316344	02/27/18 11:27	CJL	TAL CAN

Client Sample ID: SO-17303-022218-DS-001
Lab Sample ID: 240-91909-2
Date Collected: 02/22/18 10:30
Matrix: Solid
Date Received: 02/24/18 09:15
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 12:48	HMB	TAL CAN
Total/NA	Prep	3540C			316538	02/28/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8270C		1	317067	03/05/18 16:22	JMG	TAL CAN
Total/NA	Prep	3540C			316504	02/28/18 09:29	DVT	TAL CAN
Total/NA	Analysis	8082A		1	316751	03/01/18 22:18	KMG	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 20:50	KLC	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	316837	03/01/18 16:41	DSH	TAL CAN
Total/NA	Prep	7471A			316536	02/28/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	316926	03/02/18 16:33	AJC	TAL CAN

Client Sample ID: SO-17303-022218-DS-002
Lab Sample ID: 240-91909-3
Date Collected: 02/22/18 10:40
Matrix: Solid
Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316344	02/27/18 11:27	CJL	TAL CAN

Client Sample ID: SO-17303-022218-DS-002
Lab Sample ID: 240-91909-3
Date Collected: 02/22/18 10:40
Matrix: Solid
Date Received: 02/24/18 09:15
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 13:11	HMB	TAL CAN
Total/NA	Prep	3540C			316538	02/28/18 11:05	DVT	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Client Sample ID: SO-17303-022218-DS-002 — Lab Sample ID: 240-91909-3

Date Collected: 02/22/18 10:40 — **Matrix: Solid**
Date Received: 02/24/18 09:15 — **Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	317067	03/05/18 15:59	JMG	TAL CAN
Total/NA	Prep	3540C			316504	02/28/18 09:29	DVT	TAL CAN
Total/NA	Analysis	8082A		1	316751	03/01/18 22:37	KMG	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 21:13	KLC	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	316837	03/01/18 17:03	DSH	TAL CAN
Total/NA	Prep	7471A			316536	02/28/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	316926	03/02/18 16:40	AJC	TAL CAN

Client Sample ID: SO-17303-022318-DS-003 — Lab Sample ID: 240-91909-4

Date Collected: 02/23/18 09:15 — **Matrix: Solid**
Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316344	02/27/18 11:27	CJL	TAL CAN

Client Sample ID: SO-17303-022318-DS-003 — Lab Sample ID: 240-91909-4

Date Collected: 02/23/18 09:15 — **Matrix: Solid**
Date Received: 02/24/18 09:15 — **Percent Solids: 80.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 13:34	HMB	TAL CAN
Total/NA	Prep	3540C			316538	02/28/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8270C		2.5	317067	03/05/18 19:27	JMG	TAL CAN
Total/NA	Prep	3540C			316504	02/28/18 09:29	DVT	TAL CAN
Total/NA	Analysis	8082A		1	316751	03/01/18 22:56	KMG	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 21:18	KLC	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	316837	03/01/18 17:07	DSH	TAL CAN
Total/NA	Prep	7471A			316536	02/28/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	316926	03/02/18 16:44	AJC	TAL CAN

Client Sample ID: SO-17303-022318-DS-004 — Lab Sample ID: 240-91909-5

Date Collected: 02/23/18 09:20 — **Matrix: Solid**
Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316344	02/27/18 11:27	CJL	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Client Sample ID: SO-17303-022318-DS-004

Lab Sample ID: 240-91909-5
Date Collected: 02/23/18 09:20
Matrix: Solid
Date Received: 02/24/18 09:15
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 13:58	HMB	TAL CAN
Total/NA	Prep	3540C			316538	02/28/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8270C		1	317067	03/05/18 16:45	JMG	TAL CAN
Total/NA	Prep	3540C			316504	02/28/18 09:29	DVT	TAL CAN
Total/NA	Analysis	8082A		1	316751	03/01/18 23:15	KMG	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 21:32	KLC	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	316837	03/01/18 17:12	DSH	TAL CAN
Total/NA	Prep	7471A			316536	02/28/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	316926	03/02/18 16:47	AJC	TAL CAN

Client Sample ID: SO-17303-022318-DS-005

Lab Sample ID: 240-91909-6
Date Collected: 02/23/18 10:15
Matrix: Solid
Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Cleanup	Fractionation			318956	03/06/18 16:00	DRJ	TAL CAN
Fractionated	Prep	3050B			319461	03/21/18 14:00	DEE	TAL CAN
Fractionated	Analysis	6010B		1	319709	03/22/18 21:58	KLC	TAL CAN
Fractionated	Cleanup	Fractionation			318957	03/06/18 16:00	DRJ	TAL CAN
Fractionated	Prep	3050B			319461	03/21/18 14:00	DEE	TAL CAN
Fractionated	Analysis	6010B		1	319709	03/22/18 22:07	KLC	TAL CAN
Fractionated	Analysis	6010B		1	320116	03/26/18 13:49	KLC	TAL CAN
Total/NA	Analysis	Moisture		1	316344	02/27/18 11:27	CJL	TAL CAN

Client Sample ID: SO-17303-022318-DS-005

Lab Sample ID: 240-91909-6
Date Collected: 02/23/18 10:15
Matrix: Solid
Date Received: 02/24/18 09:15
Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 14:22	HMB	TAL CAN
Total/NA	Prep	3540C			316538	02/28/18 11:18	DVT	TAL CAN
Total/NA	Analysis	8270C		20	317067	03/05/18 17:54	JMG	TAL CAN
Total/NA	Prep	3540C			316504	02/28/18 09:29	DVT	TAL CAN
Total/NA	Analysis	8082A		1	316791	03/02/18 12:19	KMG	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 21:36	KLC	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	316837	03/01/18 17:25	DSH	TAL CAN
Total/NA	Prep	7471A			316536	02/28/18 16:00	DEE	TAL CAN

Client Sample ID: SO-17303-022318-DS-005 — Lab Sample ID: 240-91909-6

Date Collected: 02/23/18 10:15 — **Matrix: Solid**
Date Received: 02/24/18 09:15 — **Percent Solids: 84.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	316926	03/02/18 16:49	AJC	TAL CAN

Client Sample ID: SO-17303-022318-DS-006 — Lab Sample ID: 240-91909-7

Date Collected: 02/23/18 10:20 — **Matrix: Solid**
Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316344	02/27/18 11:27	CJL	TAL CAN

Client Sample ID: SO-17303-022318-DS-006 — Lab Sample ID: 240-91909-7

Date Collected: 02/23/18 10:20 — **Matrix: Solid**
Date Received: 02/24/18 09:15 — **Percent Solids: 86.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 14:45	HMB	TAL CAN
Total/NA	Prep	3540C			316538	02/28/18 11:18	DVT	TAL CAN
Total/NA	Analysis	8270C		1	317067	03/05/18 17:08	JMG	TAL CAN
Total/NA	Prep	3540C			316504	02/28/18 09:29	DVT	TAL CAN
Total/NA	Analysis	8082A		1	316751	03/01/18 23:53	KMG	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 21:41	KLC	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	316837	03/01/18 17:30	DSH	TAL CAN
Total/NA	Prep	7471A			316536	02/28/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	316926	03/02/18 16:51	AJC	TAL CAN

Client Sample ID: SO-17303-022318-DS-007 — Lab Sample ID: 240-91909-8

Date Collected: 02/23/18 13:15 — **Matrix: Solid**
Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316344	02/27/18 11:27	CJL	TAL CAN

Client Sample ID: SO-17303-022318-DS-007 — Lab Sample ID: 240-91909-8

Date Collected: 02/23/18 13:15 — **Matrix: Solid**
Date Received: 02/24/18 09:15 — **Percent Solids: 86.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 15:08	HMB	TAL CAN
Total/NA	Prep	3540C			316538	02/28/18 11:18	DVT	TAL CAN
Total/NA	Analysis	8270C		1	317067	03/05/18 17:31	JMG	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			316504	02/28/18 09:29	DVT	TAL CAN
Total/NA	Analysis	8082A		1	316791	03/02/18 12:39	KMG	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 21:46	KLC	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	316837	03/01/18 17:34	DSH	TAL CAN
Total/NA	Prep	7471A			316536	02/28/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	316926	03/02/18 16:53	AJC	TAL CAN

Client Sample ID: SO-17303-022318-DS-008

Lab Sample ID: 240-91909-9

Date Collected: 02/23/18 13:20

Matrix: Solid

Date Received: 02/24/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Cleanup	Fractionation			318957	03/06/18 16:00	DRJ	TAL CAN
Fractionated	Prep	3050B			319461	03/21/18 14:00	DEE	TAL CAN
Fractionated	Analysis	6010B		1	319709	03/22/18 22:02	KLC	TAL CAN
Fractionated	Cleanup	Fractionation			318956	03/06/18 16:00	DRJ	TAL CAN
Fractionated	Prep	3050B			319461	03/21/18 14:00	DEE	TAL CAN
Fractionated	Analysis	6010B		1	319709	03/22/18 22:21	KLC	TAL CAN
Fractionated	Analysis	6010B		1	320116	03/26/18 13:49	KLC	TAL CAN
Total/NA	Analysis	Moisture		1	316344	02/27/18 11:27	CJL	TAL CAN

Client Sample ID: SO-17303-022318-DS-008

Lab Sample ID: 240-91909-9

Date Collected: 02/23/18 13:20

Matrix: Solid

Date Received: 02/24/18 09:15

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 15:31	HMB	TAL CAN
Total/NA	Prep	3540C			316538	02/28/18 11:18	DVT	TAL CAN
Total/NA	Analysis	8270C		2	317067	03/05/18 18:17	JMG	TAL CAN
Total/NA	Prep	3540C			316504	02/28/18 09:29	DVT	TAL CAN
Total/NA	Analysis	8082A		1	316791	03/02/18 12:58	KMG	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 21:50	KLC	TAL CAN
Total/NA	Prep	3050B			316516	02/28/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	316837	03/01/18 17:39	DSH	TAL CAN
Total/NA	Prep	7471A			316536	02/28/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	316926	03/02/18 16:59	AJC	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-91909-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18 *
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18 *
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN 190 Chain of Custody Record

5.6/5.3

231079

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tom Kinney	Site Contact: A. Burns	Date: 2-23-18	COC No:
Company Name: GHD	Tel/Fax: 248-893-3400	Lab Contact: D. Heckler	Carrier: FedEx	1 of 1 COCs
Address: 26850 Haggerty rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Farmington Hills, Mi 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248-893-3400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: Hartland, Mi.	☐ 2 days			Job / SDG No.:
PO# 24006020	☐ 1 day			

240-91909 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC	TCL SVOC	Site TAL Metals	Fractionated Pb (SF7 2nd)	PCB's	Sample Specific Notes:
TB-17303-022018	2-20-18	/	TB	/	1	/	/	X					
SO-17303-022218-DS-001	2-22-18	1030	G	SO	8	/	/	X	X	X	X	X	
" " " " -002	↓	1040	G	SO	3	/	/	X	X	X	X	X	
SO-17303-022318-DS-003	2-23-18	0915	G	SO	3	/	/	X	X	X	X	X	
-004		0920	G	SO	3	/	/	X	X	X	X	X	
-005		1015	G	SO	3	/	/	X	X	X	X	X	
-006		1020	G	SO	3	/	/	X	X	X	X	X	
-007		1315	G	SO	3	/	/	X	X	X	X	X	
-008		1320	G	SO	3	/	/	X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

SDG# - 017303-T02-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Derek Sabba	GHD	2-23-18/1430	POD	TAL	2-24-18 915
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

3/26/2018

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 91909**
Canton Facility

Client GHD Site Name —
Cooler Received on 2-24-18 Opened on 2-24-18
Cooler unpacked by: BP
FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box (Client Cooler) Box Other
Packing material used: (Bubble Wrap) Foam ~~Plastic Bag~~ None Other
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN# IR-8 (CF **-0.3** °C) Observed Cooler Temp. 5.6 °C Corrected Cooler Temp. 5.3 °C
IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
~~IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes) No	
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes) No	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)	
-Were tamper/custody seals intact and uncompromised?	(Yes) No	NA
3. Shippers' packing slip attached to the cooler(s)?	(Yes) No	
4. Did custody papers accompany the sample(s)?	(Yes) No	
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes (No)	
7. Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
8. Could all bottle labels be reconciled with the COC?	(Yes) No	
9. Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
10. Sufficient quantity received to perform indicated analyses?	(Yes) No	
11. Are these work share samples?	Yes (No)	
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes No (NA)	pH Strip Lot# **HC730269**
13. Were VOAs on the COC?	Yes (No)	
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes No (NA)	
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B729401NB	(Yes) No	
16. Was a LL Hg or Me Hg trip blank present?	Yes (No)	

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

17. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

WI-NC-099

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-92035-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
3/13/2018 4:40:26 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-92035-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-92035-1

Comments
No additional comments.

Receipt
The samples were received on 2/28/2018 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.7º C and 2.1º C.

GC/MS VOA
Method(s) 8260B: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SO-17303-022618-DS-014 (240-92035-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-316784 and analytical batch 240-317340.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C: The requested RL for Pentachlorophenol is below the low point of the ICAL. The RL is supported by the MDL. Additionally, an LODV was analyzed in the batch to also support the RL.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8082A: The %RPD between the primary and confirmation column exceeded 40% for the following samples: SO-17303-022618-DS-009 (240-92035-2). The higher value has been reported due to analyst judgment.

Method(s) 8082A: Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SO-17303-022618-DS-009 (240-92035-2), SO-17303-022618-DS-009 (240-92035-2[MS]), SO-17303-022618-DS-009 (240-92035-2[MSD]), SO-17303-022618-DS-010 (240-92035-3) and SO-17303-022618-DS-011 (240-92035-4). These results have been reported and qualified.

Method(s) 8082A: The following samples appear to contain polychlorinated biphenyls (PCBs); however, the Aroclor patterns of the PCBs in the samples are altered and do not directly match the laboratory's individual Aroclor standards used for instrument calibration:SO-17303-022618-DS-010 (240-92035-3) and SO-17303-022618-DS-011 (240-92035-4). These altered PCB patterns may be caused by weathering, other environmental processes, and/or contributions from the presence of multiple Aroclors resulting in overlapping PCB patterns. The samples have been quantified and reported using the best overall Aroclor/standard pattern match. Due to the reasons stated above there is increased quantitative uncertainty associated with the reported results.

Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-022718-DS-019 (240-92035-12).3468458, 3154249, 3361889.

Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-022718-DS-016 (240-92035-9), SO-17303-022718-DS-017 (240-92035-10), SO-17303-022718-DS-018 (240-92035-11), SO-17303-022718-DS-019 (240-92035-12), SO-17303-022718-DS-020 (240-92035-13), (240-92035-D-13-C MS) and (240-92035-D-13-D MSD).3468458, 3154249, 3361889.

Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-022618-DS-014 (240-92035-7).3468458, 3154249, 3361889.

Method(s) 8082A: The following samples appear to contain polychlorinated biphenyls (PCBs); however, the Aroclor patterns of the PCBs in the sample is altered and do not directly match the laboratory's individual Aroclor standards used for instrument

Job ID: 240-92035-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

calibration:SO-17303-022618-DS-014 (240-92035-7). These altered PCB patterns may be caused by weathering, other environmental processes, and/or contributions from the presence of multiple Aroclors resulting in overlapping PCB patterns. The samples have been quantified and reported using the best overall Aroclor/standard pattern match. Due to the reasons stated above there is increased quantitative uncertainty associated with the reported results.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: Some requested practical quantitation limits (PQLs) fall below the laboratory's verified standard quantitation limit. The continuing calibration blanks and method blanks may not support the lower PQL.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method(s) 3540C: MS/MSD was performed on SO-17303-022618-DS-009 (240-92035-2) and SO-17303-022618-DS-009 (240-92035-2[MS]), however during the prep process the MSD dried out and could not be recovered. A parent and MS will be reported with this sample.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-92035-1	TB-17303-022618	Water	02/26/18 00:00	02/28/18 09:30
240-92035-2	SO-17303-022618-DS-009	Solid	02/26/18 09:40	02/28/18 09:30
240-92035-3	SO-17303-022618-DS-010	Solid	02/26/18 13:20	02/28/18 09:30
240-92035-4	SO-17303-022618-DS-011	Solid	02/26/18 13:25	02/28/18 09:30
240-92035-5	SO-17303-022618-DS-012	Solid	02/26/18 13:30	02/28/18 09:30
240-92035-6	SO-17303-022618-DS-013	Solid	02/26/18 13:35	02/28/18 09:30
240-92035-7	SO-17303-022618-DS-014	Solid	02/26/18 14:40	02/28/18 09:30
240-92035-8	SO-17303-022618-DS-015	Solid	02/26/18 14:45	02/28/18 09:30
240-92035-9	SO-17303-022718-DS-016	Solid	02/27/18 09:50	02/28/18 09:30
240-92035-10	SO-17303-022718-DS-017	Solid	02/27/18 10:00	02/28/18 09:30
240-92035-11	SO-17303-022718-DS-018	Solid	02/27/18 10:10	02/28/18 09:30
240-92035-12	SO-17303-022718-DS-019	Solid	02/27/18 13:50	02/28/18 09:30
240-92035-13	SO-17303-022718-DS-020	Solid	02/27/18 14:00	02/28/18 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Client Sample ID: TB-17303-022618 — Lab Sample ID: 240-92035-1

No Detections.

Client Sample ID: SO-17303-022618-DS-009 — Lab Sample ID: 240-92035-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	190	J	2100	160	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	230	J	2700	5.0	ug/Kg	6.6666	☼	8270C	Total/NA
Acenaphthene	120	J	2700	7.7	ug/Kg	6.6666	☼	8270C	Total/NA
Acenaphthylene	41	J	2700	3.5	ug/Kg	6.6666	☼	8270C	Total/NA
Anthracene	280	J	2700	7.9	ug/Kg	6.6666	☼	8270C	Total/NA
Benzo[a]anthracene	1700	J F1	2700	6.3	ug/Kg	6.6666	☼	8270C	Total/NA
Benzo[a]pyrene	2600	J F1	2700	6.4	ug/Kg	6.6666	☼	8270C	Total/NA
Benzo[b]fluoranthene	4700		2700	5.9	ug/Kg	6.6666	☼	8270C	Total/NA
Benzo[g,h,i]perylene	1900	J F1	2700	3.5	ug/Kg	6.6666	☼	8270C	Total/NA
Benzo[k]fluoranthene	1900	J F1	2700	6.8	ug/Kg	6.6666	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	930	J	2700	190	ug/Kg	6.6666	☼	8270C	Total/NA
Butyl benzyl phthalate	280	J	2700	100	ug/Kg	6.6666	☼	8270C	Total/NA
Chrysene	2900	F1	2700	11	ug/Kg	6.6666	☼	8270C	Total/NA
Dibenzofuran	82	J	2700	6.6	ug/Kg	6.6666	☼	8270C	Total/NA
Fluoranthene	5900		2700	5.5	ug/Kg	6.6666	☼	8270C	Total/NA
Fluorene	190	J	2700	5.3	ug/Kg	6.6666	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	1700	J F1	2700	3.5	ug/Kg	6.6666	☼	8270C	Total/NA
Naphthalene	410	J	2700	8.3	ug/Kg	6.6666	☼	8270C	Total/NA
Phenanthrene	1900	J F1	2700	7.4	ug/Kg	6.6666	☼	8270C	Total/NA
Pyrene	4800		2700	4.4	ug/Kg	6.6666	☼	8270C	Total/NA
Aroclor-1248	110		75	36	ug/Kg	1	☼	8082A	Total/NA
Aroclor-1260	98	F2	75	33	ug/Kg	1	☼	8082A	Total/NA
Barium	71		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.35		0.22	0.074	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.1		0.11	0.066	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.3		0.55	0.28	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	27		1.1	0.32	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		1.1	0.43	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		1.1	0.32	mg/Kg	1	☼	6010B	Total/NA
Zinc	250		2.8	1.9	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.64	F1 F2	0.22	0.17	mg/Kg	2	☼	6020	Total/NA
Arsenic	6.5		0.11	0.083	mg/Kg	2	☼	6020	Total/NA
Lead	56	B	0.28	0.086	mg/Kg	2	☼	6020	Total/NA
Selenium	0.80		0.22	0.17	mg/Kg	2	☼	6020	Total/NA
Thallium	0.25		0.11	0.066	mg/Kg	2	☼	6020	Total/NA
Vanadium	14		1.1	0.32	mg/Kg	2	☼	6020	Total/NA
Silver	0.15		0.11	0.030	mg/Kg	2	☼	6020	Total/NA
Mercury	0.059	J	0.071	0.032	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-022618-DS-010 — Lab Sample ID: 240-92035-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	15	J	300	0.57	ug/Kg	1	☼	8270C	Total/NA
Anthracene	11	J	300	0.88	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	45	J	300	0.71	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	55	J	300	0.73	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022618-DS-010 (Continued) — Lab Sample ID: 240-92035-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	89	J	300	0.67	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	56	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	42	J	300	0.77	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	49	J	300	22	ug/Kg	1	☼	8270C	Total/NA
Butyl benzyl phthalate	30	J	300	11	ug/Kg	1	☼	8270C	Total/NA
Chrysene	65	J	300	1.2	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	25	J	300	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	130	J	300	0.62	ug/Kg	1	☼	8270C	Total/NA
Fluorene	7.4	J	300	0.60	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	41	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	6.3	J	300	0.93	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	72	J	300	0.83	ug/Kg	1	☼	8270C	Total/NA
Pyrene	110	J	300	0.50	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1260	48	J	54	24	ug/Kg	1	☼	8082A	Total/NA
Barium	26		0.86	0.39	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.27		0.17	0.058	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20		0.086	0.051	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.2		0.43	0.21	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.4		0.86	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.86	0.25	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.86	0.33	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.86	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		2.1	1.5	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.32		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Arsenic	5.1		0.086	0.064	mg/Kg	2	☼	6020	Total/NA
Lead	8.5	B	0.21	0.067	mg/Kg	2	☼	6020	Total/NA
Selenium	0.40		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Thallium	0.16		0.086	0.051	mg/Kg	2	☼	6020	Total/NA
Vanadium	16		0.86	0.25	mg/Kg	2	☼	6020	Total/NA
Silver	0.036	J	0.086	0.024	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022618-DS-011 — Lab Sample ID: 240-92035-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	140		100	94	ug/Kg	2	☼	8260B	Total/NA
Vinyl chloride	1100		82	43	ug/Kg	2	☼	8260B	Total/NA
cis-1,2-Dichloroethene	8400		200	180	ug/Kg	4	☼	8260B	Total/NA
trans-1,2-Dichloroethene	220		100	89	ug/Kg	2	☼	8260B	Total/NA
2-Methylnaphthalene	5.4	J	300	0.56	ug/Kg	1	☼	8270C	Total/NA
Anthracene	7.0	J	300	0.88	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	30	J	300	0.71	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	36	J	300	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	64	J	300	0.66	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	45	J	300	0.39	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	23	J	300	0.77	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	35	J	300	21	ug/Kg	1	☼	8270C	Total/NA
Butyl benzyl phthalate	45	J	300	11	ug/Kg	1	☼	8270C	Total/NA
Chrysene	44	J	300	1.2	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	25	J	300	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	70	J	300	0.62	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022618-DS-011 (Continued) — Lab Sample ID: 240-92035-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	30	J	300	0.39	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	40	J	300	0.82	ug/Kg	1	☼	8270C	Total/NA
Pyrene	68	J	300	0.50	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1260	130		59	26	ug/Kg	1	☼	8082A	Total/NA
Barium	27		0.79	0.36	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.24		0.16	0.054	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25		0.079	0.048	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.3		0.40	0.20	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.79	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.79	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.79	0.31	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.79	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	44		2.0	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.28		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Arsenic	6.6		0.079	0.059	mg/Kg	2	☼	6020	Total/NA
Lead	13	B	0.20	0.062	mg/Kg	2	☼	6020	Total/NA
Selenium	0.40		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.18		0.079	0.048	mg/Kg	2	☼	6020	Total/NA
Vanadium	13		0.79	0.23	mg/Kg	2	☼	6020	Total/NA
Silver	0.048	J	0.079	0.022	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022618-DS-012 — Lab Sample ID: 240-92035-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1700		44	23	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	64		55	48	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	8.7	J	310	4.1	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	80	J	310	0.59	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	26	J	310	0.41	ug/Kg	1	☼	8270C	Total/NA
Chrysene	17	J	310	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	17	J	310	0.78	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	25	J	310	18	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	26	J	310	0.97	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	57	J	310	0.86	ug/Kg	1	☼	8270C	Total/NA
Pyrene	16	J	310	0.52	ug/Kg	1	☼	8270C	Total/NA
Barium	100		0.84	0.38	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.17	0.057	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25		0.084	0.050	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.8		0.42	0.21	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.84	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.84	0.25	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.84	0.32	mg/Kg	1	☼	6010B	Total/NA
Nickel	29		0.84	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		2.1	1.4	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.6		0.084	0.063	mg/Kg	2	☼	6020	Total/NA
Lead	9.3	B	0.21	0.065	mg/Kg	2	☼	6020	Total/NA
Selenium	0.62		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Thallium	0.35		0.084	0.050	mg/Kg	2	☼	6020	Total/NA
Vanadium	24		0.84	0.24	mg/Kg	2	☼	6020	Total/NA
Silver	0.045	J	0.084	0.023	mg/Kg	2	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Client Sample ID: SO-17303-022618-DS-013 — Lab Sample ID: 240-92035-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	150000		5300	4900	ug/Kg	100	☼	8260B	Total/NA
Vinyl chloride	4500		4200	2200	ug/Kg	100	☼	8260B	Total/NA
cis-1,2-Dichloroethene	250000		5300	4600	ug/Kg	100	☼	8260B	Total/NA
2-Methylnaphthalene	17	J	310	0.59	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	25	J	310	0.41	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	45	J	310	22	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	26	J	310	18	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	8.5	J	310	0.65	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	14	J	310	0.96	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	45	J	310	0.86	ug/Kg	1	☼	8270C	Total/NA
Pyrene	23	J	310	0.52	ug/Kg	1	☼	8270C	Total/NA
Barium	54		0.84	0.38	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.17	0.057	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21		0.084	0.051	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.5		0.42	0.21	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.84	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.84	0.25	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		0.84	0.33	mg/Kg	1	☼	6010B	Total/NA
Nickel	29		0.84	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		2.1	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.13	J	0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Arsenic	7.3		0.084	0.063	mg/Kg	2	☼	6020	Total/NA
Lead	11	B	0.21	0.066	mg/Kg	2	☼	6020	Total/NA
Selenium	0.51		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Thallium	0.28		0.084	0.051	mg/Kg	2	☼	6020	Total/NA
Vanadium	24		0.84	0.24	mg/Kg	2	☼	6020	Total/NA
Silver	0.044	J	0.084	0.023	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022618-DS-014 — Lab Sample ID: 240-92035-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	310	J	3000	230	ug/Kg	2	☼	8260B	Total/NA
2-Methylnaphthalene	93	J	1300	2.5	ug/Kg	4	☼	8270C	Total/NA
Acenaphthene	41	J	1300	3.8	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]anthracene	250	J	1300	3.2	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]pyrene	360	J	1300	3.2	ug/Kg	4	☼	8270C	Total/NA
Benzo[b]fluoranthene	720	J	1300	3.0	ug/Kg	4	☼	8270C	Total/NA
Benzo[g,h,i]perylene	270	J	1300	1.8	ug/Kg	4	☼	8270C	Total/NA
Benzo[k]fluoranthene	260	J	1300	3.4	ug/Kg	4	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	330	J	1300	96	ug/Kg	4	☼	8270C	Total/NA
Chrysene	460	J	1300	5.6	ug/Kg	4	☼	8270C	Total/NA
Dibenzofuran	34	J	1300	3.3	ug/Kg	4	☼	8270C	Total/NA
Fluoranthene	860	J	1300	2.8	ug/Kg	4	☼	8270C	Total/NA
Fluorene	53	J	1300	2.7	ug/Kg	4	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	260	J	1300	1.8	ug/Kg	4	☼	8270C	Total/NA
Naphthalene	71	J	1300	4.1	ug/Kg	4	☼	8270C	Total/NA
Phenanthrene	370	J	1300	3.7	ug/Kg	4	☼	8270C	Total/NA
Pyrene	710	J	1300	2.2	ug/Kg	4	☼	8270C	Total/NA
Aroclor-1248	150		60	29	ug/Kg	1	☼	8082A	Total/NA
Aroclor-1260	92		60	26	ug/Kg	1	☼	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022618-DS-014 (Continued) — Lab Sample ID: 240-92035-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	47		0.78	0.35	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.39		0.16	0.052	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.42		0.078	0.047	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.0		0.39	0.19	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.78	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.78	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.78	0.30	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.78	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.9	1.3	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.17		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Arsenic	7.8		0.078	0.058	mg/Kg	2	☼	6020	Total/NA
Lead	11	B	0.19	0.060	mg/Kg	2	☼	6020	Total/NA
Selenium	0.51		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.21		0.078	0.047	mg/Kg	2	☼	6020	Total/NA
Vanadium	16		0.78	0.22	mg/Kg	2	☼	6020	Total/NA
Silver	0.11		0.078	0.021	mg/Kg	2	☼	6020	Total/NA
Mercury	0.033	J	0.045	0.020	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-022618-DS-015 — Lab Sample ID: 240-92035-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	41	J	310	0.60	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	21	J	310	0.42	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	37	J	310	23	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	25	J	310	18	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	50	J	310	0.87	ug/Kg	1	☼	8270C	Total/NA
Pyrene	17	J	310	0.52	ug/Kg	1	☼	8270C	Total/NA
Barium	74		0.71	0.32	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.14	0.048	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19		0.071	0.043	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.1		0.36	0.18	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.71	0.13	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.71	0.21	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.71	0.27	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.71	0.21	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.8	1.2	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.15		0.14	0.11	mg/Kg	2	☼	6020	Total/NA
Arsenic	17		0.071	0.053	mg/Kg	2	☼	6020	Total/NA
Lead	9.2	B	0.18	0.055	mg/Kg	2	☼	6020	Total/NA
Selenium	0.55		0.14	0.11	mg/Kg	2	☼	6020	Total/NA
Thallium	0.23		0.071	0.043	mg/Kg	2	☼	6020	Total/NA
Vanadium	23		0.71	0.20	mg/Kg	2	☼	6020	Total/NA
Silver	0.040	J	0.071	0.020	mg/Kg	2	☼	6020	Total/NA
Mercury	0.019	J	0.041	0.019	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-022718-DS-016 — Lab Sample ID: 240-92035-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	190		51	47	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	90		51	44	ug/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022718-DS-016 (Continued) — Lab Sample ID: 240-92035-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	190	J	3000	8.9	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]anthracene	1500	J	3000	7.2	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]pyrene	1700	J	3000	7.3	ug/Kg	10	☼	8270C	Total/NA
Benzo[b]fluoranthene	2800	J	3000	6.7	ug/Kg	10	☼	8270C	Total/NA
Benzo[g,h,i]perylene	1100	J	3000	4.0	ug/Kg	10	☼	8270C	Total/NA
Benzo[k]fluoranthene	1200	J	3000	7.8	ug/Kg	10	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	470	J	3000	220	ug/Kg	10	☼	8270C	Total/NA
Butyl benzyl phthalate	280	J	3000	110	ug/Kg	10	☼	8270C	Total/NA
Chrysene	2000	J	3000	13	ug/Kg	10	☼	8270C	Total/NA
Dibenz(a,h)anthracene	220	J	3000	7.5	ug/Kg	10	☼	8270C	Total/NA
Fluoranthene	3100		3000	6.3	ug/Kg	10	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	960	J	3000	4.0	ug/Kg	10	☼	8270C	Total/NA
Phenanthrene	500	J	3000	8.3	ug/Kg	10	☼	8270C	Total/NA
Pyrene	2700	J	3000	5.0	ug/Kg	10	☼	8270C	Total/NA
Aroclor-1242	49	J	57	22	ug/Kg	1	☼	8082A	Total/NA
Aroclor-1254	150		57	26	ug/Kg	1	☼	8082A	Total/NA
Barium	36		0.75	0.34	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.28		0.15	0.051	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.39		0.075	0.045	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.1		0.37	0.19	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.75	0.14	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.75	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	260		0.75	0.29	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.75	0.22	mg/Kg	1	☼	6010B	Total/NA
Zinc	64		1.9	1.3	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.17		0.15	0.12	mg/Kg	2	☼	6020	Total/NA
Arsenic	4.2		0.075	0.056	mg/Kg	2	☼	6020	Total/NA
Lead	15	B	0.19	0.058	mg/Kg	2	☼	6020	Total/NA
Selenium	0.44		0.15	0.11	mg/Kg	2	☼	6020	Total/NA
Thallium	0.16		0.075	0.045	mg/Kg	2	☼	6020	Total/NA
Vanadium	13		0.75	0.21	mg/Kg	2	☼	6020	Total/NA
Silver	0.089		0.075	0.021	mg/Kg	2	☼	6020	Total/NA
Mercury	0.021	J	0.039	0.017	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-022718-DS-017 — Lab Sample ID: 240-92035-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	23	J	320	0.60	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	23	J	320	0.42	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	36	J	320	23	ug/Kg	1	☼	8270C	Total/NA
Chrysene	16	J	320	1.3	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	27	J	320	18	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	48	J	320	0.88	ug/Kg	1	☼	8270C	Total/NA
Pyrene	19	J	320	0.53	ug/Kg	1	☼	8270C	Total/NA
Barium	62		0.81	0.37	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.16	0.055	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28		0.081	0.049	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.41	0.20	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.81	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.81	0.24	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022718-DS-017 (Continued) — Lab Sample ID: 240-92035-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	320		0.81	0.31	mg/Kg	1	☼	6010B	Total/NA
Nickel	30		0.81	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		2.0	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.13	J	0.16	0.13	mg/Kg	2	☼	6020	Total/NA
Arsenic	5.5		0.081	0.061	mg/Kg	2	☼	6020	Total/NA
Lead	11	B	0.20	0.063	mg/Kg	2	☼	6020	Total/NA
Selenium	0.65		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.31		0.081	0.049	mg/Kg	2	☼	6020	Total/NA
Vanadium	26		0.81	0.23	mg/Kg	2	☼	6020	Total/NA
Silver	0.051	J	0.081	0.022	mg/Kg	2	☼	6020	Total/NA
Mercury	0.023	J	0.051	0.023	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-022718-DS-018 — Lab Sample ID: 240-92035-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	29	J	310	22	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	11	J	310	0.85	ug/Kg	1	☼	8270C	Total/NA
Barium	12		0.83	0.37	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.19		0.17	0.056	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.55		0.083	0.050	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.6		0.41	0.21	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.1		0.83	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.83	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.83	0.32	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.83	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		2.1	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.21		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Arsenic	8.4		0.083	0.062	mg/Kg	2	☼	6020	Total/NA
Lead	6.7	B	0.21	0.064	mg/Kg	2	☼	6020	Total/NA
Selenium	0.54		0.17	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.31		0.083	0.050	mg/Kg	2	☼	6020	Total/NA
Vanadium	11		0.83	0.24	mg/Kg	2	☼	6020	Total/NA
Silver	0.036	J	0.083	0.023	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022718-DS-019 — Lab Sample ID: 240-92035-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	160	J	1500	120	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	16	J	320	0.61	ug/Kg	1	☼	8270C	Total/NA
Anthracene	22	J	320	0.96	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	110	J	320	0.77	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	160	J	320	0.79	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	300	J	320	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	120	J	320	0.43	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	130	J	320	0.83	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	100	J	320	23	ug/Kg	1	☼	8270C	Total/NA
Butyl benzyl phthalate	49	J	320	12	ug/Kg	1	☼	8270C	Total/NA
Chrysene	190	J	320	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	10	J	320	0.81	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	35	J	320	18	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022718-DS-019 (Continued) — Lab Sample ID: 240-92035-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	340		320	0.67	ug/Kg	1	☼	8270C	Total/NA
Fluorene	15	J	320	0.65	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	110	J	320	0.43	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	8.3	J	320	1.0	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	140	J	320	0.90	ug/Kg	1	☼	8270C	Total/NA
Pyrene	290	J	320	0.54	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1242	48	J	62	24	ug/Kg	1	☼	8082A	Total/NA
Aroclor-1254	180		62	29	ug/Kg	1	☼	8082A	Total/NA
Barium	54		0.95	0.43	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.32		0.19	0.064	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.73		0.095	0.057	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.3		0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.95	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	21		0.95	0.28	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.95	0.37	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.95	0.28	mg/Kg	1	☼	6010B	Total/NA
Zinc	160		2.4	1.6	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.27		0.19	0.15	mg/Kg	2	☼	6020	Total/NA
Arsenic	5.3		0.095	0.071	mg/Kg	2	☼	6020	Total/NA
Lead	32	B	0.24	0.074	mg/Kg	2	☼	6020	Total/NA
Selenium	0.64		0.19	0.14	mg/Kg	2	☼	6020	Total/NA
Thallium	0.18		0.095	0.057	mg/Kg	2	☼	6020	Total/NA
Vanadium	14		0.95	0.27	mg/Kg	2	☼	6020	Total/NA
Silver	0.12		0.095	0.026	mg/Kg	2	☼	6020	Total/NA
Mercury	0.028	J	0.056	0.025	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-022718-DS-020 — Lab Sample ID: 240-92035-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	11	J	350	0.77	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	36	J	350	25	ug/Kg	1	☼	8270C	Total/NA
Chrysene	12	J	350	1.4	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	27	J	350	20	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	7.9	J	350	0.72	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	6.2	J	350	0.96	ug/Kg	1	☼	8270C	Total/NA
Pyrene	8.6	J	350	0.58	ug/Kg	1	☼	8270C	Total/NA
Barium	37		0.88	0.40	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.18	0.059	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13		0.088	0.053	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.44	0.22	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.88	0.17	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.88	0.26	mg/Kg	1	☼	6010B	Total/NA
Manganese	150		0.88	0.34	mg/Kg	1	☼	6010B	Total/NA
Nickel	18		0.88	0.26	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		2.2	1.5	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.2		0.088	0.066	mg/Kg	2	☼	6020	Total/NA
Lead	9.5	B	0.22	0.069	mg/Kg	2	☼	6020	Total/NA
Selenium	0.53		0.18	0.13	mg/Kg	2	☼	6020	Total/NA
Thallium	0.29		0.088	0.053	mg/Kg	2	☼	6020	Total/NA
Vanadium	20		0.88	0.25	mg/Kg	2	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022718-DS-020 (Continued) — Lab Sample ID: 240-92035-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.026	J	0.088	0.024	mg/Kg	2	☼	6020	Total/NA
Mercury	0.025	J	0.050	0.022	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17303-022618
Date Collected: 02/26/18 00:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			03/02/18 21:02	1
Benzene	1.0	U	1.0	0.28	ug/L			03/02/18 21:02	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			03/02/18 21:02	1
Bromoform	1.0	U	1.0	0.43	ug/L			03/02/18 21:02	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/02/18 21:02	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			03/02/18 21:02	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			03/02/18 21:02	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			03/02/18 21:02	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			03/02/18 21:02	1
Chloroethane	1.0	U	1.0	0.41	ug/L			03/02/18 21:02	1
Chloroform	1.0	U	1.0	0.31	ug/L			03/02/18 21:02	1
Chloromethane	1.0	U	1.0	0.43	ug/L			03/02/18 21:02	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			03/02/18 21:02	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/02/18 21:02	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			03/02/18 21:02	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			03/02/18 21:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			03/02/18 21:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			03/02/18 21:02	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			03/02/18 21:02	1
2-Hexanone	10	U	10	1.2	ug/L			03/02/18 21:02	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			03/02/18 21:02	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			03/02/18 21:02	1
Styrene	1.0	U	1.0	0.23	ug/L			03/02/18 21:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			03/02/18 21:02	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			03/02/18 21:02	1
Toluene	1.0	U	1.0	0.23	ug/L			03/02/18 21:02	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			03/02/18 21:02	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/02/18 21:02	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			03/02/18 21:02	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/02/18 21:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			03/02/18 21:02	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			03/02/18 21:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			03/02/18 21:02	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			03/02/18 21:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			03/02/18 21:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/02/18 21:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/02/18 21:02	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			03/02/18 21:02	1
Methyl acetate	10	U	10	1.4	ug/L			03/02/18 21:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			03/02/18 21:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/02/18 21:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			03/02/18 21:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			03/02/18 21:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			03/02/18 21:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			03/02/18 21:02	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			03/02/18 21:02	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			03/02/18 21:02	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			03/02/18 21:02	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		61 - 138		03/02/18 21:02	1
4-Bromofluorobenzene (Surr)	85		69 - 120		03/02/18 21:02	1
Toluene-d8 (Surr)	101		73 - 120		03/02/18 21:02	1
Dibromofluoromethane (Surr)	97		69 - 124		03/02/18 21:02	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-009
Date Collected: 02/26/18 09:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-2
Matrix: Solid
Percent Solids: 65.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1300	U	1300	210	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Benzene	87	U	87	52	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Bromodichloromethane	170	U	170	39	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Bromoform	170	U	170	50	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Bromomethane	430	U	430	61	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
2-Butanone (MEK)	1300	U	1300	110	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Carbon disulfide	430	U	430	39	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Carbon tetrachloride	87	U	87	59	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Chlorobenzene	87	U	87	65	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Chloroethane	430	U	430	61	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Chloroform	87	U	87	52	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Chloromethane	430	U	430	39	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,1-Dichloroethane	87	U	87	67	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,2-Dichloroethane	87	U	87	65	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,1-Dichloroethene	87	U	87	78	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,2-Dichloropropane	87	U	87	65	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
cis-1,3-Dichloropropene	87	U	87	50	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
trans-1,3-Dichloropropene	87	U	87	33	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Ethylbenzene	87	U	87	76	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
2-Hexanone	4300	U	4300	190	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Methylene Chloride	430	U	430	140	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
4-Methyl-2-pentanone (MIBK)	4300	U	4300	87	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Styrene	87	U	87	22	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,1,2,2-Tetrachloroethane	87	U	87	52	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Tetrachloroethene	87	U	87	46	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Toluene	170	U	170	52	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Trichloroethene	87	U	87	80	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Vinyl chloride	70	U	70	37	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Xylenes, Total	260	U	260	61	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,1,1-Trichloroethane	87	U	87	61	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,1,2-Trichloroethane	87	U	87	50	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Cyclohexane	2100	U	2100	65	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,2-Dibromo-3-Chloropropane	430	U	430	100	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,2-Dibromoethane	430	U	430	50	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Dichlorodifluoromethane	170	U	170	48	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
cis-1,2-Dichloroethene	87	U	87	76	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
trans-1,2-Dichloroethene	87	U	87	76	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Isopropylbenzene	430	U	430	74	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Methyl acetate	**190**	**J**	2100	160	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Methyl tert-butyl ether	430	U	430	57	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	430	U	430	50	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,2,4-Trichlorobenzene	430	U	430	57	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,2-Dichlorobenzene	170	U	170	39	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,3-Dichlorobenzene	170	U	170	83	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
1,4-Dichlorobenzene	170	U	170	59	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Trichlorofluoromethane	170	U	170	74	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Dibromochloromethane	87	U	87	74	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1
Methylcyclohexane	2100	U	2100	80	ug/Kg	☼	03/01/18 21:57	03/04/18 15:54	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		64 - 144	03/01/18 21:57	03/04/18 15:54	1
4-Bromofluorobenzene (Surr)	72		58 - 142	03/01/18 21:57	03/04/18 15:54	1
Toluene-d8 (Surr)	85		61 - 137	03/01/18 21:57	03/04/18 15:54	1
Dibromofluoromethane (Surr)	78		31 - 155	03/01/18 21:57	03/04/18 15:54	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-010
Date Collected: 02/26/18 13:20
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-3
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	690	U	690	110	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Benzene	46	U	46	28	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Bromodichloromethane	93	U	93	21	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Bromoform	93	U	93	27	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Bromomethane	230	U	230	32	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
2-Butanone (MEK)	690	U	690	58	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Carbon disulfide	230	U	230	21	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Carbon tetrachloride	46	U	46	31	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Chlorobenzene	46	U	46	35	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Chloroethane	230	U	230	32	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Chloroform	46	U	46	28	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Chloromethane	230	U	230	21	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,1-Dichloroethane	46	U	46	36	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,2-Dichloroethane	46	U	46	35	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,1-Dichloroethene	46	U	46	42	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,2-Dichloropropane	46	U	46	35	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
cis-1,3-Dichloropropene	46	U	46	27	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
trans-1,3-Dichloropropene	46	U	46	17	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Ethylbenzene	46	U	46	40	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
2-Hexanone	2300	U	2300	99	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Methylene Chloride	230	U	230	75	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
4-Methyl-2-pentanone (MIBK)	2300	U	2300	46	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Styrene	46	U	46	12	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,1,2,2-Tetrachloroethane	46	U	46	28	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Tetrachloroethene	46	U	46	24	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Toluene	93	U	93	28	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Trichloroethene	46	U	46	43	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Vinyl chloride	37	U	37	20	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Xylenes, Total	140	U	140	32	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,1,1-Trichloroethane	46	U	46	32	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,1,2-Trichloroethane	46	U	46	27	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Cyclohexane	1100	U	1100	35	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,2-Dibromo-3-Chloropropane	230	U	230	56	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,2-Dibromoethane	230	U	230	27	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Dichlorodifluoromethane	93	U	93	25	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
cis-1,2-Dichloroethene	46	U	46	40	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
trans-1,2-Dichloroethene	46	U	46	40	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Isopropylbenzene	230	U	230	39	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Methyl acetate	1100	U	1100	87	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Methyl tert-butyl ether	230	U	230	30	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	230	U	230	27	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,2,4-Trichlorobenzene	230	U	230	30	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,2-Dichlorobenzene	93	U	93	21	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,3-Dichlorobenzene	93	U	93	44	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
1,4-Dichlorobenzene	93	U	93	31	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Trichlorofluoromethane	93	U	93	39	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Dibromochloromethane	46	U	46	39	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1
Methylcyclohexane	1100	U	1100	43	ug/Kg	☼	03/01/18 21:57	03/04/18 16:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		64 - 144	03/01/18 21:57	03/04/18 16:18	1
4-Bromofluorobenzene (Surr)	83		58 - 142	03/01/18 21:57	03/04/18 16:18	1
Toluene-d8 (Surr)	94		61 - 137	03/01/18 21:57	03/04/18 16:18	1
Dibromofluoromethane (Surr)	93		31 - 155	03/01/18 21:57	03/04/18 16:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-011
Date Collected: 02/26/18 13:25
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-4
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1500	U	1500	250	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Benzene	100	U	100	61	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Bromodichloromethane	200	U	200	46	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Bromoform	200	U	200	59	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Bromomethane	510	U	510	71	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
2-Butanone (MEK)	1500	U	1500	130	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Carbon disulfide	510	U	510	46	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Carbon tetrachloride	100	U	100	69	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Chlorobenzene	100	U	100	77	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Chloroethane	510	U	510	71	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Chloroform	100	U	100	61	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Chloromethane	510	U	510	46	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,1-Dichloroethane	100	U	100	79	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,2-Dichloroethane	100	U	100	77	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,1-Dichloroethene	100	U	100	92	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,2-Dichloropropane	100	U	100	77	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
cis-1,3-Dichloropropene	100	U	100	59	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
trans-1,3-Dichloropropene	100	U	100	38	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Ethylbenzene	100	U	100	89	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
2-Hexanone	5100	U	5100	220	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Methylene Chloride	510	U	510	170	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
4-Methyl-2-pentanone (MIBK)	5100	U	5100	100	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Styrene	100	U	100	26	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,1,2,2-Tetrachloroethane	100	U	100	61	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Tetrachloroethene	100	U	100	54	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Toluene	200	U	200	61	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Trichloroethene	**140**		100	94	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Vinyl chloride	**1100**		82	43	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Xylenes, Total	310	U	310	71	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,1,1-Trichloroethane	100	U	100	71	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,1,2-Trichloroethane	100	U	100	59	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Cyclohexane	2400	U	2400	77	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,2-Dibromo-3-Chloropropane	510	U	510	120	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,2-Dibromoethane	510	U	510	59	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Dichlorodifluoromethane	200	U	200	56	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
cis-1,2-Dichloroethene	**8400**		200	180	ug/Kg	☼	03/01/18 21:57	03/06/18 15:33	4
trans-1,2-Dichloroethene	**220**		100	89	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Isopropylbenzene	510	U	510	87	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Methyl acetate	2400	U	2400	190	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Methyl tert-butyl ether	510	U	510	66	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,1,2-Trichloro-1,2,2-trifluoroethane	510	U	510	59	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,2,4-Trichlorobenzene	510	U	510	66	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,2-Dichlorobenzene	200	U	200	46	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,3-Dichlorobenzene	200	U	200	97	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
1,4-Dichlorobenzene	200	U	200	69	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Trichlorofluoromethane	200	U	200	87	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Dibromochloromethane	100	U	100	87	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2
Methylcyclohexane	2400	U	2400	94	ug/Kg	☼	03/01/18 21:57	03/04/18 16:42	2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		64 - 144	03/01/18 21:57	03/04/18 16:42	2
1,2-Dichloroethane-d4 (Surr)	98		64 - 144	03/01/18 21:57	03/06/18 15:33	4
4-Bromofluorobenzene (Surr)	90		58 - 142	03/01/18 21:57	03/04/18 16:42	2
4-Bromofluorobenzene (Surr)	92		58 - 142	03/01/18 21:57	03/06/18 15:33	4
Toluene-d8 (Surr)	104		61 - 137	03/01/18 21:57	03/04/18 16:42	2
Toluene-d8 (Surr)	104		61 - 137	03/01/18 21:57	03/06/18 15:33	4
Dibromofluoromethane (Surr)	103		31 - 155	03/01/18 21:57	03/04/18 16:42	2
Dibromofluoromethane (Surr)	114		31 - 155	03/01/18 21:57	03/06/18 15:33	4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-012
Date Collected: 02/26/18 13:30
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-5
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	820	U	820	130	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Benzene	55	U	55	33	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Bromoform	110	U	110	32	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Bromomethane	270	U	270	38	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
2-Butanone (MEK)	820	U	820	69	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Carbon disulfide	270	U	270	25	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Carbon tetrachloride	55	U	55	37	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Chlorobenzene	55	U	55	41	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Chloroethane	270	U	270	38	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Chloroform	55	U	55	33	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Chloromethane	270	U	270	25	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,1-Dichloroethane	55	U	55	43	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,2-Dichloroethane	55	U	55	41	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,1-Dichloroethene	55	U	55	49	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,2-Dichloropropane	55	U	55	41	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
cis-1,3-Dichloropropene	55	U	55	32	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
trans-1,3-Dichloropropene	55	U	55	21	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Ethylbenzene	55	U	55	48	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
2-Hexanone	2700	U	2700	120	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Methylene Chloride	270	U	270	89	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	55	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Styrene	55	U	55	14	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,1,2,2-Tetrachloroethane	55	U	55	33	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Tetrachloroethene	55	U	55	29	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Toluene	110	U	110	33	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Trichloroethene	55	U	55	51	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Vinyl chloride	**1700**		44	23	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Xylenes, Total	160	U	160	38	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,1,1-Trichloroethane	55	U	55	38	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,1,2-Trichloroethane	55	U	55	32	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Cyclohexane	1300	U	1300	41	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,2-Dibromo-3-Chloropropane	270	U	270	66	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,2-Dibromoethane	270	U	270	32	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Dichlorodifluoromethane	110	U	110	30	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
cis-1,2-Dichloroethene	**64**		55	48	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
trans-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Isopropylbenzene	270	U	270	47	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Methyl acetate	1300	U	1300	100	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Methyl tert-butyl ether	270	U	270	36	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	32	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,2,4-Trichlorobenzene	270	U	270	36	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,3-Dichlorobenzene	110	U	110	52	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
1,4-Dichlorobenzene	110	U	110	37	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Trichlorofluoromethane	110	U	110	47	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Dibromochloromethane	55	U	55	47	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1
Methylcyclohexane	1300	U	1300	51	ug/Kg	☼	03/01/18 21:57	03/04/18 17:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		64 - 144	03/01/18 21:57	03/04/18 17:05	1
4-Bromofluorobenzene (Surr)	79		58 - 142	03/01/18 21:57	03/04/18 17:05	1
Toluene-d8 (Surr)	96		61 - 137	03/01/18 21:57	03/04/18 17:05	1
Dibromofluoromethane (Surr)	95		31 - 155	03/01/18 21:57	03/04/18 17:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-013
Date Collected: 02/26/18 13:35
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-6
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	79000	U	79000	13000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Benzene	5300	U	5300	3200	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Bromodichloromethane	11000	U	11000	2400	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Bromoform	11000	U	11000	3000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Bromomethane	26000	U	26000	3700	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
2-Butanone (MEK)	79000	U	79000	6600	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Carbon disulfide	26000	U	26000	2400	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Carbon tetrachloride	5300	U	5300	3600	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Chlorobenzene	5300	U	5300	4000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Chloroethane	26000	U	26000	3700	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Chloroform	5300	U	5300	3200	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Chloromethane	26000	U	26000	2400	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,1-Dichloroethane	5300	U	5300	4100	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,2-Dichloroethane	5300	U	5300	4000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,1-Dichloroethene	5300	U	5300	4800	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,2-Dichloropropane	5300	U	5300	4000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
cis-1,3-Dichloropropene	5300	U	5300	3000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
trans-1,3-Dichloropropene	5300	U	5300	2000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Ethylbenzene	5300	U	5300	4600	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
2-Hexanone	260000	U	260000	11000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Methylene Chloride	26000	U	26000	8600	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
4-Methyl-2-pentanone (MIBK)	260000	U	260000	5300	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Styrene	5300	U	5300	1300	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,1,2,2-Tetrachloroethane	5300	U	5300	3200	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Tetrachloroethene	5300	U	5300	2800	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Toluene	11000	U	11000	3200	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Trichloroethene	**150000**		5300	4900	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Vinyl chloride	**4500**		4200	2200	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Xylenes, Total	16000	U	16000	3700	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,1,1-Trichloroethane	5300	U	5300	3700	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,1,2-Trichloroethane	5300	U	5300	3000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Cyclohexane	130000	U	130000	4000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,2-Dibromo-3-Chloropropane	26000	U	26000	6300	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,2-Dibromoethane	26000	U	26000	3000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Dichlorodifluoromethane	11000	U	11000	2900	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
cis-1,2-Dichloroethene	**250000**		5300	4600	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
trans-1,2-Dichloroethene	5300	U	5300	4600	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Isopropylbenzene	26000	U	26000	4500	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Methyl acetate	130000	U	130000	9900	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Methyl tert-butyl ether	26000	U	26000	3400	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,1,2-Trichloro-1,2,2-trifluoroethane	26000	U	26000	3000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,2,4-Trichlorobenzene	26000	U	26000	3400	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,2-Dichlorobenzene	11000	U	11000	2400	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,3-Dichlorobenzene	11000	U	11000	5000	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
1,4-Dichlorobenzene	11000	U	11000	3600	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Trichlorofluoromethane	11000	U	11000	4500	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Dibromochloromethane	5300	U	5300	4500	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100
Methylcyclohexane	130000	U	130000	4900	ug/Kg	☼	03/01/18 21:57	03/04/18 17:28	100

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		64 - 144	03/01/18 21:57	03/04/18 17:28	100
4-Bromofluorobenzene (Surr)	96		58 - 142	03/01/18 21:57	03/04/18 17:28	100
Toluene-d8 (Surr)	85		61 - 137	03/01/18 21:57	03/04/18 17:28	100
Dibromofluoromethane (Surr)	53		31 - 155	03/01/18 21:57	03/04/18 17:28	100

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-014
Date Collected: 02/26/18 14:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-7
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1900	U	1900	300	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Benzene	130	U	130	75	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Bromodichloromethane	250	U	250	56	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Bromoform	250	U	250	72	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Bromomethane	630	U	630	88	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
2-Butanone (MEK)	1900	U	1900	160	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Carbon disulfide	630	U	630	56	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Carbon tetrachloride	130	U	130	84	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Chlorobenzene	130	U	130	94	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Chloroethane	630	U	630	88	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Chloroform	130	U	130	75	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Chloromethane	630	U	630	56	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,1-Dichloroethane	130	U	130	97	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,2-Dichloroethane	130	U	130	94	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,1-Dichloroethene	130	U	130	110	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,2-Dichloropropane	130	U	130	94	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
cis-1,3-Dichloropropene	130	U	130	72	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
trans-1,3-Dichloropropene	130	U	130	47	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Ethylbenzene	130	U	130	110	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
2-Hexanone	6300	U	6300	270	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Methylene Chloride	630	U	630	200	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
4-Methyl-2-pentanone (MIBK)	6300	U	6300	130	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Styrene	130	U	130	31	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,1,2,2-Tetrachloroethane	130	U	130	75	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Tetrachloroethene	130	U	130	66	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Toluene	250	U	250	75	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Trichloroethene	130	U	130	120	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Vinyl chloride	100	U	100	53	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Xylenes, Total	380	U	380	88	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,1,1-Trichloroethane	130	U	130	88	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,1,2-Trichloroethane	130	U	130	72	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Cyclohexane	3000	U	3000	94	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,2-Dibromo-3-Chloropropane	630	U	630	150	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,2-Dibromoethane	630	U	630	72	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Dichlorodifluoromethane	250	U	250	69	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
cis-1,2-Dichloroethene	130	U	130	110	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
trans-1,2-Dichloroethene	130	U	130	110	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Isopropylbenzene	630	U	630	110	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Methyl acetate	**310**	**J**	3000	230	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Methyl tert-butyl ether	630	U	630	81	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,1,2-Trichloro-1,2,2-trifluoroethane	630	U	630	72	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,2,4-Trichlorobenzene	630	U	630	81	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,2-Dichlorobenzene	250	U	250	56	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,3-Dichlorobenzene	250	U	250	120	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
1,4-Dichlorobenzene	250	U	250	84	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Trichlorofluoromethane	250	U	250	110	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Dibromochloromethane	130	U	130	110	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2
Methylcyclohexane	3000	U	3000	120	ug/Kg	☼	03/01/18 21:57	03/04/18 17:51	2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	72		64 - 144	03/01/18 21:57	03/04/18 17:51	2
4-Bromofluorobenzene (Surr)	68		58 - 142	03/01/18 21:57	03/04/18 17:51	2
Toluene-d8 (Surr)	78		61 - 137	03/01/18 21:57	03/04/18 17:51	2
Dibromofluoromethane (Surr)	68		31 - 155	03/01/18 21:57	03/04/18 17:51	2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-015
Date Collected: 02/26/18 14:45
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-8
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	840	U	840	140	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Benzene	56	U	56	34	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Bromoform	110	U	110	32	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Bromomethane	280	U	280	39	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
2-Butanone (MEK)	840	U	840	70	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Carbon disulfide	280	U	280	25	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Carbon tetrachloride	56	U	56	38	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Chlorobenzene	56	U	56	42	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Chloroethane	280	U	280	39	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Chloroform	56	U	56	34	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Chloromethane	280	U	280	25	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,1-Dichloroethane	56	U	56	43	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,2-Dichloroethane	56	U	56	42	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,1-Dichloroethene	56	U	56	50	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,2-Dichloropropane	56	U	56	42	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
cis-1,3-Dichloropropene	56	U	56	32	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
trans-1,3-Dichloropropene	56	U	56	21	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Ethylbenzene	56	U	56	49	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
2-Hexanone	2800	U	2800	120	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Methylene Chloride	280	U	280	91	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	56	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Styrene	56	U	56	14	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,1,2,2-Tetrachloroethane	56	U	56	34	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Tetrachloroethene	56	U	56	29	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Toluene	110	U	110	34	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Trichloroethene	56	U	56	52	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Vinyl chloride	45	U	45	24	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Xylenes, Total	170	U	170	39	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,1,1-Trichloroethane	56	U	56	39	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,1,2-Trichloroethane	56	U	56	32	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Cyclohexane	1300	U	1300	42	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,2-Dibromo-3-Chloropropane	280	U	280	67	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,2-Dibromoethane	280	U	280	32	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Dichlorodifluoromethane	110	U	110	31	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
cis-1,2-Dichloroethene	56	U	56	49	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
trans-1,2-Dichloroethene	56	U	56	49	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Isopropylbenzene	280	U	280	47	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Methyl acetate	1300	U	1300	100	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Methyl tert-butyl ether	280	U	280	36	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	32	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,2,4-Trichlorobenzene	280	U	280	36	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,3-Dichlorobenzene	110	U	110	53	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
1,4-Dichlorobenzene	110	U	110	38	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Trichlorofluoromethane	110	U	110	47	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Dibromochloromethane	56	U	56	47	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1
Methylcyclohexane	1300	U	1300	52	ug/Kg	☼	03/01/18 21:57	03/04/18 18:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		64 - 144	03/01/18 21:57	03/04/18 18:14	1
4-Bromofluorobenzene (Surr)	66		58 - 142	03/01/18 21:57	03/04/18 18:14	1
Toluene-d8 (Surr)	79		61 - 137	03/01/18 21:57	03/04/18 18:14	1
Dibromofluoromethane (Surr)	80		31 - 155	03/01/18 21:57	03/04/18 18:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-016
Date Collected: 02/27/18 09:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-9
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	760	U	760	120	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Benzene	51	U	51	30	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Bromoform	100	U	100	29	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Bromomethane	250	U	250	35	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
2-Butanone (MEK)	760	U	760	63	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Carbon disulfide	250	U	250	23	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Carbon tetrachloride	51	U	51	34	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Chlorobenzene	51	U	51	38	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Chloroethane	250	U	250	35	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Chloroform	51	U	51	30	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Chloromethane	250	U	250	23	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,1-Dichloroethane	51	U	51	39	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,2-Dichloroethane	51	U	51	38	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,1-Dichloroethene	51	U	51	45	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,2-Dichloropropane	51	U	51	38	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
cis-1,3-Dichloropropene	51	U	51	29	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
trans-1,3-Dichloropropene	51	U	51	19	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Ethylbenzene	51	U	51	44	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
2-Hexanone	2500	U	2500	110	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Methylene Chloride	250	U	250	82	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	51	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Styrene	51	U	51	13	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,1,2,2-Tetrachloroethane	51	U	51	30	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Tetrachloroethene	51	U	51	27	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Toluene	100	U	100	30	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Trichloroethene	**190**		51	47	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Vinyl chloride	40	U	40	21	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Xylenes, Total	150	U	150	35	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,1,1-Trichloroethane	51	U	51	35	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,1,2-Trichloroethane	51	U	51	29	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Cyclohexane	1200	U	1200	38	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,2-Dibromo-3-Chloropropane	250	U	250	61	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,2-Dibromoethane	250	U	250	29	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
cis-1,2-Dichloroethene	**90**		51	44	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
trans-1,2-Dichloroethene	51	U	51	44	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Isopropylbenzene	250	U	250	43	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Methyl acetate	1200	U	1200	95	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Methyl tert-butyl ether	250	U	250	33	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	29	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,2,4-Trichlorobenzene	250	U	250	33	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,3-Dichlorobenzene	100	U	100	48	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
1,4-Dichlorobenzene	100	U	100	34	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Trichlorofluoromethane	100	U	100	43	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Dibromochloromethane	51	U	51	43	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1
Methylcyclohexane	1200	U	1200	47	ug/Kg	☼	03/01/18 21:57	03/04/18 18:37	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		64 - 144	03/01/18 21:57	03/04/18 18:37	1
4-Bromofluorobenzene (Surr)	79		58 - 142	03/01/18 21:57	03/04/18 18:37	1
Toluene-d8 (Surr)	91		61 - 137	03/01/18 21:57	03/04/18 18:37	1
Dibromofluoromethane (Surr)	84		31 - 155	03/01/18 21:57	03/04/18 18:37	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-017
Date Collected: 02/27/18 10:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-10
Matrix: Solid
Percent Solids: 81.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	860	U	860	140	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Benzene	58	U	58	35	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Bromodichloromethane	120	U	120	26	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Bromoform	120	U	120	33	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Bromomethane	290	U	290	40	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
2-Butanone (MEK)	860	U	860	72	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Carbon disulfide	290	U	290	26	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Carbon tetrachloride	58	U	58	39	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Chlorobenzene	58	U	58	43	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Chloroethane	290	U	290	40	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Chloroform	58	U	58	35	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Chloromethane	290	U	290	26	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,1-Dichloroethane	58	U	58	45	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,2-Dichloroethane	58	U	58	43	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,1-Dichloroethene	58	U	58	52	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,2-Dichloropropane	58	U	58	43	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
cis-1,3-Dichloropropene	58	U	58	33	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
trans-1,3-Dichloropropene	58	U	58	22	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Ethylbenzene	58	U	58	50	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
2-Hexanone	2900	U	2900	120	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Methylene Chloride	290	U	290	94	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
4-Methyl-2-pentanone (MIBK)	2900	U	2900	58	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Styrene	58	U	58	14	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,1,2,2-Tetrachloroethane	58	U	58	35	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Tetrachloroethene	58	U	58	30	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Toluene	120	U	120	35	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Trichloroethene	58	U	58	53	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Vinyl chloride	46	U	46	24	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Xylenes, Total	170	U	170	40	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,1,1-Trichloroethane	58	U	58	40	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,1,2-Trichloroethane	58	U	58	33	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Cyclohexane	1400	U	1400	43	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,2-Dibromo-3-Chloropropane	290	U	290	69	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,2-Dibromoethane	290	U	290	33	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Dichlorodifluoromethane	120	U	120	32	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
cis-1,2-Dichloroethene	58	U	58	50	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
trans-1,2-Dichloroethene	58	U	58	50	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Isopropylbenzene	290	U	290	49	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Methyl acetate	1400	U	1400	110	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Methyl tert-butyl ether	290	U	290	37	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	290	U	290	33	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,2,4-Trichlorobenzene	290	U	290	37	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,2-Dichlorobenzene	120	U	120	26	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,3-Dichlorobenzene	120	U	120	55	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
1,4-Dichlorobenzene	120	U	120	39	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Trichlorofluoromethane	120	U	120	49	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Dibromochloromethane	58	U	58	49	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1
Methylcyclohexane	1400	U	1400	53	ug/Kg	☼	03/01/18 21:57	03/04/18 19:01	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		64 - 144	03/01/18 21:57	03/04/18 19:01	1
4-Bromofluorobenzene (Surr)	78		58 - 142	03/01/18 21:57	03/04/18 19:01	1
Toluene-d8 (Surr)	94		61 - 137	03/01/18 21:57	03/04/18 19:01	1
Dibromofluoromethane (Surr)	93		31 - 155	03/01/18 21:57	03/04/18 19:01	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-018
Date Collected: 02/27/18 10:10
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-11
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	780	U	780	130	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Benzene	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Bromoform	100	U	100	30	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Bromomethane	260	U	260	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
2-Butanone (MEK)	780	U	780	65	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Carbon disulfide	260	U	260	23	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Carbon tetrachloride	52	U	52	35	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Chlorobenzene	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Chloroethane	260	U	260	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Chloroform	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Chloromethane	260	U	260	23	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,1-Dichloroethane	52	U	52	40	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,2-Dichloroethane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,1-Dichloroethene	52	U	52	47	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,2-Dichloropropane	52	U	52	39	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
cis-1,3-Dichloropropene	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
trans-1,3-Dichloropropene	52	U	52	19	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Ethylbenzene	52	U	52	45	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Methylene Chloride	260	U	260	84	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	52	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Styrene	52	U	52	13	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,1,2,2-Tetrachloroethane	52	U	52	31	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Tetrachloroethene	52	U	52	27	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Toluene	100	U	100	31	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Trichloroethene	52	U	52	48	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Xylenes, Total	160	U	160	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,1,1-Trichloroethane	52	U	52	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,1,2-Trichloroethane	52	U	52	30	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Cyclohexane	1200	U	1200	39	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,2-Dibromo-3-Chloropropane	260	U	260	62	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
cis-1,2-Dichloroethene	52	U	52	45	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
trans-1,2-Dichloroethene	52	U	52	45	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Isopropylbenzene	260	U	260	44	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Methyl acetate	1200	U	1200	97	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Methyl tert-butyl ether	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,2,4-Trichlorobenzene	260	U	260	34	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,3-Dichlorobenzene	100	U	100	49	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Trichlorofluoromethane	100	U	100	44	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Dibromochloromethane	52	U	52	44	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1
Methylcyclohexane	1200	U	1200	48	ug/Kg	☼	03/01/18 21:57	03/04/18 19:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		64 - 144	03/01/18 21:57	03/04/18 19:24	1
4-Bromofluorobenzene (Surr)	79		58 - 142	03/01/18 21:57	03/04/18 19:24	1
Toluene-d8 (Surr)	90		61 - 137	03/01/18 21:57	03/04/18 19:24	1
Dibromofluoromethane (Surr)	81		31 - 155	03/01/18 21:57	03/04/18 19:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-019
Date Collected: 02/27/18 13:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-12
Matrix: Solid
Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	940	U	940	150	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Benzene	63	U	63	38	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Bromodichloromethane	130	U	130	28	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Bromoform	130	U	130	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Bromomethane	310	U	310	44	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
2-Butanone (MEK)	940	U	940	79	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Carbon disulfide	310	U	310	28	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Carbon tetrachloride	63	U	63	42	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Chlorobenzene	63	U	63	47	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Chloroethane	310	U	310	44	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Chloroform	63	U	63	38	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Chloromethane	310	U	310	28	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,1-Dichloroethane	63	U	63	49	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,2-Dichloroethane	63	U	63	47	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,1-Dichloroethene	63	U	63	57	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,2-Dichloropropane	63	U	63	47	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
cis-1,3-Dichloropropene	63	U	63	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
trans-1,3-Dichloropropene	63	U	63	24	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Ethylbenzene	63	U	63	55	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
2-Hexanone	3100	U	3100	140	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Methylene Chloride	310	U	310	100	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
4-Methyl-2-pentanone (MIBK)	3100	U	3100	63	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Styrene	63	U	63	16	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,1,2,2-Tetrachloroethane	63	U	63	38	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Tetrachloroethene	63	U	63	33	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Toluene	130	U	130	38	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Trichloroethene	63	U	63	58	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Vinyl chloride	50	U	50	27	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Xylenes, Total	190	U	190	44	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,1,1-Trichloroethane	63	U	63	44	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,1,2-Trichloroethane	63	U	63	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Cyclohexane	1500	U	1500	47	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,2-Dibromo-3-Chloropropane	310	U	310	75	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,2-Dibromoethane	310	U	310	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Dichlorodifluoromethane	130	U	130	35	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
cis-1,2-Dichloroethene	63	U	63	55	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
trans-1,2-Dichloroethene	63	U	63	55	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Isopropylbenzene	310	U	310	53	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Methyl acetate	**160**	**J**	1500	120	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Methyl tert-butyl ether	310	U	310	41	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	310	U	310	36	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,2,4-Trichlorobenzene	310	U	310	41	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,2-Dichlorobenzene	130	U	130	28	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,3-Dichlorobenzene	130	U	130	60	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
1,4-Dichlorobenzene	130	U	130	42	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Trichlorofluoromethane	130	U	130	53	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Dibromochloromethane	63	U	63	53	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1
Methylcyclohexane	1500	U	1500	58	ug/Kg	☼	03/01/18 21:57	03/04/18 19:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	70		64 - 144	03/01/18 21:57	03/04/18 19:47	1
4-Bromofluorobenzene (Surr)	64		58 - 142	03/01/18 21:57	03/04/18 19:47	1
Toluene-d8 (Surr)	73		61 - 137	03/01/18 21:57	03/04/18 19:47	1
Dibromofluoromethane (Surr)	61		31 - 155	03/01/18 21:57	03/04/18 19:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-020
Date Collected: 02/27/18 14:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-13
Matrix: Solid
Percent Solids: 76.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	970	U	970	160	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Benzene	65	U	65	39	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Bromodichloromethane	130	U	130	29	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Bromoform	130	U	130	37	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Bromomethane	320	U	320	45	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
2-Butanone (MEK)	970	U	970	81	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Carbon disulfide	320	U	320	29	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Carbon tetrachloride	65	U	65	44	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Chlorobenzene	65	U	65	48	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Chloroethane	320	U	320	45	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Chloroform	65	U	65	39	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Chloromethane	320	U	320	29	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,1-Dichloroethane	65	U	65	50	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,2-Dichloroethane	65	U	65	48	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,1-Dichloroethene	65	U	65	58	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,2-Dichloropropane	65	U	65	48	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
cis-1,3-Dichloropropene	65	U	65	37	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
trans-1,3-Dichloropropene	65	U	65	24	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Ethylbenzene	65	U	65	57	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
2-Hexanone	3200	U	3200	140	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Methylene Chloride	320	U	320	110	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
4-Methyl-2-pentanone (MIBK)	3200	U	3200	65	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Styrene	65	U	65	16	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,1,2,2-Tetrachloroethane	65	U	65	39	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Tetrachloroethene	65	U	65	34	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Toluene	130	U	130	39	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Trichloroethene	65	U	65	60	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Vinyl chloride	52	U	52	27	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Xylenes, Total	190	U	190	45	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,1,1-Trichloroethane	65	U	65	45	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,1,2-Trichloroethane	65	U	65	37	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Cyclohexane	1600	U	1600	48	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,2-Dibromo-3-Chloropropane	320	U	320	78	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,2-Dibromoethane	320	U	320	37	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Dichlorodifluoromethane	130	U	130	36	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
cis-1,2-Dichloroethene	65	U	65	57	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
trans-1,2-Dichloroethene	65	U	65	57	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Isopropylbenzene	320	U	320	55	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Methyl acetate	1600	U	1600	120	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Methyl tert-butyl ether	320	U	320	42	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	320	U	320	37	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,2,4-Trichlorobenzene	320	U	320	42	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,2-Dichlorobenzene	130	U	130	29	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,3-Dichlorobenzene	130	U	130	61	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
1,4-Dichlorobenzene	130	U	130	44	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Trichlorofluoromethane	130	U	130	55	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Dibromochloromethane	65	U	65	55	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1
Methylcyclohexane	1600	U	1600	60	ug/Kg	☼	03/01/18 21:57	03/04/18 20:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		64 - 144	03/01/18 21:57	03/04/18 20:10	1
4-Bromofluorobenzene (Surr)	86		58 - 142	03/01/18 21:57	03/04/18 20:10	1
Toluene-d8 (Surr)	97		61 - 137	03/01/18 21:57	03/04/18 20:10	1
Dibromofluoromethane (Surr)	88		31 - 155	03/01/18 21:57	03/04/18 20:10	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-009 — **Lab Sample ID: 240-92035-2**
Date Collected: 02/26/18 09:40 — **Matrix: Solid**
Date Received: 02/28/18 09:30 — **Percent Solids: 65.4**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	2700	U	2700	35	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2,2'-oxybis[1-chloropropane]	2700	U	2700	96	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2,4,5-Trichlorophenol	2700	U	2700	250	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2,4,6-Trichlorophenol	2700	U	2700	90	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2,4-Dichlorophenol	2700	U	2700	200	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2,4-Dimethylphenol	2700	U F1	2700	200	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2,4-Dinitrophenol	1500	U	1500	210	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2,4-Dinitrotoluene	2700	U	2700	170	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2,6-Dinitrotoluene	2700	U	2700	210	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2-Chloronaphthalene	2700	U	2700	4.5	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2-Chlorophenol	2700	U	2700	83	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2-Methylnaphthalene	**230**	**J**	2700	5.0	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2-Methylphenol	2700	U F1	2700	110	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2-Nitroaniline	2000	U	2000	92	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
2-Nitrophenol	2700	U	2700	84	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
3,3'-Dichlorobenzidine	16000	U	16000	180	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
3-Nitroaniline	2000	U	2000	160	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
4,6-Dinitro-2-methylphenol	1500	U	1500	93	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
4-Bromophenyl phenyl ether	2700	U	2700	130	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
4-Chloro-3-methylphenol	2700	U F1	2700	210	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
4-Chloroaniline	2000	U	2000	170	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
4-Chlorophenyl phenyl ether	2700	U	2700	130	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
4-Nitroaniline	2000	U	2000	260	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
4-Nitrophenol	3300	U F1	3300	170	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Acenaphthene	**120**	**J**	2700	7.7	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Acenaphthylene	**41**	**J**	2700	3.5	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Acetophenone	2700	U	2700	93	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Anthracene	**280**	**J**	2700	7.9	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Atrazine	400	U	400	92	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Benzaldehyde	2700	U	2700	120	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Benzo[a]anthracene	**1700**	**J F1**	2700	6.3	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Benzo[a]pyrene	**2600**	**J F1**	2700	6.4	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Benzo[b]fluoranthene	**4700**		2700	5.9	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Benzo[g,h,i]perylene	**1900**	**J F1**	2700	3.5	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Benzo[k]fluoranthene	**1900**	**J F1**	2700	6.8	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Bis(2-chloroethoxy)methane	2700	U	2700	220	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Bis(2-chloroethyl)ether	810	U	810	20	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Bis(2-ethylhexyl) phthalate	**930**	**J**	2700	190	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Butyl benzyl phthalate	**280**	**J**	2700	100	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Caprolactam	2700	U	2700	370	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Carbazole	2700	U	2700	270	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Chrysene	**2900**	**F1**	2700	11	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Dibenz(a,h)anthracene	2700	U	2700	6.6	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Dibenzofuran	**82**	**J**	2700	6.6	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Diethyl phthalate	2700	U	2700	160	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Dimethyl phthalate	2700	U	2700	170	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Di-n-butyl phthalate	2700	U	2700	150	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Di-n-octyl phthalate	2700	U	2700	80	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Fluoranthene	**5900**		2700	5.5	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022618-DS-009
Date Collected: 02/26/18 09:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-2
Matrix: Solid
Percent Solids: 65.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**190**	**J**	2700	5.3	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Hexachlorobenzene	2700	U	2700	21	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Hexachlorobutadiene	400	U	400	56	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Hexachlorocyclopentadiene	2700	U F1	2700	82	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Hexachloroethane	2700	U	2700	91	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Indeno[1,2,3-cd]pyrene	**1700**	**J F1**	2700	3.5	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Isophorone	2700	U	2700	130	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Naphthalene	**410**	**J**	2700	8.3	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Nitrobenzene	2700	U	2700	22	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
N-Nitrosodi-n-propylamine	2700	U	2700	63	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
N-Nitrosodiphenylamine	2700	U	2700	210	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Pentachlorophenol	1500	U	1500	92	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Phenol	2700	U	2700	74	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Phenanthrene	**1900**	**J F1**	2700	7.4	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
Pyrene	**4800**		2700	4.4	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666
3 & 4 Methylphenol	2700	U	2700	200	ug/Kg	☼	03/01/18 08:26	03/06/18 16:20	6.6666

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*32 - 120*	*03/01/18 08:26*	*03/06/18 16:20*	*6.6666*
2-Fluorophenol (Surr)	*52*		*29 - 120*	*03/01/18 08:26*	*03/06/18 16:20*	*6.6666*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 120*	*03/01/18 08:26*	*03/06/18 16:20*	*6.6666*
Nitrobenzene-d5 (Surr)	*57*		*30 - 120*	*03/01/18 08:26*	*03/06/18 16:20*	*6.6666*
Phenol-d5 (Surr)	*14*	*X*	*29 - 120*	*03/01/18 08:26*	*03/06/18 16:20*	*6.6666*
Terphenyl-d14 (Surr)	*63*		*41 - 120*	*03/01/18 08:26*	*03/06/18 16:20*	*6.6666*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-010
Date Collected: 02/26/18 13:20
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-3
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	300	U	300	4.0	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2,4-Dinitrotoluene	300	U	300	19	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2-Chloronaphthalene	300	U	300	0.51	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2-Chlorophenol	300	U	300	9.3	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2-Methylnaphthalene	**15**	**J**	300	0.57	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2-Methylphenol	300	U	300	12	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
2-Nitrophenol	300	U	300	9.4	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
4,6-Dinitro-2-methylphenol	170	U	170	10	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
4-Chloroaniline	230	U	230	19	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
4-Nitroaniline	230	U	230	29	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
4-Nitrophenol	370	U	370	19	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Acenaphthene	300	U	300	0.86	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Acenaphthylene	300	U	300	0.40	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Acetophenone	300	U	300	10	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Anthracene	**11**	**J**	300	0.88	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Atrazine	45	U	45	10	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Benzo[a]anthracene	**45**	**J**	300	0.71	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Benzo[a]pyrene	**55**	**J**	300	0.73	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Benzo[b]fluoranthene	**89**	**J**	300	0.67	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Benzo[g,h,i]perylene	**56**	**J**	300	0.40	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Benzo[k]fluoranthene	**42**	**J**	300	0.77	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Bis(2-chloroethyl)ether	91	U	91	2.3	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Bis(2-ethylhexyl) phthalate	**49**	**J**	300	22	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Butyl benzyl phthalate	**30**	**J**	300	11	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Caprolactam	300	U	300	42	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Carbazole	300	U	300	31	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Chrysene	**65**	**J**	300	1.2	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Dibenz(a,h)anthracene	300	U	300	0.75	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Dibenzofuran	300	U	300	0.75	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Di-n-butyl phthalate	**25**	**J**	300	17	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Di-n-octyl phthalate	300	U	300	9.0	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Fluoranthene	**130**	**J**	300	0.62	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022618-DS-010
Date Collected: 02/26/18 13:20
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-3
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**7.4**	**J**	300	0.60	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Hexachlorobutadiene	45	U	45	6.3	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Hexachlorocyclopentadiene	300	U	300	9.2	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Indeno[1,2,3-cd]pyrene	**41**	**J**	300	0.40	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Isophorone	300	U	300	15	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Naphthalene	**6.3**	**J**	300	0.93	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
N-Nitrosodi-n-propylamine	300	U	300	7.1	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Phenol	300	U	300	8.3	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Phenanthrene	**72**	**J**	300	0.83	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
Pyrene	**110**	**J**	300	0.50	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	03/01/18 08:26	03/03/18 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*32 - 120*	*03/01/18 08:26*	*03/03/18 14:40*	*1*
2-Fluorophenol (Surr)	*47*		*29 - 120*	*03/01/18 08:26*	*03/03/18 14:40*	*1*
2,4,6-Tribromophenol (Surr)	*25*		*10 - 120*	*03/01/18 08:26*	*03/03/18 14:40*	*1*
Nitrobenzene-d5 (Surr)	*59*		*30 - 120*	*03/01/18 08:26*	*03/03/18 14:40*	*1*
Phenol-d5 (Surr)	*53*		*29 - 120*	*03/01/18 08:26*	*03/03/18 14:40*	*1*
Terphenyl-d14 (Surr)	*72*		*41 - 120*	*03/01/18 08:26*	*03/03/18 14:40*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-011
Date Collected: 02/26/18 13:25
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-4
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	300	U	300	3.9	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2,4-Dinitrotoluene	300	U	300	19	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2-Chloronaphthalene	300	U	300	0.51	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2-Chlorophenol	300	U	300	9.2	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2-Methylnaphthalene	**5.4**	**J**	300	0.56	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2-Methylphenol	300	U	300	12	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
2-Nitrophenol	300	U	300	9.3	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
4,6-Dinitro-2-methylphenol	170	U	170	10	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
4-Chloroaniline	230	U	230	19	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
4-Nitroaniline	230	U	230	29	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
4-Nitrophenol	370	U	370	19	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Acenaphthene	300	U	300	0.86	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Acenaphthylene	300	U	300	0.39	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Acetophenone	300	U	300	10	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Anthracene	**7.0**	**J**	300	0.88	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Atrazine	45	U	45	10	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Benzo[a]anthracene	**30**	**J**	300	0.71	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Benzo[a]pyrene	**36**	**J**	300	0.72	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Benzo[b]fluoranthene	**64**	**J**	300	0.66	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Benzo[g,h,i]perylene	**45**	**J**	300	0.39	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Benzo[k]fluoranthene	**23**	**J**	300	0.77	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Bis(2-chloroethyl)ether	90	U	90	2.3	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Bis(2-ethylhexyl) phthalate	**35**	**J**	300	21	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Butyl benzyl phthalate	**45**	**J**	300	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Caprolactam	300	U	300	42	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Carbazole	300	U	300	30	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Chrysene	**44**	**J**	300	1.2	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Dibenz(a,h)anthracene	300	U	300	0.74	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Dibenzofuran	300	U	300	0.74	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Di-n-butyl phthalate	**25**	**J**	300	17	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Di-n-octyl phthalate	300	U	300	8.9	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Fluoranthene	**70**	**J**	300	0.62	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022618-DS-011
Date Collected: 02/26/18 13:25
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-4
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	300	U	300	0.60	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Hexachlorobutadiene	45	U	45	6.3	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Hexachlorocyclopentadiene	300	U	300	9.1	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Indeno[1,2,3-cd]pyrene	**30**	**J**	300	0.39	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Isophorone	300	U	300	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Naphthalene	300	U	300	0.92	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
N-Nitrosodi-n-propylamine	300	U	300	7.1	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Phenol	300	U	300	8.2	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Phenanthrene	**40**	**J**	300	0.82	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
Pyrene	**68**	**J**	300	0.50	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	03/01/18 08:26	03/03/18 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*32 - 120*	*03/01/18 08:26*	*03/03/18 15:03*	*1*
2-Fluorophenol (Surr)	*42*		*29 - 120*	*03/01/18 08:26*	*03/03/18 15:03*	*1*
2,4,6-Tribromophenol (Surr)	*23*		*10 - 120*	*03/01/18 08:26*	*03/03/18 15:03*	*1*
Nitrobenzene-d5 (Surr)	*53*		*30 - 120*	*03/01/18 08:26*	*03/03/18 15:03*	*1*
Phenol-d5 (Surr)	*47*		*29 - 120*	*03/01/18 08:26*	*03/03/18 15:03*	*1*
Terphenyl-d14 (Surr)	*71*		*41 - 120*	*03/01/18 08:26*	*03/03/18 15:03*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-012
Date Collected: 02/26/18 13:30
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-5
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**8.7**	**J**	310	4.1	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2,2'-oxybis[1-chloropropane]	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2,4,5-Trichlorophenol	310	U	310	30	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2,4,6-Trichlorophenol	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2,4-Dichlorophenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2,4-Dimethylphenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2,4-Dinitrophenol	180	U	180	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2,4-Dinitrotoluene	310	U	310	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2,6-Dinitrotoluene	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2-Chloronaphthalene	310	U	310	0.53	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2-Chlorophenol	310	U	310	9.7	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2-Methylnaphthalene	**80**	**J**	310	0.59	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2-Methylphenol	310	U	310	13	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
2-Nitrophenol	310	U	310	9.8	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
3,3'-Dichlorobenzidine	1900	U	1900	21	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
4-Bromophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
4-Chloro-3-methylphenol	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
4-Chloroaniline	240	U	240	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
4-Chlorophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
4-Nitrophenol	390	U	390	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Acenaphthene	310	U	310	0.90	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Acenaphthylene	310	U	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Acetophenone	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Anthracene	310	U	310	0.92	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Atrazine	47	U	47	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Benzaldehyde	310	U	310	14	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Benzo[a]anthracene	310	U	310	0.74	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Benzo[a]pyrene	310	U	310	0.76	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Benzo[b]fluoranthene	310	U	310	0.70	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Benzo[g,h,i]perylene	**26**	**J**	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Benzo[k]fluoranthene	310	U	310	0.80	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Bis(2-chloroethoxy)methane	310	U	310	26	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Bis(2-chloroethyl)ether	95	U	95	2.4	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Bis(2-ethylhexyl) phthalate	310	U	310	22	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Butyl benzyl phthalate	310	U	310	12	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Caprolactam	310	U	310	44	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Carbazole	310	U	310	32	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Chrysene	**17**	**J**	310	1.3	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Dibenz(a,h)anthracene	310	U	310	0.78	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Dibenzofuran	**17**	**J**	310	0.78	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Diethyl phthalate	310	U	310	19	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Dimethyl phthalate	310	U	310	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Di-n-butyl phthalate	**25**	**J**	310	18	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Di-n-octyl phthalate	310	U	310	9.3	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Fluoranthene	310	U	310	0.65	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022618-DS-012
Date Collected: 02/26/18 13:30
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-5
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	310	U	310	0.63	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Hexachlorobenzene	310	U	310	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Hexachlorobutadiene	47	U	47	6.6	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Hexachlorocyclopentadiene	310	U	310	9.6	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Hexachloroethane	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Indeno[1,2,3-cd]pyrene	310	U	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Isophorone	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Naphthalene	**26**	**J**	310	0.97	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Nitrobenzene	310	U	310	2.6	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
N-Nitrosodi-n-propylamine	310	U	310	7.4	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
N-Nitrosodiphenylamine	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Phenol	310	U	310	8.6	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Phenanthrene	**57**	**J**	310	0.86	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
Pyrene	**16**	**J**	310	0.52	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1
3 & 4 Methylphenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*32 - 120*	*03/01/18 08:26*	*03/03/18 15:27*	*1*
2-Fluorophenol (Surr)	*50*		*29 - 120*	*03/01/18 08:26*	*03/03/18 15:27*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*10 - 120*	*03/01/18 08:26*	*03/03/18 15:27*	*1*
Nitrobenzene-d5 (Surr)	*56*		*30 - 120*	*03/01/18 08:26*	*03/03/18 15:27*	*1*
Phenol-d5 (Surr)	*41*		*29 - 120*	*03/01/18 08:26*	*03/03/18 15:27*	*1*
Terphenyl-d14 (Surr)	*68*		*41 - 120*	*03/01/18 08:26*	*03/03/18 15:27*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-013
Date Collected: 02/26/18 13:35
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-6
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	310	U	310	4.1	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2,2'-oxybis[1-chloropropane]	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2,4,5-Trichlorophenol	310	U	310	29	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2,4,6-Trichlorophenol	310	U	310	10	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2,4-Dichlorophenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2,4-Dimethylphenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2,4-Dinitrophenol	180	U	180	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2,4-Dinitrotoluene	310	U	310	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2,6-Dinitrotoluene	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2-Chloronaphthalene	310	U	310	0.53	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2-Chlorophenol	310	U	310	9.6	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2-Methylnaphthalene	**17**	**J**	310	0.59	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2-Methylphenol	310	U	310	13	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
2-Nitrophenol	310	U	310	9.8	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
3,3'-Dichlorobenzidine	1900	U	1900	21	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
4-Bromophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
4-Chloro-3-methylphenol	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
4-Chloroaniline	240	U	240	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
4-Chlorophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
4-Nitrophenol	390	U	390	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Acenaphthene	310	U	310	0.89	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Acenaphthylene	310	U	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Acetophenone	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Anthracene	310	U	310	0.92	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Atrazine	47	U	47	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Benzaldehyde	310	U	310	14	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Benzo[a]anthracene	310	U	310	0.74	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Benzo[a]pyrene	310	U	310	0.75	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Benzo[b]fluoranthene	310	U	310	0.69	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Benzo[g,h,i]perylene	**25**	**J**	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Benzo[k]fluoranthene	310	U	310	0.80	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Bis(2-chloroethoxy)methane	310	U	310	26	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Bis(2-chloroethyl)ether	94	U	94	2.4	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Bis(2-ethylhexyl) phthalate	**45**	**J**	310	22	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Butyl benzyl phthalate	310	U	310	12	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Caprolactam	310	U	310	44	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Carbazole	310	U	310	32	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Chrysene	310	U	310	1.3	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Dibenz(a,h)anthracene	310	U	310	0.78	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Dibenzofuran	310	U	310	0.78	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Diethyl phthalate	310	U	310	19	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Dimethyl phthalate	310	U	310	20	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Di-n-butyl phthalate	**26**	**J**	310	18	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Di-n-octyl phthalate	310	U	310	9.3	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Fluoranthene	**8.5**	**J**	310	0.65	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022618-DS-013
Date Collected: 02/26/18 13:35
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-6
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	310	U	310	0.62	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Hexachlorobenzene	310	U	310	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Hexachlorobutadiene	47	U	47	6.6	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Hexachlorocyclopentadiene	310	U	310	9.5	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Hexachloroethane	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Indeno[1,2,3-cd]pyrene	310	U	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Isophorone	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Naphthalene	**14**	**J**	310	0.96	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Nitrobenzene	310	U	310	2.6	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
N-Nitrosodi-n-propylamine	310	U	310	7.4	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
N-Nitrosodiphenylamine	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Phenol	310	U	310	8.6	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Phenanthrene	**45**	**J**	310	0.86	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
Pyrene	**23**	**J**	310	0.52	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1
3 & 4 Methylphenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*32 - 120*	*03/01/18 08:26*	*03/03/18 15:50*	*1*
2-Fluorophenol (Surr)	*50*		*29 - 120*	*03/01/18 08:26*	*03/03/18 15:50*	*1*
2,4,6-Tribromophenol (Surr)	*27*		*10 - 120*	*03/01/18 08:26*	*03/03/18 15:50*	*1*
Nitrobenzene-d5 (Surr)	*57*		*30 - 120*	*03/01/18 08:26*	*03/03/18 15:50*	*1*
Phenol-d5 (Surr)	*54*		*29 - 120*	*03/01/18 08:26*	*03/03/18 15:50*	*1*
Terphenyl-d14 (Surr)	*74*		*41 - 120*	*03/01/18 08:26*	*03/03/18 15:50*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-014
Date Collected: 02/26/18 14:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-7
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1300	U	1300	18	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2,2'-oxybis[1-chloropropane]	1300	U	1300	48	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2,4,5-Trichlorophenol	1300	U	1300	130	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2,4,6-Trichlorophenol	1300	U	1300	45	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2,4-Dichlorophenol	1300	U	1300	100	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2,4-Dimethylphenol	1300	U	1300	100	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2,4-Dinitrophenol	760	U	760	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2,4-Dinitrotoluene	1300	U	1300	86	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2,6-Dinitrotoluene	1300	U	1300	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2-Chloronaphthalene	1300	U	1300	2.3	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2-Chlorophenol	1300	U	1300	41	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2-Methylnaphthalene	**93**	**J**	1300	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2-Methylphenol	1300	U	1300	56	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2-Nitroaniline	1000	U	1000	46	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
2-Nitrophenol	1300	U	1300	42	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
3,3'-Dichlorobenzidine	8100	U	8100	91	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
3-Nitroaniline	1000	U	1000	81	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
4,6-Dinitro-2-methylphenol	760	U	760	46	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
4-Bromophenyl phenyl ether	1300	U	1300	66	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
4-Chloro-3-methylphenol	1300	U	1300	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
4-Chloroaniline	1000	U	1000	86	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
4-Chlorophenyl phenyl ether	1300	U	1300	66	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
4-Nitroaniline	1000	U	1000	130	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
4-Nitrophenol	1700	U	1700	86	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Acenaphthene	**41**	**J**	1300	3.8	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Acenaphthylene	1300	U	1300	1.8	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Acetophenone	1300	U	1300	46	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Anthracene	1300	U	1300	3.9	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Atrazine	200	U	200	46	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Benzaldehyde	1300	U	1300	61	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Benzo[a]anthracene	**250**	**J**	1300	3.2	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Benzo[a]pyrene	**360**	**J**	1300	3.2	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Benzo[b]fluoranthene	**720**	**J**	1300	3.0	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Benzo[g,h,i]perylene	**270**	**J**	1300	1.8	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Benzo[k]fluoranthene	**260**	**J**	1300	3.4	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Bis(2-chloroethoxy)methane	1300	U	1300	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Bis(2-chloroethyl)ether	400	U	400	10	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Bis(2-ethylhexyl) phthalate	**330**	**J**	1300	96	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Butyl benzyl phthalate	1300	U	1300	51	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Caprolactam	1300	U	1300	190	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Carbazole	1300	U	1300	140	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Chrysene	**460**	**J**	1300	5.6	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Dibenz(a,h)anthracene	1300	U	1300	3.3	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Dibenzofuran	**34**	**J**	1300	3.3	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Diethyl phthalate	1300	U	1300	81	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Dimethyl phthalate	1300	U	1300	86	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Di-n-butyl phthalate	1300	U	1300	76	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Di-n-octyl phthalate	1300	U	1300	40	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Fluoranthene	**860**	**J**	1300	2.8	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022618-DS-014
Date Collected: 02/26/18 14:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-7
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**53**	**J**	1300	2.7	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Hexachlorobenzene	1300	U	1300	11	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Hexachlorobutadiene	200	U	200	28	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Hexachlorocyclopentadiene	1300	U	1300	41	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Hexachloroethane	1300	U	1300	45	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Indeno[1,2,3-cd]pyrene	**260**	**J**	1300	1.8	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Isophorone	1300	U	1300	66	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Naphthalene	**71**	**J**	1300	4.1	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Nitrobenzene	1300	U	1300	11	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
N-Nitrosodi-n-propylamine	1300	U	1300	32	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
N-Nitrosodiphenylamine	1300	U	1300	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Pentachlorophenol	760	U	760	46	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Phenol	1300	U	1300	37	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Phenanthrene	**370**	**J**	1300	3.7	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
Pyrene	**710**	**J**	1300	2.2	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4
3 & 4 Methylphenol	1300	U	1300	100	ug/Kg	☼	03/01/18 08:26	03/03/18 18:11	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*32 - 120*	*03/01/18 08:26*	*03/03/18 18:11*	*4*
2-Fluorophenol (Surr)	*61*		*29 - 120*	*03/01/18 08:26*	*03/03/18 18:11*	*4*
2,4,6-Tribromophenol (Surr)	*44*		*10 - 120*	*03/01/18 08:26*	*03/03/18 18:11*	*4*
Nitrobenzene-d5 (Surr)	*66*		*30 - 120*	*03/01/18 08:26*	*03/03/18 18:11*	*4*
Phenol-d5 (Surr)	*57*		*29 - 120*	*03/01/18 08:26*	*03/03/18 18:11*	*4*
Terphenyl-d14 (Surr)	*73*		*41 - 120*	*03/01/18 08:26*	*03/03/18 18:11*	*4*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022618-DS-015
Date Collected: 02/26/18 14:45
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-8
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	310	U	310	4.2	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2,2'-oxybis[1-chloropropane]	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2,4,5-Trichlorophenol	310	U	310	30	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2,4,6-Trichlorophenol	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2,4-Dichlorophenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2,4-Dimethylphenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2,4-Dinitrophenol	180	U	180	25	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2,4-Dinitrotoluene	310	U	310	20	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2,6-Dinitrotoluene	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2-Chloronaphthalene	310	U	310	0.54	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2-Chlorophenol	310	U	310	9.8	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2-Methylnaphthalene	**41**	**J**	310	0.60	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2-Methylphenol	310	U	310	13	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
2-Nitrophenol	310	U	310	9.9	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
3,3'-Dichlorobenzidine	1900	U	1900	21	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
4-Bromophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
4-Chloro-3-methylphenol	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
4-Chloroaniline	240	U	240	20	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
4-Chlorophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
4-Nitrophenol	390	U	390	20	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Acenaphthene	310	U	310	0.90	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Acenaphthylene	310	U	310	0.42	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Acetophenone	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Anthracene	310	U	310	0.93	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Atrazine	48	U	48	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Benzaldehyde	310	U	310	14	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Benzo[a]anthracene	310	U	310	0.75	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Benzo[a]pyrene	310	U	310	0.76	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Benzo[b]fluoranthene	310	U	310	0.70	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Benzo[g,h,i]perylene	**21**	**J**	310	0.42	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Benzo[k]fluoranthene	310	U	310	0.81	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Bis(2-chloroethoxy)methane	310	U	310	26	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Bis(2-chloroethyl)ether	95	U	95	2.4	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Bis(2-ethylhexyl) phthalate	**37**	**J**	310	23	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Butyl benzyl phthalate	310	U	310	12	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Caprolactam	310	U	310	44	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Carbazole	310	U	310	32	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Chrysene	310	U	310	1.3	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Dibenz(a,h)anthracene	310	U	310	0.79	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Dibenzofuran	310	U	310	0.79	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Diethyl phthalate	310	U	310	19	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Dimethyl phthalate	310	U	310	20	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Di-n-butyl phthalate	**25**	**J**	310	18	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Di-n-octyl phthalate	310	U	310	9.4	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Fluoranthene	310	U	310	0.65	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022618-DS-015
Date Collected: 02/26/18 14:45
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-8
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	310	U	310	0.63	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Hexachlorobenzene	310	U	310	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Hexachlorobutadiene	48	U	48	6.7	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Hexachlorocyclopentadiene	310	U	310	9.6	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Hexachloroethane	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Indeno[1,2,3-cd]pyrene	310	U	310	0.42	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Isophorone	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Naphthalene	310	U	310	0.98	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Nitrobenzene	310	U	310	2.6	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
N-Nitrosodi-n-propylamine	310	U	310	7.5	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
N-Nitrosodiphenylamine	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Phenol	310	U	310	8.7	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Phenanthrene	**50**	**J**	310	0.87	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
Pyrene	**17**	**J**	310	0.52	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1
3 & 4 Methylphenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*32 - 120*	*03/01/18 08:26*	*03/03/18 16:14*	*1*
2-Fluorophenol (Surr)	*41*		*29 - 120*	*03/01/18 08:26*	*03/03/18 16:14*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*10 - 120*	*03/01/18 08:26*	*03/03/18 16:14*	*1*
Nitrobenzene-d5 (Surr)	*47*		*30 - 120*	*03/01/18 08:26*	*03/03/18 16:14*	*1*
Phenol-d5 (Surr)	*36*		*29 - 120*	*03/01/18 08:26*	*03/03/18 16:14*	*1*
Terphenyl-d14 (Surr)	*67*		*41 - 120*	*03/01/18 08:26*	*03/03/18 16:14*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-016
Date Collected: 02/27/18 09:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-9
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	3000	U	3000	40	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2,2'-oxybis[1-chloropropane]	3000	U	3000	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2,4,5-Trichlorophenol	3000	U	3000	290	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2,4,6-Trichlorophenol	3000	U	3000	100	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2,4-Dichlorophenol	3000	U	3000	230	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2,4-Dimethylphenol	3000	U	3000	230	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2,4-Dinitrophenol	1700	U	1700	240	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2,4-Dinitrotoluene	3000	U	3000	190	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2,6-Dinitrotoluene	3000	U	3000	240	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2-Chloronaphthalene	3000	U	3000	5.1	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2-Chlorophenol	3000	U	3000	94	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2-Methylnaphthalene	3000	U	3000	5.7	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2-Methylphenol	3000	U	3000	130	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2-Nitroaniline	2300	U	2300	100	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
2-Nitrophenol	3000	U	3000	95	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
3,3'-Dichlorobenzidine	18000	U	18000	210	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
3-Nitroaniline	2300	U	2300	180	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
4,6-Dinitro-2-methylphenol	1700	U	1700	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
4-Bromophenyl phenyl ether	3000	U	3000	150	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
4-Chloro-3-methylphenol	3000	U	3000	240	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
4-Chloroaniline	2300	U	2300	190	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
4-Chlorophenyl phenyl ether	3000	U	3000	150	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
4-Nitroaniline	2300	U	2300	300	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
4-Nitrophenol	3800	U	3800	190	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Acenaphthene	3000	U	3000	8.7	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Acenaphthylene	3000	U	3000	4.0	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Acetophenone	3000	U	3000	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Anthracene	**190**	**J**	3000	8.9	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Atrazine	460	U	460	100	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Benzaldehyde	3000	U	3000	140	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Benzo[a]anthracene	**1500**	**J**	3000	7.2	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Benzo[a]pyrene	**1700**	**J**	3000	7.3	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Benzo[b]fluoranthene	**2800**	**J**	3000	6.7	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Benzo[g,h,i]perylene	**1100**	**J**	3000	4.0	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Benzo[k]fluoranthene	**1200**	**J**	3000	7.8	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Bis(2-chloroethoxy)methane	3000	U	3000	250	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Bis(2-chloroethyl)ether	910	U	910	23	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Bis(2-ethylhexyl) phthalate	**470**	**J**	3000	220	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Butyl benzyl phthalate	**280**	**J**	3000	110	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Caprolactam	3000	U	3000	420	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Carbazole	3000	U	3000	310	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Chrysene	**2000**	**J**	3000	13	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Dibenz(a,h)anthracene	**220**	**J**	3000	7.5	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Dibenzofuran	3000	U	3000	7.5	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Diethyl phthalate	3000	U	3000	180	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Dimethyl phthalate	3000	U	3000	190	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Di-n-butyl phthalate	3000	U	3000	170	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Di-n-octyl phthalate	3000	U	3000	90	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Fluoranthene	**3100**		3000	6.3	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022718-DS-016
Date Collected: 02/27/18 09:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-9
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	3000	U	3000	6.1	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Hexachlorobenzene	3000	U	3000	24	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Hexachlorobutadiene	460	U	460	64	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Hexachlorocyclopentadiene	3000	U	3000	93	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Hexachloroethane	3000	U	3000	100	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Indeno[1,2,3-cd]pyrene	**960**	**J**	3000	4.0	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Isophorone	3000	U	3000	150	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Naphthalene	3000	U	3000	9.4	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Nitrobenzene	3000	U	3000	25	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
N-Nitrosodi-n-propylamine	3000	U	3000	72	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
N-Nitrosodiphenylamine	3000	U	3000	240	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Pentachlorophenol	1700	U	1700	100	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Phenol	3000	U	3000	83	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Phenanthrene	**500**	**J**	3000	8.3	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
Pyrene	**2700**	**J**	3000	5.0	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10
3 & 4 Methylphenol	3000	U	3000	230	ug/Kg	☼	03/01/18 08:26	03/03/18 18:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*32 - 120*	*03/01/18 08:26*	*03/03/18 18:35*	*10*
2-Fluorophenol (Surr)	*69*		*29 - 120*	*03/01/18 08:26*	*03/03/18 18:35*	*10*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 120*	*03/01/18 08:26*	*03/03/18 18:35*	*10*
Nitrobenzene-d5 (Surr)	*72*		*30 - 120*	*03/01/18 08:26*	*03/03/18 18:35*	*10*
Phenol-d5 (Surr)	*64*		*29 - 120*	*03/01/18 08:26*	*03/03/18 18:35*	*10*
Terphenyl-d14 (Surr)	*79*		*41 - 120*	*03/01/18 08:26*	*03/03/18 18:35*	*10*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-017
Date Collected: 02/27/18 10:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-10
Matrix: Solid
Percent Solids: 81.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	320	U	320	4.2	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2,2'-oxybis[1-chloropropane]	320	U	320	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2,4,5-Trichlorophenol	320	U	320	30	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2,4,6-Trichlorophenol	320	U	320	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2,4-Dichlorophenol	320	U	320	24	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2,4-Dimethylphenol	320	U	320	24	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2,4-Dinitrophenol	180	U	180	25	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2,4-Dinitrotoluene	320	U	320	20	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2,6-Dinitrotoluene	320	U	320	25	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2-Chloronaphthalene	320	U	320	0.54	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2-Chlorophenol	320	U	320	9.9	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2-Methylnaphthalene	**23**	**J**	320	0.60	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2-Methylphenol	320	U	320	13	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
2-Nitrophenol	320	U	320	10	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
3,3'-Dichlorobenzidine	1900	U	1900	22	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
4-Bromophenyl phenyl ether	320	U	320	16	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
4-Chloro-3-methylphenol	320	U	320	25	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
4-Chloroaniline	240	U	240	20	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
4-Chlorophenyl phenyl ether	320	U	320	16	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
4-Nitrophenol	400	U	400	20	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Acenaphthene	320	U	320	0.91	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Acenaphthylene	320	U	320	0.42	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Acetophenone	320	U	320	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Anthracene	320	U	320	0.94	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Atrazine	48	U	48	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Benzaldehyde	320	U	320	14	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Benzo[a]anthracene	320	U	320	0.76	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Benzo[a]pyrene	320	U	320	0.77	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Benzo[b]fluoranthene	320	U	320	0.71	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Benzo[g,h,i]perylene	**23**	**J**	320	0.42	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Benzo[k]fluoranthene	320	U	320	0.82	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Bis(2-chloroethoxy)methane	320	U	320	26	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Bis(2-chloroethyl)ether	96	U	96	2.4	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Bis(2-ethylhexyl) phthalate	**36**	**J**	320	23	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Butyl benzyl phthalate	320	U	320	12	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Caprolactam	320	U	320	45	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Carbazole	320	U	320	32	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Chrysene	**16**	**J**	320	1.3	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Dibenz(a,h)anthracene	320	U	320	0.79	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Dibenzofuran	320	U	320	0.79	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Diethyl phthalate	320	U	320	19	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Dimethyl phthalate	320	U	320	20	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Di-n-butyl phthalate	**27**	**J**	320	18	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Di-n-octyl phthalate	320	U	320	9.5	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Fluoranthene	320	U	320	0.66	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022718-DS-017
Date Collected: 02/27/18 10:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-10
Matrix: Solid
Percent Solids: 81.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	320	U	320	0.64	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Hexachlorobenzene	320	U	320	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Hexachlorobutadiene	48	U	48	6.7	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Hexachlorocyclopentadiene	320	U	320	9.7	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Hexachloroethane	320	U	320	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Indeno[1,2,3-cd]pyrene	320	U	320	0.42	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Isophorone	320	U	320	16	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Naphthalene	320	U	320	0.99	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Nitrobenzene	320	U	320	2.6	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
N-Nitrosodi-n-propylamine	320	U	320	7.6	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
N-Nitrosodiphenylamine	320	U	320	25	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Phenol	320	U	320	8.8	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Phenanthrene	**48**	**J**	320	0.88	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
Pyrene	**19**	**J**	320	0.53	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1
3 & 4 Methylphenol	320	U	320	24	ug/Kg	☼	03/01/18 08:26	03/03/18 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*32 - 120*	*03/01/18 08:26*	*03/03/18 16:37*	*1*
2-Fluorophenol (Surr)	*52*		*29 - 120*	*03/01/18 08:26*	*03/03/18 16:37*	*1*
2,4,6-Tribromophenol (Surr)	*26*		*10 - 120*	*03/01/18 08:26*	*03/03/18 16:37*	*1*
Nitrobenzene-d5 (Surr)	*56*		*30 - 120*	*03/01/18 08:26*	*03/03/18 16:37*	*1*
Phenol-d5 (Surr)	*38*		*29 - 120*	*03/01/18 08:26*	*03/03/18 16:37*	*1*
Terphenyl-d14 (Surr)	*71*		*41 - 120*	*03/01/18 08:26*	*03/03/18 16:37*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-018
Date Collected: 02/27/18 10:10
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-11
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	310	U	310	4.1	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2,2'-oxybis[1-chloropropane]	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2,4,5-Trichlorophenol	310	U	310	29	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2,4,6-Trichlorophenol	310	U	310	10	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2,4-Dichlorophenol	310	U	310	23	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2,4-Dimethylphenol	310	U	310	23	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2,4-Dinitrotoluene	310	U	310	20	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2,6-Dinitrotoluene	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2-Chloronaphthalene	310	U	310	0.52	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2-Chlorophenol	310	U	310	9.5	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2-Methylnaphthalene	310	U	310	0.58	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2-Methylphenol	310	U	310	13	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2-Nitroaniline	230	U	230	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
2-Nitrophenol	310	U	310	9.6	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
3,3'-Dichlorobenzidine	1900	U	1900	21	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
3-Nitroaniline	230	U	230	19	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
4,6-Dinitro-2-methylphenol	170	U	170	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
4-Bromophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
4-Chloro-3-methylphenol	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
4-Chloroaniline	230	U	230	20	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
4-Chlorophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
4-Nitrophenol	380	U	380	20	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Acenaphthene	310	U	310	0.88	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Acenaphthylene	310	U	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Acetophenone	310	U	310	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Anthracene	310	U	310	0.90	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Atrazine	46	U	46	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Benzaldehyde	310	U	310	14	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Benzo[a]anthracene	310	U	310	0.73	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Benzo[a]pyrene	310	U	310	0.74	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Benzo[b]fluoranthene	310	U	310	0.68	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Benzo[g,h,i]perylene	310	U	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Benzo[k]fluoranthene	310	U	310	0.79	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Bis(2-chloroethoxy)methane	310	U	310	25	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Bis(2-chloroethyl)ether	93	U	93	2.3	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Bis(2-ethylhexyl) phthalate	**29**	**J**	310	22	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Butyl benzyl phthalate	310	U	310	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Caprolactam	310	U	310	43	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Carbazole	310	U	310	31	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Chrysene	310	U	310	1.3	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Dibenz(a,h)anthracene	310	U	310	0.76	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Dibenzofuran	310	U	310	0.76	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Diethyl phthalate	310	U	310	19	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Dimethyl phthalate	310	U	310	20	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Di-n-butyl phthalate	310	U	310	17	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Di-n-octyl phthalate	310	U	310	9.1	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Fluoranthene	310	U	310	0.64	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022718-DS-018
Date Collected: 02/27/18 10:10
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-11
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	310	U	310	0.61	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Hexachlorobenzene	310	U	310	2.4	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Hexachlorobutadiene	46	U	46	6.5	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Hexachlorocyclopentadiene	310	U	310	9.4	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Hexachloroethane	310	U	310	10	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Indeno[1,2,3-cd]pyrene	310	U	310	0.41	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Isophorone	310	U	310	15	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Naphthalene	310	U	310	0.95	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Nitrobenzene	310	U	310	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
N-Nitrosodi-n-propylamine	310	U	310	7.3	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
N-Nitrosodiphenylamine	310	U	310	24	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Pentachlorophenol	170	U	170	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Phenol	310	U	310	8.5	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Phenanthrene	**11**	**J**	310	0.85	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
Pyrene	310	U	310	0.51	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1
3 & 4 Methylphenol	310	U	310	23	ug/Kg	☼	03/01/18 08:26	03/03/18 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*32 - 120*	*03/01/18 08:26*	*03/03/18 17:01*	*1*
2-Fluorophenol (Surr)	*57*		*29 - 120*	*03/01/18 08:26*	*03/03/18 17:01*	*1*
2,4,6-Tribromophenol (Surr)	*23*		*10 - 120*	*03/01/18 08:26*	*03/03/18 17:01*	*1*
Nitrobenzene-d5 (Surr)	*61*		*30 - 120*	*03/01/18 08:26*	*03/03/18 17:01*	*1*
Phenol-d5 (Surr)	*51*		*29 - 120*	*03/01/18 08:26*	*03/03/18 17:01*	*1*
Terphenyl-d14 (Surr)	*74*		*41 - 120*	*03/01/18 08:26*	*03/03/18 17:01*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-019
Date Collected: 02/27/18 13:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-12
Matrix: Solid
Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	320	U	320	4.3	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2,2'-oxybis[1-chloropropane]	320	U	320	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2,4,5-Trichlorophenol	320	U	320	31	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2,4,6-Trichlorophenol	320	U	320	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2,4-Dichlorophenol	320	U	320	25	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2,4-Dimethylphenol	320	U	320	25	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2,4-Dinitrophenol	180	U	180	26	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2,4-Dinitrotoluene	320	U	320	21	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2,6-Dinitrotoluene	320	U	320	26	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2-Chloronaphthalene	320	U	320	0.55	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2-Chlorophenol	320	U	320	10	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2-Methylnaphthalene	**16**	**J**	320	0.61	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2-Methylphenol	320	U	320	13	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2-Nitroaniline	250	U	250	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
2-Nitrophenol	320	U	320	10	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
3,3'-Dichlorobenzidine	2000	U	2000	22	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
3-Nitroaniline	250	U	250	20	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
4-Bromophenyl phenyl ether	320	U	320	16	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
4-Chloro-3-methylphenol	320	U	320	26	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
4-Chloroaniline	250	U	250	21	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
4-Chlorophenyl phenyl ether	320	U	320	16	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
4-Nitroaniline	250	U	250	32	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
4-Nitrophenol	400	U	400	21	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Acenaphthene	320	U	320	0.93	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Acenaphthylene	320	U	320	0.43	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Acetophenone	320	U	320	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Anthracene	**22**	**J**	320	0.96	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Atrazine	49	U	49	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Benzaldehyde	320	U	320	15	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Benzo[a]anthracene	**110**	**J**	320	0.77	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Benzo[a]pyrene	**160**	**J**	320	0.79	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Benzo[b]fluoranthene	**300**	**J**	320	0.72	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Benzo[g,h,i]perylene	**120**	**J**	320	0.43	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Benzo[k]fluoranthene	**130**	**J**	320	0.83	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Bis(2-chloroethoxy)methane	320	U	320	27	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Bis(2-chloroethyl)ether	98	U	98	2.5	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Bis(2-ethylhexyl) phthalate	**100**	**J**	320	23	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Butyl benzyl phthalate	**49**	**J**	320	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Caprolactam	320	U	320	45	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Carbazole	320	U	320	33	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Chrysene	**190**	**J**	320	1.3	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Dibenz(a,h)anthracene	320	U	320	0.81	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Dibenzofuran	**10**	**J**	320	0.81	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Diethyl phthalate	320	U	320	20	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Dimethyl phthalate	320	U	320	21	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Di-n-butyl phthalate	**35**	**J**	320	18	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Di-n-octyl phthalate	320	U	320	9.7	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Fluoranthene	**340**		320	0.67	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022718-DS-019
Date Collected: 02/27/18 13:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-12
Matrix: Solid
Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**15**	**J**	320	0.65	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Hexachlorobenzene	320	U	320	2.6	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Hexachlorobutadiene	49	U	49	6.9	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Hexachlorocyclopentadiene	320	U	320	9.9	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Hexachloroethane	320	U	320	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Indeno[1,2,3-cd]pyrene	**110**	**J**	320	0.43	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Isophorone	320	U	320	16	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Naphthalene	**8.3**	**J**	320	1.0	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Nitrobenzene	320	U	320	2.7	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
N-Nitrosodi-n-propylamine	320	U	320	7.7	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
N-Nitrosodiphenylamine	320	U	320	26	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Phenol	320	U	320	9.0	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Phenanthrene	**140**	**J**	320	0.90	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
Pyrene	**290**	**J**	320	0.54	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1
3 & 4 Methylphenol	320	U	320	25	ug/Kg	☼	03/01/18 08:26	03/03/18 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*32 - 120*	*03/01/18 08:26*	*03/03/18 17:24*	*1*
2-Fluorophenol (Surr)	*44*		*29 - 120*	*03/01/18 08:26*	*03/03/18 17:24*	*1*
2,4,6-Tribromophenol (Surr)	*31*		*10 - 120*	*03/01/18 08:26*	*03/03/18 17:24*	*1*
Nitrobenzene-d5 (Surr)	*54*		*30 - 120*	*03/01/18 08:26*	*03/03/18 17:24*	*1*
Phenol-d5 (Surr)	*46*		*29 - 120*	*03/01/18 08:26*	*03/03/18 17:24*	*1*
Terphenyl-d14 (Surr)	*66*		*41 - 120*	*03/01/18 08:26*	*03/03/18 17:24*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022718-DS-020
Date Collected: 02/27/18 14:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-13
Matrix: Solid
Percent Solids: 76.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	350	U	350	4.6	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2,2'-oxybis[1-chloropropane]	350	U	350	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2,4,5-Trichlorophenol	350	U	350	33	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2,4,6-Trichlorophenol	350	U	350	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2,4-Dichlorophenol	350	U	350	26	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2,4-Dimethylphenol	350	U	350	26	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2,4-Dinitrophenol	200	U	200	28	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2,4-Dinitrotoluene	350	U	350	22	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2,6-Dinitrotoluene	350	U	350	28	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2-Chloronaphthalene	350	U	350	0.59	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2-Chlorophenol	350	U	350	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2-Methylnaphthalene	350	U	350	0.66	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2-Methylphenol	350	U	350	14	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2-Nitroaniline	260	U	260	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
2-Nitrophenol	350	U	350	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
3,3'-Dichlorobenzidine	2100	U	2100	24	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
3-Nitroaniline	260	U	260	21	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
4,6-Dinitro-2-methylphenol	200	U	200	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
4-Bromophenyl phenyl ether	350	U	350	17	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
4-Chloro-3-methylphenol	350	U	350	28	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
4-Chloroaniline	260	U	260	22	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
4-Chlorophenyl phenyl ether	350	U	350	17	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
4-Nitroaniline	260	U	260	34	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
4-Nitrophenol	430	U	430	22	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Acenaphthene	350	U	350	1.0	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Acenaphthylene	350	U	350	0.46	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Acetophenone	350	U	350	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Anthracene	350	U	350	1.0	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Atrazine	52	U	52	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Benzaldehyde	350	U	350	16	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Benzo[a]anthracene	350	U	350	0.83	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Benzo[a]pyrene	350	U	350	0.84	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Benzo[b]fluoranthene	**11**	**J**	350	0.77	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Benzo[g,h,i]perylene	350	U	350	0.46	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Benzo[k]fluoranthene	350	U	350	0.89	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Bis(2-chloroethoxy)methane	350	U	350	29	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Bis(2-chloroethyl)ether	100	U	100	2.6	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Bis(2-ethylhexyl) phthalate	**36**	**J**	350	25	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Butyl benzyl phthalate	350	U	350	13	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Caprolactam	350	U	350	49	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Carbazole	350	U	350	35	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Chrysene	**12**	**J**	350	1.4	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Dibenz(a,h)anthracene	350	U	350	0.87	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Dibenzofuran	350	U	350	0.87	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Diethyl phthalate	350	U	350	21	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Dimethyl phthalate	350	U	350	22	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Di-n-butyl phthalate	**27**	**J**	350	20	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Di-n-octyl phthalate	350	U	350	10	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Fluoranthene	**7.9**	**J**	350	0.72	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022718-DS-020
Date Collected: 02/27/18 14:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-13
Matrix: Solid
Percent Solids: 76.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	350	U	350	0.70	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Hexachlorobenzene	350	U	350	2.8	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Hexachlorobutadiene	52	U	52	7.3	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Hexachlorocyclopentadiene	350	U	350	11	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Hexachloroethane	350	U	350	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Indeno[1,2,3-cd]pyrene	350	U	350	0.46	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Isophorone	350	U	350	17	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Naphthalene	350	U	350	1.1	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Nitrobenzene	350	U	350	2.9	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
N-Nitrosodi-n-propylamine	350	U	350	8.3	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
N-Nitrosodiphenylamine	350	U	350	28	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Pentachlorophenol	200	U	200	12	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Phenol	350	U	350	9.6	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Phenanthrene	**6.2**	**J**	350	0.96	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
Pyrene	**8.6**	**J**	350	0.58	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1
3 & 4 Methylphenol	350	U	350	26	ug/Kg	☼	03/01/18 08:26	03/03/18 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*32 - 120*	*03/01/18 08:26*	*03/03/18 17:48*	*1*
2-Fluorophenol (Surr)	*53*		*29 - 120*	*03/01/18 08:26*	*03/03/18 17:48*	*1*
2,4,6-Tribromophenol (Surr)	*25*		*10 - 120*	*03/01/18 08:26*	*03/03/18 17:48*	*1*
Nitrobenzene-d5 (Surr)	*56*		*30 - 120*	*03/01/18 08:26*	*03/03/18 17:48*	*1*
Phenol-d5 (Surr)	*46*		*29 - 120*	*03/01/18 08:26*	*03/03/18 17:48*	*1*
Terphenyl-d14 (Surr)	*69*		*41 - 120*	*03/01/18 08:26*	*03/03/18 17:48*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022618-DS-009
Date Collected: 02/26/18 09:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-2
Matrix: Solid
Percent Solids: 65.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	75	U F2	75	33	ug/Kg	☼	03/01/18 11:52	03/04/18 18:37	1
Aroclor-1221	75	U	75	36	ug/Kg	☼	03/01/18 11:52	03/04/18 18:37	1
Aroclor-1232	75	U	75	34	ug/Kg	☼	03/01/18 11:52	03/04/18 18:37	1
Aroclor-1242	75	U	75	28	ug/Kg	☼	03/01/18 11:52	03/04/18 18:37	1
Aroclor-1248	**110**		75	36	ug/Kg	☼	03/01/18 11:52	03/04/18 18:37	1
Aroclor-1254	75	U	75	34	ug/Kg	☼	03/01/18 11:52	03/04/18 18:37	1
Aroclor-1260	**98**	**F2**	75	33	ug/Kg	☼	03/01/18 11:52	03/04/18 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*109*		*14 - 128*	*03/01/18 11:52*	*03/04/18 18:37*	*1*
DCB Decachlorobiphenyl	*145*	*X*	*10 - 132*	*03/01/18 11:52*	*03/04/18 18:37*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022618-DS-010
Date Collected: 02/26/18 13:20
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-3
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	54	U	54	24	ug/Kg	☼	03/01/18 11:58	03/04/18 19:32	1
Aroclor-1221	54	U	54	26	ug/Kg	☼	03/01/18 11:58	03/04/18 19:32	1
Aroclor-1232	54	U	54	25	ug/Kg	☼	03/01/18 11:58	03/04/18 19:32	1
Aroclor-1242	54	U	54	21	ug/Kg	☼	03/01/18 11:58	03/04/18 19:32	1
Aroclor-1248	54	U	54	26	ug/Kg	☼	03/01/18 11:58	03/04/18 19:32	1
Aroclor-1254	54	U	54	25	ug/Kg	☼	03/01/18 11:58	03/04/18 19:32	1
Aroclor-1260	**48**	**J**	54	24	ug/Kg	☼	03/01/18 11:58	03/04/18 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*14 - 128*	*03/01/18 11:58*	*03/04/18 19:32*	*1*
DCB Decachlorobiphenyl	*105*		*10 - 132*	*03/01/18 11:58*	*03/04/18 19:32*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022618-DS-011
Date Collected: 02/26/18 13:25
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-4
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	59	U	59	26	ug/Kg	☼	03/01/18 11:58	03/04/18 20:45	1
Aroclor-1221	59	U	59	28	ug/Kg	☼	03/01/18 11:58	03/04/18 20:45	1
Aroclor-1232	59	U	59	27	ug/Kg	☼	03/01/18 11:58	03/04/18 20:45	1
Aroclor-1242	59	U	59	23	ug/Kg	☼	03/01/18 11:58	03/04/18 20:45	1
Aroclor-1248	59	U	59	28	ug/Kg	☼	03/01/18 11:58	03/04/18 20:45	1
Aroclor-1254	59	U	59	27	ug/Kg	☼	03/01/18 11:58	03/04/18 20:45	1
Aroclor-1260	**130**		59	26	ug/Kg	☼	03/01/18 11:58	03/04/18 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*108*		*14 - 128*	*03/01/18 11:58*	*03/04/18 20:45*	*1*
DCB Decachlorobiphenyl	*140*	*X*	*10 - 132*	*03/01/18 11:58*	*03/04/18 20:45*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022618-DS-012
Date Collected: 02/26/18 13:30
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-5
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	58	U	58	25	ug/Kg	☼	03/01/18 11:58	03/04/18 21:03	1
Aroclor-1221	58	U	58	28	ug/Kg	☼	03/01/18 11:58	03/04/18 21:03	1
Aroclor-1232	58	U	58	27	ug/Kg	☼	03/01/18 11:58	03/04/18 21:03	1
Aroclor-1242	58	U	58	22	ug/Kg	☼	03/01/18 11:58	03/04/18 21:03	1
Aroclor-1248	58	U	58	28	ug/Kg	☼	03/01/18 11:58	03/04/18 21:03	1
Aroclor-1254	58	U	58	27	ug/Kg	☼	03/01/18 11:58	03/04/18 21:03	1
Aroclor-1260	58	U	58	25	ug/Kg	☼	03/01/18 11:58	03/04/18 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*110*		*14 - 128*	*03/01/18 11:58*	*03/04/18 21:03*	*1*
DCB Decachlorobiphenyl	*124*		*10 - 132*	*03/01/18 11:58*	*03/04/18 21:03*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022618-DS-013
Date Collected: 02/26/18 13:35
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-6
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	59	U	59	26	ug/Kg	☼	03/01/18 11:58	03/04/18 21:22	1
Aroclor-1221	59	U	59	28	ug/Kg	☼	03/01/18 11:58	03/04/18 21:22	1
Aroclor-1232	59	U	59	27	ug/Kg	☼	03/01/18 11:58	03/04/18 21:22	1
Aroclor-1242	59	U	59	22	ug/Kg	☼	03/01/18 11:58	03/04/18 21:22	1
Aroclor-1248	59	U	59	28	ug/Kg	☼	03/01/18 11:58	03/04/18 21:22	1
Aroclor-1254	59	U	59	27	ug/Kg	☼	03/01/18 11:58	03/04/18 21:22	1
Aroclor-1260	59	U	59	26	ug/Kg	☼	03/01/18 11:58	03/04/18 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*91*		*14 - 128*	*03/01/18 11:58*	*03/04/18 21:22*	*1*
DCB Decachlorobiphenyl	*124*		*10 - 132*	*03/01/18 11:58*	*03/04/18 21:22*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022618-DS-014
Date Collected: 02/26/18 14:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-7
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	60	U	60	26	ug/Kg	☼	03/01/18 11:58	03/05/18 14:27	1
Aroclor-1221	60	U	60	29	ug/Kg	☼	03/01/18 11:58	03/05/18 14:27	1
Aroclor-1232	60	U	60	27	ug/Kg	☼	03/01/18 11:58	03/05/18 14:27	1
Aroclor-1242	60	U	60	23	ug/Kg	☼	03/01/18 11:58	03/05/18 14:27	1
Aroclor-1248	**150**		60	29	ug/Kg	☼	03/01/18 11:58	03/05/18 14:27	1
Aroclor-1254	60	U	60	27	ug/Kg	☼	03/01/18 11:58	03/05/18 14:27	1
Aroclor-1260	**92**		60	26	ug/Kg	☼	03/01/18 11:58	03/05/18 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*60*		*14 - 128*	*03/01/18 11:58*	*03/05/18 14:27*	*1*
DCB Decachlorobiphenyl	*65*	*p*	*10 - 132*	*03/01/18 11:58*	*03/05/18 14:27*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022618-DS-015
Date Collected: 02/26/18 14:45
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-8
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	60	U	60	26	ug/Kg	☼	03/01/18 11:58	03/04/18 21:58	1
Aroclor-1221	60	U	60	29	ug/Kg	☼	03/01/18 11:58	03/04/18 21:58	1
Aroclor-1232	60	U	60	28	ug/Kg	☼	03/01/18 11:58	03/04/18 21:58	1
Aroclor-1242	60	U	60	23	ug/Kg	☼	03/01/18 11:58	03/04/18 21:58	1
Aroclor-1248	60	U	60	29	ug/Kg	☼	03/01/18 11:58	03/04/18 21:58	1
Aroclor-1254	60	U	60	28	ug/Kg	☼	03/01/18 11:58	03/04/18 21:58	1
Aroclor-1260	60	U	60	26	ug/Kg	☼	03/01/18 11:58	03/04/18 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*91*		*14 - 128*	*03/01/18 11:58*	*03/04/18 21:58*	*1*
DCB Decachlorobiphenyl	*108*		*10 - 132*	*03/01/18 11:58*	*03/04/18 21:58*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022718-DS-016
Date Collected: 02/27/18 09:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-9
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	57	U	57	25	ug/Kg	☼	03/02/18 11:50	03/05/18 20:04	1
Aroclor-1221	57	U	57	27	ug/Kg	☼	03/02/18 11:50	03/05/18 20:04	1
Aroclor-1232	57	U	57	26	ug/Kg	☼	03/02/18 11:50	03/05/18 20:04	1
Aroclor-1242	**49**	**J**	57	22	ug/Kg	☼	03/02/18 11:50	03/05/18 20:04	1
Aroclor-1248	57	U	57	27	ug/Kg	☼	03/02/18 11:50	03/05/18 20:04	1
Aroclor-1254	**150**		57	26	ug/Kg	☼	03/02/18 11:50	03/05/18 20:04	1
Aroclor-1260	57	U	57	25	ug/Kg	☼	03/02/18 11:50	03/05/18 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*14 - 128*	*03/02/18 11:50*	*03/05/18 20:04*	*1*
DCB Decachlorobiphenyl	*90*		*10 - 132*	*03/02/18 11:50*	*03/05/18 20:04*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022718-DS-017
Date Collected: 02/27/18 10:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-10
Matrix: Solid
Percent Solids: 81.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	60	U	60	27	ug/Kg	☼	03/02/18 11:50	03/05/18 20:21	1
Aroclor-1221	60	U	60	29	ug/Kg	☼	03/02/18 11:50	03/05/18 20:21	1
Aroclor-1232	60	U	60	28	ug/Kg	☼	03/02/18 11:50	03/05/18 20:21	1
Aroclor-1242	60	U	60	23	ug/Kg	☼	03/02/18 11:50	03/05/18 20:21	1
Aroclor-1248	60	U	60	29	ug/Kg	☼	03/02/18 11:50	03/05/18 20:21	1
Aroclor-1254	60	U	60	28	ug/Kg	☼	03/02/18 11:50	03/05/18 20:21	1
Aroclor-1260	60	U	60	27	ug/Kg	☼	03/02/18 11:50	03/05/18 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*14 - 128*	*03/02/18 11:50*	*03/05/18 20:21*	*1*
DCB Decachlorobiphenyl	*102*		*10 - 132*	*03/02/18 11:50*	*03/05/18 20:21*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022718-DS-018
Date Collected: 02/27/18 10:10
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-11
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	57	U	57	25	ug/Kg	☼	03/02/18 11:50	03/05/18 21:27	1
Aroclor-1221	57	U	57	28	ug/Kg	☼	03/02/18 11:50	03/05/18 21:27	1
Aroclor-1232	57	U	57	26	ug/Kg	☼	03/02/18 11:50	03/05/18 21:27	1
Aroclor-1242	57	U	57	22	ug/Kg	☼	03/02/18 11:50	03/05/18 21:27	1
Aroclor-1248	57	U	57	28	ug/Kg	☼	03/02/18 11:50	03/05/18 21:27	1
Aroclor-1254	57	U	57	26	ug/Kg	☼	03/02/18 11:50	03/05/18 21:27	1
Aroclor-1260	57	U	57	25	ug/Kg	☼	03/02/18 11:50	03/05/18 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*14 - 128*	*03/02/18 11:50*	*03/05/18 21:27*	*1*
DCB Decachlorobiphenyl	*89*		*10 - 132*	*03/02/18 11:50*	*03/05/18 21:27*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022718-DS-019
Date Collected: 02/27/18 13:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-12
Matrix: Solid
Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	62	U	62	27	ug/Kg	☼	03/02/18 11:50	03/05/18 21:43	1
Aroclor-1221	62	U	62	30	ug/Kg	☼	03/02/18 11:50	03/05/18 21:43	1
Aroclor-1232	62	U	62	29	ug/Kg	☼	03/02/18 11:50	03/05/18 21:43	1
Aroclor-1242	**48**	**J**	62	24	ug/Kg	☼	03/02/18 11:50	03/05/18 21:43	1
Aroclor-1248	62	U	62	30	ug/Kg	☼	03/02/18 11:50	03/05/18 21:43	1
Aroclor-1254	**180**		62	29	ug/Kg	☼	03/02/18 11:50	03/05/18 21:43	1
Aroclor-1260	62	U	62	27	ug/Kg	☼	03/02/18 11:50	03/05/18 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*14 - 128*	*03/02/18 11:50*	*03/05/18 21:43*	*1*
DCB Decachlorobiphenyl	*98*		*10 - 132*	*03/02/18 11:50*	*03/05/18 21:43*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022718-DS-020
Date Collected: 02/27/18 14:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-13
Matrix: Solid
Percent Solids: 76.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	67	U	67	30	ug/Kg	☼	03/02/18 11:50	03/05/18 22:00	1
Aroclor-1221	67	U	67	32	ug/Kg	☼	03/02/18 11:50	03/05/18 22:00	1
Aroclor-1232	67	U	67	31	ug/Kg	☼	03/02/18 11:50	03/05/18 22:00	1
Aroclor-1242	67	U	67	26	ug/Kg	☼	03/02/18 11:50	03/05/18 22:00	1
Aroclor-1248	67	U	67	32	ug/Kg	☼	03/02/18 11:50	03/05/18 22:00	1
Aroclor-1254	67	U	67	31	ug/Kg	☼	03/02/18 11:50	03/05/18 22:00	1
Aroclor-1260	67	U	67	30	ug/Kg	☼	03/02/18 11:50	03/05/18 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*14 - 128*	*03/02/18 11:50*	*03/05/18 22:00*	*1*
DCB Decachlorobiphenyl	*103*		*10 - 132*	*03/02/18 11:50*	*03/05/18 22:00*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022618-DS-009
Date Collected: 02/26/18 09:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-2
Matrix: Solid
Percent Solids: 65.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	71		1.1	0.50	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1
Beryllium	0.35		0.22	0.074	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1
Cadmium	1.1		0.11	0.066	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1
Cobalt	4.3		0.55	0.28	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1
Chromium	17		1.1	0.21	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1
Copper	27		1.1	0.32	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1
Manganese	390		1.1	0.43	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1
Nickel	14		1.1	0.32	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1
Zinc	250		2.8	1.9	mg/Kg	☼	03/02/18 14:00	03/05/18 11:34	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022618-DS-010
Date Collected: 02/26/18 13:20
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-3
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	26		0.86	0.39	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1
Beryllium	0.27		0.17	0.058	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1
Cadmium	0.20		0.086	0.051	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1
Cobalt	4.2		0.43	0.21	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1
Chromium	8.4		0.86	0.16	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1
Copper	12		0.86	0.25	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1
Manganese	210		0.86	0.33	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1
Nickel	12		0.86	0.25	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1
Zinc	32		2.1	1.5	mg/Kg	☼	03/02/18 14:00	03/05/18 11:53	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022618-DS-011
Date Collected: 02/26/18 13:25
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-4
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	27		0.79	0.36	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1
Beryllium	0.24		0.16	0.054	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1
Cadmium	0.25		0.079	0.048	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1
Cobalt	4.3		0.40	0.20	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1
Chromium	11		0.79	0.15	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1
Copper	18		0.79	0.23	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1
Manganese	220		0.79	0.31	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1
Nickel	14		0.79	0.23	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1
Zinc	44		2.0	1.4	mg/Kg	☼	03/02/18 14:00	03/05/18 11:57	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022618-DS-012
Date Collected: 02/26/18 13:30
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-5
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	100		0.84	0.38	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1
Beryllium	0.56		0.17	0.057	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1
Cadmium	0.25		0.084	0.050	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1
Cobalt	9.8		0.42	0.21	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1
Chromium	16		0.84	0.16	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1
Copper	19		0.84	0.25	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1
Manganese	350		0.84	0.32	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1
Nickel	29		0.84	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1
Zinc	51		2.1	1.4	mg/Kg	☼	03/02/18 14:00	03/05/18 12:02	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022618-DS-013
Date Collected: 02/26/18 13:35
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-6
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	54		0.84	0.38	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1
Beryllium	0.54		0.17	0.057	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1
Cadmium	0.21		0.084	0.051	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1
Cobalt	9.5		0.42	0.21	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1
Chromium	16		0.84	0.16	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1
Copper	18		0.84	0.25	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1
Manganese	390		0.84	0.33	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1
Nickel	29		0.84	0.25	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1
Zinc	54		2.1	1.4	mg/Kg	☼	03/02/18 14:00	03/05/18 12:06	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022618-DS-014
Date Collected: 02/26/18 14:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-7
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	47		0.78	0.35	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1
Beryllium	0.39		0.16	0.052	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1
Cadmium	0.42		0.078	0.047	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1
Cobalt	6.0		0.39	0.19	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1
Chromium	14		0.78	0.15	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1
Copper	12		0.78	0.23	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1
Manganese	250		0.78	0.30	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1
Nickel	17		0.78	0.23	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1
Zinc	51		1.9	1.3	mg/Kg	☼	03/02/18 14:00	03/05/18 12:20	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022618-DS-015
Date Collected: 02/26/18 14:45
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-8
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	74		0.71	0.32	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1
Beryllium	0.59		0.14	0.048	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1
Cadmium	0.19		0.071	0.043	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1
Cobalt	8.1		0.36	0.18	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1
Chromium	15		0.71	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1
Copper	15		0.71	0.21	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1
Manganese	320		0.71	0.27	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1
Nickel	26		0.71	0.21	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1
Zinc	54		1.8	1.2	mg/Kg	☼	03/02/18 14:00	03/05/18 12:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022718-DS-016
Date Collected: 02/27/18 09:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-9
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	36		0.75	0.34	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1
Beryllium	0.28		0.15	0.051	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1
Cadmium	0.39		0.075	0.045	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1
Cobalt	4.1		0.37	0.19	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1
Chromium	11		0.75	0.14	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1
Copper	13		0.75	0.22	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1
Manganese	260		0.75	0.29	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1
Nickel	13		0.75	0.22	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1
Zinc	64		1.9	1.3	mg/Kg	☼	03/02/18 14:00	03/05/18 12:30	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022718-DS-017
Date Collected: 02/27/18 10:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-10
Matrix: Solid
Percent Solids: 81.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	62		0.81	0.37	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1
Beryllium	0.57		0.16	0.055	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1
Cadmium	0.28		0.081	0.049	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1
Cobalt	10		0.41	0.20	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1
Chromium	18		0.81	0.15	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1
Copper	19		0.81	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1
Manganese	320		0.81	0.31	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1
Nickel	30		0.81	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1
Zinc	55		2.0	1.4	mg/Kg	☼	03/02/18 14:00	03/05/18 12:35	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022718-DS-018
Date Collected: 02/27/18 10:10
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-11
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	12		0.83	0.37	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1
Beryllium	0.19		0.17	0.056	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1
Cadmium	0.55		0.083	0.050	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1
Cobalt	3.6		0.41	0.21	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1
Chromium	5.1		0.83	0.16	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1
Copper	15		0.83	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1
Manganese	250		0.83	0.32	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1
Nickel	12		0.83	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1
Zinc	58		2.1	1.4	mg/Kg	☼	03/02/18 14:00	03/05/18 12:39	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022718-DS-019
Date Collected: 02/27/18 13:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-12
Matrix: Solid
Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	54		0.95	0.43	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1
Beryllium	0.32		0.19	0.064	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1
Cadmium	0.73		0.095	0.057	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1
Cobalt	4.3		0.48	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1
Chromium	15		0.95	0.18	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1
Copper	21		0.95	0.28	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1
Manganese	300		0.95	0.37	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1
Nickel	13		0.95	0.28	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1
Zinc	160		2.4	1.6	mg/Kg	☼	03/02/18 14:00	03/05/18 12:44	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022718-DS-020
Date Collected: 02/27/18 14:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-13
Matrix: Solid
Percent Solids: 76.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	37		0.88	0.40	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1
Beryllium	0.43		0.18	0.059	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1
Cadmium	0.13		0.088	0.053	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1
Cobalt	7.0		0.44	0.22	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1
Chromium	14		0.88	0.17	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1
Copper	12		0.88	0.26	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1
Manganese	150		0.88	0.34	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1
Nickel	18		0.88	0.26	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1
Zinc	48		2.2	1.5	mg/Kg	☼	03/02/18 14:00	03/05/18 12:49	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022618-DS-009
Date Collected: 02/26/18 09:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-2
Matrix: Solid
Percent Solids: 65.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	F1 F2	0.22	0.17	mg/Kg	☼	03/02/18 14:00	03/05/18 10:48	2
Arsenic	6.5		0.11	0.083	mg/Kg	☼	03/02/18 14:00	03/05/18 10:48	2
Lead	56	B	0.28	0.086	mg/Kg	☼	03/02/18 14:00	03/05/18 10:48	2
Selenium	0.80		0.22	0.17	mg/Kg	☼	03/02/18 14:00	03/05/18 10:48	2
Thallium	0.25		0.11	0.066	mg/Kg	☼	03/02/18 14:00	03/05/18 10:48	2
Vanadium	14		1.1	0.32	mg/Kg	☼	03/02/18 14:00	03/05/18 10:48	2
Silver	0.15		0.11	0.030	mg/Kg	☼	03/02/18 14:00	03/05/18 10:48	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022618-DS-010
Date Collected: 02/26/18 13:20
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-3
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32		0.17	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 11:11	2
Arsenic	5.1		0.086	0.064	mg/Kg	☼	03/02/18 14:00	03/05/18 11:11	2
Lead	8.5	B	0.21	0.067	mg/Kg	☼	03/02/18 14:00	03/05/18 11:11	2
Selenium	0.40		0.17	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 11:11	2
Thallium	0.16		0.086	0.051	mg/Kg	☼	03/02/18 14:00	03/05/18 11:11	2
Vanadium	16		0.86	0.25	mg/Kg	☼	03/02/18 14:00	03/05/18 11:11	2
Silver	0.036	J	0.086	0.024	mg/Kg	☼	03/02/18 14:00	03/05/18 11:11	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022618-DS-011
Date Collected: 02/26/18 13:25
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-4
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28		0.16	0.12	mg/Kg	☼	03/02/18 14:00	03/05/18 11:15	2
Arsenic	6.6		0.079	0.059	mg/Kg	☼	03/02/18 14:00	03/05/18 11:15	2
Lead	13	B	0.20	0.062	mg/Kg	☼	03/02/18 14:00	03/05/18 11:15	2
Selenium	0.40		0.16	0.12	mg/Kg	☼	03/02/18 14:00	03/05/18 11:15	2
Thallium	0.18		0.079	0.048	mg/Kg	☼	03/02/18 14:00	03/05/18 11:15	2
Vanadium	13		0.79	0.23	mg/Kg	☼	03/02/18 14:00	03/05/18 11:15	2
Silver	0.048	J	0.079	0.022	mg/Kg	☼	03/02/18 14:00	03/05/18 11:15	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022618-DS-012
Date Collected: 02/26/18 13:30
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-5
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.17	U	0.17	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 11:20	2
Arsenic	**5.6**		0.084	0.063	mg/Kg	☼	03/02/18 14:00	03/05/18 11:20	2
Lead	**9.3**	**B**	0.21	0.065	mg/Kg	☼	03/02/18 14:00	03/05/18 11:20	2
Selenium	**0.62**		0.17	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 11:20	2
Thallium	**0.35**		0.084	0.050	mg/Kg	☼	03/02/18 14:00	03/05/18 11:20	2
Vanadium	**24**		0.84	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 11:20	2
Silver	**0.045**	**J**	0.084	0.023	mg/Kg	☼	03/02/18 14:00	03/05/18 11:20	2

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022618-DS-013
Date Collected: 02/26/18 13:35
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-6
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.13	J	0.17	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 11:33	2
Arsenic	7.3		0.084	0.063	mg/Kg	☼	03/02/18 14:00	03/05/18 11:33	2
Lead	11	B	0.21	0.066	mg/Kg	☼	03/02/18 14:00	03/05/18 11:33	2
Selenium	0.51		0.17	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 11:33	2
Thallium	0.28		0.084	0.051	mg/Kg	☼	03/02/18 14:00	03/05/18 11:33	2
Vanadium	24		0.84	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 11:33	2
Silver	0.044	J	0.084	0.023	mg/Kg	☼	03/02/18 14:00	03/05/18 11:33	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022618-DS-014
Date Collected: 02/26/18 14:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-7
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.17		0.16	0.12	mg/Kg	☼	03/02/18 14:00	03/05/18 11:37	2
Arsenic	7.8		0.078	0.058	mg/Kg	☼	03/02/18 14:00	03/05/18 11:37	2
Lead	11	B	0.19	0.060	mg/Kg	☼	03/02/18 14:00	03/05/18 11:37	2
Selenium	0.51		0.16	0.12	mg/Kg	☼	03/02/18 14:00	03/05/18 11:37	2
Thallium	0.21		0.078	0.047	mg/Kg	☼	03/02/18 14:00	03/05/18 11:37	2
Vanadium	16		0.78	0.22	mg/Kg	☼	03/02/18 14:00	03/05/18 11:37	2
Silver	0.11		0.078	0.021	mg/Kg	☼	03/02/18 14:00	03/05/18 11:37	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022618-DS-015
Date Collected: 02/26/18 14:45
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-8
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.15		0.14	0.11	mg/Kg	☼	03/02/18 14:00	03/05/18 11:42	2
Arsenic	17		0.071	0.053	mg/Kg	☼	03/02/18 14:00	03/05/18 11:42	2
Lead	9.2	B	0.18	0.055	mg/Kg	☼	03/02/18 14:00	03/05/18 11:42	2
Selenium	0.55		0.14	0.11	mg/Kg	☼	03/02/18 14:00	03/05/18 11:42	2
Thallium	0.23		0.071	0.043	mg/Kg	☼	03/02/18 14:00	03/05/18 11:42	2
Vanadium	23		0.71	0.20	mg/Kg	☼	03/02/18 14:00	03/05/18 11:42	2
Silver	0.040	J	0.071	0.020	mg/Kg	☼	03/02/18 14:00	03/05/18 11:42	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022718-DS-016
Date Collected: 02/27/18 09:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-9
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.17		0.15	0.12	mg/Kg	☼	03/02/18 14:00	03/05/18 11:46	2
Arsenic	4.2		0.075	0.056	mg/Kg	☼	03/02/18 14:00	03/05/18 11:46	2
Lead	15	B	0.19	0.058	mg/Kg	☼	03/02/18 14:00	03/05/18 11:46	2
Selenium	0.44		0.15	0.11	mg/Kg	☼	03/02/18 14:00	03/05/18 11:46	2
Thallium	0.16		0.075	0.045	mg/Kg	☼	03/02/18 14:00	03/05/18 11:46	2
Vanadium	13		0.75	0.21	mg/Kg	☼	03/02/18 14:00	03/05/18 11:46	2
Silver	0.089		0.075	0.021	mg/Kg	☼	03/02/18 14:00	03/05/18 11:46	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022718-DS-017
Date Collected: 02/27/18 10:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-10
Matrix: Solid
Percent Solids: 81.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.13	J	0.16	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 11:51	2
Arsenic	5.5		0.081	0.061	mg/Kg	☼	03/02/18 14:00	03/05/18 11:51	2
Lead	11	B	0.20	0.063	mg/Kg	☼	03/02/18 14:00	03/05/18 11:51	2
Selenium	0.65		0.16	0.12	mg/Kg	☼	03/02/18 14:00	03/05/18 11:51	2
Thallium	0.31		0.081	0.049	mg/Kg	☼	03/02/18 14:00	03/05/18 11:51	2
Vanadium	26		0.81	0.23	mg/Kg	☼	03/02/18 14:00	03/05/18 11:51	2
Silver	0.051	J	0.081	0.022	mg/Kg	☼	03/02/18 14:00	03/05/18 11:51	2

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022718-DS-018
Date Collected: 02/27/18 10:10
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-11
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.21		0.17	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 11:55	2
Arsenic	8.4		0.083	0.062	mg/Kg	☼	03/02/18 14:00	03/05/18 11:55	2
Lead	6.7	B	0.21	0.064	mg/Kg	☼	03/02/18 14:00	03/05/18 11:55	2
Selenium	0.54		0.17	0.12	mg/Kg	☼	03/02/18 14:00	03/05/18 11:55	2
Thallium	0.31		0.083	0.050	mg/Kg	☼	03/02/18 14:00	03/05/18 11:55	2
Vanadium	11		0.83	0.24	mg/Kg	☼	03/02/18 14:00	03/05/18 11:55	2
Silver	0.036	J	0.083	0.023	mg/Kg	☼	03/02/18 14:00	03/05/18 11:55	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022718-DS-019
Date Collected: 02/27/18 13:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-12
Matrix: Solid
Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27		0.19	0.15	mg/Kg	☼	03/02/18 14:00	03/05/18 12:00	2
Arsenic	5.3		0.095	0.071	mg/Kg	☼	03/02/18 14:00	03/05/18 12:00	2
Lead	32	B	0.24	0.074	mg/Kg	☼	03/02/18 14:00	03/05/18 12:00	2
Selenium	0.64		0.19	0.14	mg/Kg	☼	03/02/18 14:00	03/05/18 12:00	2
Thallium	0.18		0.095	0.057	mg/Kg	☼	03/02/18 14:00	03/05/18 12:00	2
Vanadium	14		0.95	0.27	mg/Kg	☼	03/02/18 14:00	03/05/18 12:00	2
Silver	0.12		0.095	0.026	mg/Kg	☼	03/02/18 14:00	03/05/18 12:00	2

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022718-DS-020
Date Collected: 02/27/18 14:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-13
Matrix: Solid
Percent Solids: 76.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.18	U	0.18	0.14	mg/Kg	☼	03/02/18 14:00	03/05/18 12:04	2
Arsenic	**5.2**		0.088	0.066	mg/Kg	☼	03/02/18 14:00	03/05/18 12:04	2
Lead	**9.5**	**B**	0.22	0.069	mg/Kg	☼	03/02/18 14:00	03/05/18 12:04	2
Selenium	**0.53**		0.18	0.13	mg/Kg	☼	03/02/18 14:00	03/05/18 12:04	2
Thallium	**0.29**		0.088	0.053	mg/Kg	☼	03/02/18 14:00	03/05/18 12:04	2
Vanadium	**20**		0.88	0.25	mg/Kg	☼	03/02/18 14:00	03/05/18 12:04	2
Silver	**0.026**	**J**	0.088	0.024	mg/Kg	☼	03/02/18 14:00	03/05/18 12:04	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022618-DS-009
Date Collected: 02/26/18 09:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-2
Matrix: Solid
Percent Solids: 65.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.059	J	0.071	0.032	mg/Kg	☼	03/02/18 16:00	03/05/18 13:52	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022618-DS-010
Date Collected: 02/26/18 13:20
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-3
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.018	mg/Kg	☼	03/02/18 16:00	03/05/18 13:58	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022618-DS-011
Date Collected: 02/26/18 13:25
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-4
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041	U	0.041	0.019	mg/Kg	☼	03/02/18 16:00	03/05/18 14:00	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022618-DS-012
Date Collected: 02/26/18 13:30
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-5
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047	U	0.047	0.021	mg/Kg	☼	03/02/18 16:00	03/05/18 14:02	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022618-DS-013
Date Collected: 02/26/18 13:35
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-6
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043	U	0.043	0.019	mg/Kg	☼	03/02/18 16:00	03/05/18 14:04	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022618-DS-014
Date Collected: 02/26/18 14:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-7
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	J	0.045	0.020	mg/Kg	☼	03/02/18 16:00	03/05/18 14:06	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022618-DS-015
Date Collected: 02/26/18 14:45
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-8
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.041	0.019	mg/Kg	☼	03/02/18 16:00	03/05/18 14:08	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022718-DS-016
Date Collected: 02/27/18 09:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-9
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021	J	0.039	0.017	mg/Kg	☼	03/02/18 16:00	03/05/18 14:10	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022718-DS-017
Date Collected: 02/27/18 10:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-10
Matrix: Solid
Percent Solids: 81.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	J	0.051	0.023	mg/Kg	☼	03/02/18 16:00	03/05/18 14:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022718-DS-018
Date Collected: 02/27/18 10:10
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-11
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	U	0.044	0.020	mg/Kg	☼	03/02/18 16:00	03/05/18 14:19	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022718-DS-019
Date Collected: 02/27/18 13:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-12
Matrix: Solid
Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028	J	0.056	0.025	mg/Kg	☼	03/02/18 16:00	03/05/18 14:21	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022718-DS-020
Date Collected: 02/27/18 14:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-13
Matrix: Solid
Percent Solids: 76.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025	J	0.050	0.022	mg/Kg	☼	03/02/18 16:00	03/05/18 14:23	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

General Chemistry

Client Sample ID: SO-17303-022618-DS-009
Date Collected: 02/26/18 09:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-2
Matrix: Solid
Percent Solids: 65.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	65.4		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	34.6		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

General Chemistry

Client Sample ID: SO-17303-022618-DS-010
Date Collected: 02/26/18 13:20
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-3
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.9		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	11.1		0.1	0.1	%			03/02/18 11:17	1

General Chemistry

Client Sample ID: SO-17303-022618-DS-011
Date Collected: 02/26/18 13:25
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-4
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.8		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	12.2		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

General Chemistry

Client Sample ID: SO-17303-022618-DS-012
Date Collected: 02/26/18 13:30
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-5
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.4		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	15.6		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

General Chemistry

Client Sample ID: SO-17303-022618-DS-013
Date Collected: 02/26/18 13:35
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-6
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.8		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	16.2		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

General Chemistry

Client Sample ID: SO-17303-022618-DS-014
Date Collected: 02/26/18 14:40
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-7
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80.5		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	19.5		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

General Chemistry

Client Sample ID: SO-17303-022618-DS-015
Date Collected: 02/26/18 14:45
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-8
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.3		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	16.7		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

General Chemistry

Client Sample ID: SO-17303-022718-DS-016
Date Collected: 02/27/18 09:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-9
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.3		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	11.7		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

General Chemistry

Client Sample ID: SO-17303-022718-DS-017
Date Collected: 02/27/18 10:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-10
Matrix: Solid
Percent Solids: 81.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81.9		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	18.1		0.1	0.1	%			03/02/18 11:17	1

General Chemistry

Client Sample ID: SO-17303-022718-DS-018
Date Collected: 02/27/18 10:10
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-11
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.3		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	12.7		0.1	0.1	%			03/02/18 11:17	1

General Chemistry

Client Sample ID: SO-17303-022718-DS-019
Date Collected: 02/27/18 13:50
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-12
Matrix: Solid
Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80.8		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	19.2		0.1	0.1	%			03/02/18 11:17	1

General Chemistry

Client Sample ID: SO-17303-022718-DS-020
Date Collected: 02/27/18 14:00
Date Received: 02/28/18 09:30

Lab Sample ID: 240-92035-13
Matrix: Solid
Percent Solids: 76.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	76.3		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	23.7		0.1	0.1	%			03/02/18 11:17	1

GC/MS VOA

Prep Batch: 316784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	5035	
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	5035	
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	5035	
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	5035	
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	5035	
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	5035	
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	5035	
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	5035	
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	5035	
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	5035	
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	5035	
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	5035	
MB 240-316784/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-316784/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 316897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-1	TB-17303-022618	Total/NA	Water	8260B	
MB 240-316897/6	Method Blank	Total/NA	Water	8260B	
LCS 240-316897/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 317015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	8260B	316784
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	8260B	316784
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	8260B	316784
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	8260B	316784
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	8260B	316784
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	8260B	316784
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	8260B	316784
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	8260B	316784
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	8260B	316784
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	8260B	316784
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	8260B	316784
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	8260B	316784
MB 240-316784/1-A	Method Blank	Total/NA	Solid	8260B	316784
LCS 240-316784/2-A	Lab Control Sample	Total/NA	Solid	8260B	316784

Analysis Batch: 317340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	8260B	316784

GC/MS Semi VOA

Prep Batch: 316666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	3540C	
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	3540C	
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	3540C	
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	3540C	

GC/MS Semi VOA (Continued)

Prep Batch: 316666 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	3540C	
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	3540C	
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	3540C	
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	3540C	
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	3540C	
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	3540C	
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	3540C	
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	3540C	
MB 240-316666/21-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-316666/22-A	Lab Control Sample	Total/NA	Solid	3540C	
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	3540C	

Analysis Batch: 316981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	8270C	316666
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	8270C	316666
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	8270C	316666
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	8270C	316666
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	8270C	316666
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	8270C	316666
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	8270C	316666
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	8270C	316666
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	8270C	316666
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	8270C	316666
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	8270C	316666
MB 240-316666/21-A	Method Blank	Total/NA	Solid	8270C	316666

Analysis Batch: 317213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	8270C	316666
LCS 240-316666/22-A	Lab Control Sample	Total/NA	Solid	8270C	316666
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	8270C	316666

GC Semi VOA

Prep Batch: 316734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	3540C	
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	3540C	
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	3540C	
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	3540C	
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	3540C	
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	3540C	
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	3540C	
MB 240-316734/14-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-316734/15-A	Lab Control Sample	Total/NA	Solid	3540C	
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	3540C	
240-92035-2 MSD	SO-17303-022618-DS-009	Total/NA	Solid	3540C	

GC Semi VOA (Continued)

Prep Batch: 316927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	3540C	
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	3540C	
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	3540C	
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	3540C	
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	3540C	
MB 240-316927/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-316927/24-A	Lab Control Sample	Total/NA	Solid	3540C	
240-92035-13 MS	SO-17303-022718-DS-020	Total/NA	Solid	3540C	
240-92035-13 MSD	SO-17303-022718-DS-020	Total/NA	Solid	3540C	

Analysis Batch: 317020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	8082A	316734
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	8082A	316734
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	8082A	316734
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	8082A	316734
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	8082A	316734
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	8082A	316734
MB 240-316734/14-A	Method Blank	Total/NA	Solid	8082A	316734
LCS 240-316734/15-A	Lab Control Sample	Total/NA	Solid	8082A	316734
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	8082A	316734
240-92035-2 MSD	SO-17303-022618-DS-009	Total/NA	Solid	8082A	316734

Analysis Batch: 317033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	8082A	316734

Analysis Batch: 317160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	8082A	316927
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	8082A	316927
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	8082A	316927
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	8082A	316927
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	8082A	316927
MB 240-316927/23-A	Method Blank	Total/NA	Solid	8082A	316927
LCS 240-316927/24-A	Lab Control Sample	Total/NA	Solid	8082A	316927
240-92035-13 MS	SO-17303-022718-DS-020	Total/NA	Solid	8082A	316927
240-92035-13 MSD	SO-17303-022718-DS-020	Total/NA	Solid	8082A	316927

Metals

Prep Batch: 316931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	3050B	
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	3050B	
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	3050B	
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	3050B	
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	3050B	
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	3050B	
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 316931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	3050B	
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	3050B	
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	3050B	
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	3050B	
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	3050B	
MB 240-316931/1-A	Method Blank	Total/NA	Solid	3050B	
MB 240-316931/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 240-316931/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-316931/3-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	3050B	
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	3050B	
240-92035-2 MSD	SO-17303-022618-DS-009	Total/NA	Solid	3050B	
240-92035-2 MSD	SO-17303-022618-DS-009	Total/NA	Solid	3050B	

Prep Batch: 316942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	7471A	
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	7471A	
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	7471A	
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	7471A	
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	7471A	
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	7471A	
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	7471A	
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	7471A	
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	7471A	
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	7471A	
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	7471A	
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	7471A	
MB 240-316942/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 240-316942/2-A	Lab Control Sample	Total/NA	Solid	7471A	
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	7471A	
240-92035-2 MSD	SO-17303-022618-DS-009	Total/NA	Solid	7471A	

Analysis Batch: 317172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	6020	316931
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	6020	316931
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	6020	316931
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	6020	316931
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	6020	316931
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	6020	316931
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	6020	316931
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	6020	316931
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	6020	316931
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	6020	316931
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	6020	316931
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	6020	316931
MB 240-316931/1-A ^2	Method Blank	Total/NA	Solid	6020	316931
LCS 240-316931/3-A ^2	Lab Control Sample	Total/NA	Solid	6020	316931
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	6020	316931
240-92035-2 MSD	SO-17303-022618-DS-009	Total/NA	Solid	6020	316931

Analysis Batch: 317188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	7471A	316942
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	7471A	316942
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	7471A	316942
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	7471A	316942
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	7471A	316942
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	7471A	316942
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	7471A	316942
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	7471A	316942
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	7471A	316942
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	7471A	316942
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	7471A	316942
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	7471A	316942
MB 240-316942/1-A	Method Blank	Total/NA	Solid	7471A	316942
LCS 240-316942/2-A	Lab Control Sample	Total/NA	Solid	7471A	316942
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	7471A	316942
240-92035-2 MSD	SO-17303-022618-DS-009	Total/NA	Solid	7471A	316942

Analysis Batch: 317239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	6010B	316931
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	6010B	316931
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	6010B	316931
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	6010B	316931
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	6010B	316931
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	6010B	316931
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	6010B	316931
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	6010B	316931
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	6010B	316931
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	6010B	316931
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	6010B	316931
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	6010B	316931
MB 240-316931/1-A	Method Blank	Total/NA	Solid	6010B	316931
LCS 240-316931/2-A	Lab Control Sample	Total/NA	Solid	6010B	316931
240-92035-2 MS	SO-17303-022618-DS-009	Total/NA	Solid	6010B	316931
240-92035-2 MSD	SO-17303-022618-DS-009	Total/NA	Solid	6010B	316931

General Chemistry

Analysis Batch: 316910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-2	SO-17303-022618-DS-009	Total/NA	Solid	Moisture	
240-92035-3	SO-17303-022618-DS-010	Total/NA	Solid	Moisture	
240-92035-4	SO-17303-022618-DS-011	Total/NA	Solid	Moisture	
240-92035-5	SO-17303-022618-DS-012	Total/NA	Solid	Moisture	
240-92035-6	SO-17303-022618-DS-013	Total/NA	Solid	Moisture	
240-92035-7	SO-17303-022618-DS-014	Total/NA	Solid	Moisture	
240-92035-8	SO-17303-022618-DS-015	Total/NA	Solid	Moisture	
240-92035-9	SO-17303-022718-DS-016	Total/NA	Solid	Moisture	
240-92035-10	SO-17303-022718-DS-017	Total/NA	Solid	Moisture	
240-92035-11	SO-17303-022718-DS-018	Total/NA	Solid	Moisture	
240-92035-12	SO-17303-022718-DS-019	Total/NA	Solid	Moisture	
240-92035-13	SO-17303-022718-DS-020	Total/NA	Solid	Moisture	
240-92035-2 DU	SO-17303-022618-DS-009	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 316910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92035-9 DU	SO-17303-022718-DS-016	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-316784/1-A
Matrix: Solid
Analysis Batch: 317015

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	97	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Benzene	40	U	40	24	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Bromodichloromethane	80	U	80	18	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Bromoform	80	U	80	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Bromomethane	200	U	200	28	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
2-Butanone (MEK)	600	U	600	50	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Carbon disulfide	200	U	200	18	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Carbon tetrachloride	40	U	40	27	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Chlorobenzene	40	U	40	30	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Chloroethane	200	U	200	28	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Chloroform	40	U	40	24	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Chloromethane	200	U	200	18	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1-Dichloroethane	40	U	40	31	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dichloroethane	40	U	40	30	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1-Dichloroethene	40	U	40	36	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dichloropropane	40	U	40	30	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
cis-1,3-Dichloropropene	40	U	40	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
trans-1,3-Dichloropropene	40	U	40	15	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Ethylbenzene	40	U	40	35	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
2-Hexanone	2000	U	2000	86	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Methylene Chloride	200	U	200	65	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	40	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Styrene	40	U	40	10	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1,2,2-Tetrachloroethane	40	U	40	24	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Tetrachloroethene	40	U	40	21	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Toluene	80	U	80	24	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Trichloroethene	40	U	40	37	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Vinyl chloride	32	U	32	17	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Xylenes, Total	120	U	120	28	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1,1-Trichloroethane	40	U	40	28	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1,2-Trichloroethane	40	U	40	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Cyclohexane	960	U	960	30	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dibromo-3-Chloropropane	200	U	200	48	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dibromoethane	200	U	200	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Dichlorodifluoromethane	80	U	80	22	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
cis-1,2-Dichloroethene	40	U	40	35	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
trans-1,2-Dichloroethene	40	U	40	35	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Isopropylbenzene	200	U	200	34	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Methyl acetate	960	U	960	75	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Methyl tert-butyl ether	200	U	200	26	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	23	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2,4-Trichlorobenzene	200	U	200	26	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,2-Dichlorobenzene	80	U	80	18	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,3-Dichlorobenzene	80	U	80	38	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
1,4-Dichlorobenzene	80	U	80	27	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Trichlorofluoromethane	80	U	80	34	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Dibromochloromethane	40	U	40	34	ug/Kg		03/01/18 21:57	03/04/18 12:01	1
Methylcyclohexane	960	U	960	37	ug/Kg		03/01/18 21:57	03/04/18 12:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		64 - 144	03/01/18 21:57	03/04/18 12:01	1
4-Bromofluorobenzene (Surr)	76		58 - 142	03/01/18 21:57	03/04/18 12:01	1
Toluene-d8 (Surr)	86		61 - 137	03/01/18 21:57	03/04/18 12:01	1
Dibromofluoromethane (Surr)	80		31 - 155	03/01/18 21:57	03/04/18 12:01	1

Lab Sample ID: LCS 240-316784/2-A
Matrix: Solid
Analysis Batch: 317015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	930		ug/Kg		46	24 - 125
Benzene	1000	1010		ug/Kg		101	77 - 120
Bromodichloromethane	1000	896		ug/Kg		90	61 - 132
Bromoform	1000	718		ug/Kg		72	40 - 140
Bromomethane	1000	780		ug/Kg		78	10 - 153
2-Butanone (MEK)	2000	2000		ug/Kg		100	51 - 120
Carbon disulfide	1000	632		ug/Kg		63	17 - 163
Carbon tetrachloride	1000	908		ug/Kg		91	43 - 144
Chlorobenzene	1000	996		ug/Kg		100	76 - 120
Chloroethane	1000	797		ug/Kg		80	10 - 166
Chloroform	1000	1030		ug/Kg		103	74 - 120
Chloromethane	1000	851		ug/Kg		85	41 - 124
1,1-Dichloroethane	1000	935		ug/Kg		94	72 - 120
1,2-Dichloroethane	1000	1000		ug/Kg		100	71 - 120
1,1-Dichloroethene	1000	822		ug/Kg		82	58 - 130
1,2-Dichloropropane	1000	1010		ug/Kg		101	78 - 122
cis-1,3-Dichloropropene	1000	1010		ug/Kg		101	66 - 126
trans-1,3-Dichloropropene	1000	833		ug/Kg		83	55 - 121
Ethylbenzene	1000	969		ug/Kg		97	76 - 120
2-Hexanone	2000	1980	J	ug/Kg		99	52 - 129
Methylene Chloride	1000	821		ug/Kg		82	64 - 126
4-Methyl-2-pentanone (MIBK)	2000	2050		ug/Kg		103	65 - 131
Styrene	1000	1010		ug/Kg		101	80 - 120
1,1,2,2-Tetrachloroethane	1000	988		ug/Kg		99	78 - 120
Tetrachloroethene	1000	959		ug/Kg		96	68 - 122
Toluene	1000	979		ug/Kg		98	74 - 120
Trichloroethene	1000	1030		ug/Kg		103	73 - 123
Vinyl chloride	1000	952		ug/Kg		95	49 - 131
Xylenes, Total	2000	2030		ug/Kg		102	78 - 120
1,1,1-Trichloroethane	1000	929		ug/Kg		93	60 - 136
1,1,2-Trichloroethane	1000	1050		ug/Kg		105	80 - 120
Cyclohexane	1000	788	J	ug/Kg		79	66 - 129
1,2-Dibromo-3-Chloropropane	1000	824		ug/Kg		82	40 - 133
1,2-Dibromoethane	1000	1020		ug/Kg		102	80 - 120
Dichlorodifluoromethane	1000	703		ug/Kg		70	15 - 127
cis-1,2-Dichloroethene	1000	1040		ug/Kg		104	78 - 120
trans-1,2-Dichloroethene	1000	915		ug/Kg		91	74 - 124
Isopropylbenzene	1000	934		ug/Kg		93	76 - 124
Methyl acetate	2000	1530		ug/Kg		77	63 - 126
Methyl tert-butyl ether	1000	1090		ug/Kg		109	68 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	736		ug/Kg		74	64 - 125
1,2,4-Trichlorobenzene	1000	839		ug/Kg		84	60 - 124
1,2-Dichlorobenzene	1000	942		ug/Kg		94	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-316784/2-A
Matrix: Solid
Analysis Batch: 317015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316784

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3-Dichlorobenzene			1000	921		ug/Kg		92	72 - 120		
1,4-Dichlorobenzene			1000	921		ug/Kg		92	71 - 120		
Trichlorofluoromethane			1000	785		ug/Kg		79	28 - 152		
Dibromochloromethane			1000	817		ug/Kg		82	46 - 125		
Methylcyclohexane			1000	714	J	ug/Kg		71	71 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*64 - 144*
4-Bromofluorobenzene (Surr)	*83*		*58 - 142*
Toluene-d8 (Surr)	*92*		*61 - 137*
Dibromofluoromethane (Surr)	*98*		*31 - 155*

Lab Sample ID: MB 240-316897/6
Matrix: Water
Analysis Batch: 316897

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			03/02/18 13:38	1
Benzene	1.0	U	1.0	0.28	ug/L			03/02/18 13:38	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			03/02/18 13:38	1
Bromoform	1.0	U	1.0	0.43	ug/L			03/02/18 13:38	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/02/18 13:38	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			03/02/18 13:38	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			03/02/18 13:38	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			03/02/18 13:38	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			03/02/18 13:38	1
Chloroethane	1.0	U	1.0	0.41	ug/L			03/02/18 13:38	1
Chloroform	1.0	U	1.0	0.31	ug/L			03/02/18 13:38	1
Chloromethane	1.0	U	1.0	0.43	ug/L			03/02/18 13:38	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			03/02/18 13:38	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/02/18 13:38	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			03/02/18 13:38	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			03/02/18 13:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			03/02/18 13:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			03/02/18 13:38	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			03/02/18 13:38	1
2-Hexanone	10	U	10	1.2	ug/L			03/02/18 13:38	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			03/02/18 13:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			03/02/18 13:38	1
Styrene	1.0	U	1.0	0.23	ug/L			03/02/18 13:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			03/02/18 13:38	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			03/02/18 13:38	1
Toluene	1.0	U	1.0	0.23	ug/L			03/02/18 13:38	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			03/02/18 13:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/02/18 13:38	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			03/02/18 13:38	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/02/18 13:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			03/02/18 13:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-316897/6
Matrix: Water
Analysis Batch: 316897

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	1.0	U	1.0	0.44	ug/L			03/02/18 13:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			03/02/18 13:38	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			03/02/18 13:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			03/02/18 13:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/02/18 13:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/02/18 13:38	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			03/02/18 13:38	1
Methyl acetate	10	U	10	1.4	ug/L			03/02/18 13:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			03/02/18 13:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/02/18 13:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			03/02/18 13:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			03/02/18 13:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			03/02/18 13:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			03/02/18 13:38	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			03/02/18 13:38	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			03/02/18 13:38	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			03/02/18 13:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 138*		*03/02/18 13:38*	*1*
4-Bromofluorobenzene (Surr)	*90*		*69 - 120*		*03/02/18 13:38*	*1*
Toluene-d8 (Surr)	*98*		*73 - 120*		*03/02/18 13:38*	*1*
Dibromofluoromethane (Surr)	*93*		*69 - 124*		*03/02/18 13:38*	*1*

Lab Sample ID: LCS 240-316897/4
Matrix: Water
Analysis Batch: 316897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	13.9		ug/L		69	35 - 131
Benzene	10.0	9.21		ug/L		92	79 - 120
Bromodichloromethane	10.0	9.75		ug/L		97	79 - 125
Bromoform	10.0	8.19		ug/L		82	55 - 145
Bromomethane	10.0	11.1		ug/L		111	17 - 158
2-Butanone (MEK)	20.0	14.7		ug/L		74	43 - 149
Carbon disulfide	10.0	10.1		ug/L		101	49 - 141
Carbon tetrachloride	10.0	11.8		ug/L		118	55 - 171
Chlorobenzene	10.0	10.0		ug/L		100	80 - 120
Chloroethane	10.0	6.09		ug/L		61	10 - 149
Chloroform	10.0	11.0		ug/L		110	80 - 120
Chloromethane	10.0	8.01		ug/L		80	59 - 124
1,1-Dichloroethane	10.0	10.1		ug/L		101	74 - 120
1,2-Dichloroethane	10.0	10.8		ug/L		108	68 - 133
1,1-Dichloroethene	10.0	10.7		ug/L		107	65 - 127
1,2-Dichloropropane	10.0	9.52		ug/L		95	78 - 127
cis-1,3-Dichloropropene	10.0	8.65		ug/L		86	75 - 120
trans-1,3-Dichloropropene	10.0	7.72		ug/L		77	67 - 120
Ethylbenzene	10.0	10.1		ug/L		101	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-316897/4
Matrix: Water
Analysis Batch: 316897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	20.0	14.2		ug/L		71	28 - 169
Methylene Chloride	10.0	9.73		ug/L		97	64 - 140
4-Methyl-2-pentanone (MIBK)	20.0	14.3		ug/L		72	53 - 144
Styrene	10.0	9.46		ug/L		95	80 - 121
1,1,2,2-Tetrachloroethane	10.0	8.42		ug/L		84	58 - 122
Tetrachloroethene	10.0	10.2		ug/L		102	80 - 122
Toluene	10.0	9.65		ug/L		97	78 - 120
Trichloroethene	10.0	9.90		ug/L		99	76 - 124
Vinyl chloride	10.0	9.49		ug/L		95	65 - 124
Xylenes, Total	20.0	20.3		ug/L		101	80 - 120
1,1,1-Trichloroethane	10.0	11.6		ug/L		116	64 - 147
1,1,2-Trichloroethane	10.0	8.85		ug/L		88	76 - 121
Cyclohexane	10.0	8.90		ug/L		89	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	6.37		ug/L		64	50 - 130
1,2-Dibromoethane	10.0	8.86		ug/L		89	80 - 120
Dichlorodifluoromethane	10.0	9.51		ug/L		95	42 - 141
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	77 - 120
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	74 - 124
Isopropylbenzene	10.0	10.2		ug/L		102	80 - 128
Methyl acetate	20.0	14.0		ug/L		70	63 - 137
Methyl tert-butyl ether	10.0	9.05		ug/L		90	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.9		ug/L		129	65 - 144
1,2,4-Trichlorobenzene	10.0	8.34		ug/L		83	34 - 141
1,2-Dichlorobenzene	10.0	9.48		ug/L		95	80 - 120
1,3-Dichlorobenzene	10.0	9.25		ug/L		93	80 - 120
1,4-Dichlorobenzene	10.0	9.60		ug/L		96	80 - 120
Trichlorofluoromethane	10.0	16.8		ug/L		168	27 - 176
Dibromochloromethane	10.0	9.88		ug/L		99	64 - 129
Methylcyclohexane	10.0	8.98		ug/L		90	63 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 138*
4-Bromofluorobenzene (Surr)	*91*		*69 - 120*
Toluene-d8 (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*69 - 124*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-316666/21-A
Matrix: Solid
Analysis Batch: 316981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	3.5	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2,4,6-Trichlorophenol	260	U	260	8.9	ug/Kg		03/01/18 08:26	03/03/18 08:48	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-316666/21-A
Matrix: Solid
Analysis Batch: 316981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	260	U	260	20	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2,4-Dinitrophenol	150	U	150	21	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2,4-Dinitrotoluene	260	U	260	17	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2-Chloronaphthalene	260	U	260	0.45	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2-Chlorophenol	260	U	260	8.2	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2-Methylnaphthalene	260	U	260	0.50	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2-Methylphenol	260	U	260	11	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
2-Nitrophenol	260	U	260	8.3	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
3,3'-Dichlorobenzidine	1600	U	1600	18	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
3-Nitroaniline	200	U	200	16	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
4-Bromophenyl phenyl ether	260	U	260	13	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
4-Chloroaniline	200	U	200	17	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
4-Chlorophenyl phenyl ether	260	U	260	13	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
4-Nitroaniline	200	U	200	26	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
4-Nitrophenol	330	U	330	17	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Acenaphthene	260	U	260	0.76	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Acenaphthylene	260	U	260	0.35	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Acetophenone	260	U	260	9.2	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Anthracene	260	U	260	0.78	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Atrazine	40	U	40	9.1	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Benzaldehyde	260	U	260	12	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Benzo[a]anthracene	260	U	260	0.63	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Benzo[a]pyrene	260	U	260	0.64	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Benzo[b]fluoranthene	260	U	260	0.59	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Benzo[g,h,i]perylene	260	U	260	0.35	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Benzo[k]fluoranthene	260	U	260	0.68	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Bis(2-ethylhexyl) phthalate	260	U	260	19	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Caprolactam	260	U	260	37	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Carbazole	260	U	260	27	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Chrysene	260	U	260	1.1	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Dibenz(a,h)anthracene	260	U	260	0.66	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Dibenzofuran	260	U	260	0.66	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Diethyl phthalate	260	U	260	16	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Dimethyl phthalate	260	U	260	17	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Di-n-butyl phthalate	260	U	260	15	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Di-n-octyl phthalate	260	U	260	7.9	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Fluoranthene	260	U	260	0.55	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Fluorene	260	U	260	0.53	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Hexachlorobutadiene	40	U	40	5.6	ug/Kg		03/01/18 08:26	03/03/18 08:48	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-316666/21-A
Matrix: Solid
Analysis Batch: 316981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	260	U	260	8.1	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Hexachloroethane	260	U	260	9.0	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Indeno[1,2,3-cd]pyrene	260	U	260	0.35	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Isophorone	260	U	260	13	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Naphthalene	260	U	260	0.82	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Nitrobenzene	260	U	260	2.2	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
N-Nitrosodi-n-propylamine	260	U	260	6.3	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Phenol	260	U	260	7.3	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Phenanthrene	260	U	260	0.73	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
Pyrene	260	U	260	0.44	ug/Kg		03/01/18 08:26	03/03/18 08:48	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		03/01/18 08:26	03/03/18 08:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*32 - 120*	*03/01/18 08:26*	*03/03/18 08:48*	*1*
2-Fluorophenol (Surr)	*41*		*29 - 120*	*03/01/18 08:26*	*03/03/18 08:48*	*1*
2,4,6-Tribromophenol (Surr)	*27*		*10 - 120*	*03/01/18 08:26*	*03/03/18 08:48*	*1*
Nitrobenzene-d5 (Surr)	*46*		*30 - 120*	*03/01/18 08:26*	*03/03/18 08:48*	*1*
Phenol-d5 (Surr)	*44*		*29 - 120*	*03/01/18 08:26*	*03/03/18 08:48*	*1*
Terphenyl-d14 (Surr)	*54*		*41 - 120*	*03/01/18 08:26*	*03/03/18 08:48*	*1*

Lab Sample ID: LCS 240-316666/22-A
Matrix: Solid
Analysis Batch: 317213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	510		ug/Kg		76	48 - 120
2,2'-oxybis[1-chloropropane]	667	525		ug/Kg		79	37 - 120
2,4,5-Trichlorophenol	667	392		ug/Kg		59	34 - 120
2,4,6-Trichlorophenol	667	370		ug/Kg		56	19 - 120
2,4-Dichlorophenol	667	467		ug/Kg		70	48 - 120
2,4-Dimethylphenol	667	268		ug/Kg		40	37 - 120
2,4-Dinitrophenol	1330	491		ug/Kg		37	10 - 120
2,4-Dinitrotoluene	667	543		ug/Kg		82	53 - 120
2,6-Dinitrotoluene	667	528		ug/Kg		79	54 - 120
2-Chloronaphthalene	667	501		ug/Kg		75	49 - 120
2-Chlorophenol	667	497		ug/Kg		74	50 - 120
2-Methylnaphthalene	667	522		ug/Kg		78	49 - 120
2-Methylphenol	667	484		ug/Kg		73	49 - 120
2-Nitroaniline	667	539		ug/Kg		81	46 - 120
2-Nitrophenol	667	530		ug/Kg		79	46 - 120
3,3'-Dichlorobenzidine	1330	918	J	ug/Kg		69	40 - 120
3-Nitroaniline	667	475		ug/Kg		71	48 - 120
4,6-Dinitro-2-methylphenol	1330	665		ug/Kg		50	18 - 120
4-Bromophenyl phenyl ether	667	541		ug/Kg		81	51 - 120
4-Chloro-3-methylphenol	667	397		ug/Kg		60	47 - 120
4-Chloroaniline	667	430		ug/Kg		65	37 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-316666/22-A
Matrix: Solid
Analysis Batch: 317213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorophenyl phenyl ether	667	514		ug/Kg		77	49 - 120
4-Nitroaniline	667	508		ug/Kg		76	49 - 120
4-Nitrophenol	1330	732		ug/Kg		55	42 - 120
Acenaphthene	667	515		ug/Kg		77	48 - 120
Acenaphthylene	667	540		ug/Kg		81	46 - 120
Acetophenone	667	494		ug/Kg		74	46 - 120
Anthracene	667	520		ug/Kg		78	51 - 120
Atrazine	1330	1140		ug/Kg		86	57 - 120
Benzaldehyde	1330	1120		ug/Kg		84	48 - 120
Benzo[a]anthracene	667	517		ug/Kg		78	53 - 120
Benzo[a]pyrene	667	557		ug/Kg		84	50 - 120
Benzo[b]fluoranthene	667	584		ug/Kg		88	48 - 120
Benzo[g,h,i]perylene	667	556		ug/Kg		83	50 - 120
Benzo[k]fluoranthene	667	562		ug/Kg		84	51 - 120
Bis(2-chloroethoxy)methane	667	533		ug/Kg		80	50 - 120
Bis(2-chloroethyl)ether	667	517		ug/Kg		78	48 - 120
Bis(2-ethylhexyl) phthalate	667	652		ug/Kg		98	52 - 120
Butyl benzyl phthalate	667	523		ug/Kg		79	53 - 120
Caprolactam	1330	1080		ug/Kg		81	59 - 120
Carbazole	667	533		ug/Kg		80	56 - 120
Chrysene	667	517		ug/Kg		78	54 - 120
Dibenz(a,h)anthracene	667	565		ug/Kg		85	48 - 120
Dibenzofuran	667	519		ug/Kg		78	49 - 120
Diethyl phthalate	667	519		ug/Kg		78	52 - 120
Dimethyl phthalate	667	518		ug/Kg		78	53 - 120
Di-n-butyl phthalate	667	523		ug/Kg		78	56 - 120
Di-n-octyl phthalate	667	533		ug/Kg		80	42 - 120
Fluoranthene	667	549		ug/Kg		82	53 - 120
Fluorene	667	516		ug/Kg		77	50 - 120
Hexachlorobenzene	667	522		ug/Kg		78	46 - 120
Hexachlorobutadiene	667	485		ug/Kg		73	44 - 120
Hexachlorocyclopentadiene	667	307		ug/Kg		46	14 - 120
Hexachloroethane	667	497		ug/Kg		75	45 - 120
Indeno[1,2,3-cd]pyrene	667	558		ug/Kg		84	49 - 120
Isophorone	667	525		ug/Kg		79	47 - 120
Naphthalene	667	508		ug/Kg		76	48 - 120
Nitrobenzene	667	521		ug/Kg		78	48 - 120
N-Nitrosodi-n-propylamine	667	527		ug/Kg		79	49 - 120
N-Nitrosodiphenylamine	667	540		ug/Kg		81	53 - 120
Pentachlorophenol	1330	434		ug/Kg		33	14 - 120
Phenol	667	464		ug/Kg		70	49 - 120
Phenanthrene	667	514		ug/Kg		77	52 - 120
Pyrene	667	554		ug/Kg		83	55 - 120
3 & 4 Methylphenol	667	464		ug/Kg		70	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*77*		*32 - 120*
2-Fluorophenol (Surr)	*78*		*29 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-316666/22-A
Matrix: Solid
Analysis Batch: 317213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316666

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*43*		*10 - 120*
Nitrobenzene-d5 (Surr)	*82*		*30 - 120*
Phenol-d5 (Surr)	*77*		*29 - 120*
Terphenyl-d14 (Surr)	*86*		*41 - 120*

Lab Sample ID: 240-92035-2 MS
Matrix: Solid
Analysis Batch: 317213

Client Sample ID: SO-17303-022618-DS-009
Prep Type: Total/NA
Prep Batch: 316666

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	2700	U	1010	797	J	ug/Kg	☼	79	33 - 120
2,2'-oxybis[1-chloropropane]	2700	U	1010	849	J	ug/Kg	☼	84	26 - 120
2,4,5-Trichlorophenol	2700	U	1010	521	J	ug/Kg	☼	51	20 - 120
2,4,6-Trichlorophenol	2700	U	1010	626	J	ug/Kg	☼	62	19 - 120
2,4-Dichlorophenol	2700	U	1010	581	J	ug/Kg	☼	57	32 - 120
2,4-Dimethylphenol	2700	U F1	1010	2700	U F1	ug/Kg	☼	0	28 - 120
2,4-Dinitrophenol	1500	U	2030	1530		ug/Kg	☼	76	10 - 120
2,4-Dinitrotoluene	2700	U	1010	722	J	ug/Kg	☼	71	38 - 120
2,6-Dinitrotoluene	2700	U	1010	781	J	ug/Kg	☼	77	43 - 120
2-Chloronaphthalene	2700	U	1010	778	J	ug/Kg	☼	77	35 - 120
2-Chlorophenol	2700	U	1010	677	J	ug/Kg	☼	67	30 - 120
2-Methylnaphthalene	230	J	1010	1120	J	ug/Kg	☼	88	31 - 120
2-Methylphenol	2700	U F1	1010	261	J F1	ug/Kg	☼	26	31 - 120
2-Nitroaniline	2000	U	1010	771	J	ug/Kg	☼	76	29 - 120
2-Nitrophenol	2700	U	1010	784	J	ug/Kg	☼	77	26 - 120
3,3'-Dichlorobenzidine	16000	U	2030	739	J	ug/Kg	☼	36	10 - 120
3-Nitroaniline	2000	U	1010	583	J	ug/Kg	☼	58	21 - 120
4,6-Dinitro-2-methylphenol	1500	U	2030	1080	J	ug/Kg	☼	53	10 - 120
4-Bromophenyl phenyl ether	2700	U	1010	731	J	ug/Kg	☼	72	44 - 120
4-Chloro-3-methylphenol	2700	U F1	1010	2700	U F1	ug/Kg	☼	0	31 - 120
4-Chloroaniline	2000	U	1010	574	J	ug/Kg	☼	57	15 - 120
4-Chlorophenyl phenyl ether	2700	U	1010	783	J	ug/Kg	☼	77	41 - 120
4-Nitroaniline	2000	U	1010	585	J	ug/Kg	☼	58	23 - 120
4-Nitrophenol	3300	U F1	2030	3300	U F1	ug/Kg	☼	0	32 - 120
Acenaphthene	120	J	1010	883	J	ug/Kg	☼	76	36 - 120
Acenaphthylene	41	J	1010	860	J	ug/Kg	☼	81	35 - 120
Acetophenone	2700	U	1010	907	J	ug/Kg	☼	90	31 - 120
Anthracene	280	J	1010	976	J	ug/Kg	☼	69	42 - 120
Atrazine	400	U	2030	1580		ug/Kg	☼	78	41 - 120
Benzaldehyde	2700	U	2030	1700	J	ug/Kg	☼	84	28 - 120
Benzo[a]anthracene	1700	J F1	1010	1820	J F1	ug/Kg	☼	10	35 - 120
Benzo[a]pyrene	2600	J F1	1010	2430	J F1	ug/Kg	☼	-20	33 - 120
Benzo[b]fluoranthene	4700		1010	4010	4	ug/Kg	☼	-71	26 - 120
Benzo[g,h,i]perylene	1900	J F1	1010	1760	J F1	ug/Kg	☼	-10	16 - 120
Benzo[k]fluoranthene	1900	J F1	1010	1970	J F1	ug/Kg	☼	3	33 - 120
Bis(2-chloroethoxy)methane	2700	U	1010	822	J	ug/Kg	☼	81	36 - 120
Bis(2-chloroethyl)ether	810	U	1010	609	J	ug/Kg	☼	60	33 - 120
Bis(2-ethylhexyl) phthalate	930	J	1010	1520	J	ug/Kg	☼	58	40 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-92035-2 MS
Matrix: Solid
Analysis Batch: 317213

Client Sample ID: SO-17303-022618-DS-009
Prep Type: Total/NA
Prep Batch: 316666

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	280	J	1010	948	J	ug/Kg	☼	66	46 - 120
Caprolactam	2700	U	2030	1970	J	ug/Kg	☼	97	33 - 128
Carbazole	2700	U	1010	925	J	ug/Kg	☼	91	35 - 120
Chrysene	2900	F1	1010	2690	J F1	ug/Kg	☼	-23	33 - 120
Dibenz(a,h)anthracene	2700	U	1010	830	J	ug/Kg	☼	82	30 - 120
Dibenzofuran	82	J	1010	881	J	ug/Kg	☼	79	37 - 120
Diethyl phthalate	2700	U	1010	909	J	ug/Kg	☼	90	44 - 120
Dimethyl phthalate	2700	U	1010	784	J	ug/Kg	☼	77	42 - 120
Di-n-butyl phthalate	2700	U	1010	929	J	ug/Kg	☼	92	45 - 120
Di-n-octyl phthalate	2700	U	1010	1010	J	ug/Kg	☼	100	35 - 120
Fluoranthene	5900		1010	4720	4	ug/Kg	☼	-115	26 - 121
Fluorene	190	J	1010	963	J	ug/Kg	☼	76	36 - 120
Hexachlorobenzene	2700	U	1010	674	J	ug/Kg	☼	67	36 - 120
Hexachlorobutadiene	400	U	1010	761		ug/Kg	☼	75	31 - 120
Hexachlorocyclopentadiene	2700	U F1	1010	2700	U F1	ug/Kg	☼	0	10 - 120
Hexachloroethane	2700	U	1010	466	J	ug/Kg	☼	46	15 - 120
Indeno[1,2,3-cd]pyrene	1700	J F1	1010	1730	J F1	ug/Kg	☼	7	24 - 120
Isophorone	2700	U	1010	828	J	ug/Kg	☼	82	34 - 120
Naphthalene	410	J	1010	1190	J	ug/Kg	☼	77	29 - 120
Nitrobenzene	2700	U	1010	793	J	ug/Kg	☼	78	33 - 120
N-Nitrosodi-n-propylamine	2700	U	1010	862	J	ug/Kg	☼	85	32 - 120
N-Nitrosodiphenylamine	2700	U	1010	835	J	ug/Kg	☼	82	29 - 120
Pentachlorophenol	1500	U	2030	1800		ug/Kg	☼	89	10 - 120
Phenol	2700	U	1010	256	J	ug/Kg	☼	25	21 - 120
Phenanthrene	1900	J F1	1010	2060	J F1	ug/Kg	☼	16	28 - 120
Pyrene	4800		1010	3910	4	ug/Kg	☼	-88	28 - 120
3 & 4 Methylphenol	2700	U	1010	337	J	ug/Kg	☼	33	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*67*		*32 - 120*
2-Fluorophenol (Surr)	*56*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*53*		*10 - 120*
Nitrobenzene-d5 (Surr)	*72*		*30 - 120*
Phenol-d5 (Surr)	*45*		*29 - 120*
Terphenyl-d14 (Surr)	*70*		*41 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-316734/14-A
Matrix: Solid
Analysis Batch: 317020

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		03/01/18 11:52	03/04/18 19:50	1
Aroclor-1221	50	U	50	24	ug/Kg		03/01/18 11:52	03/04/18 19:50	1
Aroclor-1232	50	U	50	23	ug/Kg		03/01/18 11:52	03/04/18 19:50	1
Aroclor-1242	50	U	50	19	ug/Kg		03/01/18 11:52	03/04/18 19:50	1
Aroclor-1248	50	U	50	24	ug/Kg		03/01/18 11:52	03/04/18 19:50	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 240-316734/14-A
Matrix: Solid
Analysis Batch: 317020

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1254	50	U	50	23	ug/Kg		03/01/18 11:52	03/04/18 19:50	1
Aroclor-1260	50	U	50	22	ug/Kg		03/01/18 11:52	03/04/18 19:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*101*		*14 - 128*	*03/01/18 11:52*	*03/04/18 19:50*	*1*
DCB Decachlorobiphenyl	*105*		*10 - 132*	*03/01/18 11:52*	*03/04/18 19:50*	*1*

Lab Sample ID: LCS 240-316734/15-A
Matrix: Solid
Analysis Batch: 317020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	944		ug/Kg		94	47 - 120
Aroclor-1260	1000	998		ug/Kg		100	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*105*		*14 - 128*
DCB Decachlorobiphenyl	*118*		*10 - 132*

Lab Sample ID: 240-92035-2 MS
Matrix: Solid
Analysis Batch: 317020

Client Sample ID: SO-17303-022618-DS-009
Prep Type: Total/NA
Prep Batch: 316734

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	75	U F2	1530	1310		ug/Kg	☼	85	31 - 120
Aroclor-1260	98	F2	1530	1430		ug/Kg	☼	87	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*98*		*14 - 128*
DCB Decachlorobiphenyl	*169*	*X*	*10 - 132*

Lab Sample ID: 240-92035-2 MSD
Matrix: Solid
Analysis Batch: 317020

Client Sample ID: SO-17303-022618-DS-009
Prep Type: Total/NA
Prep Batch: 316734

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	75	U F2	1470	1160	F2	ug/Kg	☼	79	31 - 120	31	30
Aroclor-1260	65	J F2 p	1470	1320	F2	ug/Kg	☼	85	21 - 122	41	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*14 - 128*
DCB Decachlorobiphenyl	*192*	*X*	*10 - 132*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 240-316927/23-A
Matrix: Solid
Analysis Batch: 317160

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316927

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1221	50	U	50	24	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1232	50	U	50	23	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1242	50	U	50	19	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1248	50	U	50	24	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1254	50	U	50	23	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1260	50	U	50	22	ug/Kg		03/02/18 11:50	03/05/18 20:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*101*		*14 - 128*	*03/02/18 11:50*	*03/05/18 20:37*	*1*
DCB Decachlorobiphenyl	*113*		*10 - 132*	*03/02/18 11:50*	*03/05/18 20:37*	*1*

Lab Sample ID: LCS 240-316927/24-A
Matrix: Solid
Analysis Batch: 317160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316927

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	777		ug/Kg		78	47 - 120		
Aroclor-1260			1000	959		ug/Kg		96	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*14 - 128*
DCB Decachlorobiphenyl	*98*		*10 - 132*

Lab Sample ID: 240-92035-13 MS
Matrix: Solid
Analysis Batch: 317160

Client Sample ID: SO-17303-022718-DS-020
Prep Type: Total/NA
Prep Batch: 316927

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	67	U	1320	889		ug/Kg	☼	67	31 - 120		
Aroclor-1260	67	U	1320	1060		ug/Kg	☼	80	21 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*14 - 128*
DCB Decachlorobiphenyl	*84*		*10 - 132*

Lab Sample ID: 240-92035-13 MSD
Matrix: Solid
Analysis Batch: 317160

Client Sample ID: SO-17303-022718-DS-020
Prep Type: Total/NA
Prep Batch: 316927

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	67	U	1280	732		ug/Kg	☼	57	31 - 120	19	30
Aroclor-1260	67	U	1280	898		ug/Kg	☼	70	21 - 122	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*65*		*14 - 128*
DCB Decachlorobiphenyl	*71*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-316931/1-A
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80	U	0.80	0.36	mg/Kg		03/02/18 14:00	03/05/18 11:25	1
Beryllium	0.16	U	0.16	0.054	mg/Kg		03/02/18 14:00	03/05/18 11:25	1
Cadmium	0.080	U	0.080	0.048	mg/Kg		03/02/18 14:00	03/05/18 11:25	1
Cobalt	0.40	U	0.40	0.20	mg/Kg		03/02/18 14:00	03/05/18 11:25	1
Chromium	0.80	U	0.80	0.15	mg/Kg		03/02/18 14:00	03/05/18 11:25	1
Copper	0.80	U	0.80	0.24	mg/Kg		03/02/18 14:00	03/05/18 11:25	1
Manganese	0.80	U	0.80	0.31	mg/Kg		03/02/18 14:00	03/05/18 11:25	1
Nickel	0.80	U	0.80	0.23	mg/Kg		03/02/18 14:00	03/05/18 11:25	1
Zinc	2.0	U	2.0	1.4	mg/Kg		03/02/18 14:00	03/05/18 11:25	1

Lab Sample ID: LCS 240-316931/2-A
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	185		mg/Kg		92	80 - 120
Beryllium	5.00	4.74		mg/Kg		95	80 - 120
Cadmium	5.00	4.73		mg/Kg		95	80 - 120
Cobalt	50.0	46.2		mg/Kg		92	80 - 120
Chromium	20.0	18.9		mg/Kg		94	80 - 120
Copper	25.0	23.6		mg/Kg		94	80 - 120
Manganese	50.0	47.5		mg/Kg		95	80 - 120
Nickel	50.0	47.1		mg/Kg		94	80 - 120
Zinc	50.0	47.7		mg/Kg		95	80 - 120

Lab Sample ID: 240-92035-2 MS
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: SO-17303-022618-DS-009
Prep Type: Total/NA
Prep Batch: 316931

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	71		248	298		mg/Kg	☼	92	75 - 125
Beryllium	0.35		6.21	5.87		mg/Kg	☼	89	75 - 125
Cadmium	1.1		6.21	6.68		mg/Kg	☼	90	75 - 125
Cobalt	4.3		62.1	62.6		mg/Kg	☼	94	75 - 125
Chromium	17		24.8	40.2		mg/Kg	☼	92	75 - 125
Copper	27		31.1	54.0		mg/Kg	☼	87	75 - 125
Manganese	390		62.1	467	4	mg/Kg	☼	119	75 - 125
Nickel	14		62.1	73.4		mg/Kg	☼	95	75 - 125
Zinc	250		62.1	301		mg/Kg	☼	85	75 - 125

Lab Sample ID: 240-92035-2 MSD
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: SO-17303-022618-DS-009
Prep Type: Total/NA
Prep Batch: 316931

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	71		248	306		mg/Kg	☼	95	75 - 125	3	20
Beryllium	0.35		6.21	5.96		mg/Kg	☼	90	75 - 125	1	20
Cadmium	1.1		6.21	6.94		mg/Kg	☼	94	75 - 125	4	20
Cobalt	4.3		62.1	63.5		mg/Kg	☼	95	75 - 125	1	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-92035-2 MSD
Matrix: Solid
Analysis Batch: 317239

Client Sample ID: SO-17303-022618-DS-009
Prep Type: Total/NA
Prep Batch: 316931

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	17		24.8	41.2		mg/Kg	☼	95	75 - 125	2	20
Copper	27		31.1	56.3		mg/Kg	☼	95	75 - 125	4	20
Manganese	390		62.1	446	4	mg/Kg	☼	84	75 - 125	5	20
Nickel	14		62.1	74.5		mg/Kg	☼	97	75 - 125	1	20
Zinc	250		62.1	312		mg/Kg	☼	103	75 - 125	4	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-316931/1-A ^2
Matrix: Solid
Analysis Batch: 317172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	U	0.16	0.13	mg/Kg		03/02/18 14:00	03/05/18 10:39	2
Arsenic	0.080	U	0.080	0.060	mg/Kg		03/02/18 14:00	03/05/18 10:39	2
Lead	0.161	J	0.20	0.062	mg/Kg		03/02/18 14:00	03/05/18 10:39	2
Selenium	0.16	U	0.16	0.12	mg/Kg		03/02/18 14:00	03/05/18 10:39	2
Thallium	0.080	U	0.080	0.048	mg/Kg		03/02/18 14:00	03/05/18 10:39	2
Vanadium	0.80	U	0.80	0.23	mg/Kg		03/02/18 14:00	03/05/18 10:39	2
Silver	0.080	U	0.080	0.022	mg/Kg		03/02/18 14:00	03/05/18 10:39	2

Lab Sample ID: LCS 240-316931/3-A ^2
Matrix: Solid
Analysis Batch: 317172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	8.84		mg/Kg		88	80 - 120
Arsenic	100	90.0		mg/Kg		90	80 - 120
Lead	100	98.5		mg/Kg		99	80 - 120
Selenium	100	85.9		mg/Kg		86	80 - 120
Thallium	25.0	23.4		mg/Kg		94	80 - 120
Vanadium	100	92.0		mg/Kg		92	80 - 120
Silver	10.0	9.66		mg/Kg		97	80 - 120

Lab Sample ID: 240-92035-2 MS
Matrix: Solid
Analysis Batch: 317172

Client Sample ID: SO-17303-022618-DS-009
Prep Type: Total/NA
Prep Batch: 316931

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.64	F1 F2	14.7	9.99	F1	mg/Kg	☼	64	75 - 125
Arsenic	6.5		147	137		mg/Kg	☼	89	75 - 125
Lead	56	B	147	195		mg/Kg	☼	94	75 - 125
Selenium	0.80		147	117		mg/Kg	☼	79	75 - 125
Thallium	0.25		36.7	33.9		mg/Kg	☼	92	75 - 125
Vanadium	14		147	152		mg/Kg	☼	94	75 - 125
Silver	0.15		14.7	13.8		mg/Kg	☼	93	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-92035-2 MSD — **Client Sample ID: SO-17303-022618-DS-009**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 317172 — **Prep Batch: 316931**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.64	F1 F2	14.7	7.89	F1 F2	mg/Kg	☼	49	75 - 125	23	20
Arsenic	6.5		147	139		mg/Kg	☼	90	75 - 125	1	20
Lead	56	B	147	199		mg/Kg	☼	97	75 - 125	2	20
Selenium	0.80		147	118		mg/Kg	☼	80	75 - 125	1	20
Thallium	0.25		36.7	33.8		mg/Kg	☼	91	75 - 125	0	20
Vanadium	14		147	154		mg/Kg	☼	95	75 - 125	1	20
Silver	0.15		14.7	13.9		mg/Kg	☼	93	75 - 125	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-316942/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 317188 — **Prep Batch: 316942**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.018	mg/Kg		03/02/18 16:00	03/05/18 13:42	1

Lab Sample ID: LCS 240-316942/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 317188 — **Prep Batch: 316942**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.829		mg/Kg		100	80 - 120

Lab Sample ID: 240-92035-2 MS — **Client Sample ID: SO-17303-022618-DS-009**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 317188 — **Prep Batch: 316942**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.059	J	0.239	0.282		mg/Kg	☼	93	80 - 120

Lab Sample ID: 240-92035-2 MSD — **Client Sample ID: SO-17303-022618-DS-009**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 317188 — **Prep Batch: 316942**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.059	J	0.239	0.275		mg/Kg	☼	90	80 - 120	2	20

Method: Moisture - Percent Moisture

Lab Sample ID: 240-92035-2 DU — **Client Sample ID: SO-17303-022618-DS-009**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 316910

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	65.4		42.8	F3	%		42	20
Percent Moisture	34.6		57.2	F3	%		49	20

Method: Moisture - Percent Moisture (Continued)

Lab Sample ID: 240-92035-9 DU
Matrix: Solid
Analysis Batch: 316910

Client Sample ID: SO-17303-022718-DS-016
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	88.3			88.5		%				0.2	20
Percent Moisture	11.7			11.5		%				2	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-144)	(58-142)	(61-137)	(31-155)
240-92035-2	SO-17303-022618-DS-009	84	72	85	78
240-92035-3	SO-17303-022618-DS-010	89	83	94	93
240-92035-4	SO-17303-022618-DS-011	100	90	104	103
240-92035-4	SO-17303-022618-DS-011	98	92	104	114
240-92035-5	SO-17303-022618-DS-012	95	79	96	95
240-92035-6	SO-17303-022618-DS-013	90	96	85	53
240-92035-7	SO-17303-022618-DS-014	72	68	78	68
240-92035-8	SO-17303-022618-DS-015	81	66	79	80
240-92035-9	SO-17303-022718-DS-016	84	79	91	84
240-92035-10	SO-17303-022718-DS-017	87	78	94	93
240-92035-11	SO-17303-022718-DS-018	85	79	90	81
240-92035-12	SO-17303-022718-DS-019	70	64	73	61
240-92035-13	SO-17303-022718-DS-020	91	86	97	88
LCS 240-316784/2-A	Lab Control Sample	81	83	92	98
MB 240-316784/1-A	Method Blank	82	76	86	80

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)
240-92035-1	TB-17303-022618	98	85	101	97
LCS 240-316897/4	Lab Control Sample	96	91	100	103
MB 240-316897/6	Method Blank	96	90	98	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(10-120)	(30-120)	(29-120)	(41-120)
240-92035-2	SO-17303-022618-DS-009	59	52	47	57	14 X	63
240-92035-2 MS	SO-17303-022618-DS-009	67	56	53	72	45	70
240-92035-3	SO-17303-022618-DS-010	64	47	25	59	53	72
240-92035-4	SO-17303-022618-DS-011	55	42	23	53	47	71
240-92035-5	SO-17303-022618-DS-012	59	50	22	56	41	68
240-92035-6	SO-17303-022618-DS-013	62	50	27	57	54	74

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(10-120)	(30-120)	(29-120)	(41-120)
240-92035-7	SO-17303-022618-DS-014	72	61	44	66	57	73
240-92035-8	SO-17303-022618-DS-015	54	41	22	47	36	67
240-92035-9	SO-17303-022718-DS-016	76	69	46	72	64	79
240-92035-10	SO-17303-022718-DS-017	61	52	26	56	38	71
240-92035-11	SO-17303-022718-DS-018	62	57	23	61	51	74
240-92035-12	SO-17303-022718-DS-019	59	44	31	54	46	66
240-92035-13	SO-17303-022718-DS-020	59	53	25	56	46	69
LCS 240-316666/22-A	Lab Control Sample	77	78	43	82	77	86
MB 240-316666/21-A	Method Blank	48	41	27	46	44	54

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
240-92035-9	SO-17303-022718-DS-016	82	90
240-92035-10	SO-17303-022718-DS-017	84	102
240-92035-11	SO-17303-022718-DS-018	76	89
240-92035-12	SO-17303-022718-DS-019	92	98
240-92035-13	SO-17303-022718-DS-020	83	103
240-92035-13 MS	SO-17303-022718-DS-020	77	84
240-92035-13 MSD	SO-17303-022718-DS-020	65	71
LCS 240-316927/24-A	Lab Control Sample	89	98
MB 240-316927/23-A	Method Blank	101	113

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCBP2
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
240-92035-2	SO-17303-022618-DS-009	109	145 X
240-92035-2 MS	SO-17303-022618-DS-009	98	169 X
240-92035-2 MSD	SO-17303-022618-DS-009	89	192 X
240-92035-3	SO-17303-022618-DS-010	97	105
240-92035-4	SO-17303-022618-DS-011	108	140 X
240-92035-5	SO-17303-022618-DS-012	110	124

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX2 (14-128)	DCBP2 (10-132)								
240-92035-6	SO-17303-022618-DS-013	91	124								
240-92035-7	SO-17303-022618-DS-014	60	65 p								
240-92035-8	SO-17303-022618-DS-015	91	108								
LCS 240-316734/15-A	Lab Control Sample	105	118								
MB 240-316734/14-A	Method Blank	101	105								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Client Sample ID: TB-17303-022618
Lab Sample ID: 240-92035-1
Date Collected: 02/26/18 00:00
Matrix: Water
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	316897	03/02/18 21:02	LRW	TAL CAN

Client Sample ID: SO-17303-022618-DS-009
Lab Sample ID: 240-92035-2
Date Collected: 02/26/18 09:40
Matrix: Solid
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022618-DS-009
Lab Sample ID: 240-92035-2
Date Collected: 02/26/18 09:40
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 65.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 15:54	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		6.6666	317213	03/06/18 16:20	TMH	TAL CAN
Total/NA	Prep	3540C			316734	03/01/18 11:52	SDE	TAL CAN
Total/NA	Analysis	8082A		1	317020	03/04/18 18:37	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 11:34	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 10:48	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 13:52	AJC	TAL CAN

Client Sample ID: SO-17303-022618-DS-010
Lab Sample ID: 240-92035-3
Date Collected: 02/26/18 13:20
Matrix: Solid
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022618-DS-010
Lab Sample ID: 240-92035-3
Date Collected: 02/26/18 13:20
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 16:18	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN

Client Sample ID: SO-17303-022618-DS-010

Lab Sample ID: 240-92035-3
Date Collected: 02/26/18 13:20
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	316981	03/03/18 14:40	TMH	TAL CAN
Total/NA	Prep	3540C			316734	03/01/18 11:58	SDE	TAL CAN
Total/NA	Analysis	8082A		1	317020	03/04/18 19:32	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 11:53	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:11	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 13:58	AJC	TAL CAN

Client Sample ID: SO-17303-022618-DS-011

Lab Sample ID: 240-92035-4
Date Collected: 02/26/18 13:25
Matrix: Solid
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022618-DS-011

Lab Sample ID: 240-92035-4
Date Collected: 02/26/18 13:25
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		2	317015	03/04/18 16:42	HMB	TAL CAN
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		4	317340	03/06/18 15:33	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		1	316981	03/03/18 15:03	TMH	TAL CAN
Total/NA	Prep	3540C			316734	03/01/18 11:58	SDE	TAL CAN
Total/NA	Analysis	8082A		1	317020	03/04/18 20:45	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 11:57	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:15	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:00	AJC	TAL CAN

Client Sample ID: SO-17303-022618-DS-012

Lab Sample ID: 240-92035-5
Date Collected: 02/26/18 13:30
Matrix: Solid
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022618-DS-012

Lab Sample ID: 240-92035-5
Date Collected: 02/26/18 13:30
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 17:05	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		1	316981	03/03/18 15:27	TMH	TAL CAN
Total/NA	Prep	3540C			316734	03/01/18 11:58	SDE	TAL CAN
Total/NA	Analysis	8082A		1	317020	03/04/18 21:03	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:02	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:20	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:02	AJC	TAL CAN

Client Sample ID: SO-17303-022618-DS-013

Lab Sample ID: 240-92035-6
Date Collected: 02/26/18 13:35
Matrix: Solid
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022618-DS-013

Lab Sample ID: 240-92035-6
Date Collected: 02/26/18 13:35
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		100	317015	03/04/18 17:28	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		1	316981	03/03/18 15:50	TMH	TAL CAN
Total/NA	Prep	3540C			316734	03/01/18 11:58	SDE	TAL CAN
Total/NA	Analysis	8082A		1	317020	03/04/18 21:22	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:06	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:33	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:04	AJC	TAL CAN

Client Sample ID: SO-17303-022618-DS-014 — Lab Sample ID: 240-92035-7

Date Collected: 02/26/18 14:40 — **Matrix: Solid**
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022618-DS-014 — Lab Sample ID: 240-92035-7

Date Collected: 02/26/18 14:40 — **Matrix: Solid**
Date Received: 02/28/18 09:30 — **Percent Solids: 80.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		2	317015	03/04/18 17:51	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		4	316981	03/03/18 18:11	TMH	TAL CAN
Total/NA	Prep	3540C			316734	03/01/18 11:58	SDE	TAL CAN
Total/NA	Analysis	8082A		1	317033	03/05/18 14:27	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:20	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:37	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:06	AJC	TAL CAN

Client Sample ID: SO-17303-022618-DS-015 — Lab Sample ID: 240-92035-8

Date Collected: 02/26/18 14:45 — **Matrix: Solid**
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022618-DS-015 — Lab Sample ID: 240-92035-8

Date Collected: 02/26/18 14:45 — **Matrix: Solid**
Date Received: 02/28/18 09:30 — **Percent Solids: 83.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 18:14	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		1	316981	03/03/18 16:14	TMH	TAL CAN
Total/NA	Prep	3540C			316734	03/01/18 11:58	SDE	TAL CAN
Total/NA	Analysis	8082A		1	317020	03/04/18 21:58	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:25	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:42	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN

Client Sample ID: SO-17303-022618-DS-015 — Lab Sample ID: 240-92035-8

Date Collected: 02/26/18 14:45 — **Matrix: Solid**
Date Received: 02/28/18 09:30 — **Percent Solids: 83.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	317188	03/05/18 14:08	AJC	TAL CAN

Client Sample ID: SO-17303-022718-DS-016 — Lab Sample ID: 240-92035-9

Date Collected: 02/27/18 09:50 — **Matrix: Solid**
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022718-DS-016 — Lab Sample ID: 240-92035-9

Date Collected: 02/27/18 09:50 — **Matrix: Solid**
Date Received: 02/28/18 09:30 — **Percent Solids: 88.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 18:37	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		10	316981	03/03/18 18:35	TMH	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 20:04	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:30	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:46	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:10	AJC	TAL CAN

Client Sample ID: SO-17303-022718-DS-017 — Lab Sample ID: 240-92035-10

Date Collected: 02/27/18 10:00 — **Matrix: Solid**
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022718-DS-017 — Lab Sample ID: 240-92035-10

Date Collected: 02/27/18 10:00 — **Matrix: Solid**
Date Received: 02/28/18 09:30 — **Percent Solids: 81.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 19:01	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		1	316981	03/03/18 16:37	TMH	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 20:21	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:35	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:51	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:17	AJC	TAL CAN

Client Sample ID: SO-17303-022718-DS-018
Lab Sample ID: 240-92035-11

Date Collected: 02/27/18 10:10
Matrix: Solid
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022718-DS-018
Lab Sample ID: 240-92035-11

Date Collected: 02/27/18 10:10
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 19:24	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		1	316981	03/03/18 17:01	TMH	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 21:27	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:39	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 11:55	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:19	AJC	TAL CAN

Client Sample ID: SO-17303-022718-DS-019
Lab Sample ID: 240-92035-12

Date Collected: 02/27/18 13:50
Matrix: Solid
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022718-DS-019
Lab Sample ID: 240-92035-12

Date Collected: 02/27/18 13:50
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Client Sample ID: SO-17303-022718-DS-019

Lab Sample ID: 240-92035-12
Date Collected: 02/27/18 13:50
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	317015	03/04/18 19:47	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		1	316981	03/03/18 17:24	TMH	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 21:43	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:44	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 12:00	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:21	AJC	TAL CAN

Client Sample ID: SO-17303-022718-DS-020

Lab Sample ID: 240-92035-13
Date Collected: 02/27/18 14:00
Matrix: Solid
Date Received: 02/28/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022718-DS-020

Lab Sample ID: 240-92035-13
Date Collected: 02/27/18 14:00
Matrix: Solid
Date Received: 02/28/18 09:30
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			316784	03/01/18 21:57	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317015	03/04/18 20:10	HMB	TAL CAN
Total/NA	Prep	3540C			316666	03/01/18 08:26	SDE	TAL CAN
Total/NA	Analysis	8270C		1	316981	03/03/18 17:48	TMH	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 22:00	LSH	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317239	03/05/18 12:49	KLC	TAL CAN
Total/NA	Prep	3050B			316931	03/02/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317172	03/05/18 12:04	DSH	TAL CAN
Total/NA	Prep	7471A			316942	03/02/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317188	03/05/18 14:23	AJC	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92035-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-18 *
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-18 *
Kentucky (UST)	State Program	4	58	02-23-18 *
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-18 *
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN 190

Chain of Custody Record

231104

2.4/C2.1 1.0/C0.7

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tom Kinney	Site Contact: A. Bains	Date: 2-27-18	COC No:
Company Name: GHD	Tel/Fax: 248-893-3400	Lab Contact: D. Heckler	Carrier: Fed EX	1 of 2 COCs
Address: 26850 Meggett Rd.	Analysis Turnaround Time			Sampler:
City/State/Zip: Farmington Hills, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248-893-3400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: Ypsilanti, MI	☐ 2 days			Job / SDG No.:
PO# 2400 6070	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC	TCL SVOC	Site TAL Metals Pb (if > 15ppm)	TCL PCB's
TB-17303-022618	2-26-18	/	TB	TB	1	/	/	X			
SO-17303-022618-DS-009		0940	G	SO	6	/	/	X	X	X	X
-010		1330				/	/	X	X	X	X
-011		1335				/	/	X	X	X	X
-012		1330				/	/	X	X	X	X
-013		1335				/	/	X	X	X	X
-014		1440				/	/	X	X	X	X
-015		1445				/	/	X	X	X	X
SO-17303-022718-DS-016	2-27-18	0950				/	/	X	X	X	X
-017		1000				/	/	X	X	X	X
-018		1010				/	/	X	X	X	X
-019		1350				/	/	X	X	X	X

240-92035 Chain of Custody

Sample Specific Notes:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

SSOW-017303-TO2-04-2618-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Derik Sallis	GHD	2-27-18/1600	DOP	TAL	2-28-18 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

3/13/2018

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN
190

Chain of Custody Record

231080

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tom Kinney	Site Contact: A. Burns	Date: 2-27-18	COC No:
Company Name: GHD	Tel/Fax: 248-893-3400	Lab Contact: D. Heckler	Carrier: FedEx	2 of 2 COCs
Address: 26850 Haggerty rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Farmington Hills, MI. 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248-893-3400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			Job / SDG No.:
Site: Ypsilanti, MI	☐ 2 days			
PO# 21400 6020	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC	TCL SVOC	Site TAL Metals	Trace Pb (if >1 ppb)	PCB's	Sample Specific Notes:
SO-17303-022718-DS-020	2-27-18	1400	G	SO	3	/	/	X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

SSOW: 017303-T02-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Derek Sabota	GHD	2-27-18/1600	POP	TAL	2-28-18 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

3/13/2018

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 92035

Client GHD Site Name —

Cooler Received on 2-28-18 Opened on 2-28-18

Cooler unpacked by: BOP

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt — See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.3** °C) Observed Cooler Temp.____ °C Corrected Cooler Temp.____ °C
   IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp.____ °C Corrected Cooler Temp.____ °C
   ~~IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp.____ °C Corrected Cooler Temp.____ °C~~

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No	
-Were the seals on the outside of the cooler(s) signed & dated?	Yes No	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No	
-Were tamper/custody seals intact and uncompromised?	Yes No	NA
3. Shippers' packing slip attached to the cooler(s)?	Yes No	
4. Did custody papers accompany the sample(s)?	Yes No	
5. Were the custody papers relinquished & signed in the appropriate place?	Yes No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No	
7. Did all bottles arrive in good condition (Unbroken)?	Yes No	
8. Could all bottle labels be reconciled with the COC?	Yes No	
9. Were correct bottle(s) used for the test(s) indicated?	Yes No	
10. Sufficient quantity received to perform indicated analyses?	Yes No	
11. Are these work share samples?	Yes No	
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA	pH Strip Lot# HC732776
13. Were VOAs on the COC?	Yes No	
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes No NA	
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B729401NB	Yes No	
16. Was a LL Hg or Me Hg trip blank present?	Yes No	

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

RECEIVED 2 TB. COC = 1
SAMPLE # 014 APPEARS TO BE CONTAMINATED WITH COOLER WATER

17. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # :** 92035
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
CLIENT	8	2.4	2.1	ICE
	"	1.0	0.7	"

X:\X-Drive Document Control\SOPs\Work Instructions\Word Version Work Instructions\WI-NC-099H-071615 Cooler Receipt Form_page 2 - Multiple Coolers.doc rls

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-92114-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
3/13/2018 4:47:55 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-92114-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-92114-1

Comments
No additional comments.

Receipt
The samples were received on 3/1/2018 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

GC/MS VOA
Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 317128 recovered above the upper control limit for Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: TB-17303-022818 (240-92114-1).

Method(s) 8260B: The method blank for 317128 contained Methylene Chloride above the reporting limit (RL). This compound is considered a common laboratory contaminant. The associated sample(s) was not re-extracted and/or re-analyzed because the concentration of the common lab contaminant in the method blank was less than 5 times the RL.

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 240-317662 recovered above the upper control limit for ethylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: SO-17303-022818-DS-021 (240-92114-2), SO-17303-022818-DS-022 (240-92114-3), SO-17303-022818-DS-025 (240-92114-6) and (CCVIS 240-317662/5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C: The following sample was diluted due to the nature of the sample matrix: SO-17303-022818-DS-021 (240-92114-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-022818-DS-021 (240-92114-2), SO-17303-022818-DS-022 (240-92114-3), SO-17303-022818-DS-023 (240-92114-4), SO-17303-022818-DS-024 (240-92114-5), SO-17303-022818-DS-025 (240-92114-6), (240-92035-D-13-B), (240-92035-D-13-C MS) and (240-92035-D-13-D MSD).3468458, 3154249, 3361889.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: SO-17303-022818-DS-021 (240-92114-2), SO-17303-022818-DS-022 (240-92114-3), SO-17303-022818-DS-023 (240-92114-4), SO-17303-022818-DS-024 (240-92114-5) and SO-17303-022818-DS-025 (240-92114-6). The continuing calibration blanks and method blanks may not support the lower PQL.

Method(s) 6020: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: SO-17303-022818-DS-023 (240-92114-4), SO-17303-022818-DS-024 (240-92114-5) and SO-17303-022818-DS-025 (240-92114-6). The continuing calibration blanks and method blanks may not support the lower PQL.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Job ID: 240-92114-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-92114-1	TB-17303-022818	Water	02/28/18 00:00	03/01/18 09:40
240-92114-2	SO-17303-022818-DS-021	Solid	02/28/18 12:25	03/01/18 09:40
240-92114-3	SO-17303-022818-DS-022	Solid	02/28/18 12:30	03/01/18 09:40
240-92114-4	SO-17303-022818-DS-023	Solid	02/28/18 14:00	03/01/18 09:40
240-92114-5	SO-17303-022818-DS-024	Solid	02/28/18 14:10	03/01/18 09:40
240-92114-6	SO-17303-022818-DS-025	Solid	02/28/18 14:20	03/01/18 09:40

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Client Sample ID: TB-17303-022818 — Lab Sample ID: 240-92114-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J	10	1.8	ug/L	1		8260B	Total/NA

Client Sample ID: SO-17303-022818-DS-021 — Lab Sample ID: 240-92114-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	360	J	1100	88	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	21	J	750	9.9	ug/Kg	2.5	☼	8270C	Total/NA
2-Methylnaphthalene	120	J	750	1.4	ug/Kg	2.5	☼	8270C	Total/NA
Acenaphthene	68	J	750	2.2	ug/Kg	2.5	☼	8270C	Total/NA
Anthracene	97	J	750	2.2	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]anthracene	400	J	750	1.8	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]pyrene	550	J	750	1.8	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[b]fluoranthene	940		750	1.7	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[g,h,i]perylene	370	J	750	0.99	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[k]fluoranthene	370	J	750	1.9	ug/Kg	2.5	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	110	J	750	54	ug/Kg	2.5	☼	8270C	Total/NA
Carbazole	99	J	750	77	ug/Kg	2.5	☼	8270C	Total/NA
Chrysene	630	J	750	3.1	ug/Kg	2.5	☼	8270C	Total/NA
Dibenz(a,h)anthracene	87	J	750	1.9	ug/Kg	2.5	☼	8270C	Total/NA
Dibenzofuran	48	J	750	1.9	ug/Kg	2.5	☼	8270C	Total/NA
Fluoranthene	1300		750	1.6	ug/Kg	2.5	☼	8270C	Total/NA
Fluorene	57	J	750	1.5	ug/Kg	2.5	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	330	J	750	0.99	ug/Kg	2.5	☼	8270C	Total/NA
Naphthalene	41	J	750	2.3	ug/Kg	2.5	☼	8270C	Total/NA
Phenanthrene	610	J	750	2.1	ug/Kg	2.5	☼	8270C	Total/NA
Pyrene	1300		750	1.2	ug/Kg	2.5	☼	8270C	Total/NA
Barium	57		0.84	0.38	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.17	0.056	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.56		0.084	0.050	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.9		0.42	0.21	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.84	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.84	0.25	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.84	0.32	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.84	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		2.1	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.16	J	0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Arsenic	7.4		0.084	0.063	mg/Kg	2	☼	6020	Total/NA
Lead	19		0.21	0.065	mg/Kg	2	☼	6020	Total/NA
Selenium	0.77		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Thallium	0.39		0.084	0.050	mg/Kg	2	☼	6020	Total/NA
Vanadium	19		0.84	0.24	mg/Kg	2	☼	6020	Total/NA
Silver	0.094		0.084	0.023	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022818-DS-022 — Lab Sample ID: 240-92114-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	11	J	310	4.1	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	75	J	310	0.59	ug/Kg	1	☼	8270C	Total/NA
Anthracene	5.5	J	310	0.92	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	6.3	J	310	0.76	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022818-DS-022 (Continued) — Lab Sample ID: 240-92114-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	12	J	310	0.70	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	20	J	310	0.41	ug/Kg	1	☼	8270C	Total/NA
Chrysene	19	J	310	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	21	J	310	0.78	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	7.6	J	310	0.65	ug/Kg	1	☼	8270C	Total/NA
Fluorene	10	J	310	0.63	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	22	J	310	0.97	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	66	J	310	0.86	ug/Kg	1	☼	8270C	Total/NA
Pyrene	20	J	310	0.52	ug/Kg	1	☼	8270C	Total/NA
Barium	59		0.93	0.42	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.19	0.063	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.29		0.093	0.056	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.93	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	20		0.93	0.28	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.93	0.36	mg/Kg	1	☼	6010B	Total/NA
Nickel	31		0.93	0.27	mg/Kg	1	☼	6010B	Total/NA
Zinc	61		2.3	1.6	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.6		0.093	0.070	mg/Kg	2	☼	6020	Total/NA
Lead	9.3		0.23	0.073	mg/Kg	2	☼	6020	Total/NA
Selenium	0.61		0.19	0.14	mg/Kg	2	☼	6020	Total/NA
Thallium	0.39		0.093	0.056	mg/Kg	2	☼	6020	Total/NA
Vanadium	24		0.93	0.27	mg/Kg	2	☼	6020	Total/NA
Silver	0.044	J	0.093	0.026	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022818-DS-023 — Lab Sample ID: 240-92114-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	200	J	1400	110	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	20	J	330	4.4	ug/Kg	1	☼	8270C	Total/NA
2,4-Dinitrotoluene	28	J	330	21	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	120	J	330	0.63	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	15	J	330	0.95	ug/Kg	1	☼	8270C	Total/NA
Anthracene	14	J	330	0.98	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	34	J	330	0.79	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	43	J	330	0.80	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	78	J	330	0.74	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	35	J	330	0.44	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	31	J	330	0.85	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	33	J	330	24	ug/Kg	1	☼	8270C	Total/NA
Chrysene	82	J	330	1.4	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	7.1	J	330	0.83	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	26	J	330	0.83	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	110	J	330	0.69	ug/Kg	1	☼	8270C	Total/NA
Fluorene	16	J	330	0.66	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	20	J	330	0.44	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	38	J	330	1.0	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	170	J	330	0.91	ug/Kg	1	☼	8270C	Total/NA
Pyrene	110	J	330	0.55	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1242	85		62	24	ug/Kg	1	☼	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-022818-DS-023 (Continued) — Lab Sample ID: 240-92114-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1254	200		62	29	ug/Kg	1	☼	8082A	Total/NA
Barium	67		0.86	0.39	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.17	0.058	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.35		0.086	0.051	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.2		0.43	0.21	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.86	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	25		1.7	0.51	mg/Kg	2	☼	6010B	Total/NA
Manganese	350		0.86	0.33	mg/Kg	1	☼	6010B	Total/NA
Nickel	28		0.86	0.25	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		2.1	1.5	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.14	J	0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Arsenic	7.8		0.086	0.064	mg/Kg	2	☼	6020	Total/NA
Lead	11		0.21	0.067	mg/Kg	2	☼	6020	Total/NA
Selenium	0.69		0.17	0.13	mg/Kg	2	☼	6020	Total/NA
Thallium	0.41		0.086	0.051	mg/Kg	2	☼	6020	Total/NA
Vanadium	19		0.86	0.25	mg/Kg	2	☼	6020	Total/NA
Silver	0.060	J	0.086	0.024	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022818-DS-024 — Lab Sample ID: 240-92114-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	170	J	1500	120	ug/Kg	1	☼	8260B	Total/NA
Benzo[b]fluoranthene	4.9	J	340	0.76	ug/Kg	1	☼	8270C	Total/NA
Pyrene	8.7	J	340	0.56	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1242	230	J	310	120	ug/Kg	5	☼	8082A	Total/NA
Aroclor-1254	680		310	140	ug/Kg	5	☼	8082A	Total/NA
Barium	53		1.0	0.45	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.20	0.068	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31		0.10	0.060	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.0		0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		1.0	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	20		1.0	0.30	mg/Kg	1	☼	6010B	Total/NA
Manganese	150		1.0	0.39	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		1.0	0.29	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		2.5	1.7	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.0		0.10	0.075	mg/Kg	2	☼	6020	Total/NA
Lead	9.6		0.25	0.078	mg/Kg	2	☼	6020	Total/NA
Selenium	0.55		0.20	0.15	mg/Kg	2	☼	6020	Total/NA
Thallium	0.28		0.10	0.060	mg/Kg	2	☼	6020	Total/NA
Vanadium	22		1.0	0.29	mg/Kg	2	☼	6020	Total/NA
Silver	0.040	J	0.10	0.028	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-022818-DS-025 — Lab Sample ID: 240-92114-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	7.5	J	310	4.1	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	30	J	310	0.58	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	8.9	J	310	0.69	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	16	J	310	0.41	ug/Kg	1	☼	8270C	Total/NA
Chrysene	20	J	310	1.3	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Client Sample ID: SO-17303-022818-DS-025 (Continued) — Lab Sample ID: 240-92114-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenzofuran	18	J	310	0.77	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	4.0	J	310	0.64	ug/Kg	1	☼	8270C	Total/NA
Fluorene	10	J	310	0.62	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	9.9	J	310	0.96	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	72	J	310	0.85	ug/Kg	1	☼	8270C	Total/NA
Pyrene	22	J	310	0.51	ug/Kg	1	☼	8270C	Total/NA
Barium	61		0.81	0.37	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.16	0.054	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31		0.081	0.048	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.40	0.20	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.81	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.81	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.81	0.31	mg/Kg	1	☼	6010B	Total/NA
Nickel	31		0.81	0.24	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		2.0	1.4	mg/Kg	1	☼	6010B	Total/NA
Arsenic	10		0.081	0.061	mg/Kg	2	☼	6020	Total/NA
Lead	9.0		0.20	0.063	mg/Kg	2	☼	6020	Total/NA
Selenium	0.57		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.49		0.081	0.048	mg/Kg	2	☼	6020	Total/NA
Vanadium	24		0.81	0.23	mg/Kg	2	☼	6020	Total/NA
Silver	0.041	J	0.081	0.022	mg/Kg	2	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17303-022818
Date Collected: 02/28/18 00:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.1**	**J**	10	1.8	ug/L			03/05/18 22:23	1
Benzene	1.0	U	1.0	0.28	ug/L			03/05/18 22:23	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			03/05/18 22:23	1
Bromoform	1.0	U	1.0	0.43	ug/L			03/05/18 22:23	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/05/18 22:23	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			03/05/18 22:23	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			03/05/18 22:23	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			03/05/18 22:23	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			03/05/18 22:23	1
Chloroethane	1.0	U	1.0	0.41	ug/L			03/05/18 22:23	1
Chloroform	1.0	U	1.0	0.31	ug/L			03/05/18 22:23	1
Chloromethane	1.0	U	1.0	0.43	ug/L			03/05/18 22:23	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			03/05/18 22:23	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/05/18 22:23	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			03/05/18 22:23	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			03/05/18 22:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			03/05/18 22:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			03/05/18 22:23	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			03/05/18 22:23	1
2-Hexanone	10	U	10	1.2	ug/L			03/05/18 22:23	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			03/05/18 22:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			03/05/18 22:23	1
Styrene	1.0	U	1.0	0.23	ug/L			03/05/18 22:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			03/05/18 22:23	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			03/05/18 22:23	1
Toluene	1.0	U	1.0	0.23	ug/L			03/05/18 22:23	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			03/05/18 22:23	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/05/18 22:23	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			03/05/18 22:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/05/18 22:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			03/05/18 22:23	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			03/05/18 22:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			03/05/18 22:23	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			03/05/18 22:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			03/05/18 22:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/05/18 22:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/05/18 22:23	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			03/05/18 22:23	1
Methyl acetate	10	U	10	1.4	ug/L			03/05/18 22:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			03/05/18 22:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/05/18 22:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			03/05/18 22:23	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			03/05/18 22:23	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			03/05/18 22:23	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			03/05/18 22:23	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			03/05/18 22:23	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			03/05/18 22:23	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			03/05/18 22:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		61 - 138		03/05/18 22:23	1
4-Bromofluorobenzene (Surr)	85		69 - 120		03/05/18 22:23	1
Toluene-d8 (Surr)	92		73 - 120		03/05/18 22:23	1
Dibromofluoromethane (Surr)	108		69 - 124		03/05/18 22:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-021
Date Collected: 02/28/18 12:25
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-2
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	700	U	700	110	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Benzene	47	U	47	28	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Bromodichloromethane	93	U	93	21	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Bromoform	93	U	93	27	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Bromomethane	230	U	230	33	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
2-Butanone (MEK)	700	U	700	58	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Carbon disulfide	230	U	230	21	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Carbon tetrachloride	47	U	47	32	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Chlorobenzene	47	U	47	35	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Chloroethane	230	U	230	33	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Chloroform	47	U	47	28	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Chloromethane	230	U	230	21	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,1-Dichloroethane	47	U	47	36	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,2-Dichloroethane	47	U	47	35	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,1-Dichloroethene	47	U	47	42	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,2-Dichloropropane	47	U	47	35	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
cis-1,3-Dichloropropene	47	U	47	27	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
trans-1,3-Dichloropropene	47	U	47	18	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Ethylbenzene	47	U	47	41	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
2-Hexanone	2300	U	2300	100	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Methylene Chloride	230	U	230	76	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
4-Methyl-2-pentanone (MIBK)	2300	U	2300	47	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Styrene	47	U	47	12	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,1,2,2-Tetrachloroethane	47	U	47	28	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Tetrachloroethene	47	U	47	25	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Toluene	93	U	93	28	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Trichloroethene	47	U	47	43	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Vinyl chloride	37	U	37	20	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Xylenes, Total	140	U	140	33	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,1,1-Trichloroethane	47	U	47	33	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,1,2-Trichloroethane	47	U	47	27	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Cyclohexane	1100	U	1100	35	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,2-Dibromo-3-Chloropropane	230	U	230	56	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,2-Dibromoethane	230	U	230	27	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Dichlorodifluoromethane	93	U	93	26	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
cis-1,2-Dichloroethene	47	U	47	41	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
trans-1,2-Dichloroethene	47	U	47	41	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Isopropylbenzene	230	U	230	40	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Methyl acetate	**360**	**J**	1100	88	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Methyl tert-butyl ether	230	U	230	30	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	230	U	230	27	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,2,4-Trichlorobenzene	230	U	230	30	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,2-Dichlorobenzene	93	U	93	21	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,3-Dichlorobenzene	93	U	93	44	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
1,4-Dichlorobenzene	93	U	93	32	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Trichlorofluoromethane	93	U	93	40	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Dibromochloromethane	47	U	47	40	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1
Methylcyclohexane	1100	U	1100	43	ug/Kg	☼	03/06/18 14:22	03/08/18 23:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		64 - 144	03/06/18 14:22	03/08/18 23:58	1
4-Bromofluorobenzene (Surr)	83		58 - 142	03/06/18 14:22	03/08/18 23:58	1
Toluene-d8 (Surr)	91		61 - 137	03/06/18 14:22	03/08/18 23:58	1
Dibromofluoromethane (Surr)	80		31 - 155	03/06/18 14:22	03/08/18 23:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-022
Date Collected: 02/28/18 12:30
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-3
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	830	U	830	130	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Benzene	55	U	55	33	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Bromoform	110	U	110	32	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Bromomethane	280	U	280	39	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
2-Butanone (MEK)	830	U	830	69	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Carbon disulfide	280	U	280	25	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Carbon tetrachloride	55	U	55	37	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Chlorobenzene	55	U	55	42	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Chloroethane	280	U	280	39	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Chloroform	55	U	55	33	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Chloromethane	280	U	280	25	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,1-Dichloroethane	55	U	55	43	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,2-Dichloroethane	55	U	55	42	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,1-Dichloroethene	55	U	55	50	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,2-Dichloropropane	55	U	55	42	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
cis-1,3-Dichloropropene	55	U	55	32	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
trans-1,3-Dichloropropene	55	U	55	21	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Ethylbenzene	55	U	55	48	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
2-Hexanone	2800	U	2800	120	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Methylene Chloride	280	U	280	90	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	55	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Styrene	55	U	55	14	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,1,2,2-Tetrachloroethane	55	U	55	33	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Tetrachloroethene	55	U	55	29	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Toluene	110	U	110	33	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Trichloroethene	55	U	55	51	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Vinyl chloride	44	U	44	24	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Xylenes, Total	170	U	170	39	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,1,1-Trichloroethane	55	U	55	39	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,1,2-Trichloroethane	55	U	55	32	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Cyclohexane	1300	U	1300	42	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,2-Dibromo-3-Chloropropane	280	U	280	66	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,2-Dibromoethane	280	U	280	32	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Dichlorodifluoromethane	110	U	110	30	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
cis-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
trans-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Isopropylbenzene	280	U	280	47	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Methyl acetate	1300	U	1300	100	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Methyl tert-butyl ether	280	U	280	36	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	32	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,2,4-Trichlorobenzene	280	U	280	36	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,3-Dichlorobenzene	110	U	110	53	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
1,4-Dichlorobenzene	110	U	110	37	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Trichlorofluoromethane	110	U	110	47	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Dibromochloromethane	55	U	55	47	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1
Methylcyclohexane	1300	U	1300	51	ug/Kg	☼	03/06/18 14:22	03/09/18 00:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		64 - 144	03/06/18 14:22	03/09/18 00:21	1
4-Bromofluorobenzene (Surr)	80		58 - 142	03/06/18 14:22	03/09/18 00:21	1
Toluene-d8 (Surr)	87		61 - 137	03/06/18 14:22	03/09/18 00:21	1
Dibromofluoromethane (Surr)	76		31 - 155	03/06/18 14:22	03/09/18 00:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-023
Date Collected: 02/28/18 14:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-4
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	870	U	870	140	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Benzene	58	U	58	35	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Bromodichloromethane	120	U	120	26	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Bromoform	120	U	120	33	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Bromomethane	290	U	290	40	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
2-Butanone (MEK)	870	U	870	72	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Carbon disulfide	290	U	290	26	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Carbon tetrachloride	58	U	58	39	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Chlorobenzene	58	U	58	43	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Chloroethane	290	U	290	40	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Chloroform	58	U	58	35	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Chloromethane	290	U	290	26	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,1-Dichloroethane	58	U	58	45	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,2-Dichloroethane	58	U	58	43	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,1-Dichloroethene	58	U	58	52	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,2-Dichloropropane	58	U	58	43	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
cis-1,3-Dichloropropene	58	U	58	33	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
trans-1,3-Dichloropropene	58	U	58	22	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Ethylbenzene	58	U	58	51	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
2-Hexanone	2900	U	2900	120	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Methylene Chloride	290	U	290	94	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
4-Methyl-2-pentanone (MIBK)	2900	U	2900	58	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Styrene	58	U	58	14	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,1,2,2-Tetrachloroethane	58	U	58	35	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Tetrachloroethene	58	U	58	30	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Toluene	120	U	120	35	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Trichloroethene	58	U	58	53	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Vinyl chloride	46	U	46	25	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Xylenes, Total	170	U	170	40	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,1,1-Trichloroethane	58	U	58	40	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,1,2-Trichloroethane	58	U	58	33	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Cyclohexane	1400	U	1400	43	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,2-Dibromo-3-Chloropropane	290	U	290	69	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,2-Dibromoethane	290	U	290	33	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Dichlorodifluoromethane	120	U	120	32	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
cis-1,2-Dichloroethene	58	U	58	51	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
trans-1,2-Dichloroethene	58	U	58	51	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Isopropylbenzene	290	U	290	49	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Methyl acetate	**200**	**J**	1400	110	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Methyl tert-butyl ether	290	U	290	38	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	290	U	290	33	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,2,4-Trichlorobenzene	290	U	290	38	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,2-Dichlorobenzene	120	U	120	26	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,3-Dichlorobenzene	120	U	120	55	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
1,4-Dichlorobenzene	120	U	120	39	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Trichlorofluoromethane	120	U	120	49	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Dibromochloromethane	58	U	58	49	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1
Methylcyclohexane	1400	U	1400	53	ug/Kg	☼	03/06/18 14:22	03/09/18 23:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		64 - 144	03/06/18 14:22	03/09/18 23:18	1
4-Bromofluorobenzene (Surr)	88		58 - 142	03/06/18 14:22	03/09/18 23:18	1
Toluene-d8 (Surr)	95		61 - 137	03/06/18 14:22	03/09/18 23:18	1
Dibromofluoromethane (Surr)	86		31 - 155	03/06/18 14:22	03/09/18 23:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-024
Date Collected: 02/28/18 14:10
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-5
Matrix: Solid
Percent Solids: 77.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	950	U	950	150	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Benzene	63	U	63	38	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Bromodichloromethane	130	U	130	28	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Bromoform	130	U	130	36	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Bromomethane	320	U	320	44	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
2-Butanone (MEK)	950	U	950	79	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Carbon disulfide	320	U	320	28	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Carbon tetrachloride	63	U	63	43	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Chlorobenzene	63	U	63	47	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Chloroethane	320	U	320	44	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Chloroform	63	U	63	38	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Chloromethane	320	U	320	28	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,1-Dichloroethane	63	U	63	49	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,2-Dichloroethane	63	U	63	47	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,1-Dichloroethene	63	U	63	57	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,2-Dichloropropane	63	U	63	47	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
cis-1,3-Dichloropropene	63	U	63	36	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
trans-1,3-Dichloropropene	63	U	63	24	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Ethylbenzene	63	U	63	55	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
2-Hexanone	3200	U	3200	140	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Methylene Chloride	320	U	320	100	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
4-Methyl-2-pentanone (MIBK)	3200	U	3200	63	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Styrene	63	U	63	16	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,1,2,2-Tetrachloroethane	63	U	63	38	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Tetrachloroethene	63	U	63	33	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Toluene	130	U	130	38	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Trichloroethene	63	U	63	58	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Vinyl chloride	50	U	50	27	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Xylenes, Total	190	U	190	44	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,1,1-Trichloroethane	63	U	63	44	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,1,2-Trichloroethane	63	U	63	36	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Cyclohexane	1500	U	1500	47	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,2-Dibromo-3-Chloropropane	320	U	320	76	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,2-Dibromoethane	320	U	320	36	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Dichlorodifluoromethane	130	U	130	35	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
cis-1,2-Dichloroethene	63	U	63	55	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
trans-1,2-Dichloroethene	63	U	63	55	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Isopropylbenzene	320	U	320	54	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Methyl acetate	**170**	**J**	1500	120	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Methyl tert-butyl ether	320	U	320	41	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	320	U	320	36	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,2,4-Trichlorobenzene	320	U	320	41	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,2-Dichlorobenzene	130	U	130	28	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,3-Dichlorobenzene	130	U	130	60	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
1,4-Dichlorobenzene	130	U	130	43	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Trichlorofluoromethane	130	U	130	54	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Dibromochloromethane	63	U	63	54	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1
Methylcyclohexane	1500	U	1500	58	ug/Kg	☼	03/06/18 14:22	03/09/18 23:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		64 - 144	03/06/18 14:22	03/09/18 23:41	1
4-Bromofluorobenzene (Surr)	96		58 - 142	03/06/18 14:22	03/09/18 23:41	1
Toluene-d8 (Surr)	100		61 - 137	03/06/18 14:22	03/09/18 23:41	1
Dibromofluoromethane (Surr)	82		31 - 155	03/06/18 14:22	03/09/18 23:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-025
Date Collected: 02/28/18 14:20
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-6
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	820	U	820	130	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Benzene	55	U	55	33	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Bromoform	110	U	110	31	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Bromomethane	270	U	270	38	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
2-Butanone (MEK)	820	U	820	68	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Carbon disulfide	270	U	270	25	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Carbon tetrachloride	55	U	55	37	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Chlorobenzene	55	U	55	41	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Chloroethane	270	U	270	38	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Chloroform	55	U	55	33	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Chloromethane	270	U	270	25	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,1-Dichloroethane	55	U	55	42	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,2-Dichloroethane	55	U	55	41	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,1-Dichloroethene	55	U	55	49	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,2-Dichloropropane	55	U	55	41	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
cis-1,3-Dichloropropene	55	U	55	31	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
trans-1,3-Dichloropropene	55	U	55	20	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Ethylbenzene	55	U	55	48	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
2-Hexanone	2700	U	2700	120	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Methylene Chloride	270	U	270	89	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	55	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Styrene	55	U	55	14	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,1,2,2-Tetrachloroethane	55	U	55	33	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Tetrachloroethene	55	U	55	29	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Toluene	110	U	110	33	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Trichloroethene	55	U	55	50	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Vinyl chloride	44	U	44	23	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Xylenes, Total	160	U	160	38	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,1,1-Trichloroethane	55	U	55	38	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,1,2-Trichloroethane	55	U	55	31	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Cyclohexane	1300	U	1300	41	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,2-Dibromo-3-Chloropropane	270	U	270	65	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,2-Dibromoethane	270	U	270	31	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Dichlorodifluoromethane	110	U	110	30	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
cis-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
trans-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Isopropylbenzene	270	U	270	46	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Methyl acetate	1300	U	1300	100	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Methyl tert-butyl ether	270	U	270	35	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	31	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,2,4-Trichlorobenzene	270	U	270	35	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,3-Dichlorobenzene	110	U	110	52	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
1,4-Dichlorobenzene	110	U	110	37	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Trichlorofluoromethane	110	U	110	46	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Dibromochloromethane	55	U	55	46	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1
Methylcyclohexane	1300	U	1300	50	ug/Kg	☼	03/06/18 14:22	03/08/18 23:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		64 - 144	03/06/18 14:22	03/08/18 23:35	1
4-Bromofluorobenzene (Surr)	85		58 - 142	03/06/18 14:22	03/08/18 23:35	1
Toluene-d8 (Surr)	93		61 - 137	03/06/18 14:22	03/08/18 23:35	1
Dibromofluoromethane (Surr)	80		31 - 155	03/06/18 14:22	03/08/18 23:35	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-021
Date Collected: 02/28/18 12:25
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-2
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**21**	**J**	750	9.9	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2,2'-oxybis[1-chloropropane]	750	U	750	27	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2,4,5-Trichlorophenol	750	U	750	71	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2,4,6-Trichlorophenol	750	U	750	25	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2,4-Dichlorophenol	750	U	750	57	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2,4-Dimethylphenol	750	U	750	57	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2,4-Dinitrophenol	430	U	430	60	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2,4-Dinitrotoluene	750	U	750	48	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2,6-Dinitrotoluene	750	U	750	60	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2-Chloronaphthalene	750	U	750	1.3	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2-Chlorophenol	750	U	750	23	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2-Methylnaphthalene	**120**	**J**	750	1.4	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2-Methylphenol	750	U	750	31	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2-Nitroaniline	570	U	570	26	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
2-Nitrophenol	750	U	750	24	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
3,3'-Dichlorobenzidine	4500	U	4500	51	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
3-Nitroaniline	570	U	570	45	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
4,6-Dinitro-2-methylphenol	430	U	430	26	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
4-Bromophenyl phenyl ether	750	U	750	37	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
4-Chloro-3-methylphenol	750	U	750	60	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
4-Chloroaniline	570	U	570	48	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
4-Chlorophenyl phenyl ether	750	U	750	37	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
4-Nitroaniline	570	U	570	74	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
4-Nitrophenol	940	U	940	48	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Acenaphthene	**68**	**J**	750	2.2	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Acenaphthylene	750	U	750	0.99	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Acetophenone	750	U	750	26	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Anthracene	**97**	**J**	750	2.2	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Atrazine	110	U	110	26	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Benzaldehyde	750	U	750	34	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Benzo[a]anthracene	**400**	**J**	750	1.8	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Benzo[a]pyrene	**550**	**J**	750	1.8	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Benzo[b]fluoranthene	**940**		750	1.7	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Benzo[g,h,i]perylene	**370**	**J**	750	0.99	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Benzo[k]fluoranthene	**370**	**J**	750	1.9	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Bis(2-chloroethoxy)methane	750	U	750	62	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Bis(2-chloroethyl)ether	230	U	230	5.7	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Bis(2-ethylhexyl) phthalate	**110**	**J**	750	54	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Butyl benzyl phthalate	750	U	750	28	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Caprolactam	750	U	750	100	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Carbazole	**99**	**J**	750	77	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Chrysene	**630**	**J**	750	3.1	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Dibenz(a,h)anthracene	**87**	**J**	750	1.9	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Dibenzofuran	**48**	**J**	750	1.9	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Diethyl phthalate	750	U	750	45	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Dimethyl phthalate	750	U	750	48	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Di-n-butyl phthalate	750	U	750	43	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Di-n-octyl phthalate	750	U	750	22	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Fluoranthene	**1300**		750	1.6	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022818-DS-021
Date Collected: 02/28/18 12:25
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-2
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**57**	**J**	750	1.5	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Hexachlorobenzene	750	U	750	6.0	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Hexachlorobutadiene	110	U	110	16	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Hexachlorocyclopentadiene	750	U	750	23	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Hexachloroethane	750	U	750	26	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Indeno[1,2,3-cd]pyrene	**330**	**J**	750	0.99	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Isophorone	750	U	750	37	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Naphthalene	**41**	**J**	750	2.3	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Nitrobenzene	750	U	750	6.2	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
N-Nitrosodi-n-propylamine	750	U	750	18	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
N-Nitrosodiphenylamine	750	U	750	60	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Pentachlorophenol	430	U	430	26	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Phenol	750	U	750	21	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Phenanthrene	**610**	**J**	750	2.1	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
Pyrene	**1300**		750	1.2	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5
3 & 4 Methylphenol	750	U	750	57	ug/Kg	☼	03/05/18 11:03	03/12/18 15:43	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*32 - 120*	*03/05/18 11:03*	*03/12/18 15:43*	*2.5*
2-Fluorophenol (Surr)	*75*		*29 - 120*	*03/05/18 11:03*	*03/12/18 15:43*	*2.5*
2,4,6-Tribromophenol (Surr)	*48*		*10 - 120*	*03/05/18 11:03*	*03/12/18 15:43*	*2.5*
Nitrobenzene-d5 (Surr)	*75*		*30 - 120*	*03/05/18 11:03*	*03/12/18 15:43*	*2.5*
Phenol-d5 (Surr)	*78*		*29 - 120*	*03/05/18 11:03*	*03/12/18 15:43*	*2.5*
Terphenyl-d14 (Surr)	*79*		*41 - 120*	*03/05/18 11:03*	*03/12/18 15:43*	*2.5*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-022
Date Collected: 02/28/18 12:30
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-3
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**11**	**J**	310	4.1	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2,2'-oxybis[1-chloropropane]	310	U	310	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2,4,5-Trichlorophenol	310	U	310	30	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2,4,6-Trichlorophenol	310	U	310	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2,4-Dichlorophenol	310	U	310	24	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2,4-Dimethylphenol	310	U	310	24	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2,4-Dinitrophenol	180	U	180	25	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2,4-Dinitrotoluene	310	U	310	20	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2,6-Dinitrotoluene	310	U	310	25	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2-Chloronaphthalene	310	U	310	0.53	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2-Chlorophenol	310	U	310	9.7	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2-Methylnaphthalene	**75**	**J**	310	0.59	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2-Methylphenol	310	U	310	13	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
2-Nitrophenol	310	U	310	9.8	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
3,3'-Dichlorobenzidine	1900	U	1900	21	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
4-Bromophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
4-Chloro-3-methylphenol	310	U	310	25	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
4-Chloroaniline	240	U	240	20	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
4-Chlorophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
4-Nitrophenol	390	U	390	20	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Acenaphthene	310	U	310	0.90	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Acenaphthylene	310	U	310	0.41	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Acetophenone	310	U	310	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Anthracene	**5.5**	**J**	310	0.92	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Atrazine	47	U	47	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Benzaldehyde	310	U	310	14	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Benzo[a]anthracene	310	U	310	0.75	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Benzo[a]pyrene	**6.3**	**J**	310	0.76	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Benzo[b]fluoranthene	**12**	**J**	310	0.70	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Benzo[g,h,i]perylene	**20**	**J**	310	0.41	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Benzo[k]fluoranthene	310	U	310	0.81	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Bis(2-chloroethoxy)methane	310	U	310	26	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Bis(2-chloroethyl)ether	95	U	95	2.4	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Bis(2-ethylhexyl) phthalate	310	U	310	23	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Butyl benzyl phthalate	310	U	310	12	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Caprolactam	310	U	310	44	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Carbazole	310	U	310	32	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Chrysene	**19**	**J**	310	1.3	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Dibenz(a,h)anthracene	310	U	310	0.78	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Dibenzofuran	**21**	**J**	310	0.78	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Diethyl phthalate	310	U	310	19	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Dimethyl phthalate	310	U	310	20	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Di-n-butyl phthalate	310	U	310	18	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Di-n-octyl phthalate	310	U	310	9.4	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Fluoranthene	**7.6**	**J**	310	0.65	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022818-DS-022
Date Collected: 02/28/18 12:30
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-3
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**10**	**J**	310	0.63	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Hexachlorobenzene	310	U	310	2.5	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Hexachlorobutadiene	47	U	47	6.6	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Hexachlorocyclopentadiene	310	U	310	9.6	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Hexachloroethane	310	U	310	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Indeno[1,2,3-cd]pyrene	310	U	310	0.41	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Isophorone	310	U	310	15	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Naphthalene	**22**	**J**	310	0.97	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Nitrobenzene	310	U	310	2.6	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
N-Nitrosodi-n-propylamine	310	U	310	7.5	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
N-Nitrosodiphenylamine	310	U	310	25	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Phenol	310	U	310	8.6	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Phenanthrene	**66**	**J**	310	0.86	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
Pyrene	**20**	**J**	310	0.52	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1
3 & 4 Methylphenol	310	U	310	24	ug/Kg	☼	03/05/18 11:03	03/12/18 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*82*		*32 - 120*	*03/05/18 11:03*	*03/12/18 16:09*	*1*
2-Fluorophenol (Surr)	*80*		*29 - 120*	*03/05/18 11:03*	*03/12/18 16:09*	*1*
2,4,6-Tribromophenol (Surr)	*37*		*10 - 120*	*03/05/18 11:03*	*03/12/18 16:09*	*1*
Nitrobenzene-d5 (Surr)	*72*		*30 - 120*	*03/05/18 11:03*	*03/12/18 16:09*	*1*
Phenol-d5 (Surr)	*85*		*29 - 120*	*03/05/18 11:03*	*03/12/18 16:09*	*1*
Terphenyl-d14 (Surr)	*91*		*41 - 120*	*03/05/18 11:03*	*03/12/18 16:09*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-023
Date Collected: 02/28/18 14:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-4
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**20**	**J**	330	4.4	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2,2'-oxybis[1-chloropropane]	330	U	330	12	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2,4,5-Trichlorophenol	330	U	330	31	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2,4,6-Trichlorophenol	330	U	330	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2,4-Dichlorophenol	330	U	330	25	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2,4-Dimethylphenol	330	U	330	25	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2,4-Dinitrophenol	190	U	190	26	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2,4-Dinitrotoluene	**28**	**J**	330	21	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2,6-Dinitrotoluene	330	U	330	26	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2-Chloronaphthalene	330	U	330	0.56	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2-Chlorophenol	330	U	330	10	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2-Methylnaphthalene	**120**	**J**	330	0.63	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2-Methylphenol	330	U	330	14	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2-Nitroaniline	250	U	250	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
2-Nitrophenol	330	U	330	10	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
3,3'-Dichlorobenzidine	2000	U	2000	23	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
3-Nitroaniline	250	U	250	20	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
4,6-Dinitro-2-methylphenol	190	U	190	12	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
4-Bromophenyl phenyl ether	330	U	330	16	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
4-Chloro-3-methylphenol	330	U	330	26	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
4-Chloroaniline	250	U	250	21	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
4-Chlorophenyl phenyl ether	330	U	330	16	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
4-Nitroaniline	250	U	250	33	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
4-Nitrophenol	410	U	410	21	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Acenaphthene	**15**	**J**	330	0.95	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Acenaphthylene	330	U	330	0.44	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Acetophenone	330	U	330	12	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Anthracene	**14**	**J**	330	0.98	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Atrazine	50	U	50	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Benzaldehyde	330	U	330	15	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Benzo[a]anthracene	**34**	**J**	330	0.79	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Benzo[a]pyrene	**43**	**J**	330	0.80	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Benzo[b]fluoranthene	**78**	**J**	330	0.74	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Benzo[g,h,i]perylene	**35**	**J**	330	0.44	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Benzo[k]fluoranthene	**31**	**J**	330	0.85	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Bis(2-chloroethoxy)methane	330	U	330	28	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Bis(2-chloroethyl)ether	100	U	100	2.5	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Bis(2-ethylhexyl) phthalate	**33**	**J**	330	24	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Butyl benzyl phthalate	330	U	330	13	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Caprolactam	330	U	330	46	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Carbazole	330	U	330	34	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Chrysene	**82**	**J**	330	1.4	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Dibenz(a,h)anthracene	**7.1**	**J**	330	0.83	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Dibenzofuran	**26**	**J**	330	0.83	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Diethyl phthalate	330	U	330	20	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Dimethyl phthalate	330	U	330	21	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Di-n-butyl phthalate	330	U	330	19	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Di-n-octyl phthalate	330	U	330	9.9	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Fluoranthene	**110**	**J**	330	0.69	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022818-DS-023
Date Collected: 02/28/18 14:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-4
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**16**	**J**	330	0.66	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Hexachlorobenzene	330	U	330	2.6	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Hexachlorobutadiene	50	U	50	7.0	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Hexachlorocyclopentadiene	330	U	330	10	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Hexachloroethane	330	U	330	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Indeno[1,2,3-cd]pyrene	**20**	**J**	330	0.44	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Isophorone	330	U	330	16	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Naphthalene	**38**	**J**	330	1.0	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Nitrobenzene	330	U	330	2.8	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
N-Nitrosodi-n-propylamine	330	U	330	7.9	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
N-Nitrosodiphenylamine	330	U	330	26	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Pentachlorophenol	190	U	190	11	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Phenol	330	U	330	9.1	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Phenanthrene	**170**	**J**	330	0.91	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
Pyrene	**110**	**J**	330	0.55	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1
3 & 4 Methylphenol	330	U	330	25	ug/Kg	☼	03/05/18 11:03	03/12/18 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*78*		*32 - 120*	*03/05/18 11:03*	*03/12/18 16:35*	*1*
2-Fluorophenol (Surr)	*81*		*29 - 120*	*03/05/18 11:03*	*03/12/18 16:35*	*1*
2,4,6-Tribromophenol (Surr)	*40*		*10 - 120*	*03/05/18 11:03*	*03/12/18 16:35*	*1*
Nitrobenzene-d5 (Surr)	*77*		*30 - 120*	*03/05/18 11:03*	*03/12/18 16:35*	*1*
Phenol-d5 (Surr)	*84*		*29 - 120*	*03/05/18 11:03*	*03/12/18 16:35*	*1*
Terphenyl-d14 (Surr)	*89*		*41 - 120*	*03/05/18 11:03*	*03/12/18 16:35*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-024
Date Collected: 02/28/18 14:10
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-5
Matrix: Solid
Percent Solids: 77.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	340	U	340	4.5	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2,2'-oxybis[1-chloropropane]	340	U	340	12	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2,4,5-Trichlorophenol	340	U	340	32	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2,4,6-Trichlorophenol	340	U	340	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2,4-Dichlorophenol	340	U	340	26	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2,4-Dimethylphenol	340	U	340	26	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2,4-Dinitrophenol	190	U	190	27	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2,4-Dinitrotoluene	340	U	340	22	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2,6-Dinitrotoluene	340	U	340	27	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2-Chloronaphthalene	340	U	340	0.58	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2-Chlorophenol	340	U	340	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2-Methylnaphthalene	340	U	340	0.64	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2-Methylphenol	340	U	340	14	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2-Nitroaniline	260	U	260	12	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
2-Nitrophenol	340	U	340	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
3,3'-Dichlorobenzidine	2100	U	2100	23	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
3-Nitroaniline	260	U	260	21	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
4,6-Dinitro-2-methylphenol	190	U	190	12	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
4-Bromophenyl phenyl ether	340	U	340	17	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
4-Chloro-3-methylphenol	340	U	340	27	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
4-Chloroaniline	260	U	260	22	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
4-Chlorophenyl phenyl ether	340	U	340	17	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
4-Nitroaniline	260	U	260	33	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
4-Nitrophenol	420	U	420	22	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Acenaphthene	340	U	340	0.97	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Acenaphthylene	340	U	340	0.45	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Acetophenone	340	U	340	12	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Anthracene	340	U	340	1.0	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Atrazine	51	U	51	12	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Benzaldehyde	340	U	340	15	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Benzo[a]anthracene	340	U	340	0.81	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Benzo[a]pyrene	340	U	340	0.82	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Benzo[b]fluoranthene	**4.9**	**J**	340	0.76	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Benzo[g,h,i]perylene	340	U	340	0.45	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Benzo[k]fluoranthene	340	U	340	0.87	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Bis(2-chloroethoxy)methane	340	U	340	28	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Bis(2-chloroethyl)ether	100	U	100	2.6	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Bis(2-ethylhexyl) phthalate	340	U	340	24	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Butyl benzyl phthalate	340	U	340	13	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Caprolactam	340	U	340	47	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Carbazole	340	U	340	35	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Chrysene	340	U	340	1.4	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Dibenz(a,h)anthracene	340	U	340	0.85	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Dibenzofuran	340	U	340	0.85	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Diethyl phthalate	340	U	340	21	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Dimethyl phthalate	340	U	340	22	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Di-n-butyl phthalate	340	U	340	19	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Di-n-octyl phthalate	340	U	340	10	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Fluoranthene	340	U	340	0.71	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022818-DS-024
Date Collected: 02/28/18 14:10
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-5
Matrix: Solid
Percent Solids: 77.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	340	U	340	0.68	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Hexachlorobenzene	340	U	340	2.7	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Hexachlorobutadiene	51	U	51	7.2	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Hexachlorocyclopentadiene	340	U	340	10	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Hexachloroethane	340	U	340	12	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Indeno[1,2,3-cd]pyrene	340	U	340	0.45	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Isophorone	340	U	340	17	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Naphthalene	340	U	340	1.1	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Nitrobenzene	340	U	340	2.8	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
N-Nitrosodi-n-propylamine	340	U	340	8.1	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
N-Nitrosodiphenylamine	340	U	340	27	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Pentachlorophenol	190	U	190	12	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Phenol	340	U	340	9.4	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Phenanthrene	340	U	340	0.94	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
Pyrene	**8.7**	**J**	340	0.56	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1
3 & 4 Methylphenol	340	U	340	26	ug/Kg	☼	03/05/18 11:03	03/12/18 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*32 - 120*	*03/05/18 11:03*	*03/12/18 17:01*	*1*
2-Fluorophenol (Surr)	*75*		*29 - 120*	*03/05/18 11:03*	*03/12/18 17:01*	*1*
2,4,6-Tribromophenol (Surr)	*42*		*10 - 120*	*03/05/18 11:03*	*03/12/18 17:01*	*1*
Nitrobenzene-d5 (Surr)	*63*		*30 - 120*	*03/05/18 11:03*	*03/12/18 17:01*	*1*
Phenol-d5 (Surr)	*76*		*29 - 120*	*03/05/18 11:03*	*03/12/18 17:01*	*1*
Terphenyl-d14 (Surr)	*88*		*41 - 120*	*03/05/18 11:03*	*03/12/18 17:01*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-022818-DS-025
Date Collected: 02/28/18 14:20
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-6
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**7.5**	**J**	310	4.1	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2,2'-oxybis[1-chloropropane]	310	U	310	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2,4,5-Trichlorophenol	310	U	310	29	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2,4,6-Trichlorophenol	310	U	310	10	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2,4-Dichlorophenol	310	U	310	23	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2,4-Dimethylphenol	310	U	310	23	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2,4-Dinitrophenol	180	U	180	25	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2,4-Dinitrotoluene	310	U	310	20	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2,6-Dinitrotoluene	310	U	310	25	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2-Chloronaphthalene	310	U	310	0.53	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2-Chlorophenol	310	U	310	9.6	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2-Methylnaphthalene	**30**	**J**	310	0.58	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2-Methylphenol	310	U	310	13	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2-Nitroaniline	230	U	230	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
2-Nitrophenol	310	U	310	9.7	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
3,3'-Dichlorobenzidine	1900	U	1900	21	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
3-Nitroaniline	230	U	230	19	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
4-Bromophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
4-Chloro-3-methylphenol	310	U	310	25	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
4-Chloroaniline	230	U	230	20	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
4-Chlorophenyl phenyl ether	310	U	310	15	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
4-Nitrophenol	390	U	390	20	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Acenaphthene	310	U	310	0.89	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Acenaphthylene	310	U	310	0.41	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Acetophenone	310	U	310	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Anthracene	310	U	310	0.91	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Atrazine	47	U	47	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Benzaldehyde	310	U	310	14	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Benzo[a]anthracene	310	U	310	0.74	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Benzo[a]pyrene	310	U	310	0.75	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Benzo[b]fluoranthene	**8.9**	**J**	310	0.69	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Benzo[g,h,i]perylene	**16**	**J**	310	0.41	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Benzo[k]fluoranthene	310	U	310	0.79	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Bis(2-chloroethoxy)methane	310	U	310	26	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Bis(2-chloroethyl)ether	93	U	93	2.3	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Bis(2-ethylhexyl) phthalate	310	U	310	22	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Butyl benzyl phthalate	310	U	310	12	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Caprolactam	310	U	310	43	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Carbazole	310	U	310	32	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Chrysene	**20**	**J**	310	1.3	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Dibenz(a,h)anthracene	310	U	310	0.77	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Dibenzofuran	**18**	**J**	310	0.77	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Diethyl phthalate	310	U	310	19	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Dimethyl phthalate	310	U	310	20	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Di-n-butyl phthalate	310	U	310	18	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Di-n-octyl phthalate	310	U	310	9.2	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Fluoranthene	**4.0**	**J**	310	0.64	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-022818-DS-025
Date Collected: 02/28/18 14:20
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-6
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**10**	**J**	310	0.62	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Hexachlorobenzene	310	U	310	2.5	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Hexachlorobutadiene	47	U	47	6.5	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Hexachlorocyclopentadiene	310	U	310	9.5	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Hexachloroethane	310	U	310	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Indeno[1,2,3-cd]pyrene	310	U	310	0.41	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Isophorone	310	U	310	15	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Naphthalene	**9.9**	**J**	310	0.96	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Nitrobenzene	310	U	310	2.6	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
N-Nitrosodi-n-propylamine	310	U	310	7.4	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
N-Nitrosodiphenylamine	310	U	310	25	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Phenol	310	U	310	8.5	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Phenanthrene	**72**	**J**	310	0.85	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
Pyrene	**22**	**J**	310	0.51	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1
3 & 4 Methylphenol	310	U	310	23	ug/Kg	☼	03/05/18 11:03	03/12/18 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*32 - 120*	*03/05/18 11:03*	*03/12/18 17:27*	*1*
2-Fluorophenol (Surr)	*81*		*29 - 120*	*03/05/18 11:03*	*03/12/18 17:27*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*10 - 120*	*03/05/18 11:03*	*03/12/18 17:27*	*1*
Nitrobenzene-d5 (Surr)	*69*		*30 - 120*	*03/05/18 11:03*	*03/12/18 17:27*	*1*
Phenol-d5 (Surr)	*84*		*29 - 120*	*03/05/18 11:03*	*03/12/18 17:27*	*1*
Terphenyl-d14 (Surr)	*93*		*41 - 120*	*03/05/18 11:03*	*03/12/18 17:27*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022818-DS-021
Date Collected: 02/28/18 12:25
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-2
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	59	U	59	26	ug/Kg	☼	03/02/18 11:50	03/05/18 18:40	1
Aroclor-1221	59	U	59	28	ug/Kg	☼	03/02/18 11:50	03/05/18 18:40	1
Aroclor-1232	59	U	59	27	ug/Kg	☼	03/02/18 11:50	03/05/18 18:40	1
Aroclor-1242	59	U	59	23	ug/Kg	☼	03/02/18 11:50	03/05/18 18:40	1
Aroclor-1248	59	U	59	28	ug/Kg	☼	03/02/18 11:50	03/05/18 18:40	1
Aroclor-1254	59	U	59	27	ug/Kg	☼	03/02/18 11:50	03/05/18 18:40	1
Aroclor-1260	59	U	59	26	ug/Kg	☼	03/02/18 11:50	03/05/18 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*14 - 128*	*03/02/18 11:50*	*03/05/18 18:40*	*1*
DCB Decachlorobiphenyl	*87*		*10 - 132*	*03/02/18 11:50*	*03/05/18 18:40*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022818-DS-022
Date Collected: 02/28/18 12:30
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-3
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	60	U	60	26	ug/Kg	☼	03/02/18 11:50	03/05/18 18:57	1
Aroclor-1221	60	U	60	29	ug/Kg	☼	03/02/18 11:50	03/05/18 18:57	1
Aroclor-1232	60	U	60	27	ug/Kg	☼	03/02/18 11:50	03/05/18 18:57	1
Aroclor-1242	60	U	60	23	ug/Kg	☼	03/02/18 11:50	03/05/18 18:57	1
Aroclor-1248	60	U	60	29	ug/Kg	☼	03/02/18 11:50	03/05/18 18:57	1
Aroclor-1254	60	U	60	27	ug/Kg	☼	03/02/18 11:50	03/05/18 18:57	1
Aroclor-1260	60	U	60	26	ug/Kg	☼	03/02/18 11:50	03/05/18 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*03/02/18 11:50*	*03/05/18 18:57*	*1*
DCB Decachlorobiphenyl	*92*		*10 - 132*	*03/02/18 11:50*	*03/05/18 18:57*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022818-DS-023
Date Collected: 02/28/18 14:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-4
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	62	U	62	27	ug/Kg	☼	03/02/18 11:50	03/05/18 19:14	1
Aroclor-1221	62	U	62	30	ug/Kg	☼	03/02/18 11:50	03/05/18 19:14	1
Aroclor-1232	62	U	62	29	ug/Kg	☼	03/02/18 11:50	03/05/18 19:14	1
Aroclor-1242	**85**		62	24	ug/Kg	☼	03/02/18 11:50	03/05/18 19:14	1
Aroclor-1248	62	U	62	30	ug/Kg	☼	03/02/18 11:50	03/05/18 19:14	1
Aroclor-1254	**200**		62	29	ug/Kg	☼	03/02/18 11:50	03/05/18 19:14	1
Aroclor-1260	62	U	62	27	ug/Kg	☼	03/02/18 11:50	03/05/18 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*14 - 128*	*03/02/18 11:50*	*03/05/18 19:14*	*1*
DCB Decachlorobiphenyl	*106*		*10 - 132*	*03/02/18 11:50*	*03/05/18 19:14*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022818-DS-024
Date Collected: 02/28/18 14:10
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-5
Matrix: Solid
Percent Solids: 77.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	310	U	310	140	ug/Kg	☼	03/02/18 11:50	03/05/18 19:30	5
Aroclor-1221	310	U	310	150	ug/Kg	☼	03/02/18 11:50	03/05/18 19:30	5
Aroclor-1232	310	U	310	140	ug/Kg	☼	03/02/18 11:50	03/05/18 19:30	5
Aroclor-1242	**230**	**J**	310	120	ug/Kg	☼	03/02/18 11:50	03/05/18 19:30	5
Aroclor-1248	310	U	310	150	ug/Kg	☼	03/02/18 11:50	03/05/18 19:30	5
Aroclor-1254	**680**		310	140	ug/Kg	☼	03/02/18 11:50	03/05/18 19:30	5
Aroclor-1260	310	U	310	140	ug/Kg	☼	03/02/18 11:50	03/05/18 19:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*14 - 128*	*03/02/18 11:50*	*03/05/18 19:30*	*5*
DCB Decachlorobiphenyl	*96*		*10 - 132*	*03/02/18 11:50*	*03/05/18 19:30*	*5*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-022818-DS-025
Date Collected: 02/28/18 14:20
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-6
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	58	U	58	26	ug/Kg	☼	03/02/18 11:50	03/05/18 19:47	1
Aroclor-1221	58	U	58	28	ug/Kg	☼	03/02/18 11:50	03/05/18 19:47	1
Aroclor-1232	58	U	58	27	ug/Kg	☼	03/02/18 11:50	03/05/18 19:47	1
Aroclor-1242	58	U	58	22	ug/Kg	☼	03/02/18 11:50	03/05/18 19:47	1
Aroclor-1248	58	U	58	28	ug/Kg	☼	03/02/18 11:50	03/05/18 19:47	1
Aroclor-1254	58	U	58	27	ug/Kg	☼	03/02/18 11:50	03/05/18 19:47	1
Aroclor-1260	58	U	58	26	ug/Kg	☼	03/02/18 11:50	03/05/18 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*14 - 128*	*03/02/18 11:50*	*03/05/18 19:47*	*1*
DCB Decachlorobiphenyl	*92*		*10 - 132*	*03/02/18 11:50*	*03/05/18 19:47*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022818-DS-021
Date Collected: 02/28/18 12:25
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-2
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	57		0.84	0.38	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1
Beryllium	0.42		0.17	0.056	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1
Cadmium	0.56		0.084	0.050	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1
Cobalt	8.9		0.42	0.21	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1
Chromium	15		0.84	0.16	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1
Copper	25		0.84	0.25	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1
Manganese	350		0.84	0.32	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1
Nickel	26		0.84	0.24	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1
Zinc	120		2.1	1.4	mg/Kg	☼	03/06/18 14:00	03/08/18 08:13	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022818-DS-022
Date Collected: 02/28/18 12:30
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-3
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	59		0.93	0.42	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1
Beryllium	0.53		0.19	0.063	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1
Cadmium	0.29		0.093	0.056	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1
Cobalt	10		0.47	0.23	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1
Chromium	17		0.93	0.18	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1
Copper	20		0.93	0.28	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1
Manganese	370		0.93	0.36	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1
Nickel	31		0.93	0.27	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1
Zinc	61		2.3	1.6	mg/Kg	☼	03/06/18 14:00	03/08/18 08:18	1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022818-DS-023
Date Collected: 02/28/18 14:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-4
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	67		0.86	0.39	mg/Kg	☼	03/06/18 14:00	03/08/18 08:22	1
Beryllium	0.42		0.17	0.058	mg/Kg	☼	03/06/18 14:00	03/08/18 08:22	1
Cadmium	0.35		0.086	0.051	mg/Kg	☼	03/06/18 14:00	03/08/18 08:22	1
Cobalt	9.2		0.43	0.21	mg/Kg	☼	03/06/18 14:00	03/08/18 08:22	1
Chromium	15		0.86	0.16	mg/Kg	☼	03/06/18 14:00	03/08/18 08:22	1
Copper	25		1.7	0.51	mg/Kg	☼	03/06/18 14:00	03/08/18 23:47	2
Manganese	350		0.86	0.33	mg/Kg	☼	03/06/18 14:00	03/08/18 08:22	1
Nickel	28		0.86	0.25	mg/Kg	☼	03/06/18 14:00	03/08/18 08:22	1
Zinc	57		2.1	1.5	mg/Kg	☼	03/06/18 14:00	03/08/18 08:22	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022818-DS-024
Date Collected: 02/28/18 14:10
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-5
Matrix: Solid
Percent Solids: 77.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	53		1.0	0.45	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1
Beryllium	0.43		0.20	0.068	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1
Cadmium	0.31		0.10	0.060	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1
Cobalt	8.0		0.50	0.25	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1
Chromium	15		1.0	0.19	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1
Copper	20		1.0	0.30	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1
Manganese	150		1.0	0.39	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1
Nickel	24		1.0	0.29	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1
Zinc	51		2.5	1.7	mg/Kg	☼	03/06/18 14:00	03/08/18 08:27	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-022818-DS-025
Date Collected: 02/28/18 14:20
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-6
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	61		0.81	0.37	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1
Beryllium	0.52		0.16	0.054	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1
Cadmium	0.31		0.081	0.048	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1
Cobalt	10		0.40	0.20	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1
Chromium	16		0.81	0.15	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1
Copper	19		0.81	0.24	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1
Manganese	350		0.81	0.31	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1
Nickel	31		0.81	0.24	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1
Zinc	56		2.0	1.4	mg/Kg	☼	03/06/18 14:00	03/08/18 08:41	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022818-DS-021
Date Collected: 02/28/18 12:25
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-2
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	J	0.17	0.13	mg/Kg	☼	03/06/18 14:00	03/07/18 16:28	2
Arsenic	7.4		0.084	0.063	mg/Kg	☼	03/06/18 14:00	03/07/18 16:28	2
Lead	19		0.21	0.065	mg/Kg	☼	03/06/18 14:00	03/07/18 16:28	2
Selenium	0.77		0.17	0.13	mg/Kg	☼	03/06/18 14:00	03/07/18 16:28	2
Thallium	0.39		0.084	0.050	mg/Kg	☼	03/06/18 14:00	03/07/18 16:28	2
Vanadium	19		0.84	0.24	mg/Kg	☼	03/06/18 14:00	03/07/18 16:28	2
Silver	0.094		0.084	0.023	mg/Kg	☼	03/06/18 14:00	03/07/18 16:28	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022818-DS-022
Date Collected: 02/28/18 12:30
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-3
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.19	U	0.19	0.15	mg/Kg	☼	03/06/18 14:00	03/07/18 16:32	2
Arsenic	**6.6**		0.093	0.070	mg/Kg	☼	03/06/18 14:00	03/07/18 16:32	2
Lead	**9.3**		0.23	0.073	mg/Kg	☼	03/06/18 14:00	03/07/18 16:32	2
Selenium	**0.61**		0.19	0.14	mg/Kg	☼	03/06/18 14:00	03/07/18 16:32	2
Thallium	**0.39**		0.093	0.056	mg/Kg	☼	03/06/18 14:00	03/07/18 16:32	2
Vanadium	**24**		0.93	0.27	mg/Kg	☼	03/06/18 14:00	03/07/18 16:32	2
Silver	**0.044**	**J**	0.093	0.026	mg/Kg	☼	03/06/18 14:00	03/07/18 16:32	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022818-DS-023
Date Collected: 02/28/18 14:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-4
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.14	J	0.17	0.13	mg/Kg	☼	03/06/18 14:00	03/07/18 16:46	2
Arsenic	7.8		0.086	0.064	mg/Kg	☼	03/06/18 14:00	03/07/18 16:46	2
Lead	11		0.21	0.067	mg/Kg	☼	03/06/18 14:00	03/07/18 16:46	2
Selenium	0.69		0.17	0.13	mg/Kg	☼	03/06/18 14:00	03/07/18 16:46	2
Thallium	0.41		0.086	0.051	mg/Kg	☼	03/06/18 14:00	03/07/18 16:46	2
Vanadium	19		0.86	0.25	mg/Kg	☼	03/06/18 14:00	03/07/18 16:46	2
Silver	0.060	J	0.086	0.024	mg/Kg	☼	03/06/18 14:00	03/07/18 16:46	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022818-DS-024
Date Collected: 02/28/18 14:10
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-5
Matrix: Solid
Percent Solids: 77.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.20	U	0.20	0.16	mg/Kg	☼	03/06/18 14:00	03/07/18 16:50	2
Arsenic	**5.0**		0.10	0.075	mg/Kg	☼	03/06/18 14:00	03/07/18 16:50	2
Lead	**9.6**		0.25	0.078	mg/Kg	☼	03/06/18 14:00	03/07/18 16:50	2
Selenium	**0.55**		0.20	0.15	mg/Kg	☼	03/06/18 14:00	03/07/18 16:50	2
Thallium	**0.28**		0.10	0.060	mg/Kg	☼	03/06/18 14:00	03/07/18 16:50	2
Vanadium	**22**		1.0	0.29	mg/Kg	☼	03/06/18 14:00	03/07/18 16:50	2
Silver	**0.040**	**J**	0.10	0.028	mg/Kg	☼	03/06/18 14:00	03/07/18 16:50	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-022818-DS-025
Date Collected: 02/28/18 14:20
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-6
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	U	0.16	0.13	mg/Kg	☼	03/06/18 14:00	03/07/18 16:55	2
Arsenic	**10**		0.081	0.061	mg/Kg	☼	03/06/18 14:00	03/07/18 16:55	2
Lead	**9.0**		0.20	0.063	mg/Kg	☼	03/06/18 14:00	03/07/18 16:55	2
Selenium	**0.57**		0.16	0.12	mg/Kg	☼	03/06/18 14:00	03/07/18 16:55	2
Thallium	**0.49**		0.081	0.048	mg/Kg	☼	03/06/18 14:00	03/07/18 16:55	2
Vanadium	**24**		0.81	0.23	mg/Kg	☼	03/06/18 14:00	03/07/18 16:55	2
Silver	**0.041**	**J**	0.081	0.022	mg/Kg	☼	03/06/18 14:00	03/07/18 16:55	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022818-DS-021
Date Collected: 02/28/18 12:25
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-2
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045	U	0.045	0.020	mg/Kg	☼	03/06/18 16:00	03/07/18 14:54	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022818-DS-022
Date Collected: 02/28/18 12:30
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-3
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050	U	0.050	0.023	mg/Kg	☼	03/06/18 16:00	03/07/18 14:56	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022818-DS-023
Date Collected: 02/28/18 14:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-4
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.058	U	0.058	0.026	mg/Kg	☼	03/06/18 16:00	03/07/18 14:58	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022818-DS-024
Date Collected: 02/28/18 14:10
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-5
Matrix: Solid
Percent Solids: 77.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.058	U	0.058	0.026	mg/Kg	☼	03/06/18 16:00	03/07/18 15:00	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-022818-DS-025
Date Collected: 02/28/18 14:20
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-6
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	U	0.044	0.020	mg/Kg	☼	03/06/18 16:00	03/07/18 15:02	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

General Chemistry

Client Sample ID: SO-17303-022818-DS-021
Date Collected: 02/28/18 12:25
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-2
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.8		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	12.2		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

General Chemistry

Client Sample ID: SO-17303-022818-DS-022
Date Collected: 02/28/18 12:30
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-3
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.0		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	16.0		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

General Chemistry

Client Sample ID: SO-17303-022818-DS-023
Date Collected: 02/28/18 14:00
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-4
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79.0		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	21.0		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

General Chemistry

Client Sample ID: SO-17303-022818-DS-024
Date Collected: 02/28/18 14:10
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-5
Matrix: Solid
Percent Solids: 77.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77.5		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	22.5		0.1	0.1	%			03/02/18 11:17	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

General Chemistry

Client Sample ID: SO-17303-022818-DS-025
Date Collected: 02/28/18 14:20
Date Received: 03/01/18 09:40

Lab Sample ID: 240-92114-6
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.7		0.1	0.1	%			03/02/18 11:17	1
Percent Moisture	15.3		0.1	0.1	%			03/02/18 11:17	1

GC/MS VOA

Analysis Batch: 317128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-1	TB-17303-022818	Total/NA	Water	8260B	
MB 240-317128/6	Method Blank	Total/NA	Water	8260B	
LCS 240-317128/4	Lab Control Sample	Total/NA	Water	8260B	

Prep Batch: 317367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	5035	
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	5035	
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	5035	
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	5035	
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	5035	
MB 240-317367/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-317367/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 240-317367/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 317662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	8260B	317367
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	8260B	317367
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	8260B	317367
MB 240-317367/1-A	Method Blank	Total/NA	Solid	8260B	317367
LCS 240-317367/2-A	Lab Control Sample	Total/NA	Solid	8260B	317367
LCSD 240-317367/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	317367

Analysis Batch: 317923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	8260B	317367
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	8260B	317367

GC/MS Semi VOA

Prep Batch: 317123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	3540C	
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	3540C	
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	3540C	
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	3540C	
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	3540C	
MB 240-317123/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-317123/24-A	Lab Control Sample	Total/NA	Solid	3540C	

Analysis Batch: 317412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-317123/23-A	Method Blank	Total/NA	Solid	8270C	317123
LCS 240-317123/24-A	Lab Control Sample	Total/NA	Solid	8270C	317123

Analysis Batch: 318001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	8270C	317123
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	8270C	317123

GC/MS Semi VOA (Continued)

Analysis Batch: 318001 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	8270C	317123
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	8270C	317123
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	8270C	317123

GC Semi VOA

Prep Batch: 316927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	3540C	
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	3540C	
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	3540C	
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	3540C	
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	3540C	
MB 240-316927/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-316927/24-A	Lab Control Sample	Total/NA	Solid	3540C	

Analysis Batch: 317160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	8082A	316927
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	8082A	316927
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	8082A	316927
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	8082A	316927
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	8082A	316927
MB 240-316927/23-A	Method Blank	Total/NA	Solid	8082A	316927
LCS 240-316927/24-A	Lab Control Sample	Total/NA	Solid	8082A	316927

Metals

Prep Batch: 317303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	3050B	
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	3050B	
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	3050B	
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	3050B	
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	3050B	
MB 240-317303/1-A	Method Blank	Total/NA	Solid	3050B	
MB 240-317303/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 240-317303/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-317303/3-A ^2	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 317313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	7471A	
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	7471A	
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	7471A	
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	7471A	
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	7471A	
MB 240-317313/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 240-317313/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Metals (Continued)

Analysis Batch: 317524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	7471A	317313
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	7471A	317313
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	7471A	317313
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	7471A	317313
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	7471A	317313
MB 240-317313/1-A	Method Blank	Total/NA	Solid	7471A	317313
LCS 240-317313/2-A	Lab Control Sample	Total/NA	Solid	7471A	317313

Analysis Batch: 317649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	6020	317303
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	6020	317303
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	6020	317303
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	6020	317303
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	6020	317303
MB 240-317303/1-A ^2	Method Blank	Total/NA	Solid	6020	317303
LCS 240-317303/3-A ^2	Lab Control Sample	Total/NA	Solid	6020	317303

Analysis Batch: 317653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	6010B	317303
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	6010B	317303
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	6010B	317303
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	6010B	317303
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	6010B	317303
MB 240-317303/1-A	Method Blank	Total/NA	Solid	6010B	317303
LCS 240-317303/2-A	Lab Control Sample	Total/NA	Solid	6010B	317303

Analysis Batch: 317791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	6010B	317303

General Chemistry

Analysis Batch: 316910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92114-2	SO-17303-022818-DS-021	Total/NA	Solid	Moisture	
240-92114-3	SO-17303-022818-DS-022	Total/NA	Solid	Moisture	
240-92114-4	SO-17303-022818-DS-023	Total/NA	Solid	Moisture	
240-92114-5	SO-17303-022818-DS-024	Total/NA	Solid	Moisture	
240-92114-6	SO-17303-022818-DS-025	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-317128/6
Matrix: Water
Analysis Batch: 317128

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			03/05/18 13:49	1
Benzene	1.0	U	1.0	0.28	ug/L			03/05/18 13:49	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			03/05/18 13:49	1
Bromoform	1.0	U	1.0	0.43	ug/L			03/05/18 13:49	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/05/18 13:49	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			03/05/18 13:49	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			03/05/18 13:49	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			03/05/18 13:49	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			03/05/18 13:49	1
Chloroethane	1.0	U	1.0	0.41	ug/L			03/05/18 13:49	1
Chloroform	1.0	U	1.0	0.31	ug/L			03/05/18 13:49	1
Chloromethane	1.0	U	1.0	0.43	ug/L			03/05/18 13:49	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			03/05/18 13:49	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/05/18 13:49	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			03/05/18 13:49	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			03/05/18 13:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			03/05/18 13:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			03/05/18 13:49	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			03/05/18 13:49	1
2-Hexanone	10	U	10	1.2	ug/L			03/05/18 13:49	1
Methylene Chloride	1.07	J	5.0	0.53	ug/L			03/05/18 13:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			03/05/18 13:49	1
Styrene	1.0	U	1.0	0.23	ug/L			03/05/18 13:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			03/05/18 13:49	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			03/05/18 13:49	1
Toluene	1.0	U	1.0	0.23	ug/L			03/05/18 13:49	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			03/05/18 13:49	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/05/18 13:49	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			03/05/18 13:49	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/05/18 13:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			03/05/18 13:49	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			03/05/18 13:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			03/05/18 13:49	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			03/05/18 13:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			03/05/18 13:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/05/18 13:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/05/18 13:49	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			03/05/18 13:49	1
Methyl acetate	10	U	10	1.4	ug/L			03/05/18 13:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			03/05/18 13:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/05/18 13:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			03/05/18 13:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			03/05/18 13:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			03/05/18 13:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			03/05/18 13:49	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			03/05/18 13:49	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			03/05/18 13:49	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			03/05/18 13:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		61 - 138		03/05/18 13:49	1
4-Bromofluorobenzene (Surr)	88		69 - 120		03/05/18 13:49	1
Toluene-d8 (Surr)	94		73 - 120		03/05/18 13:49	1
Dibromofluoromethane (Surr)	99		69 - 124		03/05/18 13:49	1

Lab Sample ID: LCS 240-317128/4
Matrix: Water
Analysis Batch: 317128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	13.3		ug/L		66	35 - 131
Benzene	10.0	10.6		ug/L		106	79 - 120
Bromodichloromethane	10.0	10.9		ug/L		109	79 - 125
Bromoform	10.0	9.92		ug/L		99	55 - 145
Bromomethane	10.0	9.61		ug/L		96	17 - 158
2-Butanone (MEK)	20.0	14.1		ug/L		71	43 - 149
Carbon disulfide	10.0	12.4		ug/L		124	49 - 141
Carbon tetrachloride	10.0	12.3		ug/L		123	55 - 171
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120
Chloroethane	10.0	9.83		ug/L		98	10 - 149
Chloroform	10.0	11.1		ug/L		111	80 - 120
Chloromethane	10.0	10.1		ug/L		101	59 - 124
1,1-Dichloroethane	10.0	11.2		ug/L		112	74 - 120
1,2-Dichloroethane	10.0	10.2		ug/L		102	68 - 133
1,1-Dichloroethene	10.0	10.9		ug/L		109	65 - 127
1,2-Dichloropropane	10.0	11.5		ug/L		115	78 - 127
cis-1,3-Dichloropropene	10.0	10.2		ug/L		102	75 - 120
trans-1,3-Dichloropropene	10.0	9.48		ug/L		95	67 - 120
Ethylbenzene	10.0	10.6		ug/L		106	80 - 120
2-Hexanone	20.0	16.7		ug/L		84	28 - 169
Methylene Chloride	10.0	10.8		ug/L		108	64 - 140
4-Methyl-2-pentanone (MIBK)	20.0	16.1		ug/L		80	53 - 144
Styrene	10.0	10.4		ug/L		104	80 - 121
1,1,2,2-Tetrachloroethane	10.0	8.49		ug/L		85	58 - 122
Tetrachloroethene	10.0	10.8		ug/L		108	80 - 122
Toluene	10.0	10.7		ug/L		107	78 - 120
Trichloroethene	10.0	10.9		ug/L		109	76 - 124
Vinyl chloride	10.0	11.8		ug/L		118	65 - 124
Xylenes, Total	20.0	21.1		ug/L		106	80 - 120
1,1,1-Trichloroethane	10.0	11.8		ug/L		118	64 - 147
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	76 - 121
Cyclohexane	10.0	12.1		ug/L		121	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	7.49		ug/L		75	50 - 130
1,2-Dibromoethane	10.0	9.76		ug/L		98	80 - 120
Dichlorodifluoromethane	10.0	9.88		ug/L		99	42 - 141
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	77 - 120
trans-1,2-Dichloroethene	10.0	11.3		ug/L		113	74 - 124
Isopropylbenzene	10.0	10.4		ug/L		104	80 - 128
Methyl acetate	20.0	14.1		ug/L		70	63 - 137
Methyl tert-butyl ether	10.0	9.76		ug/L		98	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.8		ug/L		128	65 - 144
1,2,4-Trichlorobenzene	10.0	8.70		ug/L		87	34 - 141
1,2-Dichlorobenzene	10.0	9.66		ug/L		97	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317128/4
Matrix: Water
Analysis Batch: 317128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	10.0	9.67		ug/L		97	80 - 120
1,4-Dichlorobenzene	10.0	9.74		ug/L		97	80 - 120
Trichlorofluoromethane	10.0	11.3		ug/L		113	27 - 176
Dibromochloromethane	10.0	10.8		ug/L		108	64 - 129
Methylcyclohexane	10.0	11.2		ug/L		112	63 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 138*
4-Bromofluorobenzene (Surr)	*99*		*69 - 120*
Toluene-d8 (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*69 - 124*

Lab Sample ID: MB 240-317367/1-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317367

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	97	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Benzene	40	U	40	24	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Bromodichloromethane	80	U	80	18	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Bromoform	80	U	80	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Bromomethane	200	U	200	28	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
2-Butanone (MEK)	600	U	600	50	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Carbon disulfide	200	U	200	18	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Carbon tetrachloride	40	U	40	27	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Chlorobenzene	40	U	40	30	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Chloroethane	200	U	200	28	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Chloroform	40	U	40	24	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Chloromethane	200	U	200	18	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1-Dichloroethane	40	U	40	31	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dichloroethane	40	U	40	30	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1-Dichloroethene	40	U	40	36	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dichloropropane	40	U	40	30	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
cis-1,3-Dichloropropene	40	U	40	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
trans-1,3-Dichloropropene	40	U	40	15	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Ethylbenzene	40	U	40	35	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
2-Hexanone	2000	U	2000	86	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Methylene Chloride	200	U	200	65	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	40	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Styrene	40	U	40	10	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1,2,2-Tetrachloroethane	40	U	40	24	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Tetrachloroethene	40	U	40	21	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Toluene	80	U	80	24	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Trichloroethene	40	U	40	37	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Vinyl chloride	32	U	32	17	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Xylenes, Total	120	U	120	28	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1,1-Trichloroethane	40	U	40	28	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1,2-Trichloroethane	40	U	40	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-317367/1-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317367

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	960	U	960	30	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dibromo-3-Chloropropane	200	U	200	48	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dibromoethane	200	U	200	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Dichlorodifluoromethane	80	U	80	22	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
cis-1,2-Dichloroethene	40	U	40	35	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
trans-1,2-Dichloroethene	40	U	40	35	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Isopropylbenzene	200	U	200	34	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Methyl acetate	960	U	960	75	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Methyl tert-butyl ether	200	U	200	26	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2,4-Trichlorobenzene	200	U	200	26	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dichlorobenzene	80	U	80	18	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,3-Dichlorobenzene	80	U	80	38	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,4-Dichlorobenzene	80	U	80	27	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Trichlorofluoromethane	80	U	80	34	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Dibromochloromethane	40	U	40	34	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Methylcyclohexane	960	U	960	37	ug/Kg		03/06/18 14:22	03/08/18 20:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*64 - 144*	*03/06/18 14:22*	*03/08/18 20:53*	*1*
4-Bromofluorobenzene (Surr)	*95*		*58 - 142*	*03/06/18 14:22*	*03/08/18 20:53*	*1*
Toluene-d8 (Surr)	*100*		*61 - 137*	*03/06/18 14:22*	*03/08/18 20:53*	*1*
Dibromofluoromethane (Surr)	*81*		*31 - 155*	*03/06/18 14:22*	*03/08/18 20:53*	*1*

Lab Sample ID: LCS 240-317367/2-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317367

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	2140		ug/Kg		107	24 - 125
Benzene	1000	910		ug/Kg		91	77 - 120
Bromodichloromethane	1000	847		ug/Kg		85	61 - 132
Bromoform	1000	934		ug/Kg		93	40 - 140
Bromomethane	1000	1060		ug/Kg		106	10 - 153
2-Butanone (MEK)	2000	2050		ug/Kg		103	51 - 120
Carbon disulfide	1000	815		ug/Kg		82	17 - 163
Carbon tetrachloride	1000	826		ug/Kg		83	43 - 144
Chlorobenzene	1000	1040		ug/Kg		104	76 - 120
Chloroethane	1000	1060		ug/Kg		106	10 - 166
Chloroform	1000	889		ug/Kg		89	74 - 120
Chloromethane	1000	927		ug/Kg		93	41 - 124
1,1-Dichloroethane	1000	847		ug/Kg		85	72 - 120
1,2-Dichloroethane	1000	904		ug/Kg		90	71 - 120
1,1-Dichloroethene	1000	947		ug/Kg		95	58 - 130
1,2-Dichloropropane	1000	914		ug/Kg		91	78 - 122
cis-1,3-Dichloropropene	1000	917		ug/Kg		92	66 - 126
trans-1,3-Dichloropropene	1000	971		ug/Kg		97	55 - 121
Ethylbenzene	1000	1050		ug/Kg		105	76 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317367/2-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317367

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	2000	2180		ug/Kg		109	52 - 129
Methylene Chloride	1000	898		ug/Kg		90	64 - 126
4-Methyl-2-pentanone (MIBK)	2000	1980	J	ug/Kg		99	65 - 131
Styrene	1000	1050		ug/Kg		105	80 - 120
1,1,2,2-Tetrachloroethane	1000	1040		ug/Kg		104	78 - 120
Tetrachloroethene	1000	1060		ug/Kg		106	68 - 122
Toluene	1000	1010		ug/Kg		101	74 - 120
Trichloroethene	1000	954		ug/Kg		95	73 - 123
Vinyl chloride	1000	744		ug/Kg		74	49 - 131
Xylenes, Total	2000	2090		ug/Kg		105	78 - 120
1,1,1-Trichloroethane	1000	869		ug/Kg		87	60 - 136
1,1,2-Trichloroethane	1000	1110		ug/Kg		111	80 - 120
Cyclohexane	1000	814	J	ug/Kg		81	66 - 129
1,2-Dibromo-3-Chloropropane	1000	913		ug/Kg		91	40 - 133
1,2-Dibromoethane	1000	1100		ug/Kg		110	80 - 120
Dichlorodifluoromethane	1000	574		ug/Kg		57	15 - 127
cis-1,2-Dichloroethene	1000	909		ug/Kg		91	78 - 120
trans-1,2-Dichloroethene	1000	921		ug/Kg		92	74 - 124
Isopropylbenzene	1000	1030		ug/Kg		103	76 - 124
Methyl acetate	2000	2040		ug/Kg		102	63 - 126
Methyl tert-butyl ether	1000	933		ug/Kg		93	68 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	997		ug/Kg		100	64 - 125
1,2,4-Trichlorobenzene	1000	763		ug/Kg		76	60 - 124
1,2-Dichlorobenzene	1000	1020		ug/Kg		102	75 - 120
1,3-Dichlorobenzene	1000	1020		ug/Kg		102	72 - 120
1,4-Dichlorobenzene	1000	1020		ug/Kg		102	71 - 120
Trichlorofluoromethane	1000	819		ug/Kg		82	28 - 152
Dibromochloromethane	1000	991		ug/Kg		99	46 - 125
Methylcyclohexane	1000	791	J	ug/Kg		79	71 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*64 - 144*
4-Bromofluorobenzene (Surr)	*95*		*58 - 142*
Toluene-d8 (Surr)	*95*		*61 - 137*
Dibromofluoromethane (Surr)	*83*		*31 - 155*

Lab Sample ID: LCSD 240-317367/3-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 317367

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	2000	2250		ug/Kg		112	24 - 125	5	40
Benzene	1000	874		ug/Kg		87	77 - 120	4	40
Bromodichloromethane	1000	831		ug/Kg		83	61 - 132	2	40
Bromoform	1000	922		ug/Kg		92	40 - 140	1	40
Bromomethane	1000	1070		ug/Kg		107	10 - 153	0	40
2-Butanone (MEK)	2000	2150		ug/Kg		108	51 - 120	5	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 240-317367/3-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 317367

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide			1000	806		ug/Kg		81	17 - 163	1	40
Carbon tetrachloride			1000	798		ug/Kg		80	43 - 144	3	40
Chlorobenzene			1000	973		ug/Kg		97	76 - 120	7	40
Chloroethane			1000	1030		ug/Kg		103	10 - 166	3	40
Chloroform			1000	859		ug/Kg		86	74 - 120	3	40
Chloromethane			1000	902		ug/Kg		90	41 - 124	3	40
1,1-Dichloroethane			1000	820		ug/Kg		82	72 - 120	3	40
1,2-Dichloroethane			1000	875		ug/Kg		87	71 - 120	3	40
1,1-Dichloroethene			1000	948		ug/Kg		95	58 - 130	0	40
1,2-Dichloropropane			1000	884		ug/Kg		88	78 - 122	3	40
cis-1,3-Dichloropropene			1000	888		ug/Kg		89	66 - 126	3	40
trans-1,3-Dichloropropene			1000	913		ug/Kg		91	55 - 121	6	40
Ethylbenzene			1000	974		ug/Kg		97	76 - 120	7	40
2-Hexanone			2000	2220		ug/Kg		111	52 - 129	2	40
Methylene Chloride			1000	870		ug/Kg		87	64 - 126	3	40
4-Methyl-2-pentanone (MIBK)			2000	2050		ug/Kg		102	65 - 131	3	40
Styrene			1000	974		ug/Kg		97	80 - 120	7	40
1,1,2,2-Tetrachloroethane			1000	987		ug/Kg		99	78 - 120	6	40
Tetrachloroethene			1000	1020		ug/Kg		102	68 - 122	4	40
Toluene			1000	956		ug/Kg		96	74 - 120	6	40
Trichloroethene			1000	921		ug/Kg		92	73 - 123	4	40
Vinyl chloride			1000	746		ug/Kg		75	49 - 131	0	40
Xylenes, Total			2000	1940		ug/Kg		97	78 - 120	8	40
1,1,1-Trichloroethane			1000	843		ug/Kg		84	60 - 136	3	40
1,1,2-Trichloroethane			1000	1040		ug/Kg		104	80 - 120	6	40
Cyclohexane			1000	743	J	ug/Kg		74	66 - 129	9	40
1,2-Dibromo-3-Chloropropane			1000	964		ug/Kg		96	40 - 133	5	40
1,2-Dibromoethane			1000	1050		ug/Kg		105	80 - 120	4	40
Dichlorodifluoromethane			1000	548		ug/Kg		55	15 - 127	5	40
cis-1,2-Dichloroethene			1000	859		ug/Kg		86	78 - 120	6	40
trans-1,2-Dichloroethene			1000	884		ug/Kg		88	74 - 124	4	40
Isopropylbenzene			1000	961		ug/Kg		96	76 - 124	7	40
Methyl acetate			2000	2120		ug/Kg		106	63 - 126	4	40
Methyl tert-butyl ether			1000	916		ug/Kg		92	68 - 129	2	40
1,1,2-Trichloro-1,2,2-trifluoroethane			1000	943		ug/Kg		94	64 - 125	6	40
1,2,4-Trichlorobenzene			1000	818		ug/Kg		82	60 - 124	7	40
1,2-Dichlorobenzene			1000	946		ug/Kg		95	75 - 120	7	40
1,3-Dichlorobenzene			1000	968		ug/Kg		97	72 - 120	5	40
1,4-Dichlorobenzene			1000	952		ug/Kg		95	71 - 120	7	40
Trichlorofluoromethane			1000	809		ug/Kg		81	28 - 152	1	40
Dibromochloromethane			1000	950		ug/Kg		95	46 - 125	4	40
Methylcyclohexane			1000	731	J	ug/Kg		73	71 - 126	8	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*64 - 144*
4-Bromofluorobenzene (Surr)	*92*		*58 - 142*
Toluene-d8 (Surr)	*92*		*61 - 137*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 240-317367/3-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 317367

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*84*		*31 - 155*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-317123/23-A
Matrix: Solid
Analysis Batch: 317412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317123

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	3.5	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2,4,6-Trichlorophenol	260	U	260	8.9	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2,4-Dichlorophenol	260	U	260	20	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2,4-Dinitrophenol	150	U	150	21	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2,4-Dinitrotoluene	260	U	260	17	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2-Chloronaphthalene	260	U	260	0.45	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2-Chlorophenol	260	U	260	8.2	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2-Methylnaphthalene	260	U	260	0.50	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2-Methylphenol	260	U	260	11	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
2-Nitrophenol	260	U	260	8.3	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
3,3'-Dichlorobenzidine	1600	U	1600	18	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
3-Nitroaniline	200	U	200	16	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
4-Bromophenyl phenyl ether	260	U	260	13	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
4-Chloroaniline	200	U	200	17	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
4-Chlorophenyl phenyl ether	260	U	260	13	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
4-Nitroaniline	200	U	200	26	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
4-Nitrophenol	330	U	330	17	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Acenaphthene	260	U	260	0.76	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Acenaphthylene	260	U	260	0.35	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Acetophenone	260	U	260	9.2	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Anthracene	260	U	260	0.78	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Atrazine	40	U	40	9.1	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Benzaldehyde	260	U	260	12	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Benzo[a]anthracene	260	U	260	0.63	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Benzo[a]pyrene	260	U	260	0.64	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Benzo[b]fluoranthene	260	U	260	0.59	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Benzo[g,h,i]perylene	260	U	260	0.35	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Benzo[k]fluoranthene	260	U	260	0.68	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Bis(2-ethylhexyl) phthalate	260	U	260	19	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		03/05/18 11:03	03/07/18 08:08	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-317123/23-A
Matrix: Solid
Analysis Batch: 317412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317123

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	260	U	260	37	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Carbazole	260	U	260	27	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Chrysene	260	U	260	1.1	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Dibenz(a,h)anthracene	260	U	260	0.66	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Dibenzofuran	260	U	260	0.66	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Diethyl phthalate	260	U	260	16	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Dimethyl phthalate	260	U	260	17	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Di-n-butyl phthalate	260	U	260	15	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Di-n-octyl phthalate	260	U	260	7.9	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Fluoranthene	260	U	260	0.55	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Fluorene	260	U	260	0.53	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Hexachlorobutadiene	40	U	40	5.6	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Hexachlorocyclopentadiene	260	U	260	8.1	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Hexachloroethane	260	U	260	9.0	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Indeno[1,2,3-cd]pyrene	260	U	260	0.35	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Isophorone	260	U	260	13	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Naphthalene	260	U	260	0.82	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Nitrobenzene	260	U	260	2.2	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
N-Nitrosodi-n-propylamine	260	U	260	6.3	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Phenol	260	U	260	7.3	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Phenanthrene	260	U	260	0.73	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
Pyrene	260	U	260	0.44	ug/Kg		03/05/18 11:03	03/07/18 08:08	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		03/05/18 11:03	03/07/18 08:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*91*		*32 - 120*	*03/05/18 11:03*	*03/07/18 08:08*	*1*
2-Fluorophenol (Surr)	*76*		*29 - 120*	*03/05/18 11:03*	*03/07/18 08:08*	*1*
2,4,6-Tribromophenol (Surr)	*44*		*10 - 120*	*03/05/18 11:03*	*03/07/18 08:08*	*1*
Nitrobenzene-d5 (Surr)	*81*		*30 - 120*	*03/05/18 11:03*	*03/07/18 08:08*	*1*
Phenol-d5 (Surr)	*79*		*29 - 120*	*03/05/18 11:03*	*03/07/18 08:08*	*1*
Terphenyl-d14 (Surr)	*100*		*41 - 120*	*03/05/18 11:03*	*03/07/18 08:08*	*1*

Lab Sample ID: LCS 240-317123/24-A
Matrix: Solid
Analysis Batch: 317412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317123

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	568		ug/Kg		85	48 - 120
2,2'-oxybis[1-chloropropane]	667	562		ug/Kg		84	37 - 120
2,4,5-Trichlorophenol	667	563		ug/Kg		84	34 - 120
2,4,6-Trichlorophenol	667	545		ug/Kg		82	19 - 120
2,4-Dichlorophenol	667	542		ug/Kg		81	48 - 120
2,4-Dimethylphenol	667	324		ug/Kg		49	37 - 120
2,4-Dinitrophenol	1330	235		ug/Kg		18	10 - 120
2,4-Dinitrotoluene	667	540		ug/Kg		81	53 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317123/24-A
Matrix: Solid
Analysis Batch: 317412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317123

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	667	592		ug/Kg		89	54 - 120
2-Chloronaphthalene	667	553		ug/Kg		83	49 - 120
2-Chlorophenol	667	537		ug/Kg		81	50 - 120
2-Methylnaphthalene	667	561		ug/Kg		84	49 - 120
2-Methylphenol	667	496		ug/Kg		74	49 - 120
2-Nitroaniline	667	618		ug/Kg		93	46 - 120
2-Nitrophenol	667	566		ug/Kg		85	46 - 120
3,3'-Dichlorobenzidine	1330	856	J	ug/Kg		64	40 - 120
3-Nitroaniline	667	541		ug/Kg		81	48 - 120
4,6-Dinitro-2-methylphenol	1330	600		ug/Kg		45	18 - 120
4-Bromophenyl phenyl ether	667	549		ug/Kg		82	51 - 120
4-Chloro-3-methylphenol	667	549		ug/Kg		82	47 - 120
4-Chloroaniline	667	415		ug/Kg		62	37 - 120
4-Chlorophenyl phenyl ether	667	570		ug/Kg		85	49 - 120
4-Nitroaniline	667	573		ug/Kg		86	49 - 120
4-Nitrophenol	1330	1040		ug/Kg		78	42 - 120
Acenaphthene	667	564		ug/Kg		85	48 - 120
Acenaphthylene	667	566		ug/Kg		85	46 - 120
Acetophenone	667	505		ug/Kg		76	46 - 120
Anthracene	667	558		ug/Kg		84	51 - 120
Atrazine	1330	1250		ug/Kg		94	57 - 120
Benzaldehyde	1330	1180		ug/Kg		88	48 - 120
Benzo[a]anthracene	667	519		ug/Kg		78	53 - 120
Benzo[a]pyrene	667	629		ug/Kg		94	50 - 120
Benzo[b]fluoranthene	667	653		ug/Kg		98	48 - 120
Benzo[g,h,i]perylene	667	622		ug/Kg		93	50 - 120
Benzo[k]fluoranthene	667	651		ug/Kg		98	51 - 120
Bis(2-chloroethoxy)methane	667	577		ug/Kg		87	50 - 120
Bis(2-chloroethyl)ether	667	544		ug/Kg		82	48 - 120
Bis(2-ethylhexyl) phthalate	667	517		ug/Kg		78	52 - 120
Butyl benzyl phthalate	667	531		ug/Kg		80	53 - 120
Caprolactam	1330	1130		ug/Kg		85	59 - 120
Carbazole	667	576		ug/Kg		86	56 - 120
Chrysene	667	518		ug/Kg		78	54 - 120
Dibenz(a,h)anthracene	667	634		ug/Kg		95	48 - 120
Dibenzofuran	667	574		ug/Kg		86	49 - 120
Diethyl phthalate	667	595		ug/Kg		89	52 - 120
Dimethyl phthalate	667	593		ug/Kg		89	53 - 120
Di-n-butyl phthalate	667	614		ug/Kg		92	56 - 120
Di-n-octyl phthalate	667	580		ug/Kg		87	42 - 120
Fluoranthene	667	572		ug/Kg		86	53 - 120
Fluorene	667	587		ug/Kg		88	50 - 120
Hexachlorobenzene	667	546		ug/Kg		82	46 - 120
Hexachlorobutadiene	667	522		ug/Kg		78	44 - 120
Hexachlorocyclopentadiene	667	455		ug/Kg		68	14 - 120
Hexachloroethane	667	512		ug/Kg		77	45 - 120
Indeno[1,2,3-cd]pyrene	667	643		ug/Kg		96	49 - 120
Isophorone	667	558		ug/Kg		84	47 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317123/24-A
Matrix: Solid
Analysis Batch: 317412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317123

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	667	553		ug/Kg		83	48 - 120
Nitrobenzene	667	570		ug/Kg		85	48 - 120
N-Nitrosodi-n-propylamine	667	558		ug/Kg		84	49 - 120
N-Nitrosodiphenylamine	667	540		ug/Kg		81	53 - 120
Pentachlorophenol	1330	396		ug/Kg		30	14 - 120
Phenol	667	560		ug/Kg		84	49 - 120
Phenanthrene	667	562		ug/Kg		84	52 - 120
Pyrene	667	547		ug/Kg		82	55 - 120
3 & 4 Methylphenol	667	538		ug/Kg		81	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*89*		*32 - 120*
2-Fluorophenol (Surr)	*85*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*77*		*10 - 120*
Nitrobenzene-d5 (Surr)	*86*		*30 - 120*
Phenol-d5 (Surr)	*86*		*29 - 120*
Terphenyl-d14 (Surr)	*86*		*41 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-316927/23-A
Matrix: Solid
Analysis Batch: 317160

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316927

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1221	50	U	50	24	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1232	50	U	50	23	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1242	50	U	50	19	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1248	50	U	50	24	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1254	50	U	50	23	ug/Kg		03/02/18 11:50	03/05/18 20:37	1
Aroclor-1260	50	U	50	22	ug/Kg		03/02/18 11:50	03/05/18 20:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*101*		*14 - 128*	*03/02/18 11:50*	*03/05/18 20:37*	*1*
DCB Decachlorobiphenyl	*113*		*10 - 132*	*03/02/18 11:50*	*03/05/18 20:37*	*1*

Lab Sample ID: LCS 240-316927/24-A
Matrix: Solid
Analysis Batch: 317160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	777		ug/Kg		78	47 - 120
Aroclor-1260	1000	959		ug/Kg		96	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*14 - 128*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-316927/24-A
Matrix: Solid
Analysis Batch: 317160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316927

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*98*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-317303/1-A
Matrix: Solid
Analysis Batch: 317653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317303

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80	U	0.80	0.36	mg/Kg		03/06/18 14:00	03/08/18 06:55	1
Beryllium	0.16	U	0.16	0.054	mg/Kg		03/06/18 14:00	03/08/18 06:55	1
Cadmium	0.080	U	0.080	0.048	mg/Kg		03/06/18 14:00	03/08/18 06:55	1
Cobalt	0.40	U	0.40	0.20	mg/Kg		03/06/18 14:00	03/08/18 06:55	1
Chromium	0.80	U	0.80	0.15	mg/Kg		03/06/18 14:00	03/08/18 06:55	1
Copper	0.80	U	0.80	0.24	mg/Kg		03/06/18 14:00	03/08/18 06:55	1
Manganese	0.80	U	0.80	0.31	mg/Kg		03/06/18 14:00	03/08/18 06:55	1
Nickel	0.80	U	0.80	0.23	mg/Kg		03/06/18 14:00	03/08/18 06:55	1
Zinc	2.0	U	2.0	1.4	mg/Kg		03/06/18 14:00	03/08/18 06:55	1

Lab Sample ID: LCS 240-317303/2-A
Matrix: Solid
Analysis Batch: 317653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317303

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	202		mg/Kg		101	80 - 120
Beryllium	5.00	4.82		mg/Kg		96	80 - 120
Cadmium	5.00	5.27		mg/Kg		105	80 - 120
Cobalt	50.0	50.1		mg/Kg		100	80 - 120
Chromium	20.0	19.7		mg/Kg		99	80 - 120
Copper	25.0	25.6		mg/Kg		102	80 - 120
Manganese	50.0	50.3		mg/Kg		101	80 - 120
Nickel	50.0	50.3		mg/Kg		101	80 - 120
Zinc	50.0	51.8		mg/Kg		104	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-317303/1-A ^2
Matrix: Solid
Analysis Batch: 317649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317303

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	U	0.16	0.13	mg/Kg		03/06/18 14:00	03/07/18 15:52	2
Arsenic	0.080	U	0.080	0.060	mg/Kg		03/06/18 14:00	03/07/18 15:52	2
Lead	0.20	U	0.20	0.062	mg/Kg		03/06/18 14:00	03/07/18 15:52	2
Selenium	0.16	U	0.16	0.12	mg/Kg		03/06/18 14:00	03/07/18 15:52	2
Thallium	0.080	U	0.080	0.048	mg/Kg		03/06/18 14:00	03/07/18 15:52	2
Vanadium	0.80	U	0.80	0.23	mg/Kg		03/06/18 14:00	03/07/18 15:52	2
Silver	0.080	U	0.080	0.022	mg/Kg		03/06/18 14:00	03/07/18 15:52	2

Lab Sample ID: LCS 240-317303/3-A ^2
Matrix: Solid
Analysis Batch: 317649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317303

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	8.66		mg/Kg		87	80 - 120
Arsenic	100	91.0		mg/Kg		91	80 - 120
Lead	100	99.8		mg/Kg		100	80 - 120
Selenium	100	87.0		mg/Kg		87	80 - 120
Thallium	25.0	24.3		mg/Kg		97	80 - 120
Vanadium	100	94.2		mg/Kg		94	80 - 120
Silver	10.0	9.26		mg/Kg		93	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-317313/1-A
Matrix: Solid
Analysis Batch: 317524

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.018	mg/Kg		03/06/18 16:00	03/07/18 14:09	1

Lab Sample ID: LCS 240-317313/2-A
Matrix: Solid
Analysis Batch: 317524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.715		mg/Kg		86	80 - 120

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-144)	(58-142)	(61-137)	(31-155)
240-92114-2	SO-17303-022818-DS-021	85	83	91	80
240-92114-3	SO-17303-022818-DS-022	81	80	87	76
240-92114-4	SO-17303-022818-DS-023	89	88	95	86
240-92114-5	SO-17303-022818-DS-024	87	96	100	82
240-92114-6	SO-17303-022818-DS-025	85	85	93	80
LCS 240-317367/2-A	Lab Control Sample	82	95	95	83
LCSD 240-317367/3-A	Lab Control Sample Dup	81	92	92	84
MB 240-317367/1-A	Method Blank	86	95	100	81

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)
240-92114-1	TB-17303-022818	112	85	92	108
LCS 240-317128/4	Lab Control Sample	91	99	100	97
MB 240-317128/6	Method Blank	95	88	94	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(10-120)	(30-120)	(29-120)	(41-120)
240-92114-2	SO-17303-022818-DS-021	79	75	48	75	78	79
240-92114-3	SO-17303-022818-DS-022	82	80	37	72	85	91
240-92114-4	SO-17303-022818-DS-023	78	81	40	77	84	89
240-92114-5	SO-17303-022818-DS-024	74	75	42	63	76	88
240-92114-6	SO-17303-022818-DS-025	81	81	41	69	84	93
LCS 240-317123/24-A	Lab Control Sample	89	85	77	86	86	86
MB 240-317123/23-A	Method Blank	91	76	44	81	79	100

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
240-92114-2	SO-17303-022818-DS-021	74	87
240-92114-3	SO-17303-022818-DS-022	77	92
240-92114-4	SO-17303-022818-DS-023	90	106
240-92114-5	SO-17303-022818-DS-024	88	96
240-92114-6	SO-17303-022818-DS-025	84	92
LCS 240-316927/24-A	Lab Control Sample	89	98
MB 240-316927/23-A	Method Blank	101	113

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Client Sample ID: TB-17303-022818
Lab Sample ID: 240-92114-1
Date Collected: 02/28/18 00:00
Matrix: Water
Date Received: 03/01/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	317128	03/05/18 22:23	LEE	TAL CAN

Client Sample ID: SO-17303-022818-DS-021
Lab Sample ID: 240-92114-2
Date Collected: 02/28/18 12:25
Matrix: Solid
Date Received: 03/01/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022818-DS-021
Lab Sample ID: 240-92114-2
Date Collected: 02/28/18 12:25
Matrix: Solid
Date Received: 03/01/18 09:40
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 14:22	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317662	03/08/18 23:58	TJL1	TAL CAN
Total/NA	Prep	3540C			317123	03/05/18 11:03	AMT	TAL CAN
Total/NA	Analysis	8270C		2.5	318001	03/12/18 15:43	MRU	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 18:40	LSH	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317653	03/08/18 08:13	AS1	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317649	03/07/18 16:28	DSH	TAL CAN
Total/NA	Prep	7471A			317313	03/06/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317524	03/07/18 14:54	AJC	TAL CAN

Client Sample ID: SO-17303-022818-DS-022
Lab Sample ID: 240-92114-3
Date Collected: 02/28/18 12:30
Matrix: Solid
Date Received: 03/01/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022818-DS-022
Lab Sample ID: 240-92114-3
Date Collected: 02/28/18 12:30
Matrix: Solid
Date Received: 03/01/18 09:40
Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 14:22	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317662	03/09/18 00:21	TJL1	TAL CAN
Total/NA	Prep	3540C			317123	03/05/18 11:03	AMT	TAL CAN

Client Sample ID: SO-17303-022818-DS-022

Lab Sample ID: 240-92114-3
Date Collected: 02/28/18 12:30
Matrix: Solid
Date Received: 03/01/18 09:40
Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	318001	03/12/18 16:09	MRU	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 18:57	LSH	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317653	03/08/18 08:18	AS1	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317649	03/07/18 16:32	DSH	TAL CAN
Total/NA	Prep	7471A			317313	03/06/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317524	03/07/18 14:56	AJC	TAL CAN

Client Sample ID: SO-17303-022818-DS-023

Lab Sample ID: 240-92114-4
Date Collected: 02/28/18 14:00
Matrix: Solid
Date Received: 03/01/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022818-DS-023

Lab Sample ID: 240-92114-4
Date Collected: 02/28/18 14:00
Matrix: Solid
Date Received: 03/01/18 09:40
Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 14:22	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317923	03/09/18 23:18	TJL1	TAL CAN
Total/NA	Prep	3540C			317123	03/05/18 11:03	AMT	TAL CAN
Total/NA	Analysis	8270C		1	318001	03/12/18 16:35	MRU	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 19:14	LSH	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317653	03/08/18 08:22	AS1	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		2	317791	03/08/18 23:47	AS1	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317649	03/07/18 16:46	DSH	TAL CAN
Total/NA	Prep	7471A			317313	03/06/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317524	03/07/18 14:58	AJC	TAL CAN

Client Sample ID: SO-17303-022818-DS-024

Lab Sample ID: 240-92114-5
Date Collected: 02/28/18 14:10
Matrix: Solid
Date Received: 03/01/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Client Sample ID: SO-17303-022818-DS-024

Lab Sample ID: 240-92114-5
Date Collected: 02/28/18 14:10
Matrix: Solid
Date Received: 03/01/18 09:40
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 14:22	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317923	03/09/18 23:41	TJL1	TAL CAN
Total/NA	Prep	3540C			317123	03/05/18 11:03	AMT	TAL CAN
Total/NA	Analysis	8270C		1	318001	03/12/18 17:01	MRU	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		5	317160	03/05/18 19:30	LSH	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317653	03/08/18 08:27	AS1	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317649	03/07/18 16:50	DSH	TAL CAN
Total/NA	Prep	7471A			317313	03/06/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317524	03/07/18 15:00	AJC	TAL CAN

Client Sample ID: SO-17303-022818-DS-025

Lab Sample ID: 240-92114-6
Date Collected: 02/28/18 14:20
Matrix: Solid
Date Received: 03/01/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	316910	03/02/18 11:17	CJL	TAL CAN

Client Sample ID: SO-17303-022818-DS-025

Lab Sample ID: 240-92114-6
Date Collected: 02/28/18 14:20
Matrix: Solid
Date Received: 03/01/18 09:40
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 14:22	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317662	03/08/18 23:35	TJL1	TAL CAN
Total/NA	Prep	3540C			317123	03/05/18 11:03	AMT	TAL CAN
Total/NA	Analysis	8270C		1	318001	03/12/18 17:27	MRU	TAL CAN
Total/NA	Prep	3540C			316927	03/02/18 11:50	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317160	03/05/18 19:47	LSH	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	317653	03/08/18 08:41	AS1	TAL CAN
Total/NA	Prep	3050B			317303	03/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317649	03/07/18 16:55	DSH	TAL CAN
Total/NA	Prep	7471A			317313	03/06/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317524	03/07/18 15:02	AJC	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92114-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-18 *
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-18 *
Kentucky (UST)	State Program	4	58	02-23-18 *
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-18 *
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN 190

Chain of Custody Record

231081

4.4/4.1

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tom Rinsky	Site Contact: A. Daum.	Date: 2-28-18	COC No: 1 of 1 COCs
Company Name: GHD	Tel/Fax: 248-865-3400	Lab Contact: D. Heckler	Carrier: Fed Ex	Sampler:
Address: 26050 Haggerty rd	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Farmington Hills, MI	☐ CALENDAR DAYS ☒ WORKING DAYS			Walk-in Client:
Phone: 248-865-3400	TAT if different from Below			Lab Sampling:
Fax:	☒ 2 weeks			
Project Name: CVO	☐ 1 week			Job / SDG No.:
Site: Ypsilanti, MI	☐ 2 days			
PO # 2400607O	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Ti VOC	TCL SVOC	Site TAL Metals: Trans. Pb (<7.5ppb) PCB's.				Sample Specific Notes:
TB-17303-022818	2-28-18	/	TB	TB	1	/	/	X						
SO-17303-022818-DS-021		1225	G	SO	3			X	X	X	X	X		
-022		1230	G					X	X	X	X	X		
-023		1400	G					X	X	X	X	X		
-024		1410	G					X	X	X	X	X		
-025		1420	G					X	X	X	X	X		

240-92114 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
SSOW: 017303-T02-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Derek Salida	GHD	2-28-18/1600		TA	3-1-18 940
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

3/13/2018

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 92114**
Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 3-1-18 Opened on 3-1-18

FedEx: 1st Grd ~~Exp~~ UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble~~ Wrap Foam Plastic Bag None Other _____

COOLANT: ~~Wet~~ Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF **-0.3** °C) Observed Cooler Temp. 4.4 °C Corrected Cooler Temp. 4.1 °C

IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

~~IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	~~No~~
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	~~No~~
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	~~No~~
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No ~~NA~~ pH Strip Lot# **HC732776**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	~~No~~ NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	~~No~~

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-92321-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
3/16/2018 4:39:09 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-92321-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-92321-1

Comments
No additional comments.

Receipt
The samples were received on 3/6/2018 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
Method(s) 5035: The following samples were received in pre-weighed containers with a label that was added in the field, which would cause a slight low bias in the final results. SO-17303-030518-DA-026 (240-92321-2), SO-17303-030518-DA-027 (240-92321-3), SO-17303-030518-DA-028 (240-92321-4) and SO-17303-030518-DA-029 (240-92321-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C: The following samples was diluted due to the nature of the sample matrix: SO-17303-030518-DA-026 (240-92321-2) and SO-17303-030518-DA-028 (240-92321-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-030518-DA-026 (240-92321-2) and SO-17303-030518-DA-027 (240-92321-3).
3488776, 3154250, 3361891.

Method(s) 8082A: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering, other environmental processes and/or contributions from the presence of multiple Aroclors, resulting in overlapping PCB patterns, the PCBs in the samples do not directly match any of the laboratory's Aroclor standards used for instrument calibration: SO-17303-030518-DA-026 (240-92321-2), SO-17303-030518-DA-027 (240-92321-3) and SO-17303-030518-DA-028 (240-92321-4). The samples have been quantified and reported using the best overall Aroclor/standard pattern match. Due to the reasons stated above there is increased quantitative uncertainty associated with this result.

Method(s) 8082A: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering, other environmental processes and/or contributions from the presence of multiple Aroclors, resulting in overlapping PCB patterns, the PCBs in the samples do not directly match any of the laboratory's Aroclor standards used for instrument calibration: SO-17303-030518-DA-029 (240-92321-5). The samples have been quantified and reported using the best overall Aroclor/standard pattern match. Due to the reasons stated above there is increased quantitative uncertainty associated with this result.

Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-030518-DA-029 (240-92321-5), (240-92321-C-5-B MS) and (240-92321-C-5-C MSD).
3488776, 3154250, 3361891.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 200.7 Rev 4.4, 6010B: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: SO-17303-030518-DA-026 (240-92321-2), SO-17303-030518-DA-027 (240-92321-3), SO-17303-030518-DA-028 (240-92321-4) and SO-17303-030518-DA-029 (240-92321-5). The continuing calibration blanks and method blanks may not support the lower PQL.

Method(s) 6020: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: SO-17303-030518-DA-026 (240-92321-2), SO-17303-030518-DA-027 (240-92321-3), SO-17303-030518-DA-028

Job ID: 240-92321-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

(240-92321-4) and SO-17303-030518-DA-029 (240-92321-5). The continuing calibration blanks and method blanks may not support the lower PQL.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-92321-1	TB-17303-030518	Water	03/05/18 00:00	03/06/18 09:30
240-92321-2	SO-17303-030518-DA-026	Solid	03/05/18 13:00	03/06/18 09:30
240-92321-3	SO-17303-030518-DA-027	Solid	03/05/18 14:20	03/06/18 09:30
240-92321-4	SO-17303-030518-DA-028	Solid	03/05/18 14:10	03/06/18 09:30
240-92321-5	SO-17303-030518-DA-029	Solid	03/05/18 13:30	03/06/18 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Client Sample ID: TB-17303-030518 — Lab Sample ID: 240-92321-1

No Detections.

Client Sample ID: SO-17303-030518-DA-026 — Lab Sample ID: 240-92321-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	81	J	1300	52	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	65	J	640	1.2	ug/Kg	2	☼	8270C	Total/NA
Acenaphthene	37	J	640	1.8	ug/Kg	2	☼	8270C	Total/NA
Anthracene	31	J	640	1.9	ug/Kg	2	☼	8270C	Total/NA
Benzo[a]anthracene	140	J	640	1.5	ug/Kg	2	☼	8270C	Total/NA
Benzo[a]pyrene	200	J	640	1.5	ug/Kg	2	☼	8270C	Total/NA
Benzo[b]fluoranthene	390	J	640	1.4	ug/Kg	2	☼	8270C	Total/NA
Benzo[g,h,i]perylene	130	J	640	0.84	ug/Kg	2	☼	8270C	Total/NA
Benzo[k]fluoranthene	130	J	640	1.6	ug/Kg	2	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	240	J	640	46	ug/Kg	2	☼	8270C	Total/NA
Chrysene	260	J	640	2.7	ug/Kg	2	☼	8270C	Total/NA
Dibenz(a,h)anthracene	73	J	640	1.6	ug/Kg	2	☼	8270C	Total/NA
Dibenzofuran	26	J	640	1.6	ug/Kg	2	☼	8270C	Total/NA
Fluoranthene	470	J	640	1.3	ug/Kg	2	☼	8270C	Total/NA
Fluorene	37	J	640	1.3	ug/Kg	2	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	140	J	640	0.84	ug/Kg	2	☼	8270C	Total/NA
Phenanthrene	240	J	640	1.8	ug/Kg	2	☼	8270C	Total/NA
Pyrene	400	J	640	1.1	ug/Kg	2	☼	8270C	Total/NA
Aroclor-1254	36	J	58	27	ug/Kg	1	☼	8082A	Total/NA
Barium	60		0.80	0.36	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.16	0.054	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.38		0.080	0.048	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.7		0.40	0.20	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.80	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.80	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.80	0.31	mg/Kg	1	☼	6010B	Total/NA
Nickel	27		0.80	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	63		2.0	1.4	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.22		0.16	0.13	mg/Kg	2	☼	6020	Total/NA
Arsenic	6.7	B	0.080	0.060	mg/Kg	2	☼	6020	Total/NA
Lead	18		0.20	0.063	mg/Kg	2	☼	6020	Total/NA
Selenium	0.59		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.38		0.080	0.048	mg/Kg	2	☼	6020	Total/NA
Vanadium	20		0.80	0.23	mg/Kg	2	☼	6020	Total/NA
Silver	0.053	J	0.080	0.022	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-030518-DA-027 — Lab Sample ID: 240-92321-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	10	J	300	4.0	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	50	J	300	0.57	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	21	J	300	0.87	ug/Kg	1	☼	8270C	Total/NA
Anthracene	16	J	300	0.89	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	48	J	300	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	68	J	300	0.73	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	98	J	300	0.67	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	58	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-030518-DA-027 (Continued) — Lab Sample ID: 240-92321-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	43	J	300	0.77	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	86	J	300	22	ug/Kg	1	☼	8270C	Total/NA
Chrysene	86	J	300	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	33	J	300	0.75	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	25	J	300	0.75	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	140	J	300	0.63	ug/Kg	1	☼	8270C	Total/NA
Fluorene	19	J	300	0.60	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	51	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	16	J	300	0.93	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	110	J	300	0.83	ug/Kg	1	☼	8270C	Total/NA
Pyrene	120	J	300	0.50	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1260	51	J	56	24	ug/Kg	1	☼	8082A	Total/NA
Barium	49		0.79	0.36	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.36		0.16	0.053	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28		0.079	0.047	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.3		0.39	0.20	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.79	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.79	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.79	0.30	mg/Kg	1	☼	6010B	Total/NA
Nickel	22		0.79	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	46	F1 F2	2.0	1.3	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.30	F2 F1	0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Arsenic	5.7	B	0.079	0.059	mg/Kg	2	☼	6020	Total/NA
Lead	11		0.20	0.061	mg/Kg	2	☼	6020	Total/NA
Selenium	0.61		0.16	0.12	mg/Kg	2	☼	6020	Total/NA
Thallium	0.38		0.079	0.047	mg/Kg	2	☼	6020	Total/NA
Vanadium	16		0.79	0.22	mg/Kg	2	☼	6020	Total/NA
Silver	0.045	J	0.079	0.022	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-030518-DA-028 — Lab Sample ID: 240-92321-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	51	J	1300	49	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	80	J	1200	2.3	ug/Kg	4	☼	8270C	Total/NA
Acenaphthene	36	J	1200	3.6	ug/Kg	4	☼	8270C	Total/NA
Anthracene	63	J	1200	3.6	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]anthracene	310	J	1200	2.9	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]pyrene	490	J	1200	3.0	ug/Kg	4	☼	8270C	Total/NA
Benzo[b]fluoranthene	910	J	1200	2.8	ug/Kg	4	☼	8270C	Total/NA
Benzo[g,h,i]perylene	340	J	1200	1.6	ug/Kg	4	☼	8270C	Total/NA
Benzo[k]fluoranthene	300	J	1200	3.2	ug/Kg	4	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	390	J	1200	89	ug/Kg	4	☼	8270C	Total/NA
Butyl benzyl phthalate	150	J	1200	47	ug/Kg	4	☼	8270C	Total/NA
Chrysene	490	J	1200	5.1	ug/Kg	4	☼	8270C	Total/NA
Dibenz(a,h)anthracene	160	J	1200	3.1	ug/Kg	4	☼	8270C	Total/NA
Fluoranthene	1100	J	1200	2.6	ug/Kg	4	☼	8270C	Total/NA
Fluorene	26	J	1200	2.5	ug/Kg	4	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	330	J	1200	1.6	ug/Kg	4	☼	8270C	Total/NA
Naphthalene	44	J	1200	3.8	ug/Kg	4	☼	8270C	Total/NA
Phenanthrene	320	J	1200	3.4	ug/Kg	4	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-030518-DA-028 (Continued) — Lab Sample ID: 240-92321-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	900	J	1200	2.1	ug/Kg	4	☼	8270C	Total/NA
Aroclor-1260	48	J	55	24	ug/Kg	1	☼	8082A	Total/NA
Barium	44		0.64	0.29	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.26		0.13	0.043	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.81		0.064	0.039	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.1		0.32	0.16	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.64	0.12	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.64	0.19	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.64	0.25	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.64	0.19	mg/Kg	1	☼	6010B	Total/NA
Zinc	110		1.6	1.1	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.32		0.13	0.10	mg/Kg	2	☼	6020	Total/NA
Arsenic	5.3	B	0.064	0.048	mg/Kg	2	☼	6020	Total/NA
Lead	33		0.16	0.050	mg/Kg	2	☼	6020	Total/NA
Selenium	0.64		0.13	0.096	mg/Kg	2	☼	6020	Total/NA
Thallium	0.24		0.064	0.039	mg/Kg	2	☼	6020	Total/NA
Vanadium	15		0.64	0.18	mg/Kg	2	☼	6020	Total/NA
Silver	0.094		0.064	0.018	mg/Kg	2	☼	6020	Total/NA
Mercury	0.020	J	0.041	0.018	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-030518-DA-029 — Lab Sample ID: 240-92321-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	180	J	1600	120	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	16	J	360	4.8	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	68	J	360	0.69	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	34	J	360	1.0	ug/Kg	1	☼	8270C	Total/NA
Anthracene	45	J	360	1.1	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	180	J	360	0.87	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	210	J	360	0.88	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	350	J	360	0.81	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	160	J	360	0.48	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	120	J	360	0.94	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	78	J	360	26	ug/Kg	1	☼	8270C	Total/NA
Carbazole	37	J	360	37	ug/Kg	1	☼	8270C	Total/NA
Chrysene	270	J	360	1.5	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	61	J	360	0.91	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	31	J	360	0.91	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	560		360	0.76	ug/Kg	1	☼	8270C	Total/NA
Fluorene	31	J	360	0.73	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	140	J	360	0.48	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	27	J	360	1.1	ug/Kg	1	☼	8270C	Total/NA
Phenol	13	J	360	10	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	310	J	360	1.0	ug/Kg	1	☼	8270C	Total/NA
Pyrene	450		360	0.61	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1248	77		70	34	ug/Kg	1	☼	8082A	Total/NA
Barium	150		0.98	0.44	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.27		0.20	0.066	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.37		0.098	0.059	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.9		0.49	0.25	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Client Sample ID: SO-17303-030518-DA-029 (Continued) — Lab Sample ID: 240-92321-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	7.8		0.98	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.98	0.29	mg/Kg	1	☼	6010B	Total/NA
Manganese	760		0.98	0.38	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.98	0.29	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		2.5	1.7	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.29		0.20	0.15	mg/Kg	2	☼	6020	Total/NA
Arsenic	11	B	0.098	0.074	mg/Kg	2	☼	6020	Total/NA
Lead	17		0.25	0.077	mg/Kg	2	☼	6020	Total/NA
Selenium	0.41		0.20	0.15	mg/Kg	2	☼	6020	Total/NA
Thallium	0.32		0.098	0.059	mg/Kg	2	☼	6020	Total/NA
Vanadium	11		0.98	0.28	mg/Kg	2	☼	6020	Total/NA
Silver	0.050	J	0.098	0.027	mg/Kg	2	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17303-030518
Date Collected: 03/05/18 00:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			03/07/18 19:57	1
Benzene	1.0	U	1.0	0.28	ug/L			03/07/18 19:57	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			03/07/18 19:57	1
Bromoform	1.0	U	1.0	0.43	ug/L			03/07/18 19:57	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/07/18 19:57	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			03/07/18 19:57	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			03/07/18 19:57	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			03/07/18 19:57	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			03/07/18 19:57	1
Chloroethane	1.0	U	1.0	0.41	ug/L			03/07/18 19:57	1
Chloroform	1.0	U	1.0	0.31	ug/L			03/07/18 19:57	1
Chloromethane	1.0	U	1.0	0.43	ug/L			03/07/18 19:57	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			03/07/18 19:57	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/07/18 19:57	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			03/07/18 19:57	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			03/07/18 19:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			03/07/18 19:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			03/07/18 19:57	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			03/07/18 19:57	1
2-Hexanone	10	U	10	1.2	ug/L			03/07/18 19:57	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			03/07/18 19:57	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			03/07/18 19:57	1
Styrene	1.0	U	1.0	0.23	ug/L			03/07/18 19:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			03/07/18 19:57	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			03/07/18 19:57	1
Toluene	1.0	U	1.0	0.23	ug/L			03/07/18 19:57	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			03/07/18 19:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/07/18 19:57	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			03/07/18 19:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/07/18 19:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			03/07/18 19:57	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			03/07/18 19:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			03/07/18 19:57	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			03/07/18 19:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			03/07/18 19:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/07/18 19:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/07/18 19:57	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			03/07/18 19:57	1
Methyl acetate	10	U	10	1.4	ug/L			03/07/18 19:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			03/07/18 19:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/07/18 19:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			03/07/18 19:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			03/07/18 19:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			03/07/18 19:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			03/07/18 19:57	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			03/07/18 19:57	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			03/07/18 19:57	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			03/07/18 19:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		61 - 138		03/07/18 19:57	1
4-Bromofluorobenzene (Surr)	88		69 - 120		03/07/18 19:57	1
Toluene-d8 (Surr)	96		73 - 120		03/07/18 19:57	1
Dibromofluoromethane (Surr)	96		69 - 124		03/07/18 19:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-030518-DA-026
Date Collected: 03/05/18 13:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-2
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	840	U	840	140	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Benzene	56	U	56	34	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Bromoform	110	U	110	32	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Bromomethane	280	U	280	39	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
2-Butanone (MEK)	840	U	840	70	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Carbon disulfide	280	U	280	25	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Carbon tetrachloride	56	U	56	38	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Chlorobenzene	56	U	56	42	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Chloroethane	280	U	280	39	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Chloroform	56	U	56	34	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Chloromethane	280	U	280	25	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,1-Dichloroethane	56	U	56	43	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,2-Dichloroethane	56	U	56	42	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,1-Dichloroethene	56	U	56	50	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,2-Dichloropropane	56	U	56	42	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
cis-1,3-Dichloropropene	56	U	56	32	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
trans-1,3-Dichloropropene	56	U	56	21	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Ethylbenzene	56	U	56	49	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
2-Hexanone	2800	U	2800	120	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Methylene Chloride	280	U	280	91	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	56	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Styrene	56	U	56	14	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,1,2,2-Tetrachloroethane	56	U	56	34	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Tetrachloroethene	56	U	56	29	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Toluene	110	U	110	34	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Trichloroethene	56	U	56	52	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Vinyl chloride	45	U	45	24	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Xylenes, Total	170	U	170	39	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,1,1-Trichloroethane	56	U	56	39	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,1,2-Trichloroethane	56	U	56	32	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Cyclohexane	1300	U	1300	42	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,2-Dibromo-3-Chloropropane	280	U	280	67	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,2-Dibromoethane	280	U	280	32	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Dichlorodifluoromethane	110	U	110	31	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
cis-1,2-Dichloroethene	56	U	56	49	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
trans-1,2-Dichloroethene	56	U	56	49	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Isopropylbenzene	280	U	280	48	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Methyl acetate	1300	U	1300	100	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Methyl tert-butyl ether	280	U	280	36	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	32	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,2,4-Trichlorobenzene	280	U	280	36	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,3-Dichlorobenzene	110	U	110	53	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
1,4-Dichlorobenzene	110	U	110	38	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Trichlorofluoromethane	110	U	110	48	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Dibromochloromethane	56	U	56	48	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1
Methylcyclohexane	**81**	**J**	1300	52	ug/Kg	☼	03/06/18 21:27	03/10/18 00:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		64 - 144	03/06/18 21:27	03/10/18 00:47	1
4-Bromofluorobenzene (Surr)	78		58 - 142	03/06/18 21:27	03/10/18 00:47	1
Toluene-d8 (Surr)	89		61 - 137	03/06/18 21:27	03/10/18 00:47	1
Dibromofluoromethane (Surr)	73		31 - 155	03/06/18 21:27	03/10/18 00:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-030518-DA-027
Date Collected: 03/05/18 14:20
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-3
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	770	U	770	120	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Benzene	51	U	51	31	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Bromoform	100	U	100	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Bromomethane	260	U	260	36	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
2-Butanone (MEK)	770	U	770	64	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Carbon disulfide	260	U	260	23	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Carbon tetrachloride	51	U	51	35	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Chlorobenzene	51	U	51	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Chloroethane	260	U	260	36	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Chloroform	51	U	51	31	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Chloromethane	260	U	260	23	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,1-Dichloroethane	51	U	51	40	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,2-Dichloroethane	51	U	51	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,1-Dichloroethene	51	U	51	46	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,2-Dichloropropane	51	U	51	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
cis-1,3-Dichloropropene	51	U	51	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
trans-1,3-Dichloropropene	51	U	51	19	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Ethylbenzene	51	U	51	45	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Methylene Chloride	260	U	260	83	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	51	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Styrene	51	U	51	13	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,1,2,2-Tetrachloroethane	51	U	51	31	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Tetrachloroethene	51	U	51	27	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Toluene	100	U	100	31	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Trichloroethene	51	U	51	47	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Xylenes, Total	150	U	150	36	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,1,1-Trichloroethane	51	U	51	36	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,1,2-Trichloroethane	51	U	51	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Cyclohexane	1200	U	1200	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,2-Dibromo-3-Chloropropane	260	U	260	62	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,2-Dibromoethane	260	U	260	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
cis-1,2-Dichloroethene	51	U	51	45	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
trans-1,2-Dichloroethene	51	U	51	45	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Isopropylbenzene	260	U	260	44	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Methyl acetate	1200	U	1200	96	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Methyl tert-butyl ether	260	U	260	33	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,2,4-Trichlorobenzene	260	U	260	33	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,3-Dichlorobenzene	100	U	100	49	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Trichlorofluoromethane	100	U	100	44	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Dibromochloromethane	51	U	51	44	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1
Methylcyclohexane	1200	U	1200	47	ug/Kg	☼	03/06/18 21:27	03/10/18 01:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		64 - 144	03/06/18 21:27	03/10/18 01:10	1
4-Bromofluorobenzene (Surr)	86		58 - 142	03/06/18 21:27	03/10/18 01:10	1
Toluene-d8 (Surr)	90		61 - 137	03/06/18 21:27	03/10/18 01:10	1
Dibromofluoromethane (Surr)	79		31 - 155	03/06/18 21:27	03/10/18 01:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-030518-DA-028
Date Collected: 03/05/18 14:10
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-4
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	790	U	790	130	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Benzene	53	U	53	32	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Bromodichloromethane	110	U	110	24	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Bromoform	110	U	110	30	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Bromomethane	260	U	260	37	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
2-Butanone (MEK)	790	U	790	66	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Carbon disulfide	260	U	260	24	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Carbon tetrachloride	53	U	53	35	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Chlorobenzene	53	U	53	39	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Chloroethane	260	U	260	37	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Chloroform	53	U	53	32	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Chloromethane	260	U	260	24	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,1-Dichloroethane	53	U	53	41	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,2-Dichloroethane	53	U	53	39	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,1-Dichloroethene	53	U	53	47	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,2-Dichloropropane	53	U	53	39	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
cis-1,3-Dichloropropene	53	U	53	30	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
trans-1,3-Dichloropropene	53	U	53	20	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Ethylbenzene	53	U	53	46	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Methylene Chloride	260	U	260	85	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	53	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Styrene	53	U	53	13	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,1,2,2-Tetrachloroethane	53	U	53	32	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Tetrachloroethene	53	U	53	28	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Toluene	110	U	110	32	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Trichloroethene	53	U	53	49	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Vinyl chloride	42	U	42	22	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,1,1-Trichloroethane	53	U	53	37	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,1,2-Trichloroethane	53	U	53	30	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Cyclohexane	1300	U	1300	39	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,2-Dibromo-3-Chloropropane	260	U	260	63	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Dichlorodifluoromethane	110	U	110	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
cis-1,2-Dichloroethene	53	U	53	46	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
trans-1,2-Dichloroethene	53	U	53	46	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Isopropylbenzene	260	U	260	45	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Methyl acetate	1300	U	1300	99	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Methyl tert-butyl ether	260	U	260	34	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,2,4-Trichlorobenzene	260	U	260	34	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,2-Dichlorobenzene	110	U	110	24	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,3-Dichlorobenzene	110	U	110	50	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
1,4-Dichlorobenzene	110	U	110	35	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Trichlorofluoromethane	110	U	110	45	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Dibromochloromethane	53	U	53	45	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1
Methylcyclohexane	**51**	**J**	1300	49	ug/Kg	☼	03/06/18 21:27	03/10/18 01:32	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		64 - 144	03/06/18 21:27	03/10/18 01:32	1
4-Bromofluorobenzene (Surr)	87		58 - 142	03/06/18 21:27	03/10/18 01:32	1
Toluene-d8 (Surr)	91		61 - 137	03/06/18 21:27	03/10/18 01:32	1
Dibromofluoromethane (Surr)	79		31 - 155	03/06/18 21:27	03/10/18 01:32	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	980	U	980	160	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Benzene	65	U	65	39	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Bromodichloromethane	130	U	130	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Bromoform	130	U	130	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Bromomethane	330	U	330	46	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
2-Butanone (MEK)	980	U	980	82	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Carbon disulfide	330	U	330	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Carbon tetrachloride	65	U	65	44	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Chlorobenzene	65	U	65	49	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Chloroethane	330	U	330	46	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Chloroform	65	U	65	39	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Chloromethane	330	U	330	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,1-Dichloroethane	65	U	65	51	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,2-Dichloroethane	65	U	65	49	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,1-Dichloroethene	65	U	65	59	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,2-Dichloropropane	65	U	65	49	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
cis-1,3-Dichloropropene	65	U	65	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
trans-1,3-Dichloropropene	65	U	65	24	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Ethylbenzene	65	U	65	57	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
2-Hexanone	3300	U	3300	140	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Methylene Chloride	330	U	330	110	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
4-Methyl-2-pentanone (MIBK)	3300	U	3300	65	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Styrene	65	U	65	16	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,1,2,2-Tetrachloroethane	65	U	65	39	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Tetrachloroethene	65	U	65	34	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Toluene	130	U	130	39	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Trichloroethene	65	U	65	60	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Vinyl chloride	52	U	52	28	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Xylenes, Total	200	U	200	46	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,1,1-Trichloroethane	65	U	65	46	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,1,2-Trichloroethane	65	U	65	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Cyclohexane	1600	U	1600	49	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,2-Dibromo-3-Chloropropane	330	U	330	78	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,2-Dibromoethane	330	U	330	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Dichlorodifluoromethane	130	U	130	36	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
cis-1,2-Dichloroethene	65	U	65	57	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
trans-1,2-Dichloroethene	65	U	65	57	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Isopropylbenzene	330	U	330	55	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Methyl acetate	**180**	**J**	1600	120	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Methyl tert-butyl ether	330	U	330	42	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	330	U	330	38	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,2,4-Trichlorobenzene	330	U	330	42	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,2-Dichlorobenzene	130	U	130	29	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,3-Dichlorobenzene	130	U	130	62	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
1,4-Dichlorobenzene	130	U	130	44	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Trichlorofluoromethane	130	U	130	55	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Dibromochloromethane	65	U	65	55	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1
Methylcyclohexane	1600	U	1600	60	ug/Kg	☼	03/06/18 21:27	03/10/18 01:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		64 - 144	03/06/18 21:27	03/10/18 01:56	1
4-Bromofluorobenzene (Surr)	85		58 - 142	03/06/18 21:27	03/10/18 01:56	1
Toluene-d8 (Surr)	93		61 - 137	03/06/18 21:27	03/10/18 01:56	1
Dibromofluoromethane (Surr)	81		31 - 155	03/06/18 21:27	03/10/18 01:56	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-030518-DA-026
Date Collected: 03/05/18 13:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-2
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	640	U	640	8.4	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2,2'-oxybis[1-chloropropane]	640	U	640	23	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2,4,5-Trichlorophenol	640	U	640	60	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2,4,6-Trichlorophenol	640	U	640	21	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2,4-Dichlorophenol	640	U	640	48	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2,4-Dimethylphenol	640	U	640	48	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2,4-Dinitrophenol	360	U	360	51	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2,4-Dinitrotoluene	640	U	640	41	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2,6-Dinitrotoluene	640	U	640	51	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2-Chloronaphthalene	640	U	640	1.1	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2-Chlorophenol	640	U	640	20	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2-Methylnaphthalene	**65**	**J**	640	1.2	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2-Methylphenol	640	U	640	27	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2-Nitroaniline	480	U	480	22	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
2-Nitrophenol	640	U	640	20	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
3,3'-Dichlorobenzidine	3900	U	3900	43	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
3-Nitroaniline	480	U	480	39	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
4,6-Dinitro-2-methylphenol	360	U	360	22	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
4-Bromophenyl phenyl ether	640	U	640	31	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
4-Chloro-3-methylphenol	640	U	640	51	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
4-Chloroaniline	480	U	480	41	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
4-Chlorophenyl phenyl ether	640	U	640	31	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
4-Nitroaniline	480	U	480	63	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
4-Nitrophenol	800	U	800	41	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Acenaphthene	**37**	**J**	640	1.8	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Acenaphthylene	640	U	640	0.84	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Acetophenone	640	U	640	22	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Anthracene	**31**	**J**	640	1.9	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Atrazine	96	U	96	22	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Benzaldehyde	640	U	640	29	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Benzo[a]anthracene	**140**	**J**	640	1.5	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Benzo[a]pyrene	**200**	**J**	640	1.5	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Benzo[b]fluoranthene	**390**	**J**	640	1.4	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Benzo[g,h,i]perylene	**130**	**J**	640	0.84	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Benzo[k]fluoranthene	**130**	**J**	640	1.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Bis(2-chloroethoxy)methane	640	U	640	53	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Bis(2-chloroethyl)ether	190	U	190	4.8	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Bis(2-ethylhexyl) phthalate	**240**	**J**	640	46	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Butyl benzyl phthalate	640	U	640	24	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Caprolactam	640	U	640	89	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Carbazole	640	U	640	65	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Chrysene	**260**	**J**	640	2.7	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Dibenz(a,h)anthracene	**73**	**J**	640	1.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Dibenzofuran	**26**	**J**	640	1.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Diethyl phthalate	640	U	640	39	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Dimethyl phthalate	640	U	640	41	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Di-n-butyl phthalate	640	U	640	36	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Di-n-octyl phthalate	640	U	640	19	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Fluoranthene	**470**	**J**	640	1.3	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-030518-DA-026
Date Collected: 03/05/18 13:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-2
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**37**	**J**	640	1.3	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Hexachlorobenzene	640	U	640	5.1	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Hexachlorobutadiene	96	U	96	13	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Hexachlorocyclopentadiene	640	U	640	20	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Hexachloroethane	640	U	640	22	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Indeno[1,2,3-cd]pyrene	**140**	**J**	640	0.84	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Isophorone	640	U	640	31	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Naphthalene	640	U	640	2.0	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Nitrobenzene	640	U	640	5.3	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
N-Nitrosodi-n-propylamine	640	U	640	15	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
N-Nitrosodiphenylamine	640	U	640	51	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Pentachlorophenol	360	U	360	22	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Phenol	640	U	640	18	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Phenanthrene	**240**	**J**	640	1.8	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
Pyrene	**400**	**J**	640	1.1	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2
3 & 4 Methylphenol	640	U	640	48	ug/Kg	☼	03/07/18 11:35	03/16/18 13:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*32 - 120*	*03/07/18 11:35*	*03/16/18 13:47*	*2*
2-Fluorophenol (Surr)	*63*		*29 - 120*	*03/07/18 11:35*	*03/16/18 13:47*	*2*
2,4,6-Tribromophenol (Surr)	*67*		*10 - 120*	*03/07/18 11:35*	*03/16/18 13:47*	*2*
Nitrobenzene-d5 (Surr)	*60*		*30 - 120*	*03/07/18 11:35*	*03/16/18 13:47*	*2*
Phenol-d5 (Surr)	*68*		*29 - 120*	*03/07/18 11:35*	*03/16/18 13:47*	*2*
Terphenyl-d14 (Surr)	*79*		*41 - 120*	*03/07/18 11:35*	*03/16/18 13:47*	*2*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-030518-DA-027
Date Collected: 03/05/18 14:20
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-3
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**10**	**J**	300	4.0	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2,4-Dinitrotoluene	300	U	300	19	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2-Chloronaphthalene	300	U	300	0.51	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2-Chlorophenol	300	U	300	9.3	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2-Methylnaphthalene	**50**	**J**	300	0.57	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2-Methylphenol	300	U	300	13	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
2-Nitrophenol	300	U	300	9.5	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
3,3'-Dichlorobenzidine	1800	U	1800	21	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
4,6-Dinitro-2-methylphenol	170	U	170	10	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
4-Chloroaniline	230	U	230	19	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
4-Nitrophenol	380	U	380	19	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Acenaphthene	**21**	**J**	300	0.87	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Acenaphthylene	300	U	300	0.40	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Acetophenone	300	U	300	10	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Anthracene	**16**	**J**	300	0.89	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Atrazine	46	U	46	10	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Benzo[a]anthracene	**48**	**J**	300	0.72	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Benzo[a]pyrene	**68**	**J**	300	0.73	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Benzo[b]fluoranthene	**98**	**J**	300	0.67	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Benzo[g,h,i]perylene	**58**	**J**	300	0.40	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Benzo[k]fluoranthene	**43**	**J**	300	0.77	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Bis(2-chloroethyl)ether	91	U	91	2.3	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Bis(2-ethylhexyl) phthalate	**86**	**J**	300	22	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Caprolactam	300	U	300	42	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Carbazole	300	U	300	31	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Chrysene	**86**	**J**	300	1.3	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Dibenz(a,h)anthracene	**33**	**J**	300	0.75	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Dibenzofuran	**25**	**J**	300	0.75	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Di-n-butyl phthalate	300	U	300	17	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Di-n-octyl phthalate	300	U	300	9.0	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Fluoranthene	**140**	**J**	300	0.63	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-030518-DA-027
Date Collected: 03/05/18 14:20
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-3
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**19**	**J**	300	0.60	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Hexachlorobutadiene	46	U	46	6.4	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Hexachlorocyclopentadiene	300	U	300	9.2	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Indeno[1,2,3-cd]pyrene	**51**	**J**	300	0.40	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Isophorone	300	U	300	15	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Naphthalene	**16**	**J**	300	0.93	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
N-Nitrosodi-n-propylamine	300	U	300	7.2	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Phenol	300	U	300	8.3	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Phenanthrene	**110**	**J**	300	0.83	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
Pyrene	**120**	**J**	300	0.50	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	03/07/18 11:35	03/16/18 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*32 - 120*	*03/07/18 11:35*	*03/16/18 11:35*	*1*
2-Fluorophenol (Surr)	*73*		*29 - 120*	*03/07/18 11:35*	*03/16/18 11:35*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*10 - 120*	*03/07/18 11:35*	*03/16/18 11:35*	*1*
Nitrobenzene-d5 (Surr)	*70*		*30 - 120*	*03/07/18 11:35*	*03/16/18 11:35*	*1*
Phenol-d5 (Surr)	*76*		*29 - 120*	*03/07/18 11:35*	*03/16/18 11:35*	*1*
Terphenyl-d14 (Surr)	*80*		*41 - 120*	*03/07/18 11:35*	*03/16/18 11:35*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-030518-DA-028
Date Collected: 03/05/18 14:10
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-4
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1200	U	1200	16	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2,2'-oxybis[1-chloropropane]	1200	U	1200	44	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2,4,5-Trichlorophenol	1200	U	1200	120	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2,4,6-Trichlorophenol	1200	U	1200	42	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2,4-Dichlorophenol	1200	U	1200	94	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2,4-Dimethylphenol	1200	U	1200	94	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2,4-Dinitrophenol	700	U	700	98	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2,4-Dinitrotoluene	1200	U	1200	79	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2,6-Dinitrotoluene	1200	U	1200	98	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2-Chloronaphthalene	1200	U	1200	2.1	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2-Chlorophenol	1200	U	1200	38	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2-Methylnaphthalene	**80**	**J**	1200	2.3	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2-Methylphenol	1200	U	1200	51	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2-Nitroaniline	940	U	940	43	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
2-Nitrophenol	1200	U	1200	39	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
3,3'-Dichlorobenzidine	7500	U	7500	84	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
3-Nitroaniline	940	U	940	75	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
4,6-Dinitro-2-methylphenol	700	U	700	43	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
4-Bromophenyl phenyl ether	1200	U	1200	61	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
4-Chloro-3-methylphenol	1200	U	1200	98	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
4-Chloroaniline	940	U	940	79	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
4-Chlorophenyl phenyl ether	1200	U	1200	61	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
4-Nitroaniline	940	U	940	120	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
4-Nitrophenol	1500	U	1500	79	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Acenaphthene	**36**	**J**	1200	3.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Acenaphthylene	1200	U	1200	1.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Acetophenone	1200	U	1200	43	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Anthracene	**63**	**J**	1200	3.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Atrazine	190	U	190	43	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Benzaldehyde	1200	U	1200	56	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Benzo[a]anthracene	**310**	**J**	1200	2.9	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Benzo[a]pyrene	**490**	**J**	1200	3.0	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Benzo[b]fluoranthene	**910**	**J**	1200	2.8	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Benzo[g,h,i]perylene	**340**	**J**	1200	1.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Benzo[k]fluoranthene	**300**	**J**	1200	3.2	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Bis(2-chloroethoxy)methane	1200	U	1200	100	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Bis(2-chloroethyl)ether	370	U	370	9.4	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Bis(2-ethylhexyl) phthalate	**390**	**J**	1200	89	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Butyl benzyl phthalate	**150**	**J**	1200	47	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Caprolactam	1200	U	1200	170	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Carbazole	1200	U	1200	130	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Chrysene	**490**	**J**	1200	5.1	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Dibenz(a,h)anthracene	**160**	**J**	1200	3.1	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Dibenzofuran	1200	U	1200	3.1	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Diethyl phthalate	1200	U	1200	75	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Dimethyl phthalate	1200	U	1200	79	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Di-n-butyl phthalate	1200	U	1200	70	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Di-n-octyl phthalate	1200	U	1200	37	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Fluoranthene	**1100**	**J**	1200	2.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-030518-DA-028
Date Collected: 03/05/18 14:10
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-4
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**26**	**J**	1200	2.5	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Hexachlorobenzene	1200	U	1200	9.8	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Hexachlorobutadiene	190	U	190	26	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Hexachlorocyclopentadiene	1200	U	1200	38	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Hexachloroethane	1200	U	1200	42	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Indeno[1,2,3-cd]pyrene	**330**	**J**	1200	1.6	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Isophorone	1200	U	1200	61	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Naphthalene	**44**	**J**	1200	3.8	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Nitrobenzene	1200	U	1200	10	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
N-Nitrosodi-n-propylamine	1200	U	1200	29	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
N-Nitrosodiphenylamine	1200	U	1200	98	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Pentachlorophenol	700	U	700	43	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Phenol	1200	U	1200	34	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Phenanthrene	**320**	**J**	1200	3.4	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
Pyrene	**900**	**J**	1200	2.1	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4
3 & 4 Methylphenol	1200	U	1200	94	ug/Kg	☼	03/07/18 11:35	03/16/18 13:21	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*32 - 120*	*03/07/18 11:35*	*03/16/18 13:21*	*4*
2-Fluorophenol (Surr)	*67*		*29 - 120*	*03/07/18 11:35*	*03/16/18 13:21*	*4*
2,4,6-Tribromophenol (Surr)	*60*		*10 - 120*	*03/07/18 11:35*	*03/16/18 13:21*	*4*
Nitrobenzene-d5 (Surr)	*62*		*30 - 120*	*03/07/18 11:35*	*03/16/18 13:21*	*4*
Phenol-d5 (Surr)	*71*		*29 - 120*	*03/07/18 11:35*	*03/16/18 13:21*	*4*
Terphenyl-d14 (Surr)	*77*		*41 - 120*	*03/07/18 11:35*	*03/16/18 13:21*	*4*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**16**	**J**	360	4.8	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2,2'-oxybis[1-chloropropane]	360	U	360	13	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2,4,5-Trichlorophenol	360	U	360	35	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2,4,6-Trichlorophenol	360	U	360	12	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2,4-Dichlorophenol	360	U	360	28	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2,4-Dimethylphenol	360	U	360	28	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2,4-Dinitrophenol	210	U	210	29	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2,4-Dinitrotoluene	360	U	360	23	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2,6-Dinitrotoluene	360	U	360	29	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2-Chloronaphthalene	360	U	360	0.62	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2-Chlorophenol	360	U	360	11	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2-Methylnaphthalene	**68**	**J**	360	0.69	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2-Methylphenol	360	U	360	15	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2-Nitroaniline	280	U	280	13	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
2-Nitrophenol	360	U	360	11	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
3,3'-Dichlorobenzidine	2200	U	2200	25	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
3-Nitroaniline	280	U	280	22	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
4,6-Dinitro-2-methylphenol	210	U	210	13	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
4-Bromophenyl phenyl ether	360	U	360	18	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
4-Chloro-3-methylphenol	360	U	360	29	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
4-Chloroaniline	280	U	280	23	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
4-Chlorophenyl phenyl ether	360	U	360	18	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
4-Nitroaniline	280	U	280	36	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
4-Nitrophenol	460	U	460	23	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Acenaphthene	**34**	**J**	360	1.0	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Acenaphthylene	360	U	360	0.48	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Acetophenone	360	U	360	13	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Anthracene	**45**	**J**	360	1.1	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Atrazine	55	U	55	13	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Benzaldehyde	360	U	360	17	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Benzo[a]anthracene	**180**	**J**	360	0.87	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Benzo[a]pyrene	**210**	**J**	360	0.88	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Benzo[b]fluoranthene	**350**	**J**	360	0.81	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Benzo[g,h,i]perylene	**160**	**J**	360	0.48	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Benzo[k]fluoranthene	**120**	**J**	360	0.94	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Bis(2-chloroethoxy)methane	360	U	360	30	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Bis(2-chloroethyl)ether	110	U	110	2.8	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Bis(2-ethylhexyl) phthalate	**78**	**J**	360	26	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Butyl benzyl phthalate	360	U	360	14	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Caprolactam	360	U	360	51	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Carbazole	**37**	**J**	360	37	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Chrysene	**270**	**J**	360	1.5	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Dibenz(a,h)anthracene	**61**	**J**	360	0.91	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Dibenzofuran	**31**	**J**	360	0.91	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Diethyl phthalate	360	U	360	22	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Dimethyl phthalate	360	U	360	23	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Di-n-butyl phthalate	360	U	360	21	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Di-n-octyl phthalate	360	U	360	11	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Fluoranthene	**560**		360	0.76	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**31**	**J**	360	0.73	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Hexachlorobenzene	360	U	360	2.9	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Hexachlorobutadiene	55	U	55	7.7	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Hexachlorocyclopentadiene	360	U F1	360	11	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Hexachloroethane	360	U	360	12	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Indeno[1,2,3-cd]pyrene	**140**	**J**	360	0.48	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Isophorone	360	U	360	18	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Naphthalene	**27**	**J**	360	1.1	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Nitrobenzene	360	U	360	3.0	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
N-Nitrosodi-n-propylamine	360	U	360	8.7	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
N-Nitrosodiphenylamine	360	U	360	29	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Pentachlorophenol	210	U	210	13	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Phenol	**13**	**J**	360	10	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Phenanthrene	**310**	**J**	360	1.0	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
Pyrene	**450**		360	0.61	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1
3 & 4 Methylphenol	360	U	360	28	ug/Kg	☼	03/07/18 11:35	03/16/18 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*32 - 120*	*03/07/18 11:35*	*03/16/18 12:01*	*1*
2-Fluorophenol (Surr)	*77*		*29 - 120*	*03/07/18 11:35*	*03/16/18 12:01*	*1*
2,4,6-Tribromophenol (Surr)	*70*		*10 - 120*	*03/07/18 11:35*	*03/16/18 12:01*	*1*
Nitrobenzene-d5 (Surr)	*73*		*30 - 120*	*03/07/18 11:35*	*03/16/18 12:01*	*1*
Phenol-d5 (Surr)	*80*		*29 - 120*	*03/07/18 11:35*	*03/16/18 12:01*	*1*
Terphenyl-d14 (Surr)	*82*		*41 - 120*	*03/07/18 11:35*	*03/16/18 12:01*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-030518-DA-026
Date Collected: 03/05/18 13:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-2
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	58	U	58	26	ug/Kg	☼	03/07/18 10:59	03/08/18 21:55	1
Aroclor-1221	58	U	58	28	ug/Kg	☼	03/07/18 10:59	03/08/18 21:55	1
Aroclor-1232	58	U	58	27	ug/Kg	☼	03/07/18 10:59	03/08/18 21:55	1
Aroclor-1242	58	U	58	22	ug/Kg	☼	03/07/18 10:59	03/08/18 21:55	1
Aroclor-1248	58	U	58	28	ug/Kg	☼	03/07/18 10:59	03/08/18 21:55	1
Aroclor-1254	**36**	**J**	58	27	ug/Kg	☼	03/07/18 10:59	03/08/18 21:55	1
Aroclor-1260	58	U	58	26	ug/Kg	☼	03/07/18 10:59	03/08/18 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*14 - 128*	*03/07/18 10:59*	*03/08/18 21:55*	*1*
DCB Decachlorobiphenyl	*105*		*10 - 132*	*03/07/18 10:59*	*03/08/18 21:55*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-030518-DA-027
Date Collected: 03/05/18 14:20
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-3
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	56	U	56	24	ug/Kg	☼	03/07/18 10:59	03/08/18 22:14	1
Aroclor-1221	56	U	56	27	ug/Kg	☼	03/07/18 10:59	03/08/18 22:14	1
Aroclor-1232	56	U	56	26	ug/Kg	☼	03/07/18 10:59	03/08/18 22:14	1
Aroclor-1242	56	U	56	21	ug/Kg	☼	03/07/18 10:59	03/08/18 22:14	1
Aroclor-1248	56	U	56	27	ug/Kg	☼	03/07/18 10:59	03/08/18 22:14	1
Aroclor-1254	56	U	56	26	ug/Kg	☼	03/07/18 10:59	03/08/18 22:14	1
Aroclor-1260	**51**	**J**	56	24	ug/Kg	☼	03/07/18 10:59	03/08/18 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*14 - 128*	*03/07/18 10:59*	*03/08/18 22:14*	*1*
DCB Decachlorobiphenyl	*83*		*10 - 132*	*03/07/18 10:59*	*03/08/18 22:14*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-030518-DA-028
Date Collected: 03/05/18 14:10
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-4
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	55	U	55	24	ug/Kg	☼	03/07/18 10:59	03/08/18 22:33	1
Aroclor-1221	55	U	55	26	ug/Kg	☼	03/07/18 10:59	03/08/18 22:33	1
Aroclor-1232	55	U	55	25	ug/Kg	☼	03/07/18 10:59	03/08/18 22:33	1
Aroclor-1242	55	U	55	21	ug/Kg	☼	03/07/18 10:59	03/08/18 22:33	1
Aroclor-1248	55	U	55	26	ug/Kg	☼	03/07/18 10:59	03/08/18 22:33	1
Aroclor-1254	55	U	55	25	ug/Kg	☼	03/07/18 10:59	03/08/18 22:33	1
Aroclor-1260	**48**	**J**	55	24	ug/Kg	☼	03/07/18 10:59	03/08/18 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*14 - 128*	*03/07/18 10:59*	*03/08/18 22:33*	*1*
DCB Decachlorobiphenyl	*120*		*10 - 132*	*03/07/18 10:59*	*03/08/18 22:33*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	70	U	70	31	ug/Kg	☼	03/07/18 10:59	03/09/18 08:09	1
Aroclor-1221	70	U	70	34	ug/Kg	☼	03/07/18 10:59	03/09/18 08:09	1
Aroclor-1232	70	U	70	32	ug/Kg	☼	03/07/18 10:59	03/09/18 08:09	1
Aroclor-1242	70	U	70	27	ug/Kg	☼	03/07/18 10:59	03/09/18 08:09	1
Aroclor-1248	**77**		70	34	ug/Kg	☼	03/07/18 10:59	03/09/18 08:09	1
Aroclor-1254	70	U	70	32	ug/Kg	☼	03/07/18 10:59	03/09/18 08:09	1
Aroclor-1260	70	U	70	31	ug/Kg	☼	03/07/18 10:59	03/09/18 08:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*14 - 128*	*03/07/18 10:59*	*03/09/18 08:09*	*1*
DCB Decachlorobiphenyl	*127*		*10 - 132*	*03/07/18 10:59*	*03/09/18 08:09*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-030518-DA-026
Date Collected: 03/05/18 13:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-2
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	60		0.80	0.36	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1
Beryllium	0.43		0.16	0.054	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1
Cadmium	0.38		0.080	0.048	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1
Cobalt	8.7		0.40	0.20	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1
Chromium	17		0.80	0.15	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1
Copper	18		0.80	0.24	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1
Manganese	340		0.80	0.31	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1
Nickel	27		0.80	0.23	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1
Zinc	63		2.0	1.4	mg/Kg	☼	03/08/18 14:00	03/09/18 16:33	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-030518-DA-027
Date Collected: 03/05/18 14:20
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-3
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	49		0.79	0.36	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1
Beryllium	0.36		0.16	0.053	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1
Cadmium	0.28		0.079	0.047	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1
Cobalt	7.3		0.39	0.20	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1
Chromium	11		0.79	0.15	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1
Copper	16		0.79	0.23	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1
Manganese	310		0.79	0.30	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1
Nickel	22		0.79	0.23	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1
Zinc	46	F1 F2	2.0	1.3	mg/Kg	☼	03/08/18 14:00	03/09/18 16:15	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-030518-DA-028
Date Collected: 03/05/18 14:10
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-4
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	44		0.64	0.29	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1
Beryllium	0.26		0.13	0.043	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1
Cadmium	0.81		0.064	0.039	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1
Cobalt	5.1		0.32	0.16	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1
Chromium	12		0.64	0.12	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1
Copper	19		0.64	0.19	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1
Manganese	290		0.64	0.25	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1
Nickel	15		0.64	0.19	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1
Zinc	110		1.6	1.1	mg/Kg	☼	03/08/18 14:00	03/09/18 16:38	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	150		0.98	0.44	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1
Beryllium	0.27		0.20	0.066	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1
Cadmium	0.37		0.098	0.059	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1
Cobalt	5.9		0.49	0.25	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1
Chromium	7.8		0.98	0.19	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1
Copper	15		0.98	0.29	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1
Manganese	760		0.98	0.38	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1
Nickel	17		0.98	0.29	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1
Zinc	48		2.5	1.7	mg/Kg	☼	03/08/18 14:00	03/09/18 16:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-030518-DA-026
Date Collected: 03/05/18 13:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-2
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.22		0.16	0.13	mg/Kg	☼	03/08/18 14:00	03/09/18 14:13	2
Arsenic	6.7	B	0.080	0.060	mg/Kg	☼	03/08/18 14:00	03/09/18 14:13	2
Lead	18		0.20	0.063	mg/Kg	☼	03/08/18 14:00	03/09/18 14:13	2
Selenium	0.59		0.16	0.12	mg/Kg	☼	03/08/18 14:00	03/09/18 14:13	2
Thallium	0.38		0.080	0.048	mg/Kg	☼	03/08/18 14:00	03/09/18 14:13	2
Vanadium	20		0.80	0.23	mg/Kg	☼	03/08/18 14:00	03/09/18 14:13	2
Silver	0.053	J	0.080	0.022	mg/Kg	☼	03/08/18 14:00	03/09/18 14:13	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-030518-DA-027
Date Collected: 03/05/18 14:20
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-3
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	F2 F1	0.16	0.12	mg/Kg	☼	03/08/18 14:00	03/09/18 13:46	2
Arsenic	5.7	B	0.079	0.059	mg/Kg	☼	03/08/18 14:00	03/09/18 13:46	2
Lead	11		0.20	0.061	mg/Kg	☼	03/08/18 14:00	03/09/18 13:46	2
Selenium	0.61		0.16	0.12	mg/Kg	☼	03/08/18 14:00	03/09/18 13:46	2
Thallium	0.38		0.079	0.047	mg/Kg	☼	03/08/18 14:00	03/09/18 13:46	2
Vanadium	16		0.79	0.22	mg/Kg	☼	03/08/18 14:00	03/09/18 13:46	2
Silver	0.045	J	0.079	0.022	mg/Kg	☼	03/08/18 14:00	03/09/18 13:46	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-030518-DA-028
Date Collected: 03/05/18 14:10
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-4
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32		0.13	0.10	mg/Kg	☼	03/08/18 14:00	03/09/18 14:18	2
Arsenic	5.3	B	0.064	0.048	mg/Kg	☼	03/08/18 14:00	03/09/18 14:18	2
Lead	33		0.16	0.050	mg/Kg	☼	03/08/18 14:00	03/09/18 14:18	2
Selenium	0.64		0.13	0.096	mg/Kg	☼	03/08/18 14:00	03/09/18 14:18	2
Thallium	0.24		0.064	0.039	mg/Kg	☼	03/08/18 14:00	03/09/18 14:18	2
Vanadium	15		0.64	0.18	mg/Kg	☼	03/08/18 14:00	03/09/18 14:18	2
Silver	0.094		0.064	0.018	mg/Kg	☼	03/08/18 14:00	03/09/18 14:18	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29		0.20	0.15	mg/Kg	☼	03/08/18 14:00	03/09/18 14:31	2
Arsenic	11	B	0.098	0.074	mg/Kg	☼	03/08/18 14:00	03/09/18 14:31	2
Lead	17		0.25	0.077	mg/Kg	☼	03/08/18 14:00	03/09/18 14:31	2
Selenium	0.41		0.20	0.15	mg/Kg	☼	03/08/18 14:00	03/09/18 14:31	2
Thallium	0.32		0.098	0.059	mg/Kg	☼	03/08/18 14:00	03/09/18 14:31	2
Vanadium	11		0.98	0.28	mg/Kg	☼	03/08/18 14:00	03/09/18 14:31	2
Silver	0.050	J	0.098	0.027	mg/Kg	☼	03/08/18 14:00	03/09/18 14:31	2

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-030518-DA-026
Date Collected: 03/05/18 13:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-2
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042	U	0.042	0.019	mg/Kg	☼	03/08/18 16:00	03/09/18 09:57	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-030518-DA-027
Date Collected: 03/05/18 14:20
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-3
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043	U	0.043	0.020	mg/Kg	☼	03/08/18 16:00	03/09/18 09:50	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-030518-DA-028
Date Collected: 03/05/18 14:10
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-4
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	J	0.041	0.018	mg/Kg	☼	03/08/18 16:00	03/09/18 09:59	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051	U	0.051	0.023	mg/Kg	☼	03/08/18 16:00	03/09/18 10:01	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

General Chemistry

Client Sample ID: SO-17303-030518-DA-026
Date Collected: 03/05/18 13:00
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-2
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.6		0.1	0.1	%			03/07/18 13:30	1
Percent Moisture	16.4		0.1	0.1	%			03/07/18 13:30	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

General Chemistry

Client Sample ID: SO-17303-030518-DA-027
Date Collected: 03/05/18 14:20
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-3
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.8		0.1	0.1	%			03/07/18 13:30	1
Percent Moisture	12.2		0.1	0.1	%			03/07/18 13:30	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

General Chemistry

Client Sample ID: SO-17303-030518-DA-028
Date Collected: 03/05/18 14:10
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-4
Matrix: Solid
Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.4		0.1	0.1	%			03/07/18 13:30	1
Percent Moisture	13.6		0.1	0.1	%			03/07/18 13:30	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

General Chemistry

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73.3		0.1	0.1	%			03/07/18 13:30	1
Percent Moisture	26.7		0.1	0.1	%			03/07/18 13:30	1

GC/MS VOA

Prep Batch: 317367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	5035	
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	5035	
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	5035	
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	5035	
MB 240-317367/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-317367/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 240-317367/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 317472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-1	TB-17303-030518	Total/NA	Water	8260B	
MB 240-317472/6	Method Blank	Total/NA	Water	8260B	
LCS 240-317472/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 317662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-317367/1-A	Method Blank	Total/NA	Solid	8260B	317367
LCS 240-317367/2-A	Lab Control Sample	Total/NA	Solid	8260B	317367
LCSD 240-317367/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	317367

Analysis Batch: 317923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	8260B	317367
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	8260B	317367
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	8260B	317367
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	8260B	317367

GC/MS Semi VOA

Prep Batch: 317515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	3540C	
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	3540C	
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	3540C	
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	3540C	
MB 240-317515/20-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-317515/21-A	Lab Control Sample	Total/NA	Solid	3540C	
240-92321-5 MS	SO-17303-030518-DA-029	Total/NA	Solid	3540C	
240-92321-5 MSD	SO-17303-030518-DA-029	Total/NA	Solid	3540C	

Analysis Batch: 317778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-317515/20-A	Method Blank	Total/NA	Solid	8270C	317515
LCS 240-317515/21-A	Lab Control Sample	Total/NA	Solid	8270C	317515

Analysis Batch: 318773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	8270C	317515
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	8270C	317515
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	8270C	317515

GC/MS Semi VOA (Continued)

Analysis Batch: 318773 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	8270C	317515
240-92321-5 MS	SO-17303-030518-DA-029	Total/NA	Solid	8270C	317515
240-92321-5 MSD	SO-17303-030518-DA-029	Total/NA	Solid	8270C	317515

GC Semi VOA

Prep Batch: 317501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	3540C	
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	3540C	
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	3540C	
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	3540C	
MB 240-317501/17-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-317501/18-A	Lab Control Sample	Total/NA	Solid	3540C	
240-92321-5 MS	SO-17303-030518-DA-029	Total/NA	Solid	3540C	
240-92321-5 MSD	SO-17303-030518-DA-029	Total/NA	Solid	3540C	

Analysis Batch: 317743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	8082A	317501
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	8082A	317501
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	8082A	317501
MB 240-317501/17-A	Method Blank	Total/NA	Solid	8082A	317501
LCS 240-317501/18-A	Lab Control Sample	Total/NA	Solid	8082A	317501

Analysis Batch: 317755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	8082A	317501
240-92321-5 MS	SO-17303-030518-DA-029	Total/NA	Solid	8082A	317501
240-92321-5 MSD	SO-17303-030518-DA-029	Total/NA	Solid	8082A	317501

Metals

Prep Batch: 317671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	3050B	
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	3050B	
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	3050B	
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	3050B	
MB 240-317671/1-A	Method Blank	Total/NA	Solid	3050B	
MB 240-317671/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 240-317671/24-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-317671/2-A	Lab Control Sample	Total/NA	Solid	3050B	
240-92321-3 MS	SO-17303-030518-DA-027	Total/NA	Solid	3050B	
240-92321-3 MS	SO-17303-030518-DA-027	Total/NA	Solid	3050B	
240-92321-3 MSD	SO-17303-030518-DA-027	Total/NA	Solid	3050B	
240-92321-3 MSD	SO-17303-030518-DA-027	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 317689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	7471A	
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	7471A	
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	7471A	
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	7471A	
MB 240-317689/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 240-317689/2-A	Lab Control Sample	Total/NA	Solid	7471A	
240-92321-3 MS	SO-17303-030518-DA-027	Total/NA	Solid	7471A	
240-92321-3 MSD	SO-17303-030518-DA-027	Total/NA	Solid	7471A	

Analysis Batch: 317881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	7471A	317689
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	7471A	317689
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	7471A	317689
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	7471A	317689
MB 240-317689/1-A	Method Blank	Total/NA	Solid	7471A	317689
LCS 240-317689/2-A	Lab Control Sample	Total/NA	Solid	7471A	317689
240-92321-3 MS	SO-17303-030518-DA-027	Total/NA	Solid	7471A	317689
240-92321-3 MSD	SO-17303-030518-DA-027	Total/NA	Solid	7471A	317689

Analysis Batch: 317955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	6020	317671
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	6020	317671
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	6020	317671
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	6020	317671
MB 240-317671/1-A ^2	Method Blank	Total/NA	Solid	6020	317671
LCS 240-317671/24-A ^2	Lab Control Sample	Total/NA	Solid	6020	317671
240-92321-3 MS	SO-17303-030518-DA-027	Total/NA	Solid	6020	317671
240-92321-3 MSD	SO-17303-030518-DA-027	Total/NA	Solid	6020	317671

Analysis Batch: 318010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	6010B	317671
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	6010B	317671
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	6010B	317671
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	6010B	317671
MB 240-317671/1-A	Method Blank	Total/NA	Solid	6010B	317671
LCS 240-317671/2-A	Lab Control Sample	Total/NA	Solid	6010B	317671
240-92321-3 MS	SO-17303-030518-DA-027	Total/NA	Solid	6010B	317671
240-92321-3 MSD	SO-17303-030518-DA-027	Total/NA	Solid	6010B	317671

General Chemistry

Analysis Batch: 317540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92321-2	SO-17303-030518-DA-026	Total/NA	Solid	Moisture	
240-92321-3	SO-17303-030518-DA-027	Total/NA	Solid	Moisture	
240-92321-4	SO-17303-030518-DA-028	Total/NA	Solid	Moisture	
240-92321-5	SO-17303-030518-DA-029	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-317367/1-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317367

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	97	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Benzene	40	U	40	24	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Bromodichloromethane	80	U	80	18	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Bromoform	80	U	80	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Bromomethane	200	U	200	28	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
2-Butanone (MEK)	600	U	600	50	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Carbon disulfide	200	U	200	18	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Carbon tetrachloride	40	U	40	27	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Chlorobenzene	40	U	40	30	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Chloroethane	200	U	200	28	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Chloroform	40	U	40	24	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Chloromethane	200	U	200	18	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1-Dichloroethane	40	U	40	31	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dichloroethane	40	U	40	30	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1-Dichloroethene	40	U	40	36	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dichloropropane	40	U	40	30	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
cis-1,3-Dichloropropene	40	U	40	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
trans-1,3-Dichloropropene	40	U	40	15	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Ethylbenzene	40	U	40	35	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
2-Hexanone	2000	U	2000	86	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Methylene Chloride	200	U	200	65	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	40	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Styrene	40	U	40	10	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1,2,2-Tetrachloroethane	40	U	40	24	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Tetrachloroethene	40	U	40	21	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Toluene	80	U	80	24	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Trichloroethene	40	U	40	37	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Vinyl chloride	32	U	32	17	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Xylenes, Total	120	U	120	28	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1,1-Trichloroethane	40	U	40	28	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1,2-Trichloroethane	40	U	40	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Cyclohexane	960	U	960	30	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dibromo-3-Chloropropane	200	U	200	48	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dibromoethane	200	U	200	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Dichlorodifluoromethane	80	U	80	22	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
cis-1,2-Dichloroethene	40	U	40	35	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
trans-1,2-Dichloroethene	40	U	40	35	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Isopropylbenzene	200	U	200	34	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Methyl acetate	960	U	960	75	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Methyl tert-butyl ether	200	U	200	26	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	23	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2,4-Trichlorobenzene	200	U	200	26	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,2-Dichlorobenzene	80	U	80	18	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,3-Dichlorobenzene	80	U	80	38	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
1,4-Dichlorobenzene	80	U	80	27	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Trichlorofluoromethane	80	U	80	34	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Dibromochloromethane	40	U	40	34	ug/Kg		03/06/18 14:22	03/08/18 20:53	1
Methylcyclohexane	960	U	960	37	ug/Kg		03/06/18 14:22	03/08/18 20:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		64 - 144	03/06/18 14:22	03/08/18 20:53	1
4-Bromofluorobenzene (Surr)	95		58 - 142	03/06/18 14:22	03/08/18 20:53	1
Toluene-d8 (Surr)	100		61 - 137	03/06/18 14:22	03/08/18 20:53	1
Dibromofluoromethane (Surr)	81		31 - 155	03/06/18 14:22	03/08/18 20:53	1

Lab Sample ID: LCS 240-317367/2-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317367

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	2140		ug/Kg		107	24 - 125
Benzene	1000	910		ug/Kg		91	77 - 120
Bromodichloromethane	1000	847		ug/Kg		85	61 - 132
Bromoform	1000	934		ug/Kg		93	40 - 140
Bromomethane	1000	1060		ug/Kg		106	10 - 153
2-Butanone (MEK)	2000	2050		ug/Kg		103	51 - 120
Carbon disulfide	1000	815		ug/Kg		82	17 - 163
Carbon tetrachloride	1000	826		ug/Kg		83	43 - 144
Chlorobenzene	1000	1040		ug/Kg		104	76 - 120
Chloroethane	1000	1060		ug/Kg		106	10 - 166
Chloroform	1000	889		ug/Kg		89	74 - 120
Chloromethane	1000	927		ug/Kg		93	41 - 124
1,1-Dichloroethane	1000	847		ug/Kg		85	72 - 120
1,2-Dichloroethane	1000	904		ug/Kg		90	71 - 120
1,1-Dichloroethene	1000	947		ug/Kg		95	58 - 130
1,2-Dichloropropane	1000	914		ug/Kg		91	78 - 122
cis-1,3-Dichloropropene	1000	917		ug/Kg		92	66 - 126
trans-1,3-Dichloropropene	1000	971		ug/Kg		97	55 - 121
Ethylbenzene	1000	1050		ug/Kg		105	76 - 120
2-Hexanone	2000	2180		ug/Kg		109	52 - 129
Methylene Chloride	1000	898		ug/Kg		90	64 - 126
4-Methyl-2-pentanone (MIBK)	2000	1980	J	ug/Kg		99	65 - 131
Styrene	1000	1050		ug/Kg		105	80 - 120
1,1,2,2-Tetrachloroethane	1000	1040		ug/Kg		104	78 - 120
Tetrachloroethene	1000	1060		ug/Kg		106	68 - 122
Toluene	1000	1010		ug/Kg		101	74 - 120
Trichloroethene	1000	954		ug/Kg		95	73 - 123
Vinyl chloride	1000	744		ug/Kg		74	49 - 131
Xylenes, Total	2000	2090		ug/Kg		105	78 - 120
1,1,1-Trichloroethane	1000	869		ug/Kg		87	60 - 136
1,1,2-Trichloroethane	1000	1110		ug/Kg		111	80 - 120
Cyclohexane	1000	814	J	ug/Kg		81	66 - 129
1,2-Dibromo-3-Chloropropane	1000	913		ug/Kg		91	40 - 133
1,2-Dibromoethane	1000	1100		ug/Kg		110	80 - 120
Dichlorodifluoromethane	1000	574		ug/Kg		57	15 - 127
cis-1,2-Dichloroethene	1000	909		ug/Kg		91	78 - 120
trans-1,2-Dichloroethene	1000	921		ug/Kg		92	74 - 124
Isopropylbenzene	1000	1030		ug/Kg		103	76 - 124
Methyl acetate	2000	2040		ug/Kg		102	63 - 126
Methyl tert-butyl ether	1000	933		ug/Kg		93	68 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	997		ug/Kg		100	64 - 125
1,2,4-Trichlorobenzene	1000	763		ug/Kg		76	60 - 124
1,2-Dichlorobenzene	1000	1020		ug/Kg		102	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317367/2-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317367

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3-Dichlorobenzene			1000	1020		ug/Kg		102	72 - 120		
1,4-Dichlorobenzene			1000	1020		ug/Kg		102	71 - 120		
Trichlorofluoromethane			1000	819		ug/Kg		82	28 - 152		
Dibromochloromethane			1000	991		ug/Kg		99	46 - 125		
Methylcyclohexane			1000	791	J	ug/Kg		79	71 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*64 - 144*
4-Bromofluorobenzene (Surr)	*95*		*58 - 142*
Toluene-d8 (Surr)	*95*		*61 - 137*
Dibromofluoromethane (Surr)	*83*		*31 - 155*

Lab Sample ID: LCSD 240-317367/3-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 317367

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			2000	2250		ug/Kg		112	24 - 125	5	40
Benzene			1000	874		ug/Kg		87	77 - 120	4	40
Bromodichloromethane			1000	831		ug/Kg		83	61 - 132	2	40
Bromoform			1000	922		ug/Kg		92	40 - 140	1	40
Bromomethane			1000	1070		ug/Kg		107	10 - 153	0	40
2-Butanone (MEK)			2000	2150		ug/Kg		108	51 - 120	5	40
Carbon disulfide			1000	806		ug/Kg		81	17 - 163	1	40
Carbon tetrachloride			1000	798		ug/Kg		80	43 - 144	3	40
Chlorobenzene			1000	973		ug/Kg		97	76 - 120	7	40
Chloroethane			1000	1030		ug/Kg		103	10 - 166	3	40
Chloroform			1000	859		ug/Kg		86	74 - 120	3	40
Chloromethane			1000	902		ug/Kg		90	41 - 124	3	40
1,1-Dichloroethane			1000	820		ug/Kg		82	72 - 120	3	40
1,2-Dichloroethane			1000	875		ug/Kg		87	71 - 120	3	40
1,1-Dichloroethene			1000	948		ug/Kg		95	58 - 130	0	40
1,2-Dichloropropane			1000	884		ug/Kg		88	78 - 122	3	40
cis-1,3-Dichloropropene			1000	888		ug/Kg		89	66 - 126	3	40
trans-1,3-Dichloropropene			1000	913		ug/Kg		91	55 - 121	6	40
Ethylbenzene			1000	974		ug/Kg		97	76 - 120	7	40
2-Hexanone			2000	2220		ug/Kg		111	52 - 129	2	40
Methylene Chloride			1000	870		ug/Kg		87	64 - 126	3	40
4-Methyl-2-pentanone (MIBK)			2000	2050		ug/Kg		102	65 - 131	3	40
Styrene			1000	974		ug/Kg		97	80 - 120	7	40
1,1,2,2-Tetrachloroethane			1000	987		ug/Kg		99	78 - 120	6	40
Tetrachloroethene			1000	1020		ug/Kg		102	68 - 122	4	40
Toluene			1000	956		ug/Kg		96	74 - 120	6	40
Trichloroethene			1000	921		ug/Kg		92	73 - 123	4	40
Vinyl chloride			1000	746		ug/Kg		75	49 - 131	0	40
Xylenes, Total			2000	1940		ug/Kg		97	78 - 120	8	40
1,1,1-Trichloroethane			1000	843		ug/Kg		84	60 - 136	3	40
1,1,2-Trichloroethane			1000	1040		ug/Kg		104	80 - 120	6	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 240-317367/3-A
Matrix: Solid
Analysis Batch: 317662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 317367

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyclohexane			1000	743	J	ug/Kg		74	66 - 129	9	40
1,2-Dibromo-3-Chloropropane			1000	964		ug/Kg		96	40 - 133	5	40
1,2-Dibromoethane			1000	1050		ug/Kg		105	80 - 120	4	40
Dichlorodifluoromethane			1000	548		ug/Kg		55	15 - 127	5	40
cis-1,2-Dichloroethene			1000	859		ug/Kg		86	78 - 120	6	40
trans-1,2-Dichloroethene			1000	884		ug/Kg		88	74 - 124	4	40
Isopropylbenzene			1000	961		ug/Kg		96	76 - 124	7	40
Methyl acetate			2000	2120		ug/Kg		106	63 - 126	4	40
Methyl tert-butyl ether			1000	916		ug/Kg		92	68 - 129	2	40
1,1,2-Trichloro-1,2,2-trifluoroethane			1000	943		ug/Kg		94	64 - 125	6	40
1,2,4-Trichlorobenzene			1000	818		ug/Kg		82	60 - 124	7	40
1,2-Dichlorobenzene			1000	946		ug/Kg		95	75 - 120	7	40
1,3-Dichlorobenzene			1000	968		ug/Kg		97	72 - 120	5	40
1,4-Dichlorobenzene			1000	952		ug/Kg		95	71 - 120	7	40
Trichlorofluoromethane			1000	809		ug/Kg		81	28 - 152	1	40
Dibromochloromethane			1000	950		ug/Kg		95	46 - 125	4	40
Methylcyclohexane			1000	731	J	ug/Kg		73	71 - 126	8	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*64 - 144*
4-Bromofluorobenzene (Surr)	*92*		*58 - 142*
Toluene-d8 (Surr)	*92*		*61 - 137*
Dibromofluoromethane (Surr)	*84*		*31 - 155*

Lab Sample ID: MB 240-317472/6
Matrix: Water
Analysis Batch: 317472

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			03/07/18 12:05	1
Benzene	1.0	U	1.0	0.28	ug/L			03/07/18 12:05	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			03/07/18 12:05	1
Bromoform	1.0	U	1.0	0.43	ug/L			03/07/18 12:05	1
Bromomethane	1.0	U	1.0	0.42	ug/L			03/07/18 12:05	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			03/07/18 12:05	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			03/07/18 12:05	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			03/07/18 12:05	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			03/07/18 12:05	1
Chloroethane	1.0	U	1.0	0.41	ug/L			03/07/18 12:05	1
Chloroform	1.0	U	1.0	0.31	ug/L			03/07/18 12:05	1
Chloromethane	1.0	U	1.0	0.43	ug/L			03/07/18 12:05	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			03/07/18 12:05	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/07/18 12:05	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			03/07/18 12:05	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			03/07/18 12:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			03/07/18 12:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			03/07/18 12:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-317472/6
Matrix: Water
Analysis Batch: 317472

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	1.0	U	1.0	0.26	ug/L			03/07/18 12:05	1
2-Hexanone	10	U	10	1.2	ug/L			03/07/18 12:05	1
Methylene Chloride	0.995	J	5.0	0.53	ug/L			03/07/18 12:05	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			03/07/18 12:05	1
Styrene	1.0	U	1.0	0.23	ug/L			03/07/18 12:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			03/07/18 12:05	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			03/07/18 12:05	1
Toluene	1.0	U	1.0	0.23	ug/L			03/07/18 12:05	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			03/07/18 12:05	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/07/18 12:05	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			03/07/18 12:05	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/07/18 12:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			03/07/18 12:05	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			03/07/18 12:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			03/07/18 12:05	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			03/07/18 12:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			03/07/18 12:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/07/18 12:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/07/18 12:05	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			03/07/18 12:05	1
Methyl acetate	10	U	10	1.4	ug/L			03/07/18 12:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			03/07/18 12:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			03/07/18 12:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			03/07/18 12:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			03/07/18 12:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			03/07/18 12:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			03/07/18 12:05	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			03/07/18 12:05	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			03/07/18 12:05	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			03/07/18 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 138*		*03/07/18 12:05*	*1*
4-Bromofluorobenzene (Surr)	*89*		*69 - 120*		*03/07/18 12:05*	*1*
Toluene-d8 (Surr)	*94*		*73 - 120*		*03/07/18 12:05*	*1*
Dibromofluoromethane (Surr)	*96*		*69 - 124*		*03/07/18 12:05*	*1*

Lab Sample ID: LCS 240-317472/4
Matrix: Water
Analysis Batch: 317472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	7.90	J	ug/L		39	35 - 131
Benzene	10.0	9.76		ug/L		98	79 - 120
Bromodichloromethane	10.0	10.3		ug/L		103	79 - 125
Bromoform	10.0	8.24		ug/L		82	55 - 145
Bromomethane	10.0	11.4		ug/L		114	17 - 158
2-Butanone (MEK)	20.0	13.7		ug/L		69	43 - 149

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317472/4
Matrix: Water
Analysis Batch: 317472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	10.0	11.6		ug/L		116	49 - 141
Carbon tetrachloride	10.0	12.4		ug/L		124	55 - 171
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120
Chloroethane	10.0	5.93		ug/L		59	10 - 149
Chloroform	10.0	11.2		ug/L		112	80 - 120
Chloromethane	10.0	7.90		ug/L		79	59 - 124
1,1-Dichloroethane	10.0	10.5		ug/L		105	74 - 120
1,2-Dichloroethane	10.0	11.5		ug/L		115	68 - 133
1,1-Dichloroethene	10.0	11.4		ug/L		114	65 - 127
1,2-Dichloropropane	10.0	9.63		ug/L		96	78 - 127
cis-1,3-Dichloropropene	10.0	8.81		ug/L		88	75 - 120
trans-1,3-Dichloropropene	10.0	7.96		ug/L		80	67 - 120
Ethylbenzene	10.0	9.93		ug/L		99	80 - 120
2-Hexanone	20.0	14.8		ug/L		74	28 - 169
Methylene Chloride	10.0	10.9		ug/L		109	64 - 140
4-Methyl-2-pentanone (MIBK)	20.0	15.2		ug/L		76	53 - 144
Styrene	10.0	9.58		ug/L		96	80 - 121
1,1,2,2-Tetrachloroethane	10.0	8.42		ug/L		84	58 - 122
Tetrachloroethene	10.0	10.4		ug/L		104	80 - 122
Toluene	10.0	9.66		ug/L		97	78 - 120
Trichloroethene	10.0	10.2		ug/L		102	76 - 124
Vinyl chloride	10.0	9.49		ug/L		95	65 - 124
Xylenes, Total	20.0	20.6		ug/L		103	80 - 120
1,1,1-Trichloroethane	10.0	12.1		ug/L		121	64 - 147
1,1,2-Trichloroethane	10.0	8.87		ug/L		89	76 - 121
Cyclohexane	10.0	9.50		ug/L		95	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	6.84		ug/L		68	50 - 130
1,2-Dibromoethane	10.0	9.07		ug/L		91	80 - 120
Dichlorodifluoromethane	10.0	9.30		ug/L		93	42 - 141
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	77 - 120
trans-1,2-Dichloroethene	10.0	10.9		ug/L		109	74 - 124
Isopropylbenzene	10.0	10.3		ug/L		103	80 - 128
Methyl acetate	20.0	12.9		ug/L		65	63 - 137
Methyl tert-butyl ether	10.0	9.44		ug/L		94	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	13.0		ug/L		130	65 - 144
1,2,4-Trichlorobenzene	10.0	8.06		ug/L		81	34 - 141
1,2-Dichlorobenzene	10.0	9.58		ug/L		96	80 - 120
1,3-Dichlorobenzene	10.0	9.15		ug/L		92	80 - 120
1,4-Dichlorobenzene	10.0	8.99		ug/L		90	80 - 120
Trichlorofluoromethane	10.0	14.2		ug/L		142	27 - 176
Dibromochloromethane	10.0	9.63		ug/L		96	64 - 129
Methylcyclohexane	10.0	9.64		ug/L		96	63 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 138*
4-Bromofluorobenzene (Surr)	*92*		*69 - 120*
Toluene-d8 (Surr)	*98*		*73 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317472/4
Matrix: Water
Analysis Batch: 317472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	99		69 - 124

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-317515/20-A
Matrix: Solid
Analysis Batch: 317778

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317515

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	3.5	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2,4,6-Trichlorophenol	260	U	260	8.9	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2,4-Dichlorophenol	260	U	260	20	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2,4-Dinitrophenol	150	U	150	21	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2,4-Dinitrotoluene	260	U	260	17	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2-Chloronaphthalene	260	U	260	0.45	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2-Chlorophenol	260	U	260	8.2	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2-Methylnaphthalene	260	U	260	0.50	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2-Methylphenol	260	U	260	11	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
2-Nitrophenol	260	U	260	8.3	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
3,3'-Dichlorobenzidine	1600	U	1600	18	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
3-Nitroaniline	200	U	200	16	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
4-Bromophenyl phenyl ether	260	U	260	13	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
4-Chloroaniline	200	U	200	17	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
4-Chlorophenyl phenyl ether	260	U	260	13	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
4-Nitroaniline	200	U	200	26	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
4-Nitrophenol	330	U	330	17	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Acenaphthene	260	U	260	0.76	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Acenaphthylene	260	U	260	0.35	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Acetophenone	260	U	260	9.2	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Anthracene	260	U	260	0.78	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Atrazine	40	U	40	9.1	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Benzaldehyde	260	U	260	12	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Benzo[a]anthracene	260	U	260	0.63	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Benzo[a]pyrene	260	U	260	0.64	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Benzo[b]fluoranthene	260	U	260	0.59	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Benzo[g,h,i]perylene	260	U	260	0.35	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Benzo[k]fluoranthene	260	U	260	0.68	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Bis(2-ethylhexyl) phthalate	260	U	260	19	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		03/07/18 11:35	03/09/18 08:39	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-317515/20-A
Matrix: Solid
Analysis Batch: 317778

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317515

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	260	U	260	37	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Carbazole	260	U	260	27	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Chrysene	260	U	260	1.1	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Dibenz(a,h)anthracene	260	U	260	0.66	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Dibenzofuran	260	U	260	0.66	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Diethyl phthalate	260	U	260	16	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Dimethyl phthalate	260	U	260	17	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Di-n-butyl phthalate	260	U	260	15	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Di-n-octyl phthalate	260	U	260	7.9	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Fluoranthene	260	U	260	0.55	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Fluorene	260	U	260	0.53	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Hexachlorobutadiene	40	U	40	5.6	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Hexachlorocyclopentadiene	260	U	260	8.1	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Hexachloroethane	260	U	260	9.0	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Indeno[1,2,3-cd]pyrene	260	U	260	0.35	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Isophorone	260	U	260	13	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Naphthalene	260	U	260	0.82	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Nitrobenzene	260	U	260	2.2	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
N-Nitrosodi-n-propylamine	260	U	260	6.3	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Phenol	260	U	260	7.3	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Phenanthrene	260	U	260	0.73	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
Pyrene	260	U	260	0.44	ug/Kg		03/07/18 11:35	03/09/18 08:39	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		03/07/18 11:35	03/09/18 08:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*32 - 120*	*03/07/18 11:35*	*03/09/18 08:39*	*1*
2-Fluorophenol (Surr)	*63*		*29 - 120*	*03/07/18 11:35*	*03/09/18 08:39*	*1*
2,4,6-Tribromophenol (Surr)	*33*		*10 - 120*	*03/07/18 11:35*	*03/09/18 08:39*	*1*
Nitrobenzene-d5 (Surr)	*63*		*30 - 120*	*03/07/18 11:35*	*03/09/18 08:39*	*1*
Phenol-d5 (Surr)	*62*		*29 - 120*	*03/07/18 11:35*	*03/09/18 08:39*	*1*
Terphenyl-d14 (Surr)	*84*		*41 - 120*	*03/07/18 11:35*	*03/09/18 08:39*	*1*

Lab Sample ID: LCS 240-317515/21-A
Matrix: Solid
Analysis Batch: 317778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317515

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	465		ug/Kg		70	48 - 120
2,2'-oxybis[1-chloropropane]	667	481		ug/Kg		72	37 - 120
2,4,5-Trichlorophenol	667	413		ug/Kg		62	34 - 120
2,4,6-Trichlorophenol	667	384		ug/Kg		58	19 - 120
2,4-Dichlorophenol	667	411		ug/Kg		62	48 - 120
2,4-Dimethylphenol	667	350		ug/Kg		52	37 - 120
2,4-Dinitrophenol	1330	730		ug/Kg		55	10 - 120
2,4-Dinitrotoluene	667	475		ug/Kg		71	53 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317515/21-A
Matrix: Solid
Analysis Batch: 317778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317515

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	667	505		ug/Kg		76	54 - 120
2-Chloronaphthalene	667	444		ug/Kg		67	49 - 120
2-Chlorophenol	667	444		ug/Kg		67	50 - 120
2-Methylnaphthalene	667	451		ug/Kg		68	49 - 120
2-Methylphenol	667	448		ug/Kg		67	49 - 120
2-Nitroaniline	667	529		ug/Kg		79	46 - 120
2-Nitrophenol	667	446		ug/Kg		67	46 - 120
3,3'-Dichlorobenzidine	1330	814	J	ug/Kg		61	40 - 120
3-Nitroaniline	667	496		ug/Kg		74	48 - 120
4,6-Dinitro-2-methylphenol	1330	851		ug/Kg		64	18 - 120
4-Bromophenyl phenyl ether	667	459		ug/Kg		69	51 - 120
4-Chloro-3-methylphenol	667	403		ug/Kg		60	47 - 120
4-Chloroaniline	667	351		ug/Kg		53	37 - 120
4-Chlorophenyl phenyl ether	667	467		ug/Kg		70	49 - 120
4-Nitroaniline	667	531		ug/Kg		80	49 - 120
4-Nitrophenol	1330	814		ug/Kg		61	42 - 120
Acenaphthene	667	470		ug/Kg		70	48 - 120
Acenaphthylene	667	473		ug/Kg		71	46 - 120
Acetophenone	667	414		ug/Kg		62	46 - 120
Anthracene	667	509		ug/Kg		76	51 - 120
Atrazine	1330	1110		ug/Kg		84	57 - 120
Benzaldehyde	1330	985		ug/Kg		74	48 - 120
Benzo[a]anthracene	667	477		ug/Kg		72	53 - 120
Benzo[a]pyrene	667	515		ug/Kg		77	50 - 120
Benzo[b]fluoranthene	667	531		ug/Kg		80	48 - 120
Benzo[g,h,i]perylene	667	521		ug/Kg		78	50 - 120
Benzo[k]fluoranthene	667	526		ug/Kg		79	51 - 120
Bis(2-chloroethoxy)methane	667	480		ug/Kg		72	50 - 120
Bis(2-chloroethyl)ether	667	451		ug/Kg		68	48 - 120
Bis(2-ethylhexyl) phthalate	667	478		ug/Kg		72	52 - 120
Butyl benzyl phthalate	667	502		ug/Kg		75	53 - 120
Caprolactam	1330	996		ug/Kg		75	59 - 120
Carbazole	667	524		ug/Kg		79	56 - 120
Chrysene	667	484		ug/Kg		73	54 - 120
Dibenz(a,h)anthracene	667	530		ug/Kg		80	48 - 120
Dibenzofuran	667	479		ug/Kg		72	49 - 120
Diethyl phthalate	667	544		ug/Kg		82	52 - 120
Dimethyl phthalate	667	511		ug/Kg		77	53 - 120
Di-n-butyl phthalate	667	538		ug/Kg		81	56 - 120
Di-n-octyl phthalate	667	473		ug/Kg		71	42 - 120
Fluoranthene	667	508		ug/Kg		76	53 - 120
Fluorene	667	504		ug/Kg		76	50 - 120
Hexachlorobenzene	667	449		ug/Kg		67	46 - 120
Hexachlorobutadiene	667	385		ug/Kg		58	44 - 120
Hexachlorocyclopentadiene	667	373		ug/Kg		56	14 - 120
Hexachloroethane	667	426		ug/Kg		64	45 - 120
Indeno[1,2,3-cd]pyrene	667	534		ug/Kg		80	49 - 120
Isophorone	667	446		ug/Kg		67	47 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-317515/21-A
Matrix: Solid
Analysis Batch: 317778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317515

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	667	443		ug/Kg		66	48 - 120
Nitrobenzene	667	464		ug/Kg		70	48 - 120
N-Nitrosodi-n-propylamine	667	468		ug/Kg		70	49 - 120
N-Nitrosodiphenylamine	667	489		ug/Kg		73	53 - 120
Pentachlorophenol	1330	562		ug/Kg		42	14 - 120
Phenol	667	429		ug/Kg		64	49 - 120
Phenanthrene	667	495		ug/Kg		74	52 - 120
Pyrene	667	515		ug/Kg		77	55 - 120
3 & 4 Methylphenol	667	416		ug/Kg		62	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*71*		*32 - 120*
2-Fluorophenol (Surr)	*70*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 120*
Nitrobenzene-d5 (Surr)	*71*		*30 - 120*
Phenol-d5 (Surr)	*69*		*29 - 120*
Terphenyl-d14 (Surr)	*80*		*41 - 120*

Lab Sample ID: 240-92321-5 MS
Matrix: Solid
Analysis Batch: 318773

Client Sample ID: SO-17303-030518-DA-029
Prep Type: Total/NA
Prep Batch: 317515

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	16	J	907	591		ug/Kg	☼	63	33 - 120
2,2'-oxybis[1-chloropropane]	360	U	907	541		ug/Kg	☼	60	26 - 120
2,4,5-Trichlorophenol	360	U	907	580		ug/Kg	☼	64	20 - 120
2,4,6-Trichlorophenol	360	U	907	583		ug/Kg	☼	64	19 - 120
2,4-Dichlorophenol	360	U	907	637		ug/Kg	☼	70	32 - 120
2,4-Dimethylphenol	360	U	907	642		ug/Kg	☼	71	28 - 120
2,4-Dinitrophenol	210	U	1810	797		ug/Kg	☼	44	10 - 120
2,4-Dinitrotoluene	360	U	907	680		ug/Kg	☼	75	38 - 120
2,6-Dinitrotoluene	360	U	907	671		ug/Kg	☼	74	43 - 120
2-Chloronaphthalene	360	U	907	583		ug/Kg	☼	64	35 - 120
2-Chlorophenol	360	U	907	585		ug/Kg	☼	64	30 - 120
2-Methylnaphthalene	68	J	907	653		ug/Kg	☼	65	31 - 120
2-Methylphenol	360	U	907	619		ug/Kg	☼	68	31 - 120
2-Nitroaniline	280	U	907	622		ug/Kg	☼	69	29 - 120
2-Nitrophenol	360	U	907	590		ug/Kg	☼	65	26 - 120
3,3'-Dichlorobenzidine	2200	U	1810	521	J	ug/Kg	☼	29	10 - 120
3-Nitroaniline	280	U	907	330		ug/Kg	☼	36	21 - 120
4,6-Dinitro-2-methylphenol	210	U	1810	876		ug/Kg	☼	48	10 - 120
4-Bromophenyl phenyl ether	360	U	907	619		ug/Kg	☼	68	44 - 120
4-Chloro-3-methylphenol	360	U	907	688		ug/Kg	☼	76	31 - 120
4-Chloroaniline	280	U	907	314		ug/Kg	☼	35	15 - 120
4-Chlorophenyl phenyl ether	360	U	907	631		ug/Kg	☼	70	41 - 120
4-Nitroaniline	280	U	907	447		ug/Kg	☼	49	23 - 120
4-Nitrophenol	460	U	1810	1370		ug/Kg	☼	76	32 - 120
Acenaphthene	34	J	907	619		ug/Kg	☼	65	36 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-92321-5 MS | **Client Sample ID: SO-17303-030518-DA-029**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 318773 | **Prep Batch: 317515**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	360	U	907	583		ug/Kg	☼	64	35 - 120
Acetophenone	360	U	907	584		ug/Kg	☼	64	31 - 120
Anthracene	45	J	907	636		ug/Kg	☼	65	42 - 120
Atrazine	55	U	1810	1370		ug/Kg	☼	75	41 - 120
Benzaldehyde	360	U	1810	1170		ug/Kg	☼	65	28 - 120
Benzo[a]anthracene	180	J	907	802		ug/Kg	☼	69	35 - 120
Benzo[a]pyrene	210	J	907	760		ug/Kg	☼	60	33 - 120
Benzo[b]fluoranthene	350	J	907	912		ug/Kg	☼	62	26 - 120
Benzo[g,h,i]perylene	160	J	907	691		ug/Kg	☼	59	16 - 120
Benzo[k]fluoranthene	120	J	907	747		ug/Kg	☼	69	33 - 120
Bis(2-chloroethoxy)methane	360	U	907	554		ug/Kg	☼	61	36 - 120
Bis(2-chloroethyl)ether	110	U	907	584		ug/Kg	☼	64	33 - 120
Bis(2-ethylhexyl) phthalate	78	J	907	742		ug/Kg	☼	73	40 - 120
Butyl benzyl phthalate	360	U	907	689		ug/Kg	☼	76	46 - 120
Caprolactam	360	U	1810	1560		ug/Kg	☼	86	33 - 128
Carbazole	37	J	907	622		ug/Kg	☼	69	35 - 120
Chrysene	270	J	907	827		ug/Kg	☼	61	33 - 120
Dibenz(a,h)anthracene	61	J	907	564		ug/Kg	☼	55	30 - 120
Dibenzofuran	31	J	907	628		ug/Kg	☼	66	37 - 120
Diethyl phthalate	360	U	907	658		ug/Kg	☼	73	44 - 120
Dimethyl phthalate	360	U	907	616		ug/Kg	☼	68	42 - 120
Di-n-butyl phthalate	360	U	907	704		ug/Kg	☼	78	45 - 120
Di-n-octyl phthalate	360	U	907	706		ug/Kg	☼	78	35 - 120
Fluoranthene	560		907	1150		ug/Kg	☼	65	26 - 121
Fluorene	31	J	907	637		ug/Kg	☼	67	36 - 120
Hexachlorobenzene	360	U	907	578		ug/Kg	☼	64	36 - 120
Hexachlorobutadiene	55	U	907	550		ug/Kg	☼	61	31 - 120
Hexachlorocyclopentadiene	360	U F1	907	360	U F1	ug/Kg	☼	0	10 - 120
Hexachloroethane	360	U	907	449		ug/Kg	☼	50	15 - 120
Indeno[1,2,3-cd]pyrene	140	J	907	631		ug/Kg	☼	54	24 - 120
Isophorone	360	U	907	563		ug/Kg	☼	62	34 - 120
Naphthalene	27	J	907	550		ug/Kg	☼	58	29 - 120
Nitrobenzene	360	U	907	536		ug/Kg	☼	59	33 - 120
N-Nitrosodi-n-propylamine	360	U	907	641		ug/Kg	☼	71	32 - 120
N-Nitrosodiphenylamine	360	U	907	683		ug/Kg	☼	75	29 - 120
Pentachlorophenol	210	U	1810	597		ug/Kg	☼	33	10 - 120
Phenol	13	J	907	615		ug/Kg	☼	66	21 - 120
Phenanthrene	310	J	907	838		ug/Kg	☼	59	28 - 120
Pyrene	450		907	1030		ug/Kg	☼	64	28 - 120
3 & 4 Methylphenol	360	U	907	654		ug/Kg	☼	72	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*67*		*32 - 120*
2-Fluorophenol (Surr)	*67*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*64*		*10 - 120*
Nitrobenzene-d5 (Surr)	*61*		*30 - 120*
Phenol-d5 (Surr)	*70*		*29 - 120*
Terphenyl-d14 (Surr)	*76*		*41 - 120*

Lab Sample ID: 240-92321-5 MSD
Matrix: Solid
Analysis Batch: 318773

Client Sample ID: SO-17303-030518-DA-029
Prep Type: Total/NA
Prep Batch: 317515

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	16	J	904	625		ug/Kg	☼	67	33 - 120	6	33
2,2'-oxybis[1-chloropropane]	360	U	904	576		ug/Kg	☼	64	26 - 120	6	31
2,4,5-Trichlorophenol	360	U	904	618		ug/Kg	☼	68	20 - 120	6	38
2,4,6-Trichlorophenol	360	U	904	595		ug/Kg	☼	66	19 - 120	2	36
2,4-Dichlorophenol	360	U	904	686		ug/Kg	☼	76	32 - 120	7	32
2,4-Dimethylphenol	360	U	904	675		ug/Kg	☼	75	28 - 120	5	35
2,4-Dinitrophenol	210	U	1810	861		ug/Kg	☼	48	10 - 120	8	40
2,4-Dinitrotoluene	360	U	904	714		ug/Kg	☼	79	38 - 120	5	27
2,6-Dinitrotoluene	360	U	904	672		ug/Kg	☼	74	43 - 120	0	31
2-Chloronaphthalene	360	U	904	601		ug/Kg	☼	66	35 - 120	3	30
2-Chlorophenol	360	U	904	614		ug/Kg	☼	68	30 - 120	5	37
2-Methylnaphthalene	68	J	904	721		ug/Kg	☼	72	31 - 120	10	33
2-Methylphenol	360	U	904	644		ug/Kg	☼	71	31 - 120	4	36
2-Nitroaniline	280	U	904	658		ug/Kg	☼	73	29 - 120	6	31
2-Nitrophenol	360	U	904	664		ug/Kg	☼	73	26 - 120	12	38
3,3'-Dichlorobenzidine	2200	U	1810	610	J	ug/Kg	☼	34	10 - 120	16	40
3-Nitroaniline	280	U	904	412		ug/Kg	☼	46	21 - 120	22	40
4,6-Dinitro-2-methylphenol	210	U	1810	930		ug/Kg	☼	51	10 - 120	6	40
4-Bromophenyl phenyl ether	360	U	904	632		ug/Kg	☼	70	44 - 120	2	40
4-Chloro-3-methylphenol	360	U	904	729		ug/Kg	☼	81	31 - 120	6	25
4-Chloroaniline	280	U	904	365		ug/Kg	☼	40	15 - 120	15	36
4-Chlorophenyl phenyl ether	360	U	904	637		ug/Kg	☼	70	41 - 120	1	40
4-Nitroaniline	280	U	904	475		ug/Kg	☼	53	23 - 120	6	40
4-Nitrophenol	460	U	1810	1430		ug/Kg	☼	79	32 - 120	5	31
Acenaphthene	34	J	904	680		ug/Kg	☼	71	36 - 120	9	28
Acenaphthylene	360	U	904	620		ug/Kg	☼	69	35 - 120	6	26
Acetophenone	360	U	904	601		ug/Kg	☼	66	31 - 120	3	40
Anthracene	45	J	904	722		ug/Kg	☼	75	42 - 120	13	32
Atrazine	55	U	1810	1380		ug/Kg	☼	76	41 - 120	1	26
Benzaldehyde	360	U	1810	1180		ug/Kg	☼	65	28 - 120	1	40
Benzo[a]anthracene	180	J	904	962		ug/Kg	☼	87	35 - 120	18	40
Benzo[a]pyrene	210	J	904	934		ug/Kg	☼	80	33 - 120	21	40
Benzo[b]fluoranthene	350	J	904	1070		ug/Kg	☼	80	26 - 120	16	40
Benzo[g,h,i]perylene	160	J	904	691		ug/Kg	☼	59	16 - 120	0	40
Benzo[k]fluoranthene	120	J	904	961		ug/Kg	☼	93	33 - 120	25	40
Bis(2-chloroethoxy)methane	360	U	904	612		ug/Kg	☼	68	36 - 120	10	33
Bis(2-chloroethyl)ether	110	U	904	587		ug/Kg	☼	65	33 - 120	1	36
Bis(2-ethylhexyl) phthalate	78	J	904	801		ug/Kg	☼	80	40 - 120	8	28
Butyl benzyl phthalate	360	U	904	706		ug/Kg	☼	78	46 - 120	2	39
Caprolactam	360	U	1810	1620		ug/Kg	☼	89	33 - 128	3	40
Carbazole	37	J	904	665		ug/Kg	☼	74	35 - 120	7	34
Chrysene	270	J	904	995		ug/Kg	☼	80	33 - 120	18	40
Dibenz(a,h)anthracene	61	J	904	551		ug/Kg	☼	54	30 - 120	2	40
Dibenzofuran	31	J	904	649		ug/Kg	☼	68	37 - 120	3	28
Diethyl phthalate	360	U	904	661		ug/Kg	☼	73	44 - 120	0	26
Dimethyl phthalate	360	U	904	638		ug/Kg	☼	71	42 - 120	4	35
Di-n-butyl phthalate	360	U	904	721		ug/Kg	☼	80	45 - 120	2	28
Di-n-octyl phthalate	360	U	904	754		ug/Kg	☼	83	35 - 120	7	33
Fluoranthene	560		904	1480		ug/Kg	☼	102	26 - 121	25	40
Fluorene	31	J	904	689		ug/Kg	☼	73	36 - 120	8	28

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-92321-5 MSD
Matrix: Solid
Analysis Batch: 318773

Client Sample ID: SO-17303-030518-DA-029
Prep Type: Total/NA
Prep Batch: 317515

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobenzene	360	U	904	612		ug/Kg	☼	68	36 - 120	6	25
Hexachlorobutadiene	55	U	904	599		ug/Kg	☼	66	31 - 120	9	35
Hexachlorocyclopentadiene	360	U F1	904	360	U F1	ug/Kg	☼	0	10 - 120	NC	40
Hexachloroethane	360	U	904	433		ug/Kg	☼	48	15 - 120	4	40
Indeno[1,2,3-cd]pyrene	140	J	904	652		ug/Kg	☼	57	24 - 120	3	40
Isophorone	360	U	904	652		ug/Kg	☼	72	34 - 120	15	32
Naphthalene	27	J	904	592		ug/Kg	☼	62	29 - 120	7	34
Nitrobenzene	360	U	904	581		ug/Kg	☼	64	33 - 120	8	40
N-Nitrosodi-n-propylamine	360	U	904	649		ug/Kg	☼	72	32 - 120	1	32
N-Nitrosodiphenylamine	360	U	904	685		ug/Kg	☼	76	29 - 120	0	30
Pentachlorophenol	210	U	1810	487		ug/Kg	☼	27	10 - 120	20	40
Phenol	13	J	904	637		ug/Kg	☼	69	21 - 120	4	40
Phenanthrene	310	J	904	1060		ug/Kg	☼	83	28 - 120	24	40
Pyrene	450		904	1310		ug/Kg	☼	96	28 - 120	24	40
3 & 4 Methylphenol	360	U	904	653		ug/Kg	☼	72	33 - 120	0	29

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*69*		*32 - 120*
2-Fluorophenol (Surr)	*70*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*66*		*10 - 120*
Nitrobenzene-d5 (Surr)	*71*		*30 - 120*
Phenol-d5 (Surr)	*73*		*29 - 120*
Terphenyl-d14 (Surr)	*79*		*41 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-317501/17-A
Matrix: Solid
Analysis Batch: 317743

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317501

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		03/07/18 10:59	03/08/18 20:20	1
Aroclor-1221	50	U	50	24	ug/Kg		03/07/18 10:59	03/08/18 20:20	1
Aroclor-1232	50	U	50	23	ug/Kg		03/07/18 10:59	03/08/18 20:20	1
Aroclor-1242	50	U	50	19	ug/Kg		03/07/18 10:59	03/08/18 20:20	1
Aroclor-1248	50	U	50	24	ug/Kg		03/07/18 10:59	03/08/18 20:20	1
Aroclor-1254	50	U	50	23	ug/Kg		03/07/18 10:59	03/08/18 20:20	1
Aroclor-1260	50	U	50	22	ug/Kg		03/07/18 10:59	03/08/18 20:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*14 - 128*	*03/07/18 10:59*	*03/08/18 20:20*	*1*
DCB Decachlorobiphenyl	*111*		*10 - 132*	*03/07/18 10:59*	*03/08/18 20:20*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-317501/18-A
Matrix: Solid
Analysis Batch: 317743

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317501

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	711		ug/Kg		71	47 - 120		
Aroclor-1260			1000	862		ug/Kg		86	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*87*		*14 - 128*
DCB Decachlorobiphenyl	*99*		*10 - 132*

Lab Sample ID: 240-92321-5 MS
Matrix: Solid
Analysis Batch: 317755

Client Sample ID: SO-17303-030518-DA-029
Prep Type: Total/NA
Prep Batch: 317501

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	70	U	1350	852		ug/Kg	☼	63	31 - 120		
Aroclor-1260	70	U	1350	1050		ug/Kg	☼	77	21 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*74*		*14 - 128*
DCB Decachlorobiphenyl	*102*		*10 - 132*

Lab Sample ID: 240-92321-5 MSD
Matrix: Solid
Analysis Batch: 317755

Client Sample ID: SO-17303-030518-DA-029
Prep Type: Total/NA
Prep Batch: 317501

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	70	U	1390	884		ug/Kg	☼	64	31 - 120	4	30
Aroclor-1260	70	U	1390	1060		ug/Kg	☼	76	21 - 122	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*67*		*14 - 128*
DCB Decachlorobiphenyl	*103*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-317671/1-A
Matrix: Solid
Analysis Batch: 318010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80	U	0.80	0.36	mg/Kg		03/08/18 14:00	03/09/18 16:06	1
Beryllium	0.16	U	0.16	0.054	mg/Kg		03/08/18 14:00	03/09/18 16:06	1
Cadmium	0.080	U	0.080	0.048	mg/Kg		03/08/18 14:00	03/09/18 16:06	1
Cobalt	0.40	U	0.40	0.20	mg/Kg		03/08/18 14:00	03/09/18 16:06	1
Chromium	0.80	U	0.80	0.15	mg/Kg		03/08/18 14:00	03/09/18 16:06	1
Copper	0.80	U	0.80	0.24	mg/Kg		03/08/18 14:00	03/09/18 16:06	1
Manganese	0.80	U	0.80	0.31	mg/Kg		03/08/18 14:00	03/09/18 16:06	1
Nickel	0.80	U	0.80	0.23	mg/Kg		03/08/18 14:00	03/09/18 16:06	1
Zinc	2.0	U	2.0	1.4	mg/Kg		03/08/18 14:00	03/09/18 16:06	1

Lab Sample ID: LCS 240-317671/2-A
Matrix: Solid
Analysis Batch: 318010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	196		mg/Kg		98	80 - 120
Beryllium	5.00	4.89		mg/Kg		98	80 - 120
Cadmium	5.00	5.15		mg/Kg		103	80 - 120
Cobalt	50.0	48.6		mg/Kg		97	80 - 120
Chromium	20.0	19.7		mg/Kg		99	80 - 120
Copper	25.0	24.9		mg/Kg		100	80 - 120
Manganese	50.0	49.4		mg/Kg		99	80 - 120
Nickel	50.0	49.9		mg/Kg		100	80 - 120
Zinc	50.0	49.8		mg/Kg		100	80 - 120

Lab Sample ID: 240-92321-3 MS
Matrix: Solid
Analysis Batch: 318010

Client Sample ID: SO-17303-030518-DA-027
Prep Type: Total/NA
Prep Batch: 317671

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	49		196	228		mg/Kg	☼	91	75 - 125
Beryllium	0.36		4.91	4.57		mg/Kg	☼	86	75 - 125
Cadmium	0.28		4.91	4.85		mg/Kg	☼	93	75 - 125
Cobalt	7.3		49.1	55.9		mg/Kg	☼	99	75 - 125
Chromium	11		19.6	30.0		mg/Kg	☼	98	75 - 125
Copper	16		24.5	39.6		mg/Kg	☼	97	75 - 125
Manganese	310		49.1	396	4	mg/Kg	☼	171	75 - 125
Nickel	22		49.1	73.0		mg/Kg	☼	103	75 - 125
Zinc	46	F1 F2	49.1	102		mg/Kg	☼	116	75 - 125

Lab Sample ID: 240-92321-3 MSD
Matrix: Solid
Analysis Batch: 318010

Client Sample ID: SO-17303-030518-DA-027
Prep Type: Total/NA
Prep Batch: 317671

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	49		196	222		mg/Kg	☼	88	75 - 125	3	20
Beryllium	0.36		4.91	4.50		mg/Kg	☼	84	75 - 125	1	20
Cadmium	0.28		4.91	4.74		mg/Kg	☼	91	75 - 125	2	20
Cobalt	7.3		49.1	55.5		mg/Kg	☼	98	75 - 125	1	20
Chromium	11		19.6	30.1		mg/Kg	☼	99	75 - 125	0	20
Copper	16		24.5	40.2		mg/Kg	☼	99	75 - 125	1	20
Manganese	310		49.1	378	4	mg/Kg	☼	133	75 - 125	5	20
Nickel	22		49.1	73.7		mg/Kg	☼	104	75 - 125	1	20
Zinc	46	F1 F2	49.1	132	F1 F2	mg/Kg	☼	176	75 - 125	25	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-317671/1-A ^2
Matrix: Solid
Analysis Batch: 317955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	U	0.16	0.13	mg/Kg		03/08/18 14:00	03/09/18 13:37	2
Arsenic	0.0638	J	0.080	0.060	mg/Kg		03/08/18 14:00	03/09/18 13:37	2
Lead	0.20	U	0.20	0.062	mg/Kg		03/08/18 14:00	03/09/18 13:37	2
Selenium	0.16	U	0.16	0.12	mg/Kg		03/08/18 14:00	03/09/18 13:37	2

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-317671/1-A ^2
Matrix: Solid
Analysis Batch: 317955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.080	U	0.080	0.048	mg/Kg		03/08/18 14:00	03/09/18 13:37	2
Vanadium	0.80	U	0.80	0.23	mg/Kg		03/08/18 14:00	03/09/18 13:37	2
Silver	0.080	U	0.080	0.022	mg/Kg		03/08/18 14:00	03/09/18 13:37	2

Lab Sample ID: LCS 240-317671/24-A ^2
Matrix: Solid
Analysis Batch: 317955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	9.27		mg/Kg		93	80 - 120
Arsenic	100	93.2		mg/Kg		93	80 - 120
Lead	100	102		mg/Kg		102	80 - 120
Selenium	100	84.1		mg/Kg		84	80 - 120
Thallium	25.0	25.1		mg/Kg		100	80 - 120
Vanadium	100	94.4		mg/Kg		94	80 - 120
Silver	10.0	10.1		mg/Kg		101	80 - 120

Lab Sample ID: 240-92321-3 MS
Matrix: Solid
Analysis Batch: 317955

Client Sample ID: SO-17303-030518-DA-027
Prep Type: Total/NA
Prep Batch: 317671

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.30	F2 F1	9.82	4.26	F1	mg/Kg	☼	40	75 - 125
Arsenic	5.7	B	98.2	92.4		mg/Kg	☼	88	75 - 125
Lead	11		98.2	105		mg/Kg	☼	96	75 - 125
Selenium	0.61		98.2	78.5		mg/Kg	☼	79	75 - 125
Thallium	0.38		24.5	23.0		mg/Kg	☼	92	75 - 125
Vanadium	16		98.2	111		mg/Kg	☼	97	75 - 125
Silver	0.045	J	9.82	9.09		mg/Kg	☼	92	75 - 125

Lab Sample ID: 240-92321-3 MSD
Matrix: Solid
Analysis Batch: 317955

Client Sample ID: SO-17303-030518-DA-027
Prep Type: Total/NA
Prep Batch: 317671

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.30	F2 F1	9.82	2.80	F2 F1	mg/Kg	☼	25	75 - 125	41	20
Arsenic	5.7	B	98.2	97.2		mg/Kg	☼	93	75 - 125	5	20
Lead	11		98.2	101		mg/Kg	☼	93	75 - 125	3	20
Selenium	0.61		98.2	81.1		mg/Kg	☼	82	75 - 125	3	20
Thallium	0.38		24.5	22.5		mg/Kg	☼	90	75 - 125	2	20
Vanadium	16		98.2	112		mg/Kg	☼	98	75 - 125	1	20
Silver	0.045	J	9.82	9.15		mg/Kg	☼	93	75 - 125	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-317689/1-A
Matrix: Solid
Analysis Batch: 317881

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317689

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.018	mg/Kg		03/08/18 16:00	03/09/18 09:46	1

Lab Sample ID: LCS 240-317689/2-A
Matrix: Solid
Analysis Batch: 317881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317689

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.861		mg/Kg		103	80 - 120

Lab Sample ID: 240-92321-3 MS
Matrix: Solid
Analysis Batch: 317881

Client Sample ID: SO-17303-030518-DA-027
Prep Type: Total/NA
Prep Batch: 317689

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.043	U	0.207	0.226		mg/Kg	☼	109	80 - 120

Lab Sample ID: 240-92321-3 MSD
Matrix: Solid
Analysis Batch: 317881

Client Sample ID: SO-17303-030518-DA-027
Prep Type: Total/NA
Prep Batch: 317689

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.043	U	0.207	0.222		mg/Kg	☼	107	80 - 120	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-144)	(58-142)	(61-137)	(31-155)
240-92321-2	SO-17303-030518-DA-026	79	78	89	73
240-92321-3	SO-17303-030518-DA-027	84	86	90	79
240-92321-4	SO-17303-030518-DA-028	83	87	91	79
240-92321-5	SO-17303-030518-DA-029	84	85	93	81
LCS 240-317367/2-A	Lab Control Sample	82	95	95	83
LCSD 240-317367/3-A	Lab Control Sample Dup	81	92	92	84
MB 240-317367/1-A	Method Blank	86	95	100	81

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)
240-92321-1	TB-17303-030518	98	88	96	96
LCS 240-317472/4	Lab Control Sample	90	92	98	99
MB 240-317472/6	Method Blank	98	89	94	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(10-120)	(30-120)	(29-120)	(41-120)
240-92321-2	SO-17303-030518-DA-026	70	63	67	60	68	79
240-92321-3	SO-17303-030518-DA-027	72	73	60	70	76	80
240-92321-4	SO-17303-030518-DA-028	69	67	60	62	71	77
240-92321-5	SO-17303-030518-DA-029	76	77	70	73	80	82
240-92321-5 MS	SO-17303-030518-DA-029	67	67	64	61	70	76
240-92321-5 MSD	SO-17303-030518-DA-029	69	70	66	71	73	79
LCS 240-317515/21-A	Lab Control Sample	71	70	49	71	69	80
MB 240-317515/20-A	Method Blank	72	63	33	63	62	84

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCBP2
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
240-92321-2	SO-17303-030518-DA-026	74	105
240-92321-3	SO-17303-030518-DA-027	61	83
240-92321-4	SO-17303-030518-DA-028	97	120
240-92321-5	SO-17303-030518-DA-029	88	127
240-92321-5 MS	SO-17303-030518-DA-029	74	102
240-92321-5 MSD	SO-17303-030518-DA-029	67	103
LCS 240-317501/18-A	Lab Control Sample	87	99
MB 240-317501/17-A	Method Blank	96	111

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Client Sample ID: TB-17303-030518
Lab Sample ID: 240-92321-1
Date Collected: 03/05/18 00:00
Matrix: Water
Date Received: 03/06/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	317472	03/07/18 19:57	LRW	TAL CAN

Client Sample ID: SO-17303-030518-DA-026
Lab Sample ID: 240-92321-2
Date Collected: 03/05/18 13:00
Matrix: Solid
Date Received: 03/06/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	317540	03/07/18 13:30	CJL	TAL CAN

Client Sample ID: SO-17303-030518-DA-026
Lab Sample ID: 240-92321-2
Date Collected: 03/05/18 13:00
Matrix: Solid
Date Received: 03/06/18 09:30
Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 21:27	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317923	03/10/18 00:47	TJL1	TAL CAN
Total/NA	Prep	3540C			317515	03/07/18 11:35	AMT	TAL CAN
Total/NA	Analysis	8270C		2	318773	03/16/18 13:47	MRU	TAL CAN
Total/NA	Prep	3540C			317501	03/07/18 10:59	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317743	03/08/18 21:55	CSC	TAL CAN
Total/NA	Prep	3050B			317671	03/08/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	318010	03/09/18 16:33	AS1	TAL CAN
Total/NA	Prep	3050B			317671	03/08/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317955	03/09/18 14:13	DSH	TAL CAN
Total/NA	Prep	7471A			317689	03/08/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317881	03/09/18 09:57	AJC	TAL CAN

Client Sample ID: SO-17303-030518-DA-027
Lab Sample ID: 240-92321-3
Date Collected: 03/05/18 14:20
Matrix: Solid
Date Received: 03/06/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	317540	03/07/18 13:30	CJL	TAL CAN

Client Sample ID: SO-17303-030518-DA-027
Lab Sample ID: 240-92321-3
Date Collected: 03/05/18 14:20
Matrix: Solid
Date Received: 03/06/18 09:30
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 21:27	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317923	03/10/18 01:10	TJL1	TAL CAN
Total/NA	Prep	3540C			317515	03/07/18 11:35	AMT	TAL CAN

Client Sample ID: SO-17303-030518-DA-027 — Lab Sample ID: 240-92321-3

Date Collected: 03/05/18 14:20 — **Matrix: Solid**
Date Received: 03/06/18 09:30 — **Percent Solids: 87.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	318773	03/16/18 11:35	MRU	TAL CAN
Total/NA	Prep	3540C			317501	03/07/18 10:59	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317743	03/08/18 22:14	CSC	TAL CAN
Total/NA	Prep	3050B			317671	03/08/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	318010	03/09/18 16:15	AS1	TAL CAN
Total/NA	Prep	3050B			317671	03/08/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317955	03/09/18 13:46	DSH	TAL CAN
Total/NA	Prep	7471A			317689	03/08/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317881	03/09/18 09:50	AJC	TAL CAN

Client Sample ID: SO-17303-030518-DA-028 — Lab Sample ID: 240-92321-4

Date Collected: 03/05/18 14:10 — **Matrix: Solid**
Date Received: 03/06/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	317540	03/07/18 13:30	CJL	TAL CAN

Client Sample ID: SO-17303-030518-DA-028 — Lab Sample ID: 240-92321-4

Date Collected: 03/05/18 14:10 — **Matrix: Solid**
Date Received: 03/06/18 09:30 — **Percent Solids: 86.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 21:27	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317923	03/10/18 01:32	TJL1	TAL CAN
Total/NA	Prep	3540C			317515	03/07/18 11:35	AMT	TAL CAN
Total/NA	Analysis	8270C		4	318773	03/16/18 13:21	MRU	TAL CAN
Total/NA	Prep	3540C			317501	03/07/18 10:59	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317743	03/08/18 22:33	CSC	TAL CAN
Total/NA	Prep	3050B			317671	03/08/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	318010	03/09/18 16:38	AS1	TAL CAN
Total/NA	Prep	3050B			317671	03/08/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317955	03/09/18 14:18	DSH	TAL CAN
Total/NA	Prep	7471A			317689	03/08/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317881	03/09/18 09:59	AJC	TAL CAN

Client Sample ID: SO-17303-030518-DA-029 — Lab Sample ID: 240-92321-5

Date Collected: 03/05/18 13:30 — **Matrix: Solid**
Date Received: 03/06/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	317540	03/07/18 13:30	CJL	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Client Sample ID: SO-17303-030518-DA-029
Date Collected: 03/05/18 13:30
Date Received: 03/06/18 09:30

Lab Sample ID: 240-92321-5
Matrix: Solid
Percent Solids: 73.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			317367	03/06/18 21:27	LAM	TAL CAN
Total/NA	Analysis	8260B		1	317923	03/10/18 01:56	TJL1	TAL CAN
Total/NA	Prep	3540C			317515	03/07/18 11:35	AMT	TAL CAN
Total/NA	Analysis	8270C		1	318773	03/16/18 12:01	MRU	TAL CAN
Total/NA	Prep	3540C			317501	03/07/18 10:59	AMT	TAL CAN
Total/NA	Analysis	8082A		1	317755	03/09/18 08:09	CSC	TAL CAN
Total/NA	Prep	3050B			317671	03/08/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	318010	03/09/18 16:42	AS1	TAL CAN
Total/NA	Prep	3050B			317671	03/08/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6020		2	317955	03/09/18 14:31	DSH	TAL CAN
Total/NA	Prep	7471A			317689	03/08/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	317881	03/09/18 10:01	AJC	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92321-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18 *
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18 *
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN
190

Chain of Custody Record

231082

3.0/2.7

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tom Kinney	Site Contact: A. Beams	Date:	COC No:
Company Name: GHD	Tel/Fax: 248-893-2400	Lab Contact: D. Hackler	Carrier: FedEx	____ of ____ COCs
Address: 26850 Haggerty rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Farmington Hills, M. 48331	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone: 248-893-3400	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: GVO	☐ 1 week			
Site: Ypsilanti, MI	☐ 2 days			Job / SDG No.:
PO# 2400/6020	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC	TCL SVOC	Site TAL Metals From Pb (if > 7500) ACSI's.			Sample Specific Notes:
TB-17303-030518	3/5/18	/	TB	/	/			X					
SO-17303-030518-DA-026	|	1300	G	SO	3			X	X	X	X	
-027		1420	|	|	|			|	|	|	|	
-028		1410	↓	|	↓			|	|	|	|	|	
-029	↓	1330	C	↓	2			↓	↓	↓	↓	↓	

240-92321 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

SDG - 017303-T02-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ | Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Derek Salata	GHD	3/5/18 1530	POP	TAL	3-6-18 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 92321**
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: BOP

Cooler Received on 3-6-18 Opened on 3-6-18

FedEx: 1st Grd ~~Exp~~ UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam ~~Plastic Bag~~ None Other _____

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.3** °C) Observed Cooler Temp. 3.0 °C Corrected Cooler Temp. 2.7 °C
   IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   ~~IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	~~Yes~~ No	
-Were the seals on the outside of the cooler(s) signed & dated?	Yes No	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes ~~No~~	
-Were tamper/custody seals intact and uncompromised?	~~Yes~~ No	NA
3. Shippers' packing slip attached to the cooler(s)?	~~Yes~~ No	
4. Did custody papers accompany the sample(s)?	~~Yes~~ No	
5. Were the custody papers relinquished & signed in the appropriate place?	Yes No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes ~~No~~	
7. Did all bottles arrive in good condition (Unbroken)?	~~Yes~~ No	
8. Could all bottle labels be reconciled with the COC?	Yes No	
9. Were correct bottle(s) used for the test(s) indicated?	Yes No	
10. Sufficient quantity received to perform indicated analyses?	~~Yes~~ No	
11. Are these work share samples?	Yes ~~No~~	
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes No	NA pH Strip Lot# **HC732776**
13. Were VOAs on the COC?	Yes ~~No~~	
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes No	NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B725401VB	~~Yes~~ No	
16. Was a LL Hg or Me Hg trip blank present? _____	Yes ~~No~~	

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-92382-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
3/21/2018 9:33:52 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-92382-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-92382-1

Comments
No additional comments.

Receipt
The samples were received on 3/7/2018 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C: The continuing calibration verification (CCV) associated with batch 240-319006 recovered above the upper control limit for Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: SO-017303-030618-DA-001 (240-92382-1) and SO-017303-030618-DA-002 (240-92382-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-017303-030618-DA-002 (240-92382-2).3488775, 3154249, 3361889.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-92382-1	SO-017303-030618-DA-001	Solid	03/06/18 08:45	03/07/18 09:40
240-92382-2	SO-017303-030618-DA-002	Solid	03/06/18 08:55	03/07/18 09:40

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Client Sample ID: SO-017303-030618-DA-001 — Lab Sample ID: 240-92382-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0079	J	0.050	0.0041	mg/L	1		6010B	TCLP
Barium	1.2		0.50	0.0013	mg/L	1		6010B	TCLP
Cadmium	0.00099	J	0.050	0.00020	mg/L	1		6010B	TCLP
Chromium	0.0015	J B	0.050	0.00063	mg/L	1		6010B	TCLP

Client Sample ID: SO-017303-030618-DA-002 — Lab Sample ID: 240-92382-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0084	J	0.050	0.0041	mg/L	1		6010B	TCLP
Barium	1.1		0.50	0.0013	mg/L	1		6010B	TCLP
Cadmium	0.0011	J	0.050	0.00020	mg/L	1		6010B	TCLP
Chromium	0.0036	J B	0.050	0.00063	mg/L	1		6010B	TCLP
Selenium	0.0083	J	0.050	0.0060	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: SO-017303-030618-DA-001
Date Collected: 03/06/18 08:45
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.00027	mg/L			03/20/18 00:16	1
1,2-Dichloroethane	0.025	U	0.025	0.00030	mg/L			03/20/18 00:16	1
2-Butanone (MEK)	0.25	U	0.25	0.0010	mg/L			03/20/18 00:16	1
Benzene	0.025	U	0.025	0.00028	mg/L			03/20/18 00:16	1
Carbon tetrachloride	0.025	U	0.025	0.00035	mg/L			03/20/18 00:16	1
Chlorobenzene	0.025	U	0.025	0.00032	mg/L			03/20/18 00:16	1
Chloroform	0.025	U	0.025	0.00031	mg/L			03/20/18 00:16	1
Tetrachloroethene	0.025	U	0.025	0.00030	mg/L			03/20/18 00:16	1
Trichloroethene	0.025	U	0.025	0.00033	mg/L			03/20/18 00:16	1
Vinyl chloride	0.025	U	0.025	0.00045	mg/L			03/20/18 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 120*		*03/20/18 00:16*	*1*
4-Bromofluorobenzene (Surr)	*90*		*76 - 120*		*03/20/18 00:16*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*03/20/18 00:16*	*1*
Dibromofluoromethane (Surr)	*78*		*73 - 123*		*03/20/18 00:16*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: SO-017303-030618-DA-002
Date Collected: 03/06/18 08:55
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.00027	mg/L			03/20/18 00:39	1
1,2-Dichloroethane	0.025	U	0.025	0.00030	mg/L			03/20/18 00:39	1
2-Butanone (MEK)	0.25	U	0.25	0.0010	mg/L			03/20/18 00:39	1
Benzene	0.025	U	0.025	0.00028	mg/L			03/20/18 00:39	1
Carbon tetrachloride	0.025	U	0.025	0.00035	mg/L			03/20/18 00:39	1
Chlorobenzene	0.025	U	0.025	0.00032	mg/L			03/20/18 00:39	1
Chloroform	0.025	U	0.025	0.00031	mg/L			03/20/18 00:39	1
Tetrachloroethene	0.025	U	0.025	0.00030	mg/L			03/20/18 00:39	1
Trichloroethene	0.025	U	0.025	0.00033	mg/L			03/20/18 00:39	1
Vinyl chloride	0.025	U	0.025	0.00045	mg/L			03/20/18 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 120*		*03/20/18 00:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*76 - 120*		*03/20/18 00:39*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*03/20/18 00:39*	*1*
Dibromofluoromethane (Surr)	*80*		*73 - 123*		*03/20/18 00:39*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: SO-017303-030618-DA-001
Date Collected: 03/06/18 08:45
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		03/15/18 11:08	03/19/18 12:55	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		03/15/18 11:08	03/19/18 12:55	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		03/15/18 11:08	03/19/18 12:55	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		03/15/18 11:08	03/19/18 12:55	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		03/15/18 11:08	03/19/18 12:55	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		03/15/18 11:08	03/19/18 12:55	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		03/15/18 11:08	03/19/18 12:55	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		03/15/18 11:08	03/19/18 12:55	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		03/15/18 11:08	03/19/18 12:55	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		03/15/18 11:08	03/19/18 12:55	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		03/15/18 11:08	03/19/18 12:55	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		03/15/18 11:08	03/19/18 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*38 - 120*	*03/15/18 11:08*	*03/19/18 12:55*	*1*
2-Fluorophenol (Surr)	*61*		*10 - 120*	*03/15/18 11:08*	*03/19/18 12:55*	*1*
2,4,6-Tribromophenol (Surr)	*83*		*28 - 120*	*03/15/18 11:08*	*03/19/18 12:55*	*1*
Nitrobenzene-d5 (Surr)	*73*		*32 - 120*	*03/15/18 11:08*	*03/19/18 12:55*	*1*
Phenol-d5 (Surr)	*47*		*10 - 120*	*03/15/18 11:08*	*03/19/18 12:55*	*1*
Terphenyl-d14 (Surr)	*85*		*23 - 127*	*03/15/18 11:08*	*03/19/18 12:55*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: SO-017303-030618-DA-002
Date Collected: 03/06/18 08:55
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		03/15/18 11:08	03/19/18 12:28	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		03/15/18 11:08	03/19/18 12:28	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		03/15/18 11:08	03/19/18 12:28	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		03/15/18 11:08	03/19/18 12:28	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		03/15/18 11:08	03/19/18 12:28	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		03/15/18 11:08	03/19/18 12:28	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		03/15/18 11:08	03/19/18 12:28	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		03/15/18 11:08	03/19/18 12:28	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		03/15/18 11:08	03/19/18 12:28	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		03/15/18 11:08	03/19/18 12:28	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		03/15/18 11:08	03/19/18 12:28	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		03/15/18 11:08	03/19/18 12:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*38 - 120*	*03/15/18 11:08*	*03/19/18 12:28*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*03/15/18 11:08*	*03/19/18 12:28*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*28 - 120*	*03/15/18 11:08*	*03/19/18 12:28*	*1*
Nitrobenzene-d5 (Surr)	*51*		*32 - 120*	*03/15/18 11:08*	*03/19/18 12:28*	*1*
Phenol-d5 (Surr)	*37*		*10 - 120*	*03/15/18 11:08*	*03/19/18 12:28*	*1*
Terphenyl-d14 (Surr)	*56*		*23 - 127*	*03/15/18 11:08*	*03/19/18 12:28*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-017303-030618-DA-001
Date Collected: 03/06/18 08:45
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-1
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	59	U	59	26	ug/Kg	☼	03/08/18 08:44	03/09/18 21:29	1
Aroclor-1221	59	U	59	28	ug/Kg	☼	03/08/18 08:44	03/09/18 21:29	1
Aroclor-1232	59	U	59	27	ug/Kg	☼	03/08/18 08:44	03/09/18 21:29	1
Aroclor-1242	59	U	59	22	ug/Kg	☼	03/08/18 08:44	03/09/18 21:29	1
Aroclor-1248	59	U	59	28	ug/Kg	☼	03/08/18 08:44	03/09/18 21:29	1
Aroclor-1254	59	U	59	27	ug/Kg	☼	03/08/18 08:44	03/09/18 21:29	1
Aroclor-1260	59	U	59	26	ug/Kg	☼	03/08/18 08:44	03/09/18 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*03/08/18 08:44*	*03/09/18 21:29*	*1*
DCB Decachlorobiphenyl	*82*		*10 - 132*	*03/08/18 08:44*	*03/09/18 21:29*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: SO-017303-030618-DA-002
Date Collected: 03/06/18 08:55
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-2
Matrix: Solid
Percent Solids: 85.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	61	U	61	27	ug/Kg	☼	03/08/18 08:44	03/09/18 22:26	1
Aroclor-1221	61	U	61	29	ug/Kg	☼	03/08/18 08:44	03/09/18 22:26	1
Aroclor-1232	61	U	61	28	ug/Kg	☼	03/08/18 08:44	03/09/18 22:26	1
Aroclor-1242	61	U	61	23	ug/Kg	☼	03/08/18 08:44	03/09/18 22:26	1
Aroclor-1248	61	U	61	29	ug/Kg	☼	03/08/18 08:44	03/09/18 22:26	1
Aroclor-1254	61	U	61	28	ug/Kg	☼	03/08/18 08:44	03/09/18 22:26	1
Aroclor-1260	61	U	61	27	ug/Kg	☼	03/08/18 08:44	03/09/18 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*14 - 128*	*03/08/18 08:44*	*03/09/18 22:26*	*1*
DCB Decachlorobiphenyl	*84*		*10 - 132*	*03/08/18 08:44*	*03/09/18 22:26*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 6010B - Metals (ICP) - TCLP

Client Sample ID: SO-017303-030618-DA-001
Date Collected: 03/06/18 08:45
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0079**	**J**	0.050	0.0041	mg/L		03/15/18 14:00	03/17/18 19:30	1
Barium	**1.2**		0.50	0.0013	mg/L		03/15/18 14:00	03/17/18 19:30	1
Cadmium	**0.00099**	**J**	0.050	0.00020	mg/L		03/15/18 14:00	03/17/18 19:30	1
Chromium	**0.0015**	**J B**	0.050	0.00063	mg/L		03/15/18 14:00	03/17/18 19:30	1
Lead	0.050	U	0.050	0.0028	mg/L		03/15/18 14:00	03/17/18 19:30	1
Selenium	0.050	U	0.050	0.0060	mg/L		03/15/18 14:00	03/17/18 19:30	1
Silver	0.050	U	0.050	0.00062	mg/L		03/15/18 14:00	03/17/18 19:30	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 6010B - Metals (ICP) - TCLP

Client Sample ID: SO-017303-030618-DA-002
Date Collected: 03/06/18 08:55
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0084**	**J**	0.050	0.0041	mg/L		03/15/18 14:00	03/17/18 19:11	1
Barium	**1.1**		0.50	0.0013	mg/L		03/15/18 14:00	03/17/18 19:11	1
Cadmium	**0.0011**	**J**	0.050	0.00020	mg/L		03/15/18 14:00	03/17/18 19:11	1
Chromium	**0.0036**	**J B**	0.050	0.00063	mg/L		03/15/18 14:00	03/17/18 19:11	1
Lead	0.050	U	0.050	0.0028	mg/L		03/15/18 14:00	03/17/18 19:11	1
Selenium	**0.0083**	**J**	0.050	0.0060	mg/L		03/15/18 14:00	03/17/18 19:11	1
Silver	0.050	U	0.050	0.00062	mg/L		03/15/18 14:00	03/17/18 19:11	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 7470A - Mercury (CVAA) - TCLP

Client Sample ID: SO-017303-030618-DA-001
Date Collected: 03/06/18 08:45
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		03/15/18 14:00	03/16/18 12:44	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 7470A - Mercury (CVAA) - TCLP

Client Sample ID: SO-017303-030618-DA-002
Date Collected: 03/06/18 08:55
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		03/15/18 14:00	03/16/18 12:37	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

General Chemistry

Client Sample ID: SO-017303-030618-DA-001
Date Collected: 03/06/18 08:45
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.6		0.1	0.1	%			03/08/18 16:44	1
Percent Moisture	16.4		0.1	0.1	%			03/08/18 16:44	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

General Chemistry

Client Sample ID: SO-017303-030618-DA-002
Date Collected: 03/06/18 08:55
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.2		0.1	0.1	%			03/08/18 16:44	1
Percent Moisture	14.8		0.1	0.1	%			03/08/18 16:44	1

GC/MS VOA

Leach Batch: 318922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	1311	
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	1311	
LB 240-318922/1-A MB	Method Blank	TCLP	Solid	1311	
240-92382-2 MS	SO-017303-030618-DA-002	TCLP	Solid	1311	
240-92382-2 MSD	SO-017303-030618-DA-002	TCLP	Solid	1311	

Analysis Batch: 319136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	8260B	318922
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	8260B	318922
LB 240-318922/1-A MB	Method Blank	TCLP	Solid	8260B	318922
LCS 240-319136/20	Lab Control Sample	Total/NA	Solid	8260B	
240-92382-2 MS	SO-017303-030618-DA-002	TCLP	Solid	8260B	318922
240-92382-2 MSD	SO-017303-030618-DA-002	TCLP	Solid	8260B	318922

GC/MS Semi VOA

Leach Batch: 318539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	1311	
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	1311	
240-92382-1 MS	SO-017303-030618-DA-001	TCLP	Solid	1311	

Prep Batch: 318637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	3510C	318539
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	3510C	318539
MB 240-318637/8-A	Method Blank	Total/NA	Solid	3510C	
LCS 240-318637/9-A	Lab Control Sample	Total/NA	Solid	3510C	
240-92382-1 MS	SO-017303-030618-DA-001	TCLP	Solid	3510C	318539

Analysis Batch: 319006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	8270C	318637
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	8270C	318637
MB 240-318637/8-A	Method Blank	Total/NA	Solid	8270C	318637
LCS 240-318637/9-A	Lab Control Sample	Total/NA	Solid	8270C	318637
240-92382-1 MS	SO-017303-030618-DA-001	TCLP	Solid	8270C	318637

GC Semi VOA

Prep Batch: 317646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	Total/NA	Solid	3540C	
240-92382-2	SO-017303-030618-DA-002	Total/NA	Solid	3540C	
MB 240-317646/16-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-317646/17-A	Lab Control Sample	Total/NA	Solid	3540C	
240-92382-1 MS	SO-017303-030618-DA-001	Total/NA	Solid	3540C	
240-92382-1 MSD	SO-017303-030618-DA-001	Total/NA	Solid	3540C	

GC Semi VOA (Continued)

Analysis Batch: 317906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	Total/NA	Solid	8082A	317646
240-92382-2	SO-017303-030618-DA-002	Total/NA	Solid	8082A	317646
MB 240-317646/16-A	Method Blank	Total/NA	Solid	8082A	317646
LCS 240-317646/17-A	Lab Control Sample	Total/NA	Solid	8082A	317646
240-92382-1 MS	SO-017303-030618-DA-001	Total/NA	Solid	8082A	317646
240-92382-1 MSD	SO-017303-030618-DA-001	Total/NA	Solid	8082A	317646

Metals

Leach Batch: 318539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	1311	
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	1311	
LB 240-318539/1-B	Method Blank	TCLP	Solid	1311	
LB 240-318539/1-C	Method Blank	TCLP	Solid	1311	
240-92382-2 MS	SO-017303-030618-DA-002	TCLP	Solid	1311	
240-92382-2 MSD	SO-017303-030618-DA-002	TCLP	Solid	1311	

Prep Batch: 318656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	3010A	318539
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	3010A	318539
LB 240-318539/1-B	Method Blank	TCLP	Solid	3010A	318539
MB 240-318656/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 240-318656/3-A	Lab Control Sample	Total/NA	Solid	3010A	
240-92382-2 MS	SO-017303-030618-DA-002	TCLP	Solid	3010A	318539
240-92382-2 MSD	SO-017303-030618-DA-002	TCLP	Solid	3010A	318539

Prep Batch: 318657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	7470A	318539
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	7470A	318539
LB 240-318539/1-C	Method Blank	TCLP	Solid	7470A	318539
MB 240-318657/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 240-318657/3-A	Lab Control Sample	Total/NA	Solid	7470A	
240-92382-2 MS	SO-017303-030618-DA-002	TCLP	Solid	7470A	318539
240-92382-2 MSD	SO-017303-030618-DA-002	TCLP	Solid	7470A	318539

Analysis Batch: 318905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	7470A	318657
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	7470A	318657
LB 240-318539/1-C	Method Blank	TCLP	Solid	7470A	318657
MB 240-318657/2-A	Method Blank	Total/NA	Solid	7470A	318657
LCS 240-318657/3-A	Lab Control Sample	Total/NA	Solid	7470A	318657
240-92382-2 MS	SO-017303-030618-DA-002	TCLP	Solid	7470A	318657
240-92382-2 MSD	SO-017303-030618-DA-002	TCLP	Solid	7470A	318657

Metals (Continued)

Analysis Batch: 319053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	TCLP	Solid	6010B	318656
240-92382-2	SO-017303-030618-DA-002	TCLP	Solid	6010B	318656
LB 240-318539/1-B	Method Blank	TCLP	Solid	6010B	318656
MB 240-318656/2-A	Method Blank	Total/NA	Solid	6010B	318656
LCS 240-318656/3-A	Lab Control Sample	Total/NA	Solid	6010B	318656
240-92382-2 MS	SO-017303-030618-DA-002	TCLP	Solid	6010B	318656
240-92382-2 MSD	SO-017303-030618-DA-002	TCLP	Solid	6010B	318656

General Chemistry

Analysis Batch: 317741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-92382-1	SO-017303-030618-DA-001	Total/NA	Solid	Moisture	
240-92382-2	SO-017303-030618-DA-002	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 240-319136/20
Matrix: Solid
Analysis Batch: 319136

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.00	0.910		mg/L		91	76 - 131
1,2-Dichloroethane	1.00	0.957		mg/L		96	72 - 125
2-Butanone (MEK)	2.00	2.26		mg/L		113	55 - 137
Benzene	1.00	0.931		mg/L		93	80 - 122
Carbon tetrachloride	1.00	0.924		mg/L		92	69 - 130
Chlorobenzene	1.00	0.961		mg/L		96	80 - 120
Chloroform	1.00	0.926		mg/L		93	80 - 122
Tetrachloroethene	1.00	0.979		mg/L		98	79 - 120
Trichloroethene	1.00	0.984		mg/L		98	80 - 121
Vinyl chloride	1.00	0.790		mg/L		79	73 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*73 - 120*
4-Bromofluorobenzene (Surr)	*89*		*76 - 120*
Toluene-d8 (Surr)	*83*		*80 - 120*
Dibromofluoromethane (Surr)	*81*		*73 - 123*

Lab Sample ID: LB 240-318922/1-A MB
Matrix: Solid
Analysis Batch: 319136

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.00027	mg/L			03/19/18 21:56	1
1,2-Dichloroethane	0.025	U	0.025	0.00030	mg/L			03/19/18 21:56	1
2-Butanone (MEK)	0.25	U	0.25	0.0010	mg/L			03/19/18 21:56	1
Benzene	0.025	U	0.025	0.00028	mg/L			03/19/18 21:56	1
Carbon tetrachloride	0.025	U	0.025	0.00035	mg/L			03/19/18 21:56	1
Chlorobenzene	0.025	U	0.025	0.00032	mg/L			03/19/18 21:56	1
Chloroform	0.025	U	0.025	0.00031	mg/L			03/19/18 21:56	1
Tetrachloroethene	0.025	U	0.025	0.00030	mg/L			03/19/18 21:56	1
Trichloroethene	0.025	U	0.025	0.00033	mg/L			03/19/18 21:56	1
Vinyl chloride	0.025	U	0.025	0.00045	mg/L			03/19/18 21:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 120*		*03/19/18 21:56*	*1*
4-Bromofluorobenzene (Surr)	*90*		*76 - 120*		*03/19/18 21:56*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*03/19/18 21:56*	*1*
Dibromofluoromethane (Surr)	*80*		*73 - 123*		*03/19/18 21:56*	*1*

Lab Sample ID: 240-92382-2 MS
Matrix: Solid
Analysis Batch: 319136

Client Sample ID: SO-017303-030618-DA-002
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.025	U	1.00	0.797		mg/L		80	69 - 128
1,2-Dichloroethane	0.025	U	1.00	0.909		mg/L		91	68 - 123
2-Butanone (MEK)	0.25	U	2.00	1.57		mg/L		78	61 - 132

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-92382-2 MS
Matrix: Solid
Analysis Batch: 319136

Client Sample ID: SO-017303-030618-DA-002
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.025	U	1.00	0.856		mg/L		86	80 - 120
Carbon tetrachloride	0.025	U	1.00	0.809		mg/L		81	63 - 120
Chlorobenzene	0.025	U	1.00	0.902		mg/L		90	74 - 120
Chloroform	0.025	U	1.00	0.873		mg/L		87	80 - 121
Tetrachloroethene	0.025	U	1.00	0.874		mg/L		87	69 - 120
Trichloroethene	0.025	U	1.00	0.903		mg/L		90	62 - 140
Vinyl chloride	0.025	U	1.00	0.720		mg/L		72	70 - 129

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*73 - 120*
4-Bromofluorobenzene (Surr)	*91*		*76 - 120*
Toluene-d8 (Surr)	*84*		*80 - 120*
Dibromofluoromethane (Surr)	*79*		*73 - 123*

Lab Sample ID: 240-92382-2 MSD
Matrix: Solid
Analysis Batch: 319136

Client Sample ID: SO-017303-030618-DA-002
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	0.025	U	1.00	0.814		mg/L		81	69 - 128	2	11
1,2-Dichloroethane	0.025	U	1.00	0.875		mg/L		88	68 - 123	4	10
2-Butanone (MEK)	0.25	U	2.00	1.48		mg/L		74	61 - 132	6	14
Benzene	0.025	U	1.00	0.857		mg/L		86	80 - 120	0	10
Carbon tetrachloride	0.025	U	1.00	0.844		mg/L		84	63 - 120	4	12
Chlorobenzene	0.025	U	1.00	0.914		mg/L		91	74 - 120	1	11
Chloroform	0.025	U	1.00	0.888		mg/L		89	80 - 121	2	10
Tetrachloroethene	0.025	U	1.00	0.918		mg/L		92	69 - 120	5	13
Trichloroethene	0.025	U	1.00	0.932		mg/L		93	62 - 140	3	11
Vinyl chloride	0.025	U	1.00	0.723		mg/L		72	70 - 129	0	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*73 - 120*
4-Bromofluorobenzene (Surr)	*90*		*76 - 120*
Toluene-d8 (Surr)	*83*		*80 - 120*
Dibromofluoromethane (Surr)	*81*		*73 - 123*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-318637/8-A
Matrix: Solid
Analysis Batch: 319006

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318637

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		03/15/18 11:08	03/19/18 08:54	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		03/15/18 11:08	03/19/18 08:54	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		03/15/18 11:08	03/19/18 08:54	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		03/15/18 11:08	03/19/18 08:54	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-318637/8-A
Matrix: Solid
Analysis Batch: 319006

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318637

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		03/15/18 11:08	03/19/18 08:54	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		03/15/18 11:08	03/19/18 08:54	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		03/15/18 11:08	03/19/18 08:54	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		03/15/18 11:08	03/19/18 08:54	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		03/15/18 11:08	03/19/18 08:54	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		03/15/18 11:08	03/19/18 08:54	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		03/15/18 11:08	03/19/18 08:54	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		03/15/18 11:08	03/19/18 08:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*82*		*38 - 120*	*03/15/18 11:08*	*03/19/18 08:54*	*1*
2-Fluorophenol (Surr)	*70*		*10 - 120*	*03/15/18 11:08*	*03/19/18 08:54*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*28 - 120*	*03/15/18 11:08*	*03/19/18 08:54*	*1*
Nitrobenzene-d5 (Surr)	*79*		*32 - 120*	*03/15/18 11:08*	*03/19/18 08:54*	*1*
Phenol-d5 (Surr)	*55*		*10 - 120*	*03/15/18 11:08*	*03/19/18 08:54*	*1*
Terphenyl-d14 (Surr)	*86*		*23 - 127*	*03/15/18 11:08*	*03/19/18 08:54*	*1*

Lab Sample ID: LCS 240-318637/9-A
Matrix: Solid
Analysis Batch: 319006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 318637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0635		mg/L		79	47 - 120
2,4,5-Trichlorophenol	0.0800	0.0628		mg/L		78	54 - 120
2,4,6-Trichlorophenol	0.0800	0.0686		mg/L		86	54 - 120
2,4-Dinitrotoluene	0.0800	0.0692		mg/L		87	60 - 120
Hexachlorobenzene	0.0800	0.0685		mg/L		86	51 - 120
Hexachlorobutadiene	0.0800	0.0740		mg/L		93	44 - 120
Hexachloroethane	0.0800	0.0661		mg/L		83	44 - 120
3 & 4 Methylphenol	0.0800	0.0622		mg/L		78	40 - 120
2-Methylphenol	0.0800	0.0643		mg/L		80	46 - 120
Nitrobenzene	0.0800	0.0679		mg/L		85	55 - 120
Pentachlorophenol	0.160	0.126		mg/L		79	30 - 120
Pyridine	0.160	0.111		mg/L		70	23 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*87*		*38 - 120*
2-Fluorophenol (Surr)	*71*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*92*		*28 - 120*
Nitrobenzene-d5 (Surr)	*87*		*32 - 120*
Phenol-d5 (Surr)	*60*		*10 - 120*
Terphenyl-d14 (Surr)	*88*		*23 - 127*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-92382-1 MS
Matrix: Solid
Analysis Batch: 319006

Client Sample ID: SO-017303-030618-DA-001
Prep Type: TCLP
Prep Batch: 318637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0040	U	0.0800	0.0557		mg/L		70	30 - 120
2,4,5-Trichlorophenol	0.0040	U	0.0800	0.0577		mg/L		72	20 - 120
2,4,6-Trichlorophenol	0.0040	U	0.0800	0.0570		mg/L		71	40 - 120
2,4-Dinitrotoluene	0.0040	U	0.0800	0.0608		mg/L		76	49 - 120
Hexachlorobenzene	0.00080	U	0.0800	0.0592		mg/L		74	31 - 120
Hexachlorobutadiene	0.0040	U	0.0800	0.0603		mg/L		75	30 - 120
Hexachloroethane	0.0040	U	0.0800	0.0584		mg/L		73	12 - 120
3 & 4 Methylphenol	0.0040	U	0.0800	0.0560		mg/L		70	15 - 120
2-Methylphenol	0.0040	U	0.0800	0.0562		mg/L		70	18 - 120
Nitrobenzene	0.0040	U	0.0800	0.0575		mg/L		72	48 - 120
Pentachlorophenol	0.016	U	0.160	0.112		mg/L		70	20 - 120
Pyridine	0.0040	U	0.160	0.0988		mg/L		62	10 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*38 - 120*
2-Fluorophenol (Surr)	*61*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*78*		*28 - 120*
Nitrobenzene-d5 (Surr)	*73*		*32 - 120*
Phenol-d5 (Surr)	*50*		*10 - 120*
Terphenyl-d14 (Surr)	*79*		*23 - 127*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-317646/16-A
Matrix: Solid
Analysis Batch: 317906

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317646

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		03/08/18 08:44	03/09/18 16:44	1
Aroclor-1221	50	U	50	24	ug/Kg		03/08/18 08:44	03/09/18 16:44	1
Aroclor-1232	50	U	50	23	ug/Kg		03/08/18 08:44	03/09/18 16:44	1
Aroclor-1242	50	U	50	19	ug/Kg		03/08/18 08:44	03/09/18 16:44	1
Aroclor-1248	50	U	50	24	ug/Kg		03/08/18 08:44	03/09/18 16:44	1
Aroclor-1254	50	U	50	23	ug/Kg		03/08/18 08:44	03/09/18 16:44	1
Aroclor-1260	50	U	50	22	ug/Kg		03/08/18 08:44	03/09/18 16:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*14 - 128*	*03/08/18 08:44*	*03/09/18 16:44*	*1*
DCB Decachlorobiphenyl	*97*		*10 - 132*	*03/08/18 08:44*	*03/09/18 16:44*	*1*

Lab Sample ID: LCS 240-317646/17-A
Matrix: Solid
Analysis Batch: 317906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	714		ug/Kg		71	47 - 120
Aroclor-1260	1000	944		ug/Kg		94	46 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-317646/17-A
Matrix: Solid
Analysis Batch: 317906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317646

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*14 - 128*
DCB Decachlorobiphenyl	*105*		*10 - 132*

Lab Sample ID: 240-92382-1 MS
Matrix: Solid
Analysis Batch: 317906

Client Sample ID: SO-017303-030618-DA-001
Prep Type: Total/NA
Prep Batch: 317646

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	59	U	1170	749		ug/Kg	☼	64	31 - 120
Aroclor-1260	59	U	1170	908		ug/Kg	☼	77	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*79*		*14 - 128*
DCB Decachlorobiphenyl	*84*		*10 - 132*

Lab Sample ID: 240-92382-1 MSD
Matrix: Solid
Analysis Batch: 317906

Client Sample ID: SO-017303-030618-DA-001
Prep Type: Total/NA
Prep Batch: 317646

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	59	U	1250	838		ug/Kg	☼	67	31 - 120	11	30
Aroclor-1260	59	U	1250	975		ug/Kg	☼	78	21 - 122	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*14 - 128*
DCB Decachlorobiphenyl	*90*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-318656/2-A
Matrix: Solid
Analysis Batch: 319053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318656

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0041	mg/L		03/15/18 14:00	03/17/18 19:02	1
Barium	0.50	U	0.50	0.0013	mg/L		03/15/18 14:00	03/17/18 19:02	1
Cadmium	0.050	U	0.050	0.00020	mg/L		03/15/18 14:00	03/17/18 19:02	1
Chromium	0.050	U	0.050	0.00063	mg/L		03/15/18 14:00	03/17/18 19:02	1
Lead	0.050	U	0.050	0.0028	mg/L		03/15/18 14:00	03/17/18 19:02	1
Selenium	0.050	U	0.050	0.0060	mg/L		03/15/18 14:00	03/17/18 19:02	1
Silver	0.050	U	0.050	0.00062	mg/L		03/15/18 14:00	03/17/18 19:02	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 240-318656/3-A
Matrix: Solid
Analysis Batch: 319053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 318656

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.31		mg/L		116	50 - 150
Barium	2.00	2.07		mg/L		103	50 - 150
Cadmium	0.0500	0.0564		mg/L		113	50 - 150
Chromium	0.200	0.200		mg/L		100	50 - 150
Lead	0.500	0.484		mg/L		97	50 - 150
Selenium	2.00	2.33		mg/L		117	50 - 150
Silver	0.0500	0.0571		mg/L		114	50 - 150

Lab Sample ID: LB 240-318539/1-B
Matrix: Solid
Analysis Batch: 319053

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 318656

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0041	mg/L		03/15/18 14:00	03/17/18 18:43	1
Barium	0.50	U	0.50	0.0013	mg/L		03/15/18 14:00	03/17/18 18:43	1
Cadmium	0.050	U	0.050	0.00020	mg/L		03/15/18 14:00	03/17/18 18:43	1
Chromium	0.00106	J	0.050	0.00063	mg/L		03/15/18 14:00	03/17/18 18:43	1
Lead	0.050	U	0.050	0.0028	mg/L		03/15/18 14:00	03/17/18 18:43	1
Selenium	0.050	U	0.050	0.0060	mg/L		03/15/18 14:00	03/17/18 18:43	1
Silver	0.050	U	0.050	0.00062	mg/L		03/15/18 14:00	03/17/18 18:43	1

Lab Sample ID: 240-92382-2 MS
Matrix: Solid
Analysis Batch: 319053

Client Sample ID: SO-017303-030618-DA-002
Prep Type: TCLP
Prep Batch: 318656

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0084	J	5.00	5.75		mg/L		115	75 - 125
Barium	1.1		50.0	54.0		mg/L		106	75 - 125
Cadmium	0.0011	J	1.00	1.11		mg/L		111	75 - 125
Chromium	0.0036	J B	5.00	5.05		mg/L		101	75 - 125
Lead	0.050	U	5.00	5.21		mg/L		104	75 - 125
Selenium	0.0083	J	1.00	1.15		mg/L		114	75 - 125
Silver	0.050	U	1.00	1.12		mg/L		112	75 - 125

Lab Sample ID: 240-92382-2 MSD
Matrix: Solid
Analysis Batch: 319053

Client Sample ID: SO-017303-030618-DA-002
Prep Type: TCLP
Prep Batch: 318656

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0084	J	5.00	5.56		mg/L		111	75 - 125	3	20
Barium	1.1		50.0	51.5		mg/L		101	75 - 125	5	20
Cadmium	0.0011	J	1.00	1.07		mg/L		107	75 - 125	3	20
Chromium	0.0036	J B	5.00	4.86		mg/L		97	75 - 125	4	20
Lead	0.050	U	5.00	5.06		mg/L		101	75 - 125	3	20
Selenium	0.0083	J	1.00	1.12		mg/L		111	75 - 125	3	20
Silver	0.050	U	1.00	1.09		mg/L		109	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-318657/2-A
Matrix: Solid
Analysis Batch: 318905

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		03/15/18 14:00	03/16/18 12:33	1

Lab Sample ID: LCS 240-318657/3-A
Matrix: Solid
Analysis Batch: 318905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 318657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00487		mg/L		97	80 - 120

Lab Sample ID: LB 240-318539/1-C
Matrix: Solid
Analysis Batch: 318905

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 318657

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		03/15/18 14:00	03/16/18 12:31	1

Lab Sample ID: 240-92382-2 MS
Matrix: Solid
Analysis Batch: 318905

Client Sample ID: SO-017303-030618-DA-002
Prep Type: TCLP
Prep Batch: 318657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0020	U	0.00500	0.00492		mg/L		98	80 - 120

Lab Sample ID: 240-92382-2 MSD
Matrix: Solid
Analysis Batch: 318905

Client Sample ID: SO-017303-030618-DA-002
Prep Type: TCLP
Prep Batch: 318657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0020	U	0.00500	0.00487		mg/L		97	80 - 120	1	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(73-120)	(76-120)	(80-120)	(73-123)
LCS 240-319136/20	Lab Control Sample	77	89	83	81

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(73-120)	(76-120)	(80-120)	(73-123)
240-92382-1	SO-017303-030618-DA-001	81	90	87	78
240-92382-2	SO-017303-030618-DA-002	81	92	88	80
240-92382-2 MS	SO-017303-030618-DA-002	79	91	84	79
240-92382-2 MSD	SO-017303-030618-DA-002	75	90	83	81
LB 240-318922/1-A MB	Method Blank	81	90	88	80

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(38-120)	(10-120)	(28-120)	(32-120)	(10-120)	(23-127)
LCS 240-318637/9-A	Lab Control Sample	87	71	92	87	60	88
MB 240-318637/8-A	Method Blank	82	70	85	79	55	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(38-120)	(10-120)	(28-120)	(32-120)	(10-120)	(23-127)
240-92382-1	SO-017303-030618-DA-001	77	61	83	73	47	85

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(38-120)	(10-120)	(28-120)	(32-120)	(10-120)	(23-127)
240-92382-1 MS	SO-017303-030618-DA-001	74	61	78	73	50	79
240-92382-2	SO-017303-030618-DA-002	53	45	58	51	37	56

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
240-92382-1	SO-017303-030618-DA-001	77	82
240-92382-1 MS	SO-017303-030618-DA-001	79	84
240-92382-1 MSD	SO-017303-030618-DA-001	83	90
240-92382-2	SO-017303-030618-DA-002	73	84
LCS 240-317646/17-A	Lab Control Sample	89	105
MB 240-317646/16-A	Method Blank	81	97

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Client Sample ID: SO-017303-030618-DA-001

Lab Sample ID: 240-92382-1

Date Collected: 03/06/18 08:45

Matrix: Solid

Date Received: 03/07/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			318922	03/16/18 17:30	DRJ	TAL CAN
TCLP	Analysis	8260B		1	319136	03/20/18 00:16	TJL1	TAL CAN
TCLP	Leach	1311			318539	03/14/18 18:10	DRJ	TAL CAN
TCLP	Prep	3510C			318637	03/15/18 11:08	BMB	TAL CAN
TCLP	Analysis	8270C		1	319006	03/19/18 12:55	MRU	TAL CAN
TCLP	Leach	1311			318539	03/14/18 18:10	DRJ	TAL CAN
TCLP	Prep	3010A			318656	03/15/18 14:00	MBB	TAL CAN
TCLP	Analysis	6010B		1	319053	03/17/18 19:30	KLC	TAL CAN
TCLP	Leach	1311			318539	03/14/18 18:10	DRJ	TAL CAN
TCLP	Prep	7470A			318657	03/15/18 14:00	MBB	TAL CAN
TCLP	Analysis	7470A		1	318905	03/16/18 12:44	AJC	TAL CAN
Total/NA	Analysis	Moisture		1	317741	03/08/18 16:44	JESW	TAL CAN

Client Sample ID: SO-017303-030618-DA-001

Lab Sample ID: 240-92382-1

Date Collected: 03/06/18 08:45

Matrix: Solid

Date Received: 03/07/18 09:40

Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			317646	03/08/18 08:44	DVT	TAL CAN
Total/NA	Analysis	8082A		1	317906	03/09/18 21:29	LSH	TAL CAN

Client Sample ID: SO-017303-030618-DA-002

Lab Sample ID: 240-92382-2

Date Collected: 03/06/18 08:55

Matrix: Solid

Date Received: 03/07/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			318922	03/16/18 17:30	DRJ	TAL CAN
TCLP	Analysis	8260B		1	319136	03/20/18 00:39	TJL1	TAL CAN
TCLP	Leach	1311			318539	03/14/18 18:10	DRJ	TAL CAN
TCLP	Prep	3510C			318637	03/15/18 11:08	BMB	TAL CAN
TCLP	Analysis	8270C		1	319006	03/19/18 12:28	MRU	TAL CAN
TCLP	Leach	1311			318539	03/14/18 18:10	DRJ	TAL CAN
TCLP	Prep	3010A			318656	03/15/18 14:00	MBB	TAL CAN
TCLP	Analysis	6010B		1	319053	03/17/18 19:11	KLC	TAL CAN
TCLP	Leach	1311			318539	03/14/18 18:10	DRJ	TAL CAN
TCLP	Prep	7470A			318657	03/15/18 14:00	MBB	TAL CAN
TCLP	Analysis	7470A		1	318905	03/16/18 12:37	AJC	TAL CAN
Total/NA	Analysis	Moisture		1	317741	03/08/18 16:44	JESW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Client Sample ID: SO-017303-030618-DA-002
Date Collected: 03/06/18 08:55
Date Received: 03/07/18 09:40

Lab Sample ID: 240-92382-2
Matrix: Solid
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			317646	03/08/18 08:44	DVT	TAL CAN
Total/NA	Analysis	8082A		1	317906	03/09/18 22:26	LSH	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-92382-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18 *
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18 *
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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MICHIGAN 190

Chain of Custody Record

231103

2.0.1.7

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THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: TOM KINNEY	Site Contact: A. BAINS	Date:	COC No:
Company Name: GHD SERVICES INC.	Tel/Fax: (248) 893-3400	Lab Contact: D. HECKLER	Carrier: FEDEX	1 of 1 COCs
Address: 26850 HAGGERTY RD.	Analysis Turnaround Time			Sampler: D. ANTULIS
City/State/Zip: FARMINGTON HILLS, MI, 48331	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (248) 893-3400	TAT if different from Below _____			Walk-in Client:
Fax:	X 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: YPSILANTI, MI	☐ 2 days			Job / SDG No.:
PO# 2400607 0	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCLP VOCs	TCLP SVOCs	TCLP METALS	TOTAL PCBs	Sample Specific Notes:
60-017303-030618-DA-001	3/6/18	0845	C	SO	3			X	X	X	X	
↓ ↓ ↓ ↓ -002	↓	0855	↓	↓	↓			↓	↓	↓	↓	



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

SSOW: 017303-T02-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by: DILLON ANTULIS	Company: GHD	Date/Time: 3/6/18/1100	Received by:	Company: TA	Date/Time: 3.7.18 940
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

3/21/2018

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 92382**
Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 3-7-18 Opened on 3-7-18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF **-0.3** °C) Observed Cooler Temp. 2.0 °C Corrected Cooler Temp. 1.7 °C

IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

~~IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC732776**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

WI-NC-099

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-94451-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
4/27/2018 12:29:25 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-94451-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-94451-1

Comments
No additional comments.

Receipt
The sample was received on 4/21/2018 9:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: WW-17303-042018-DS-001 (240-94451-1). 3543193, 3449340, 3361890.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method(s) 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-324008.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-94451-1	WW-17303-042018-DS-001	Water	04/20/18 09:00	04/21/18 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Client Sample ID: WW-17303-042018-DS-001 — Lab Sample ID: 240-94451-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1260	0.14		0.10	0.046	ug/L	1		8082A	Total/NA
Arsenic	0.0068	J	0.050	0.0041	mg/L	1		6010B	TCLP
Barium	0.025	J B	0.50	0.0013	mg/L	1		6010B	TCLP
Cadmium	0.00031	J B	0.050	0.00020	mg/L	1		6010B	TCLP
Chromium	0.0013	J B	0.050	0.00063	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1311	TCLP Extraction	SW846	TAL CAN
3010A	Preparation, Total Metals	SW846	TAL CAN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CAN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
7470A	Preparation, Mercury	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: WW-17303-042018-DS-001
Date Collected: 04/20/18 09:00
Date Received: 04/21/18 09:30

Lab Sample ID: 240-94451-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.00027	mg/L			04/24/18 18:16	1
1,2-Dichloroethane	0.025	U	0.025	0.00030	mg/L			04/24/18 18:16	1
2-Butanone (MEK)	0.25	U	0.25	0.0010	mg/L			04/24/18 18:16	1
Benzene	0.025	U	0.025	0.00028	mg/L			04/24/18 18:16	1
Carbon tetrachloride	0.025	U	0.025	0.00035	mg/L			04/24/18 18:16	1
Chlorobenzene	0.025	U	0.025	0.00032	mg/L			04/24/18 18:16	1
Chloroform	0.025	U	0.025	0.00031	mg/L			04/24/18 18:16	1
Tetrachloroethene	0.025	U	0.025	0.00030	mg/L			04/24/18 18:16	1
Trichloroethene	0.025	U	0.025	0.00033	mg/L			04/24/18 18:16	1
Vinyl chloride	0.025	U	0.025	0.00045	mg/L			04/24/18 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*73 - 120*		*04/24/18 18:16*	*1*
4-Bromofluorobenzene (Surr)	*96*		*76 - 120*		*04/24/18 18:16*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/24/18 18:16*	*1*
Dibromofluoromethane (Surr)	*83*		*73 - 123*		*04/24/18 18:16*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: WW-17303-042018-DS-001
Date Collected: 04/20/18 09:00
Date Received: 04/21/18 09:30

Lab Sample ID: 240-94451-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		04/23/18 15:49	04/25/18 20:16	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		04/23/18 15:49	04/25/18 20:16	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		04/23/18 15:49	04/25/18 20:16	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		04/23/18 15:49	04/25/18 20:16	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		04/23/18 15:49	04/25/18 20:16	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		04/23/18 15:49	04/25/18 20:16	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		04/23/18 15:49	04/25/18 20:16	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		04/23/18 15:49	04/25/18 20:16	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		04/23/18 15:49	04/25/18 20:16	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		04/23/18 15:49	04/25/18 20:16	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		04/23/18 15:49	04/25/18 20:16	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		04/23/18 15:49	04/25/18 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*38 - 120*	*04/23/18 15:49*	*04/25/18 20:16*	*1*
2-Fluorophenol (Surr)	*50*		*10 - 120*	*04/23/18 15:49*	*04/25/18 20:16*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*28 - 120*	*04/23/18 15:49*	*04/25/18 20:16*	*1*
Nitrobenzene-d5 (Surr)	*49*		*32 - 120*	*04/23/18 15:49*	*04/25/18 20:16*	*1*
Phenol-d5 (Surr)	*43*		*10 - 120*	*04/23/18 15:49*	*04/25/18 20:16*	*1*
Terphenyl-d14 (Surr)	*78*		*23 - 127*	*04/23/18 15:49*	*04/25/18 20:16*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: WW-17303-042018-DS-001
Date Collected: 04/20/18 09:00
Date Received: 04/21/18 09:30

Lab Sample ID: 240-94451-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.056	ug/L		04/25/18 09:32	04/26/18 23:15	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		04/25/18 09:32	04/26/18 23:15	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/25/18 09:32	04/26/18 23:15	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		04/25/18 09:32	04/26/18 23:15	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		04/25/18 09:32	04/26/18 23:15	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		04/25/18 09:32	04/26/18 23:15	1
Aroclor-1260	**0.14**		0.10	0.046	ug/L		04/25/18 09:32	04/26/18 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*22 - 120*	*04/25/18 09:32*	*04/26/18 23:15*	*1*
DCB Decachlorobiphenyl	*29*		*10 - 120*	*04/25/18 09:32*	*04/26/18 23:15*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Method: 6010B - Metals (ICP) - TCLP

Client Sample ID: WW-17303-042018-DS-001
Date Collected: 04/20/18 09:00
Date Received: 04/21/18 09:30

Lab Sample ID: 240-94451-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0068**	**J**	0.050	0.0041	mg/L		04/23/18 14:00	04/24/18 22:07	1
Barium	**0.025**	**J B**	0.50	0.0013	mg/L		04/23/18 14:00	04/24/18 22:07	1
Cadmium	**0.00031**	**J B**	0.050	0.00020	mg/L		04/23/18 14:00	04/24/18 22:07	1
Chromium	**0.0013**	**J B**	0.050	0.00063	mg/L		04/23/18 14:00	04/24/18 22:07	1
Lead	0.050	U	0.050	0.0028	mg/L		04/23/18 14:00	04/24/18 22:07	1
Selenium	0.050	U	0.050	0.0060	mg/L		04/23/18 14:00	04/24/18 22:07	1
Silver	0.050	U	0.050	0.00062	mg/L		04/23/18 14:00	04/24/18 22:07	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Method: 7470A - Mercury (CVAA) - TCLP

Client Sample ID: WW-17303-042018-DS-001
Date Collected: 04/20/18 09:00
Date Received: 04/21/18 09:30

Lab Sample ID: 240-94451-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		04/23/18 14:00	04/24/18 11:45	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

GC/MS VOA

Leach Batch: 323612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	1311	
LB 240-323612/1-A MB	Method Blank	TCLP	Water	1311	

Analysis Batch: 323784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	8260B	323612
LB 240-323612/1-A MB	Method Blank	TCLP	Water	8260B	323612
LCS 240-323784/21	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Leach Batch: 323522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	1311	

Prep Batch: 323705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	3510C	323522
MB 240-323705/13-A	Method Blank	Total/NA	Water	3510C	
LCS 240-323705/14-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 323988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	8270C	323705
MB 240-323705/13-A	Method Blank	Total/NA	Water	8270C	323705
LCS 240-323705/14-A	Lab Control Sample	Total/NA	Water	8270C	323705

GC Semi VOA

Prep Batch: 324008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	Total/NA	Water	3520C	
MB 240-324008/13-A	Method Blank	Total/NA	Water	3520C	
LCS 240-324008/14-A	Lab Control Sample	Total/NA	Water	3520C	

Analysis Batch: 324342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	Total/NA	Water	8082A	324008
MB 240-324008/13-A	Method Blank	Total/NA	Water	8082A	324008
LCS 240-324008/14-A	Lab Control Sample	Total/NA	Water	8082A	324008

Metals

Leach Batch: 323522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	1311	
LB 240-323522/1-B	Method Blank	TCLP	Water	1311	
LB 240-323522/1-C	Method Blank	TCLP	Water	1311	

Metals (Continued)

Prep Batch: 323632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	3010A	323522
LB 240-323522/1-B	Method Blank	TCLP	Water	3010A	323522
MB 240-323632/2-A	Method Blank	Total/NA	Water	3010A	
LCS 240-323632/3-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 323634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	7470A	323522
LB 240-323522/1-C	Method Blank	TCLP	Water	7470A	323522
MB 240-323634/2-A	Method Blank	Total/NA	Water	7470A	
LCS 240-323634/3-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 323806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	7470A	323634
LB 240-323522/1-C	Method Blank	TCLP	Water	7470A	323634
MB 240-323634/2-A	Method Blank	Total/NA	Water	7470A	323634
LCS 240-323634/3-A	Lab Control Sample	Total/NA	Water	7470A	323634

Analysis Batch: 323976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-94451-1	WW-17303-042018-DS-001	TCLP	Water	6010B	323632
LB 240-323522/1-B	Method Blank	TCLP	Water	6010B	323632
MB 240-323632/2-A	Method Blank	Total/NA	Water	6010B	323632
LCS 240-323632/3-A	Lab Control Sample	Total/NA	Water	6010B	323632

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 240-323784/21
Matrix: Water
Analysis Batch: 323784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.00	0.880		mg/L		88	76 - 131
1,2-Dichloroethane	1.00	0.861		mg/L		86	72 - 125
2-Butanone (MEK)	2.00	1.59		mg/L		80	55 - 137
Benzene	1.00	0.873		mg/L		87	80 - 122
Carbon tetrachloride	1.00	0.718		mg/L		72	69 - 130
Chlorobenzene	1.00	0.977		mg/L		98	80 - 120
Chloroform	1.00	0.879		mg/L		88	80 - 122
Tetrachloroethene	1.00	0.884		mg/L		88	79 - 120
Trichloroethene	1.00	0.824		mg/L		82	80 - 121
Vinyl chloride	1.00	0.850		mg/L		85	73 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*73 - 120*
4-Bromofluorobenzene (Surr)	*96*		*76 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*82*		*73 - 123*

Lab Sample ID: LB 240-323612/1-A MB
Matrix: Water
Analysis Batch: 323784

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.00027	mg/L			04/24/18 14:50	1
1,2-Dichloroethane	0.025	U	0.025	0.00030	mg/L			04/24/18 14:50	1
2-Butanone (MEK)	0.25	U	0.25	0.0010	mg/L			04/24/18 14:50	1
Benzene	0.025	U	0.025	0.00028	mg/L			04/24/18 14:50	1
Carbon tetrachloride	0.025	U	0.025	0.00035	mg/L			04/24/18 14:50	1
Chlorobenzene	0.025	U	0.025	0.00032	mg/L			04/24/18 14:50	1
Chloroform	0.025	U	0.025	0.00031	mg/L			04/24/18 14:50	1
Tetrachloroethene	0.025	U	0.025	0.00030	mg/L			04/24/18 14:50	1
Trichloroethene	0.025	U	0.025	0.00033	mg/L			04/24/18 14:50	1
Vinyl chloride	0.025	U	0.025	0.00045	mg/L			04/24/18 14:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 120*		*04/24/18 14:50*	*1*
4-Bromofluorobenzene (Surr)	*106*		*76 - 120*		*04/24/18 14:50*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*04/24/18 14:50*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 123*		*04/24/18 14:50*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-323705/13-A
Matrix: Water
Analysis Batch: 323988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 323705

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		04/23/18 15:49	04/25/18 09:05	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-323705/13-A
Matrix: Water
Analysis Batch: 323988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 323705

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		04/23/18 15:49	04/25/18 09:05	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		04/23/18 15:49	04/25/18 09:05	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		04/23/18 15:49	04/25/18 09:05	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		04/23/18 15:49	04/25/18 09:05	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		04/23/18 15:49	04/25/18 09:05	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		04/23/18 15:49	04/25/18 09:05	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		04/23/18 15:49	04/25/18 09:05	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		04/23/18 15:49	04/25/18 09:05	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		04/23/18 15:49	04/25/18 09:05	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		04/23/18 15:49	04/25/18 09:05	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		04/23/18 15:49	04/25/18 09:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*38 - 120*	*04/23/18 15:49*	*04/25/18 09:05*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 120*	*04/23/18 15:49*	*04/25/18 09:05*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*28 - 120*	*04/23/18 15:49*	*04/25/18 09:05*	*1*
Nitrobenzene-d5 (Surr)	*58*		*32 - 120*	*04/23/18 15:49*	*04/25/18 09:05*	*1*
Phenol-d5 (Surr)	*57*		*10 - 120*	*04/23/18 15:49*	*04/25/18 09:05*	*1*
Terphenyl-d14 (Surr)	*87*		*23 - 127*	*04/23/18 15:49*	*04/25/18 09:05*	*1*

Lab Sample ID: LCS 240-323705/14-A
Matrix: Water
Analysis Batch: 323988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 323705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0554		mg/L		69	47 - 120
2,4,5-Trichlorophenol	0.0800	0.0700		mg/L		87	54 - 120
2,4,6-Trichlorophenol	0.0800	0.0654		mg/L		82	54 - 120
2,4-Dinitrotoluene	0.0800	0.0710		mg/L		89	60 - 120
Hexachlorobenzene	0.0800	0.0692		mg/L		87	51 - 120
Hexachlorobutadiene	0.0800	0.0577		mg/L		72	44 - 120
Hexachloroethane	0.0800	0.0509		mg/L		64	44 - 120
3 & 4 Methylphenol	0.0800	0.0597		mg/L		75	40 - 120
2-Methylphenol	0.0800	0.0572		mg/L		71	46 - 120
Nitrobenzene	0.0800	0.0579		mg/L		72	55 - 120
Pentachlorophenol	0.160	0.150		mg/L		94	30 - 120
Pyridine	0.160	0.116		mg/L		72	23 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*83*		*38 - 120*
2-Fluorophenol (Surr)	*66*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*96*		*28 - 120*
Nitrobenzene-d5 (Surr)	*77*		*32 - 120*
Phenol-d5 (Surr)	*55*		*10 - 120*
Terphenyl-d14 (Surr)	*95*		*23 - 127*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-324008/13-A
Matrix: Water
Analysis Batch: 324342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 324008

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.056	ug/L		04/25/18 09:32	04/27/18 01:38	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		04/25/18 09:32	04/27/18 01:38	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/25/18 09:32	04/27/18 01:38	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		04/25/18 09:32	04/27/18 01:38	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		04/25/18 09:32	04/27/18 01:38	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		04/25/18 09:32	04/27/18 01:38	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L		04/25/18 09:32	04/27/18 01:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*22 - 120*	*04/25/18 09:32*	*04/27/18 01:38*	*1*
DCB Decachlorobiphenyl	*84*		*10 - 120*	*04/25/18 09:32*	*04/27/18 01:38*	*1*

Lab Sample ID: LCS 240-324008/14-A
Matrix: Water
Analysis Batch: 324342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 324008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2.50	2.13		ug/L		85	28 - 120
Aroclor-1260	2.50	2.48		ug/L		99	30 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*22 - 120*
DCB Decachlorobiphenyl	*85*		*10 - 120*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-323632/2-A
Matrix: Water
Analysis Batch: 323976

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 323632

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0041	mg/L		04/23/18 14:00	04/24/18 12:15	1
Barium	0.50	U	0.50	0.0013	mg/L		04/23/18 14:00	04/24/18 12:15	1
Cadmium	0.000205	J	0.050	0.00020	mg/L		04/23/18 14:00	04/24/18 12:15	1
Chromium	0.050	U	0.050	0.00063	mg/L		04/23/18 14:00	04/24/18 12:15	1
Lead	0.050	U	0.050	0.0028	mg/L		04/23/18 14:00	04/24/18 12:15	1
Selenium	0.050	U	0.050	0.0060	mg/L		04/23/18 14:00	04/24/18 12:15	1
Silver	0.050	U	0.050	0.00062	mg/L		04/23/18 14:00	04/24/18 12:15	1

Lab Sample ID: LCS 240-323632/3-A
Matrix: Water
Analysis Batch: 323976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 323632

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	1.49		mg/L		74	50 - 150
Barium	2.00	1.36		mg/L		68	50 - 150
Cadmium	0.0500	0.0357	J	mg/L		71	50 - 150

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 240-323632/3-A
Matrix: Water
Analysis Batch: 323976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 323632

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.200	0.133		mg/L		67	50 - 150
Lead	0.500	0.304		mg/L		61	50 - 150
Selenium	2.00	1.53		mg/L		77	50 - 150
Silver	0.0500	0.0537		mg/L		107	50 - 150

Lab Sample ID: LB 240-323522/1-B
Matrix: Water
Analysis Batch: 323976

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 323632

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0041	mg/L		04/23/18 14:00	04/24/18 12:10	1
Barium	0.00169	J	0.50	0.0013	mg/L		04/23/18 14:00	04/24/18 12:10	1
Cadmium	0.050	U	0.050	0.00020	mg/L		04/23/18 14:00	04/24/18 12:10	1
Chromium	0.000898	J	0.050	0.00063	mg/L		04/23/18 14:00	04/24/18 12:10	1
Lead	0.050	U	0.050	0.0028	mg/L		04/23/18 14:00	04/24/18 12:10	1
Selenium	0.050	U	0.050	0.0060	mg/L		04/23/18 14:00	04/24/18 12:10	1
Silver	0.050	U	0.050	0.00062	mg/L		04/23/18 14:00	04/24/18 12:10	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-323634/2-A
Matrix: Water
Analysis Batch: 323806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 323634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		04/23/18 14:00	04/24/18 11:09	1

Lab Sample ID: LCS 240-323634/3-A
Matrix: Water
Analysis Batch: 323806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 323634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00457		mg/L		91	80 - 120

Lab Sample ID: LB 240-323522/1-C
Matrix: Water
Analysis Batch: 323806

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 323634

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		04/23/18 14:00	04/24/18 11:06	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(73-120)	(76-120)	(80-120)	(73-123)
LCS 240-323784/21	Lab Control Sample	76	96	97	82

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(73-120)	(76-120)	(80-120)	(73-123)
240-94451-1	WW-17303-042018-DS-001	78	96	102	83
LB 240-323612/1-A MB	Method Blank	89	106	112	90

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(38-120)	(10-120)	(28-120)	(32-120)	(10-120)	(23-127)
LCS 240-323705/14-A	Lab Control Sample	83	66	96	77	55	95
MB 240-323705/13-A	Method Blank	73	63	72	58	57	87

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(38-120)	(10-120)	(28-120)	(32-120)	(10-120)	(23-127)
240-94451-1	WW-17303-042018-DS-001	54	50	67	49	43	78

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX2	DCBP2								
Lab Sample ID	Client Sample ID	(22-120)	(10-120)								
240-94451-1	WW-17303-042018-DS-001	66	29								
LCS 240-324008/14-A	Lab Control Sample	86	85								
MB 240-324008/13-A	Method Blank	90	84								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Client Sample ID: WW-17303-042018-DS-001 **Lab Sample ID: 240-94451-1**
Date Collected: 04/20/18 09:00 **Matrix: Water**
Date Received: 04/21/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			323612	04/22/18 18:30	DRJ	TAL CAN
TCLP	Analysis	8260B		1	323784	04/24/18 18:16	HMB	TAL CAN
TCLP	Leach	1311			323522	04/22/18 15:50	DRJ	TAL CAN
TCLP	Prep	3510C			323705	04/23/18 15:49	WKD	TAL CAN
TCLP	Analysis	8270C		1	323988	04/25/18 20:16	JMG	TAL CAN
Total/NA	Prep	3520C			324008	04/25/18 09:32	WKD	TAL CAN
Total/NA	Analysis	8082A		1	324342	04/26/18 23:15	LSH	TAL CAN
TCLP	Leach	1311			323522	04/22/18 15:50	DRJ	TAL CAN
TCLP	Prep	3010A			323632	04/23/18 14:00	MBB	TAL CAN
TCLP	Analysis	6010B		1	323976	04/24/18 22:07	AS1	TAL CAN
TCLP	Leach	1311			323522	04/22/18 15:50	DRJ	TAL CAN
TCLP	Prep	7470A			323634	04/23/18 14:00	MBB	TAL CAN
TCLP	Analysis	7470A		1	323806	04/24/18 11:45	AJC	TAL CAN

Laboratory References:
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-94451-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18 *
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18 *
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN
190

Chain of Custody Record

3.6/C3.7

238193

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tom Kinney	Site Contact: A. Bains	Date: 4-20-18	COC No: 238193
Company Name: GHD	Tel/Fax: 248-843-3400	Lab Contact: D Heckler	Carrier: Fed Ex	1 of 1 COCs
Address: 26850 Haggerty Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Farmington Hills, MI 48130	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248-843-3400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: LVO	☐ 1 week			Job / SDG No.:
Site: Ypsilanti, MI	☐ 2 days			
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP VOC's	TCLP SVOC's	TCLP metals	Total PCB's	Sample Specific Notes:
WW-17303-042018-DS-001	4-2018	0900	C	WW	5	N	N	X	X	X	X	

240-94451 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
SSOW: 017303-TO2-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Derek Sulliba	GHD	4-20-18 1200	Joan Pan	TAL	4/21/18 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

4/27/2018

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 41145
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: SC

Cooler Received on 4/21/18 Opened on 4/21/18

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TAC Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam ~~Plastic Bag~~ None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF **+0.1** °C) Observed Cooler Temp. 3.6 °C Corrected Cooler Temp. 3.7 °C

IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

~~IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____	Yes (No)	
-Were the seals on the outside of the cooler(s) signed & dated?	Yes No (NA)	
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)	
-Were tamper/custody seals intact and uncompromised?	Yes No ~~NA~~	
3. Shippers' packing slip attached to the cooler(s)?	(Yes) No	
4. Did custody papers accompany the sample(s)?	(Yes) No	
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes (No)	
7. Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
8. Could all bottle labels be reconciled with the COC?	(Yes) No	
9. Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
10. Sufficient quantity received to perform indicated analyses?	(Yes) No	
11. Are these work share samples?	Yes (No)	
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes No (NA)	pH Strip Lot# **HC732776**
13. Were VOAs on the COC?	Yes (No)	
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes No (NA)	
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes (No)	
16. Was a LL Hg or Me Hg trip blank present? _____	Yes (No)	

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

WI-NC-099

Attachment C

Soil Boring Logs

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-22-SB
DATE COMPLETED: 5 March 2018
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268867.72 EASTING: 13344004.91						
2	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist	2.00	1HA 1-2 028				0.2
	END OF BOREHOLE @ 2.0ft BGS						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1HA)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-23-SB
DATE COMPLETED: 5 March 2018
DRILLING METHOD: HAND AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268804.3 EASTING: 13344048.56						
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist		1HA 1-2 027				0.2
	END OF BOREHOLE @ 2.0ft BGS	2.00					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1HA)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-24-SB
DATE COMPLETED: 26 FEBRUARY 2018
DRILLING METHOD: HAND AUGER FIELD
PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268720.59 EASTING: 13344113.4						
2	CL-SANDY CLAY, trace silt, soft, low plasticity, fine grained, black, saturated	0.40	1HA 0-2.5' -009				0.6
	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist - COLLAPSE at 2.5ft BGS	2.50					
4	END OF BOREHOLE @ 2.5ft BGS						
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1HA)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-24-SB*
DATE COMPLETED: 5 MARCH 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268720.59 EASTING: 13344113.4						
2	CL-SANDY CLAY, trace silt, soft, low plasticity, fine grained, black, saturated						
	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist	2.00	1DP (2-5' -026)		2		0.1
4							
6			2DP		2		
8							
	END OF BOREHOLE @ 9.0ft BGS	9.00					
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (2-5' -026)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-25-SB
DATE COMPLETED: 23 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268641.16 EASTING: 13344184.56						
	TOPSOIL	0.20					
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist		0-2' -007				1.1
	- with gravel at 3.0ft BGS		1DP				
4			3-5' -008				1.2
	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist	4.80					
6							1.2
			2DP				
8							0.9
10							1.1
12			3DP				
14							1.3
16							0.7
			4DP				
18							1.1
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-26-SB
DATE COMPLETED: 23 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268589.52 EASTING: 13344244.49						
0	TOPSOIL	0.20	0-2' -005				18.6
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist		1DP				
4	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist	4.00	3-5' -006				2.2
6			2DP				–
8							–
10	- stiff at 10.0ft BGS						1.8
12			3DP				
14							2.0
16							1.9
18			4DP				1.9
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-27-SB
DATE COMPLETED: 23 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268561.7 EASTING: 13344331.07						
0	TOPSOIL	0.30	0-2' -003				3.2
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist		1DP				
4	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist	3.80	3-5' -004				4.7
6							5.9
8			2DP				2.1
10							5.6
12			3DP				
14							3.5
16							2.2
18			4DP				6.4
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-28-SB
DATE COMPLETED: 22 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	PID (ppm)
	NORTHING: 268551.76 EASTING: 13344402.22						
0	SM-SILTY SAND, trace clay, trace organic matter, coarse to fine grained, poorly graded, brown, saturated	1.00	0-1' -001				2.2
2	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist		1-2.5' -002 1DP				3.4
4							
6	- soft at 5.5ft BGS - stiff at 6.0ft BGS						2.1
8			2DP				3.0
10							1.5
12			3DP				2.9
14							4.6
16							
18			4DP				4.1
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-29-SB
DATE COMPLETED: 26 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268514.78 EASTING: 13344562.92						
0	SM-SILTY SAND, trace clay, fine grained, poorly graded, brown, saturated	0.20	0-2' -010/ 011				23.7
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist		1DP				
4	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist	3.50	3-5' -013				380.0
6			5-7.5' -012				3.4
8			2DP				2.7
10							2.8
12			3DP				
14							1.7
16							1.5
18			4DP				1.7
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-30-SB
DATE COMPLETED: 26 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268495.86 EASTING: 13344661.51						
	SM-SILTY SAND, trace clay, fine grained, poorly graded, brown, saturated	0.40					
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist - 2" black staining, no odor at 0.5ft BGS	2.50	0-2.5' -014				3.5
4	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist		1DP 2.5-5' -015				1.5
6							1.1
8			2DP				1.2
10							1.2
12			3DP				
14							1.4
16							1.1
18			4DP				1.4
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-31-SB
DATE COMPLETED: 27 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268480.6 EASTING: 13344772.41						
	TOPSOIL	0.20					
	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist		0-2.5' -016				1.0
			1DP				0.8
	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist	5.00	6-7' -017				1.5
			2DP				1.5
							1.2
			3DP				1.4
							1.8
			4DP				1.9
	ML-SANDY SILT, very stiff, gray, moist	19.00	19-20' -018				
	- REFUSAL at 20.0ft BGS	20.00					
	END OF BOREHOLE @ 20.0ft BGS						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-32-SB
DATE COMPLETED: 27 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	PID (ppm)
	NORTHING: 268492.12 EASTING: 13344871.95						
	TOPSOIL	0.10					
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist		0-2' -019				1.9
			1DP				
4	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist	3.50	3-5' -020				1.9
6							1.4
			2DP				
8							2.1
10							2.1
			3DP				
12							
14							2.4
16							1.5
			4DP				
18							2.6
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-33-SB
DATE COMPLETED: 28 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

NORTHING: 268493.45
EASTING: 13344997.47

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	PID (ppm)
0	TOPSOIL	0.20	0-2' -023				2.4
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist - 6" gravel layer at 2.5ft BGS		1DP				
4	SC-CLAYEY SAND, trace silt, fine grained, poorly graded, brown, moist	4.00	3-5' -024				2.4
6	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist	5.50 6.00					2.3
8	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist		6.5-7.5' -025 2DP				3.5
10							
12			3DP				2.3
14							2.4
16							1.7
18			4DP				2.1
20	END OF BOREHOLE @ 20.0ft BGS	20.00					
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-34-SB
DATE COMPLETED: 28 February 2018
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. SALIBA

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 268522.21 EASTING: 13345041.33						
0	TOPSOIL	0.20	0-2' -021				1.9
2	CL-SANDY CLAY, trace silt, trace fine gravel, low plasticity, gray/brown, moist		1DP				
4							1.9
6	- 1' trace peat at 6.0ft BGS						1.7
8		8.00	2DP				
10	CL-SILTY CLAY, trace fine sand, trace fine gravel, low plasticity, medium stiff, gray, moist		9-10' -022				1.9
12			3DP				1.9
14							1.9
16							1.7
18			4DP				
20	END OF BOREHOLE @ 20.0ft BGS	20.00					2.1
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 25/5/18

Appendix B

Transducer Correlation Evaluation

Memorandum

August 11, 2021

To	Mr. Grant Trigger, RACER Trust		
Copy to	Kaitlyn Trestrail, Tom Kinney, Beth Landale, Sam Belisle		
From	GHD Statistical Analysis Team/mk/4	**Tel**	
Subject	Transducer Correlation Evaluation Willow Run Company Vehicle Operations (CVO) Ypsilanti, Michigan	**Project no.**	11223983

1. Introduction

The objective of the present evaluation is to look for correlation between groundwater elevations in monitoring wells at the Site and surface water elevations at three locations in nearby Willow Run Creek. Additionally, the effect of rainfall events on water elevations is considered.

Transducers (data loggers) were operated at three locations within Willow Run Creek and nine monitoring wells at the Site over the period between July 6 and August 17, 2018. Measurements were recorded at 10-minute increments over this period. Precipitation data for the area was obtained on a daily basis. The locations included in the study are:

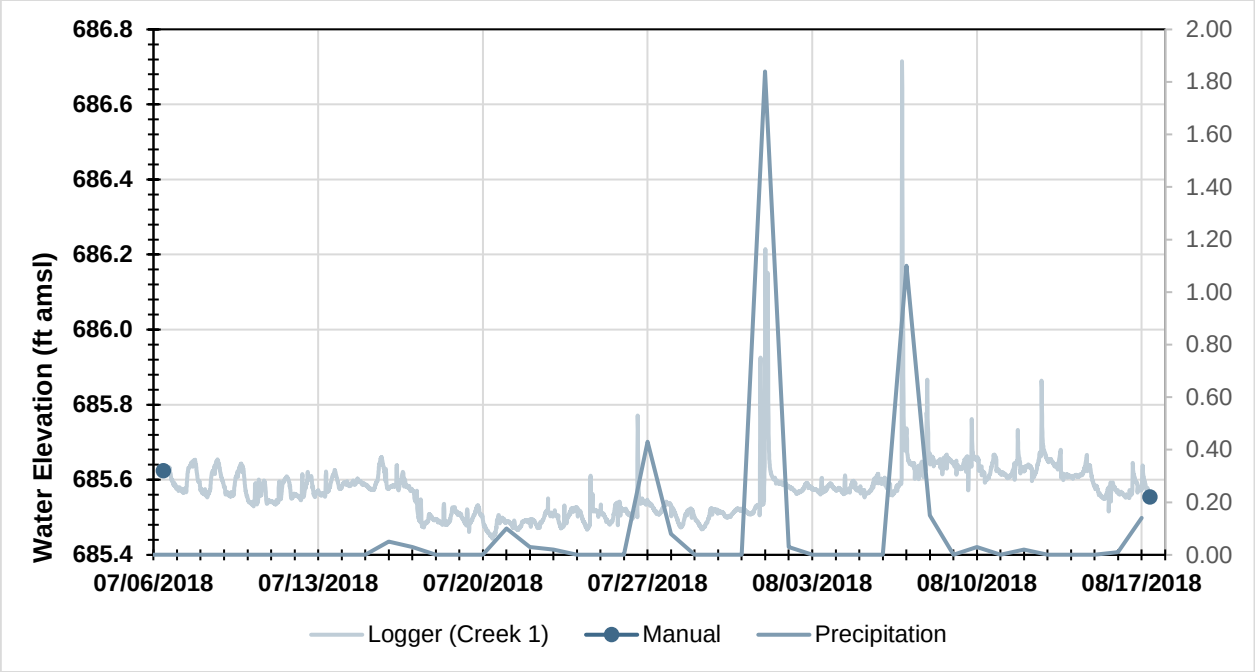
Table 1 Summary of Investigation Locations

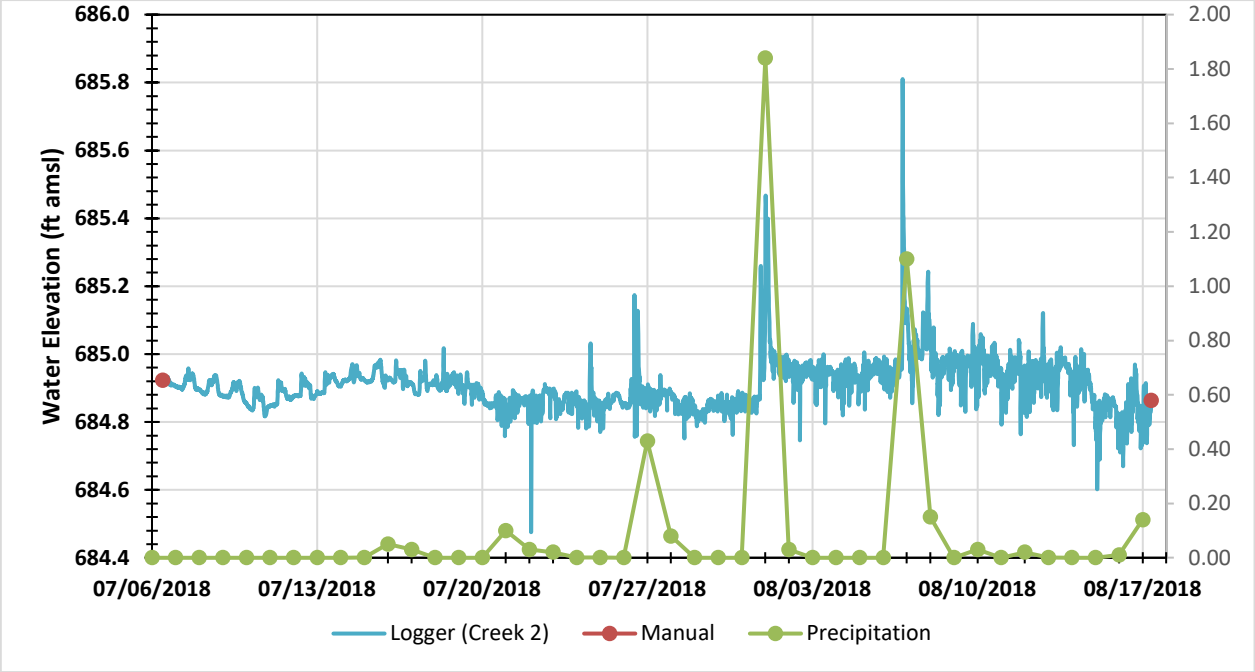
Creek Locations	Well Locations		
Creek 1	MW19-11	MW19-39	MW19-56
Creek 2	MW19-22†	MW19-41	MW19-58
Creek 3	MW19-37	MW19-49	MW19-59
† - Only partial logger data available at this location (until July 16, 2018)			

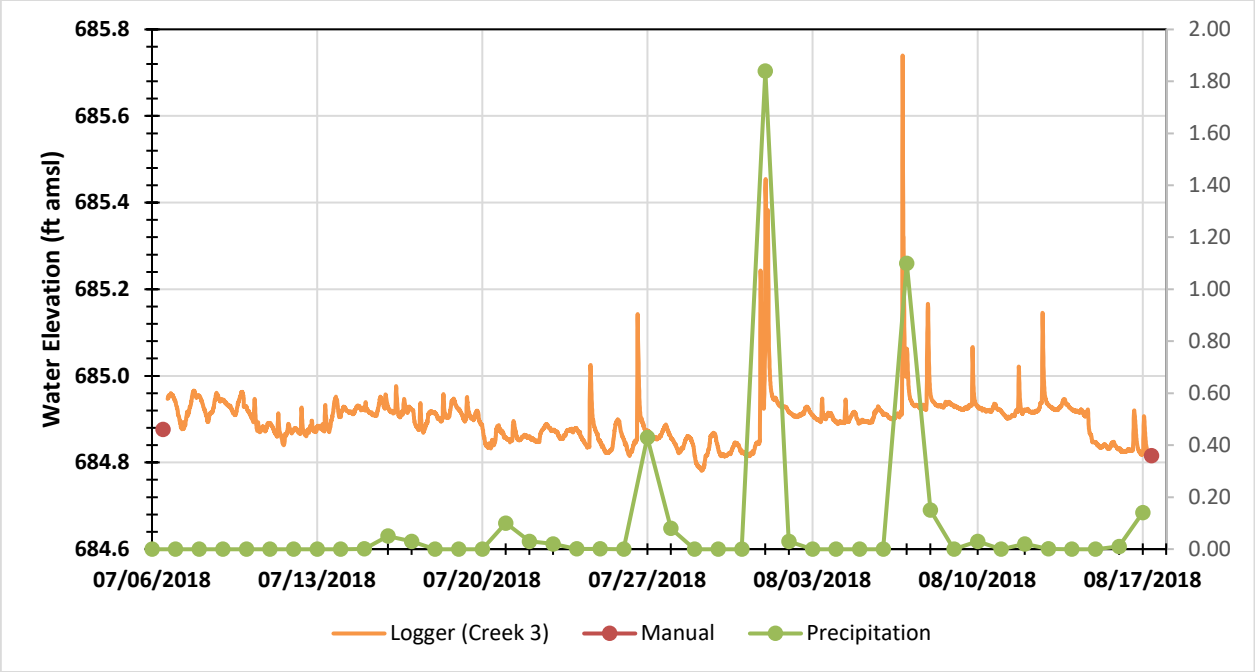
The transducer investigation locations are presented in Figure 1. All available time series data for the logged elevations at these locations are considered in the assessment. A combined graphical and statistical approach is used for the data evaluation.

2. Creek Surface Water Elevations and Rainfall

It is expected that the occurrence of rainfall will cause an increase in surface water elevation within the creek locations due to runoff. In order to assess this, the logger data for each creek monitoring station were graphed over time and the precipitation record overlaid. The resulting graphs for each creek are shown below.


686.8
686.6
686.4
686.2
686.0
685.8
685.6
685.4
Water Elevation (ft amsl)
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
07/06/2018
07/13/2018
07/20/2018
07/27/2018
08/03/2018
08/10/2018
08/17/2018
Logger (Creek 1)
Manual
Precipitation


686.0
685.8
685.6
685.4
685.2
685.0
684.8
684.6
684.4
Water Elevation (ft amsl)
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
07/06/2018
07/13/2018
07/20/2018
07/27/2018
08/03/2018
08/10/2018
08/17/2018
Logger (Creek 2)
Manual
Precipitation



Looking at the precipitation data (green line), there were six precipitation events over the time period of the study. The first two are smaller events (less than 0.1 inch of precipitation – see scale on right axis) occurring on July 16-17 and again on July 21. Three larger precipitation events follow (July 27, August 1 and August 7), of which the largest was on August 1, 2018. The final event (again smaller) occurred on the final day of the study (August 17, 2018). Looking at the two largest precipitation events, all three creek locations experienced an immediate surface water level spike. Interestingly, the August 7 event had a higher creek level increase than the August 1 event despite having lower total precipitation. This is presumably due to the August 7 even being a more intense but shorter rainfall, compared to more gradual precipitation on August 1.

The moderate precipitation event on July 27 also corresponded to a smaller spike in creek water elevations at all three creek locations. However, the magnitude of the spike is similar to others that do not correspond to substantial precipitation (for example on July 24/25 and August 13, particularly for Creek 3). Furthermore, the three smaller precipitation events (July 16/17, July 21 and August 17) did not appear to result in any distinguishable surge in creek water elevation. Thus, it appears that for precipitation amounts under approximately 0.4 inches the effect on creek water elevation is mainly undetectable.

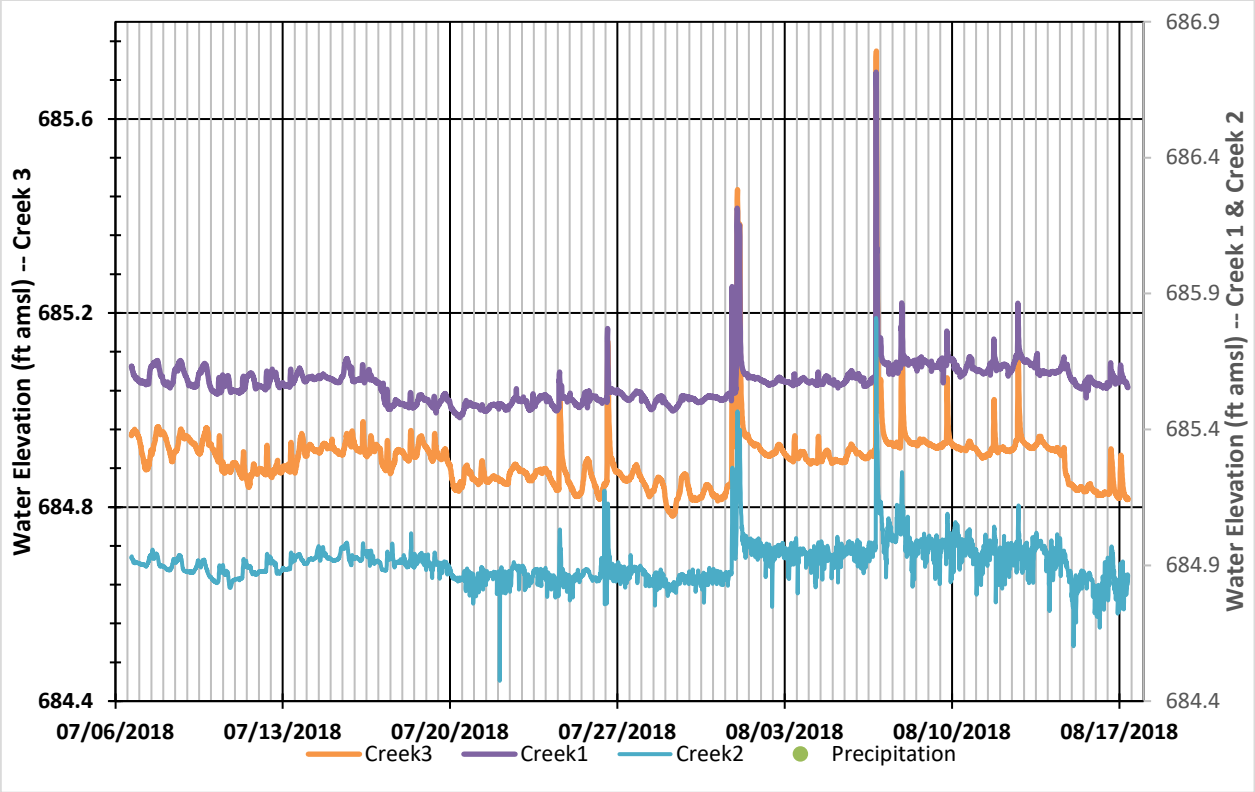
A further distinctive daily pattern is evident in the creek elevation data sets. Particularly in the first 2 weeks of the study (but also continuing throughout), daily minimum creek elevations appear to occur overnight or in the morning, and maximum creek elevations in the afternoon or evening. The within-day variation appears greater in Creek 2 than in the other creek locations, particularly later in the study period.

A final observation from the creek elevation data is that overall elevation does not appear to depend entirely on precipitation. During the second half of July (~20-30), the creek levels appear to be lower than previous or afterward despite having a number of precipitation events over that period.

Overall, surface water elevations in the three creek locations do appear to surge somewhat (as expected) following larger precipitation events (e.g., over ½ inch of precipitation), but otherwise appear as much or more affected by other (unidentified) factors than by smaller precipitation events.

3. Correlations between Creek Surface Water Elevations

Patterns in surface water elevations over time were compared between the three creek locations studied. The data are presented and compared on the following graph.



With careful inspection of the graph, the following observations are apparent:

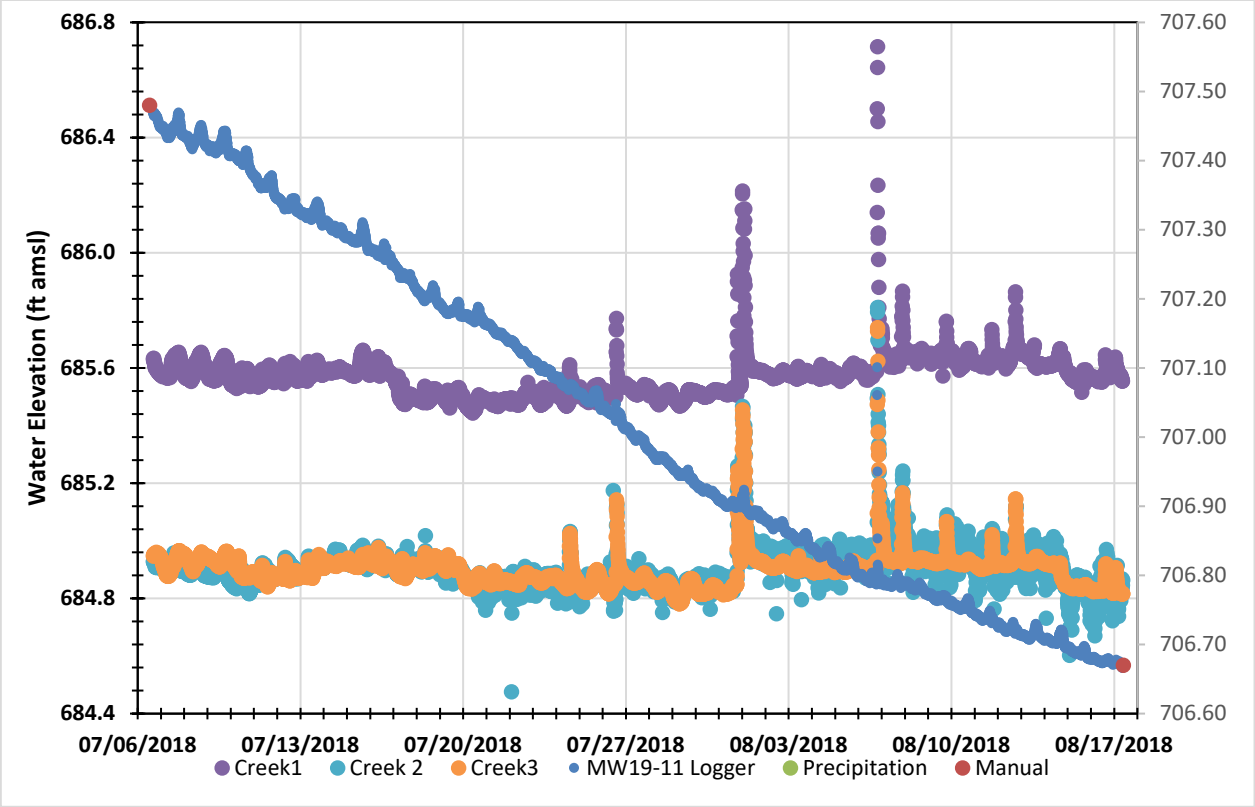
– Overall, the three creek locations follow a very similar pattern in water elevations over time.
– Creek 3 has a slightly slower response than Creek 1 and Creek 2 (elevations highs and lows in Creek 3 appear slightly later than in the other two creek locations).
– Creek 2 is subject to more variable elevation patterns than the other two creek locations (i.e., appears to have more “noise” in the pattern, particularly after July 20).

Thus, although patterns in the water levels in the three creek locations are largely similar over the study timeframe, there do appear to be distinct influences (presently unidentified) that affect each creek location independently. Creek 2 in particular appears to be subject to higher variance than the other two creek locations.

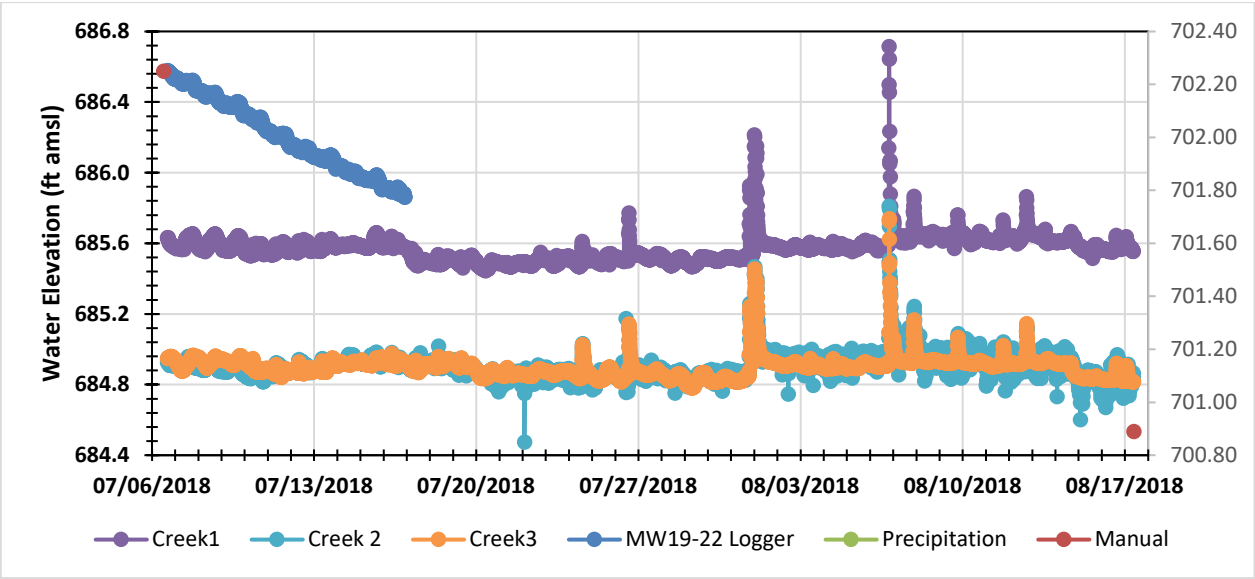
4. Correspondence of Well Groundwater and Creek Surface Water Elevations

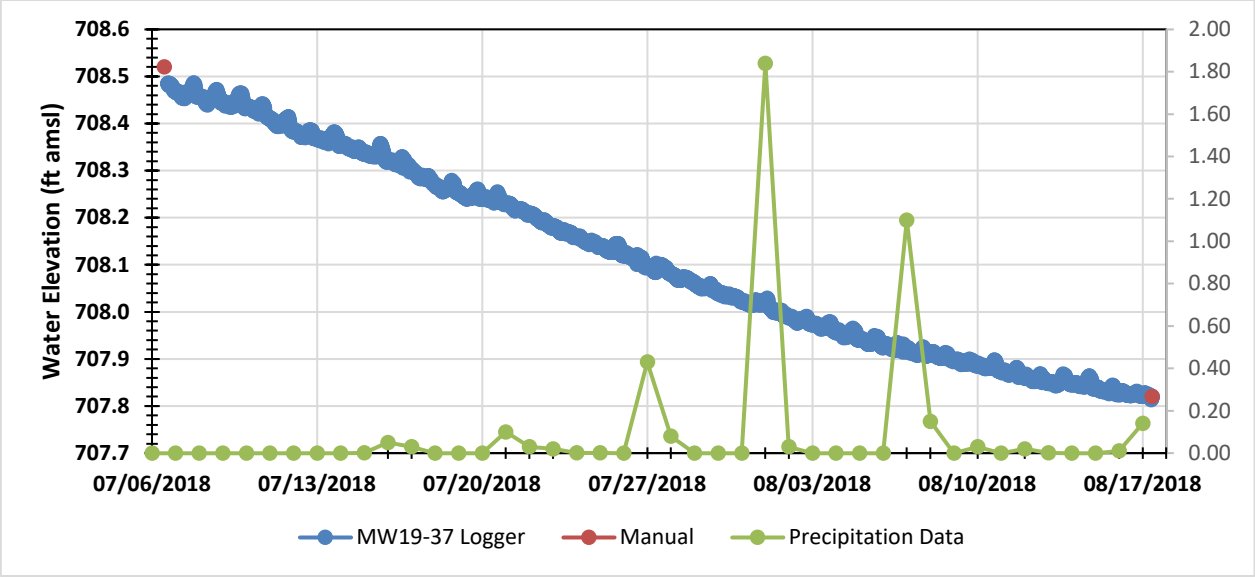
The primary objective of the present evaluation was to determine if significant correlations could be identified between groundwater elevations in the different monitoring wells and the surface water elevations in the three creek locations. As a secondary focus, the question of which well, if any, is best correlated is considered.

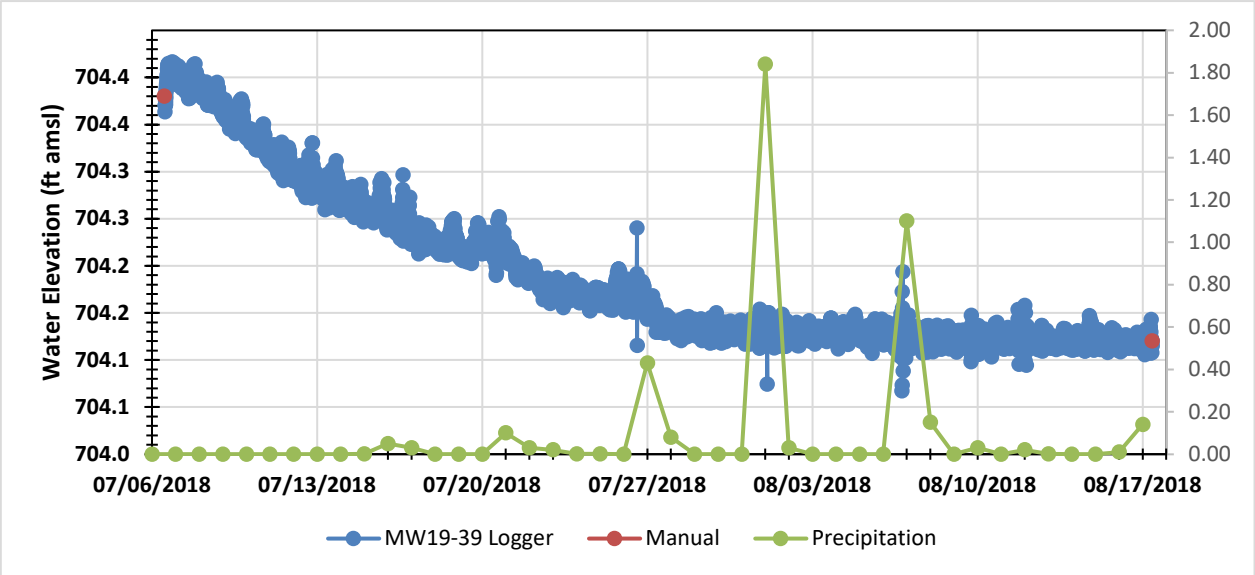
As an initial assessment component, the groundwater elevation data from each of the wells were overlaid on the graph of the creek surface water elevation data. An example of the typical pattern observed is shown below for well MW19-11:

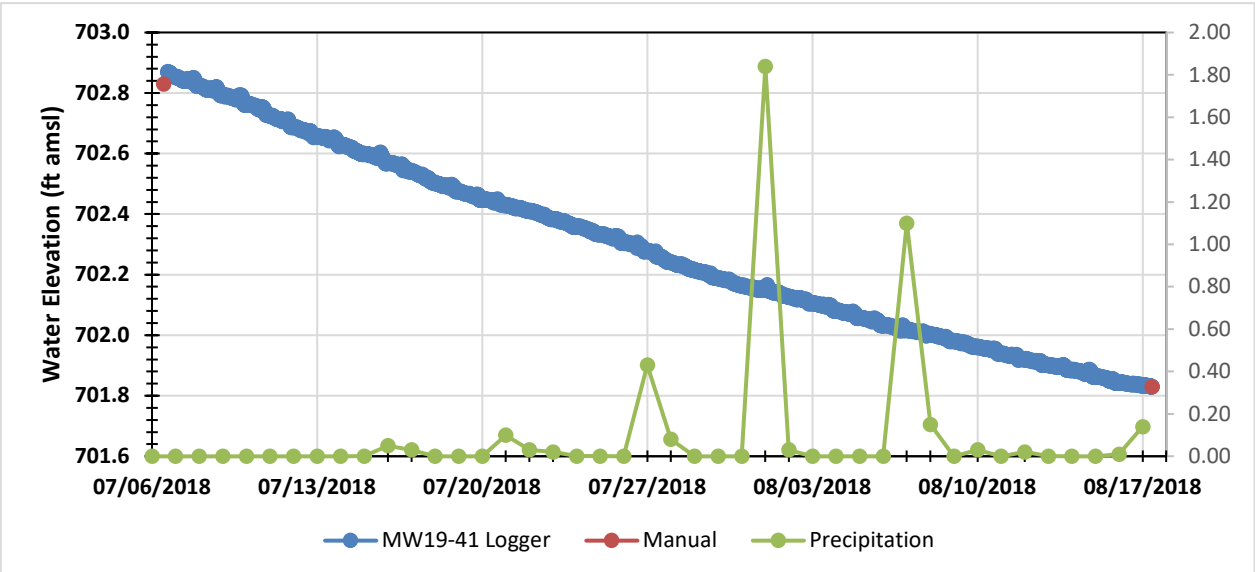


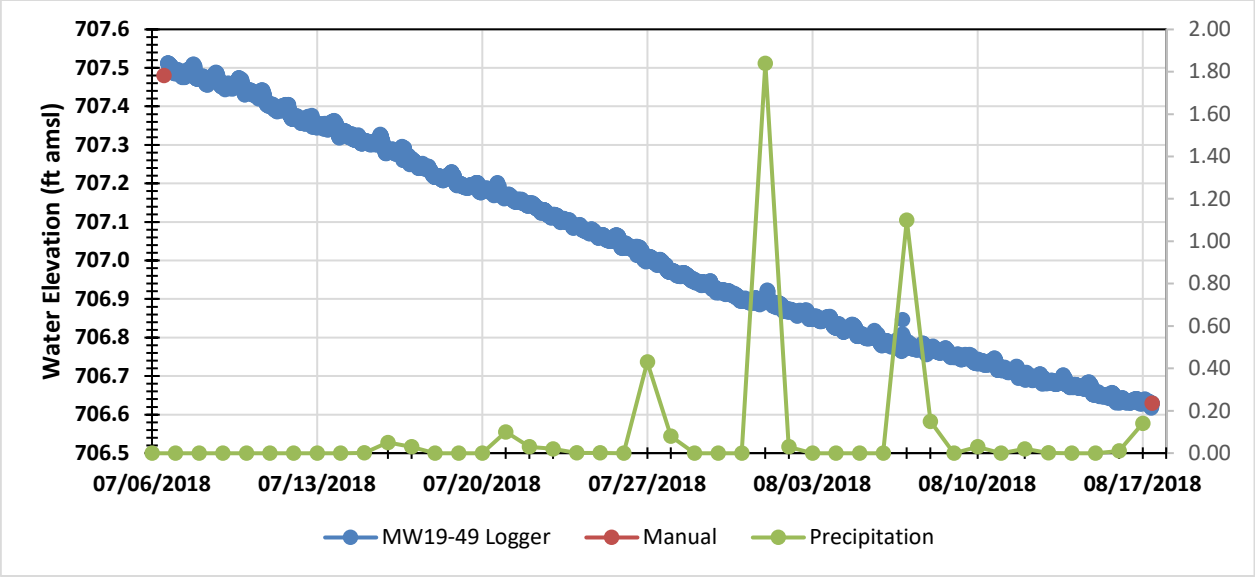
In the plot, the darker blue points are the data logger measurement for the groundwater elevation in MW19-11 (note that the elevation scale is on the right axis, with the water level in MW19-11 being close to 707 feet AMSL, whereas the creek water elevations correspond to the scale on the left axis, being about 685 feet AMSL). There is a clear pattern to the MW19-11 groundwater elevations, in that they exhibit a decreasing trend over the study time period. In contrast, while the creek water elevations do exhibit shifts over time (starting higher, dropping around July 20, then rising on August 1 before dropping again on August 15th) their pattern is not the consistent with the consistent decrease in the groundwater elevations in MW19-11. As such, a direct (simple) correlation between surface water elevation and groundwater elevation in MW19-11 is not present. The pattern in elevation variations in groundwater alone could not be used to successfully predict surface water elevations, and vice versa. This pattern in groundwater elevations is repeated in the other wells considered (see graphs below).

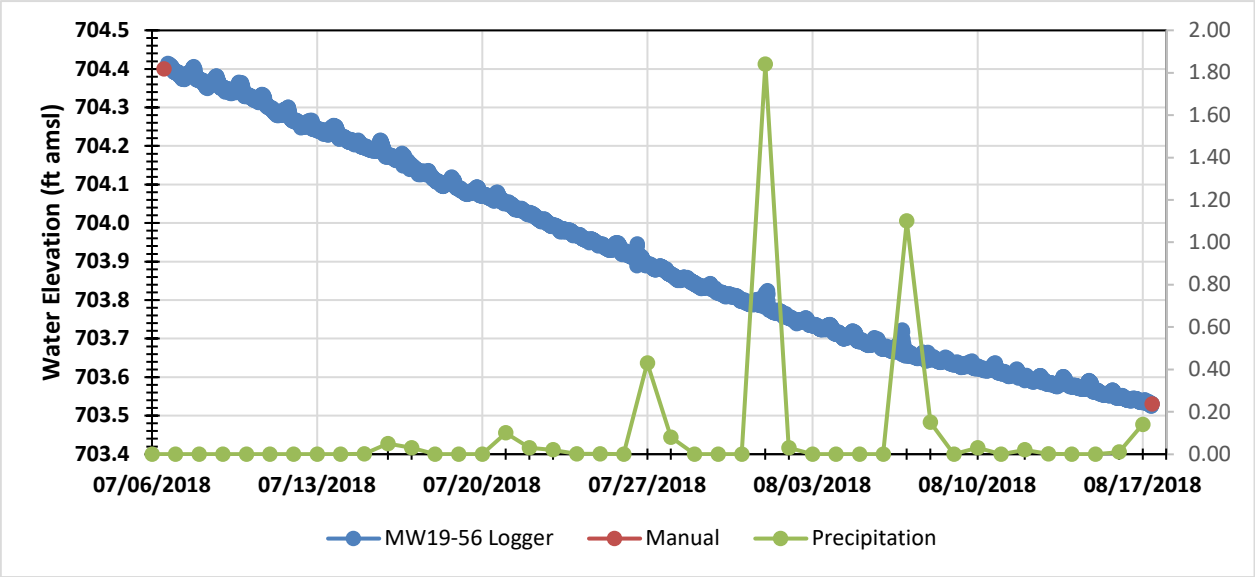


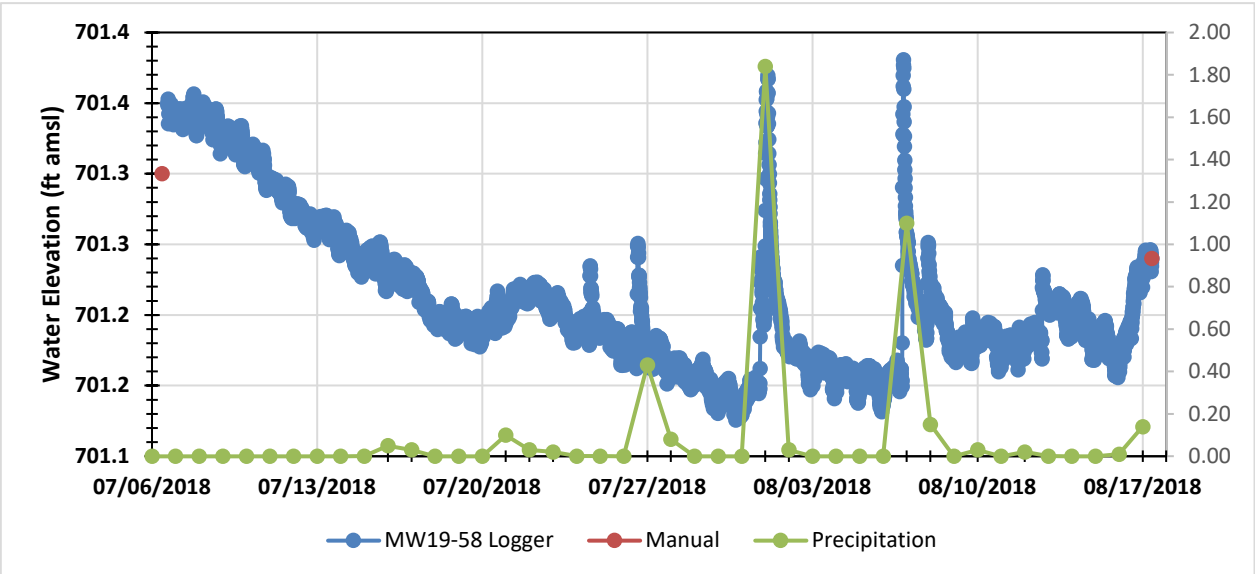

Water Elevation (ft amsl)
708.6
708.5
708.4
708.3
708.2
708.1
708.0
707.9
707.8
707.7
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
07/06/2018
07/13/2018
07/20/2018
07/27/2018
08/03/2018
08/10/2018
08/17/2018
MW19-37 Logger
Manual
Precipitation Data

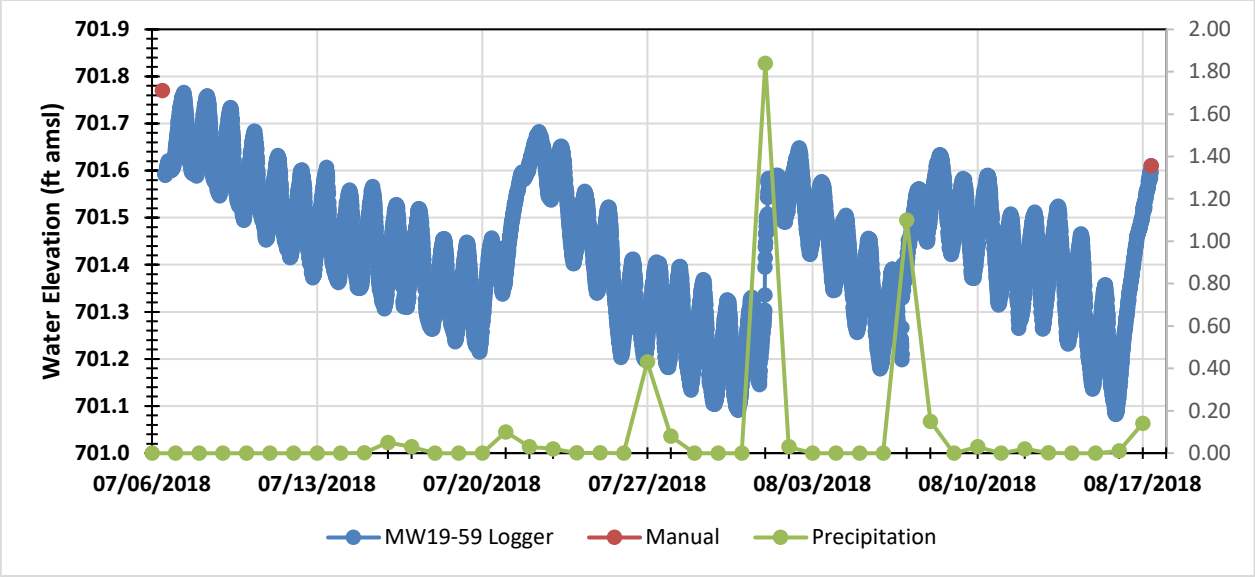

Water Elevation (ft amsl)
704.4
704.4
704.3
704.3
704.2
704.2
704.1
704.1
704.0
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
07/06/2018
07/13/2018
07/20/2018
07/27/2018
08/03/2018
08/10/2018
08/17/2018
MW19-39 Logger
Manual
Precipitation


Water Elevation (ft amsl)
703.0
702.8
702.6
702.4
702.2
702.0
701.8
701.6
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
07/06/2018
07/13/2018
07/20/2018
07/27/2018
08/03/2018
08/10/2018
08/17/2018
MW19-41 Logger
Manual
Precipitation


Water Elevation (ft amsl)
707.6
707.5
707.4
707.3
707.2
707.1
707.0
706.9
706.8
706.7
706.6
706.5
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
07/06/2018
07/13/2018
07/20/2018
07/27/2018
08/03/2018
08/10/2018
08/17/2018
MW19-49 Logger
Manual
Precipitation


Water Elevation (ft amsl)
704.5
704.4
704.3
704.2
704.1
704.0
703.9
703.8
703.7
703.6
703.5
703.4
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
07/06/2018
07/13/2018
07/20/2018
07/27/2018
08/03/2018
08/10/2018
08/17/2018
MW19-56 Logger
Manual
Precipitation


Water Elevation (ft amsl)
701.4
701.4
701.3
701.3
701.2
701.2
701.1
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
07/06/2018
07/13/2018
07/20/2018
07/27/2018
08/03/2018
08/10/2018
08/17/2018
MW19-58 Logger
Manual
Precipitation



In several cases (MW19-39, MW19-58 and MW19-59), groundwater elevations appear to have been stabilizing in the second half of the study (at the end of July and into August). In these cases, an evaluation of correlation between well groundwater elevation and creek surface water elevation could be considered in the later data, but not across the entire study period. It is evident that one or more additional factors (not measured in this study) beyond rainfall exerted an influence on groundwater elevations (i.e., causing the observed decreasing trends between July and August 2018. Additionally, one or more external factor appear to be causing cyclical variation in both well groundwater and creek surface water elevations on a daily basis.

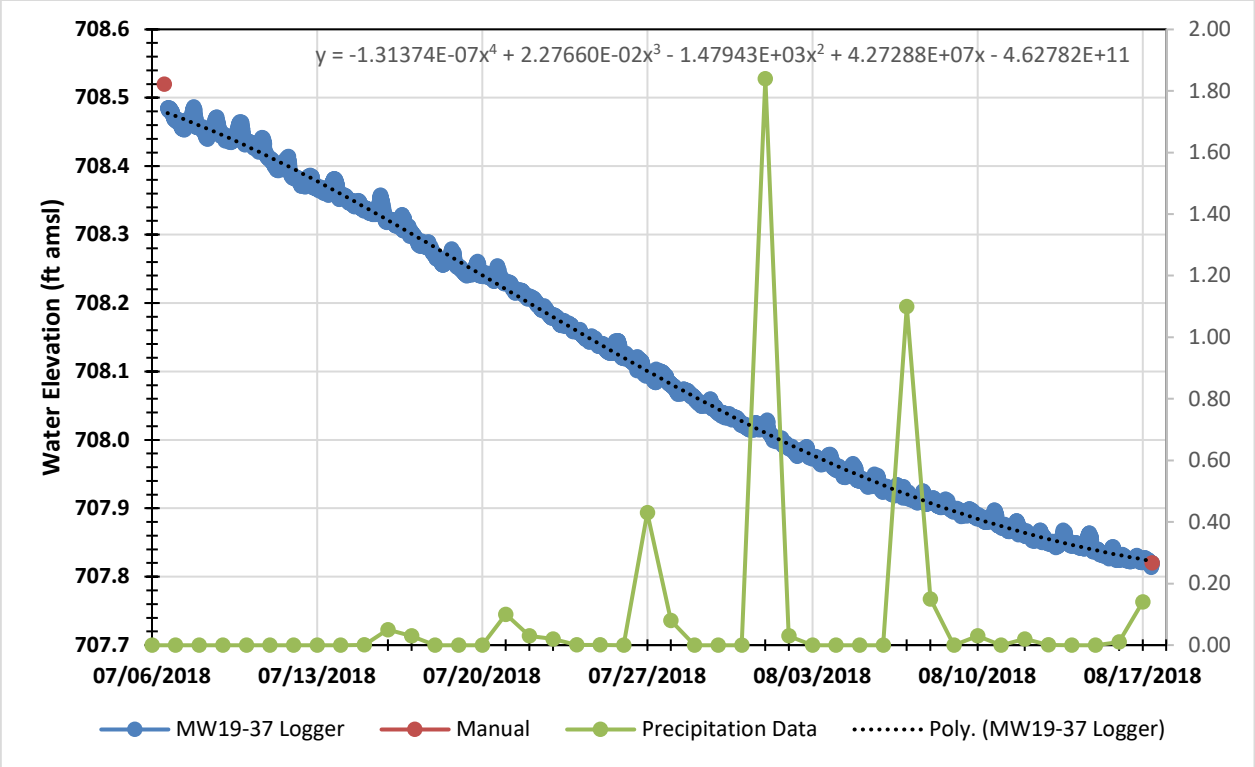
5. Correspondence of Well Groundwater and Creek Surface Water Elevations Considering De-Trended Data

Although usable direct correlations between groundwater elevations in wells and surface water elevations in the creek locations studied are not possible from the data sets obtained, additional consideration of the effect of rainfall on water elevations is possible by taking into account the underlying trends in groundwater elevations over the study period. This is accomplished by first mathematically modeling the overall temporal trends, and then looking at deviations from the modelled values (i.e., the model residuals). This process is called “de-trending” the data.

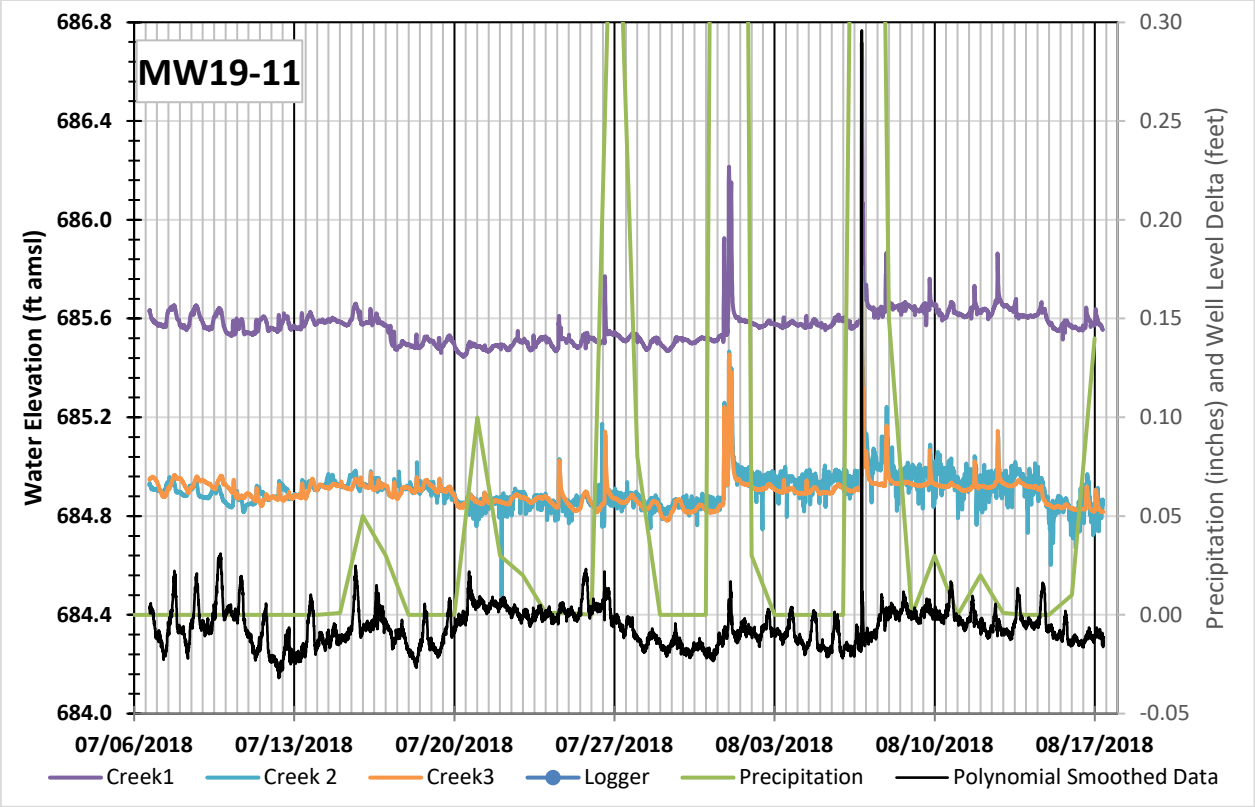
In order to de-trend the data, a series of mathematical models were considered and visually assessed for fit. A usable model was identified that could be applied across all the wells with reasonable fit, which was a fourth-order polynomial. The model had the following form:

$$y = ax^4 + bx^3 + cx^2 + dx + e$$

Where y is the groundwater elevation, x is time (date including time of day), and a e are model coefficients fit from the data. An illustration of the model fitting procedure is shown below for MW19-37 (the black dotted line is the fit equation):

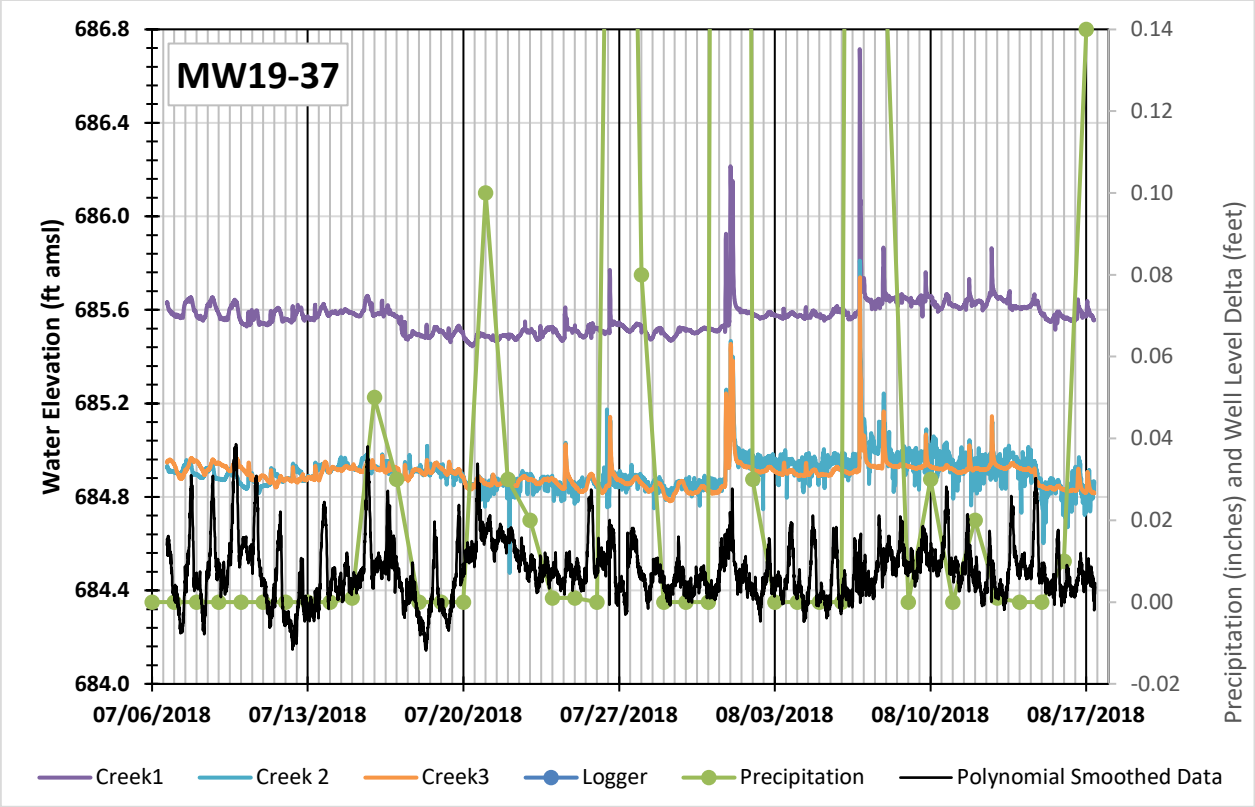


After determining the expected groundwater elevation for each data point, the resulting model residuals may be calculated and used to produce a graph showing the de-trended groundwater elevations. Note that the polynomial trend models are somewhat rough, and the de-trended elevation data are most useful for looking at short-term variations. That is, an apparent shift (up or down) over a longer period (e.g., a week or more) may be due more to the model fit than to external influences on groundwater levels. The de-trended data (black lines) are shown in the following figures, along with the creek surface water elevation and precipitation data.

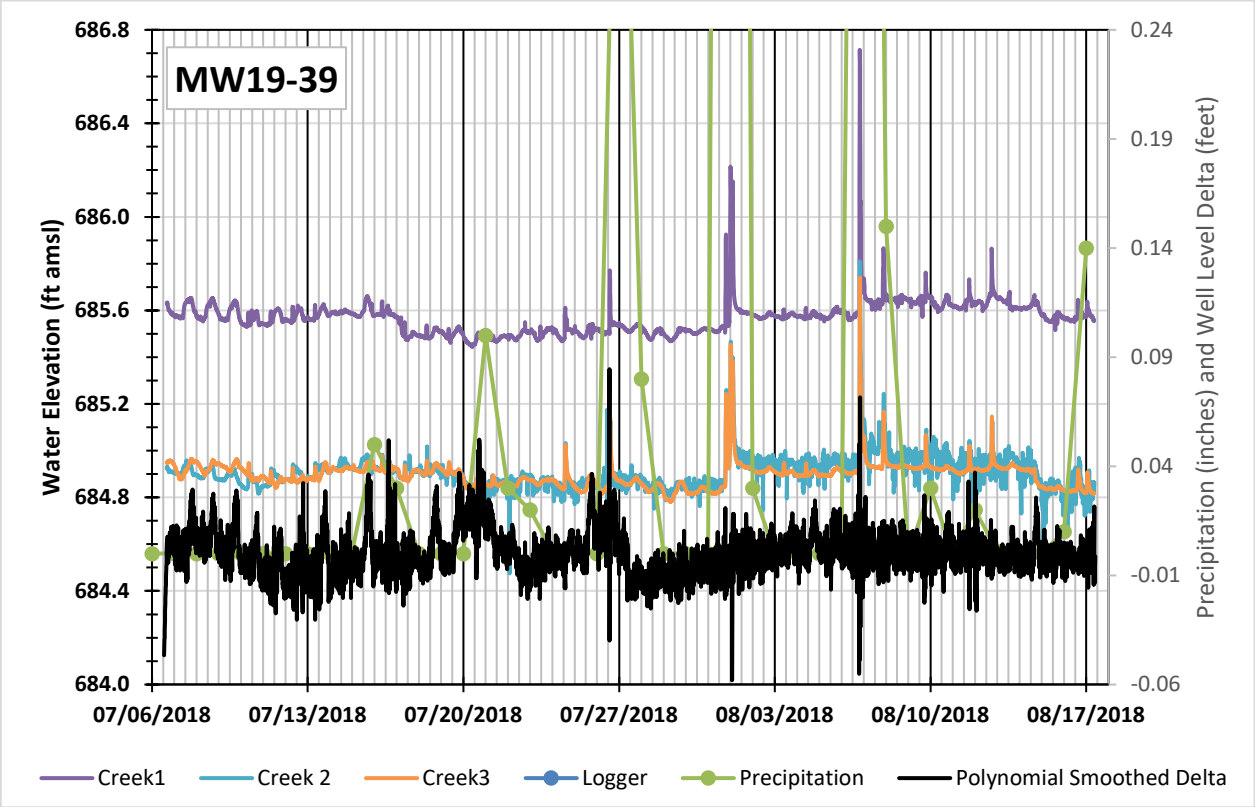


Even after de-trending the groundwater elevation data, the observed variation appears mainly due to the cyclical daily pattern (common to both groundwater and surface water). It is only with the highest rainfall events on August 1 and 7 that an observable peak occurs in the MW19-11 groundwater elevations above the surrounding daily fluctuations, and corresponds to similar peaks in the surface water elevations in all three creek locations. For the July 26 rainfall event, there is a short peak in groundwater elevation, but its magnitude is similar to the previous day when there was no precipitation recorded. For the other precipitation events the groundwater elevations in MW19-11 do not appear to vary outside of the daily cyclical pattern, which is consistent with the pattern for surface water in the three creek locations. For the daily cyclical variations, there is a strong correspondence between the patterns for groundwater elevation in MW19-11 and those for surface water in Creek 1 and Creek 3. As noted above, surface water elevations in Creek 2 appear more variable and at some points opposite to those in the other creek locations, and similarly do not closely match the observed patterns for groundwater in MW19-11.

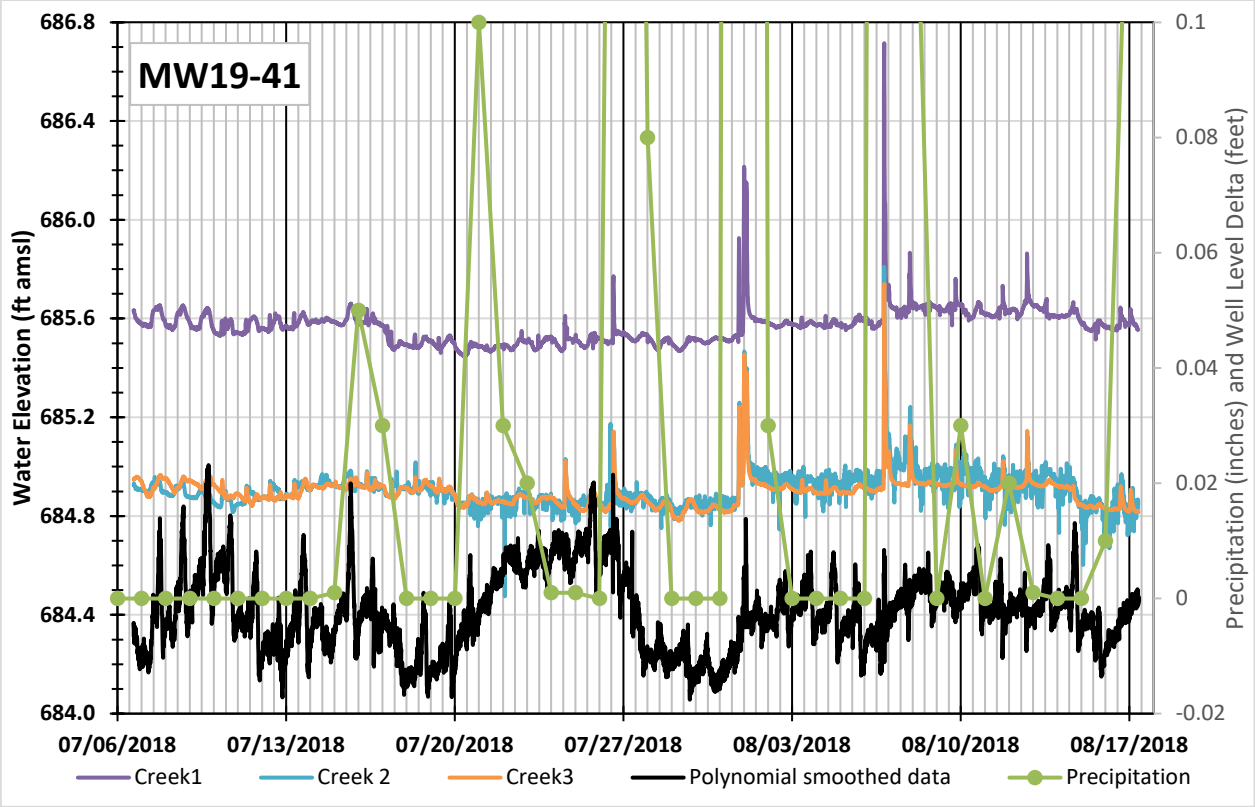
These observations occur for the majority of the data from the other monitoring wells illustrated in the graphs below. Thus, only differences in interpretation are highlighted following the graphs for the other wells.



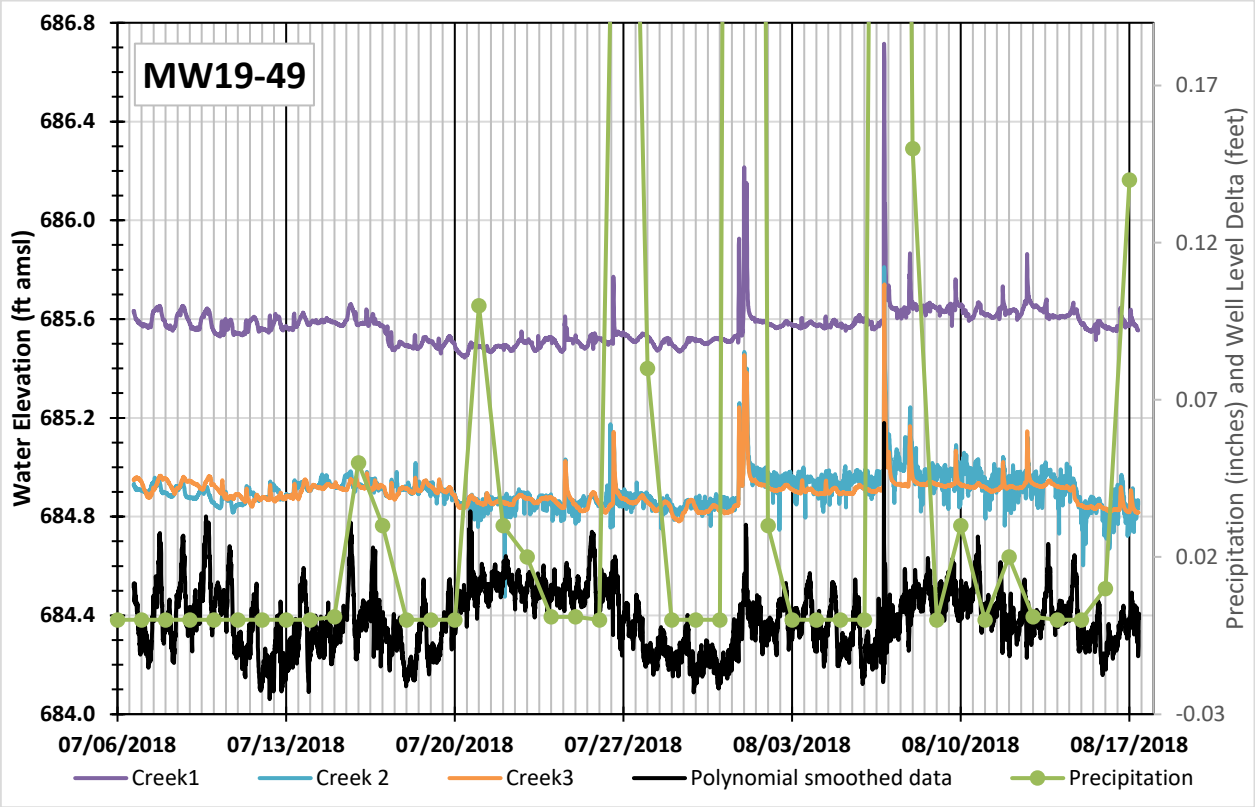
At MW19-37, the magnitude of the daily cyclical variation appears more consistent than in the creek locations. Only the August 1 rainfall event appears notable as a peak above the daily variation.



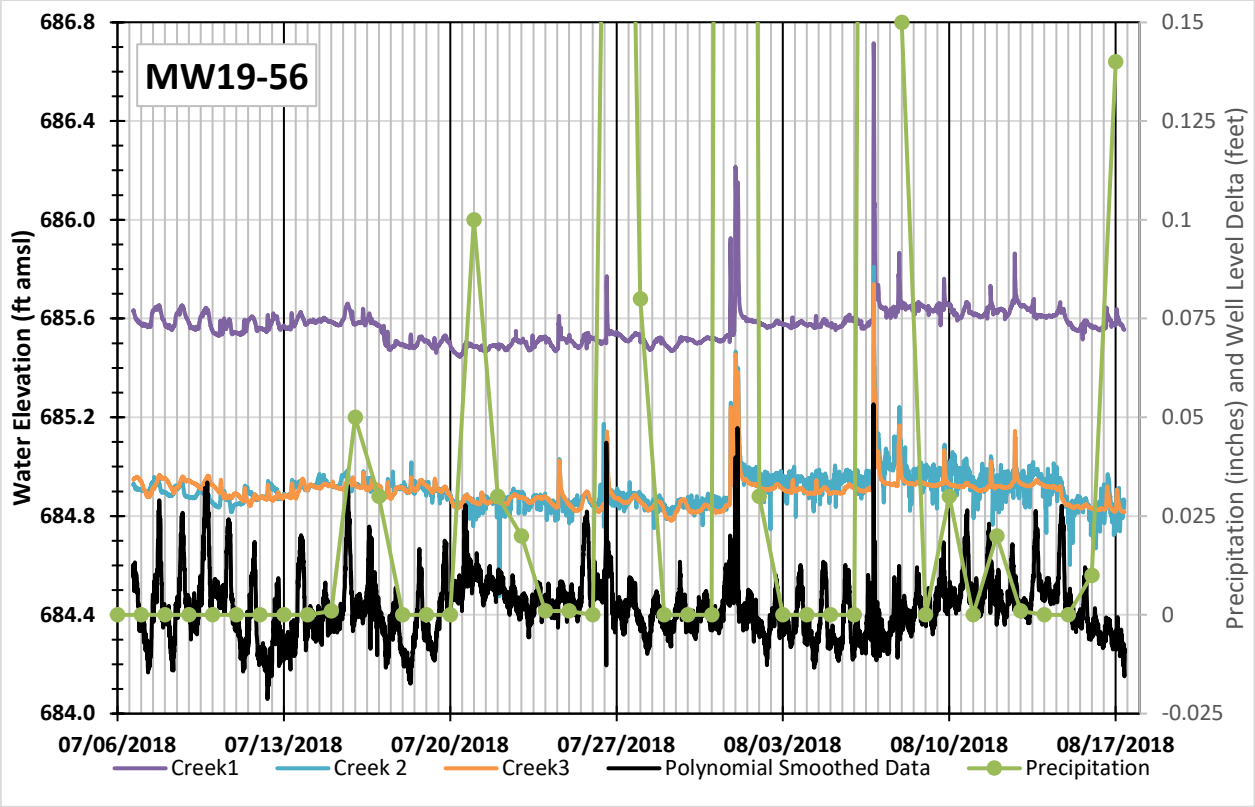
Variation in MW19-37 is greater than for other wells, and may be more responsive to rainfall events.



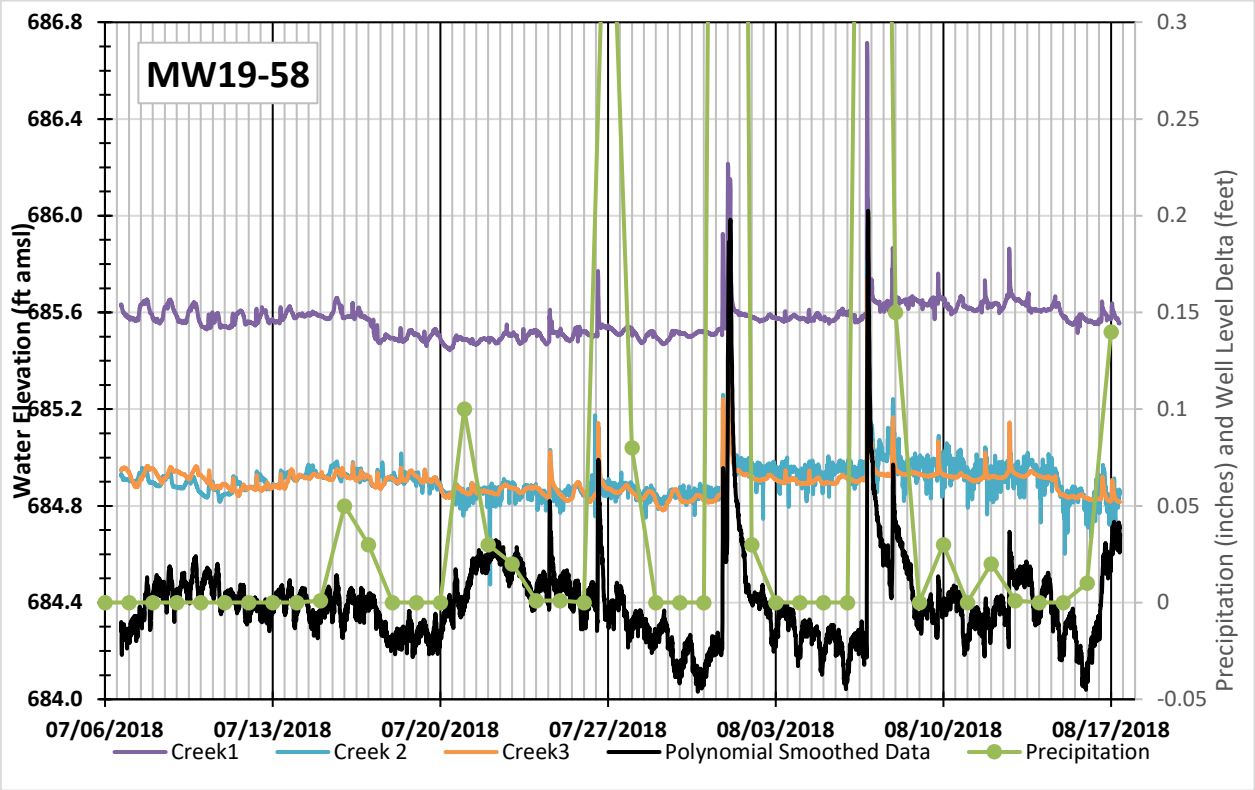
Daily variation at MW19-41 is less similar to the creek locations, potentially shifted earlier (peaks before creek locations).



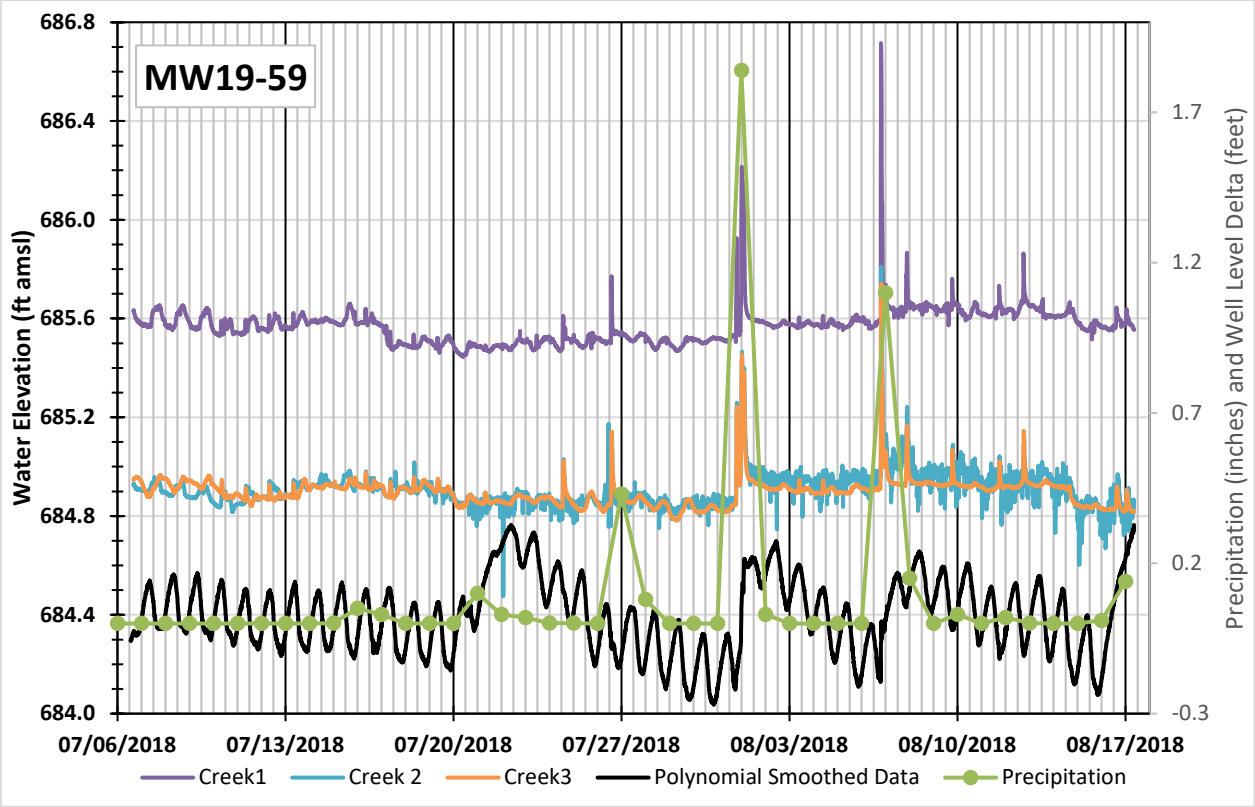
MW19-49 has potentially better response to rainfall (more pronounced peaks following precipitation).



MW19-56 is also more responsive to moderate rainfall, and has daily variation proportional to the creek locations.



Of all the wells, MW19-58 appears to vary most similarly to Creek 2. This well also seems among the most responsive to identifiable peaks following precipitation events.



MW19-59 exhibits very strong daily cyclical variation (more than other wells and the creek locations), which masks any relationship with the creek surface water elevations. There is some indication of responsiveness to rainfall events, but is not consistent (e.g., with the higher rainfall events on August 1st and 7th having similar response to the small rainfall even on July 21).

6. Conclusions

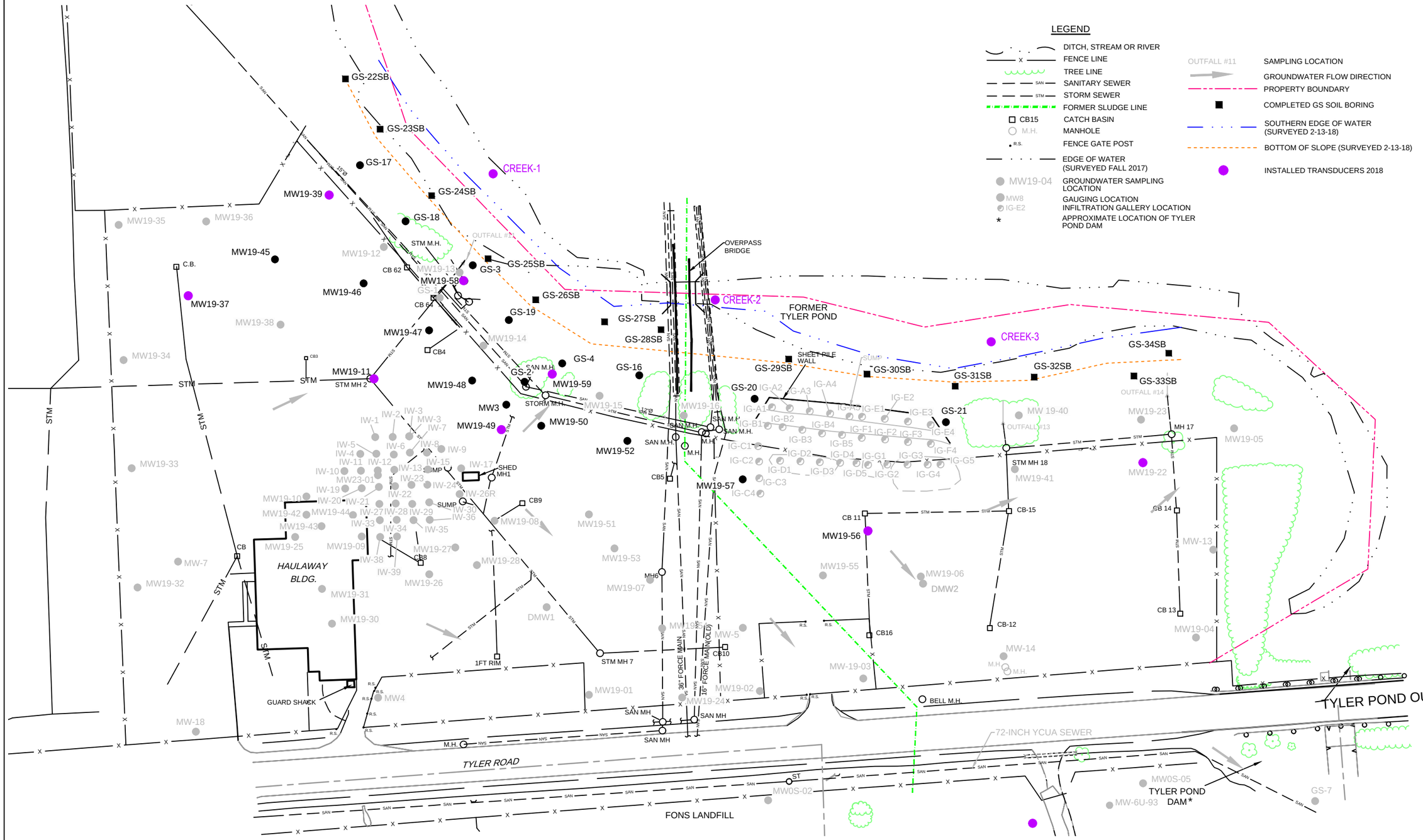
The assessment of potential correlations between groundwater elevations in monitoring wells at the Site and surface water elevations in nearby creek locations has resulted in the following conclusions:

- Surface water and groundwater elevations are subject to strong daily cyclical patterns locally, the cause of which is not identified in the evaluation. This influence is stronger than the effects of small to moderate precipitation events (below ½ inch).
- Surface water elevations in the creek locations generally vary similarly, with Creek 1 and Creek 3 being more similar to one another than to Creek 2.
- Strong underlying trends are present in the groundwater elevation data (decreasing) over the study period, precluding any possible identification of direct correlations between surface water elevations in the creek locations and groundwater elevations in the wells.
- Removing the underlying trends (de-trending) from the groundwater elevation data allows for more sensitive comparison of similarities to short-term elevation fluctuations between the surface water and groundwater. This comparison found that the daily cyclical variation in groundwater elevations in the Site wells mainly corresponds to that in the three creek locations (particularly Creek 1 and Creek 3), and thus there generally is correlation between the de-trended groundwater elevations and the creek surface water elevation data.
- However, the de-trended groundwater elevation data exhibit less sensitivity to precipitation events than found in the surface water data. In most cases a notable peak in groundwater elevation following a

precipitation event was not noticeable above the daily cyclical variation except where at least ½ inch of rainfall occurred.

Further interpretation of the transducer data could be assisted by identification and characterization of the cause of the observed daily cyclical variation, and by further measurements during a period not exhibiting a strong underlying trend in groundwater elevations over time.

Figure 1 - 2018 Transducer Location Map



Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\PRE-001\11223983-GHD-0000-PRE-EN-0101_DE-001.dwg
Plot Date: 30 July 2021 10:54 AM

Appendix C

Willow Run Creek - Additional Southern Bank Investigation – Delineation of SVOC and VOC Soil Impacts – September 2018

Memorandum

August 11, 2021

To	Mr. Grant Trigger, RACER Trust		
Copy to	Tom Kinney, Beth Landale, Sam Belisle		
From	Kaitlyn Trestrail/mk/2	**Tel**	(248) 915 8801
Subject	Willow Run Creek - Additional Southern Bank Investigation – Delineation of SVOC and VOC Soil Impacts – September 2018 Willow Run Company Vehicle Operations (CVO) Ypsilanti, Michigan	**Project no.**	11223983

1. Introduction, Background and Summary of Results

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), GHD has prepared this summary memo for the Willow Run Company Vehicle Operations (CVO) property located in Ypsilanti, Michigan (Site). The prior memorandum, "Willow Run Creek - Southern Bank Investigation – Spring 2018", concluded that the groundwater surface water interface (GSI) pathway between the soil borings completed during that investigation and the Willow Run Creek is incomplete due to the lack of water bearing, permeable materials encountered. A supplemental investigation was completed in September 2018 to further delineate impacts at the Site and add multiple lines of evidence to support the incomplete GSI pathway.

Due to historical fill and dumping activities at the Site, a series of environmental investigations have been completed to characterize and delineate the impacts within soils and groundwater. Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), inorganics, and polychlorinated biphenyls (PCBs) impacts within soils have been observed, while VOCs, primarily chlorinated VOCs, are predominantly the concern in groundwater at the Site. A number of Interim Response Actions (IRAs) and Deed Restrictions have been implemented at the Site to address these contaminants of concern and protect human health and the environment. However, the VOCs in groundwater, particularly vinyl chloride, still remain a potential concern for off Site migration into nearby Willow Run Creek (formerly Tyler Pond).

In the spring of 2017, Tyler Pond water levels were lowered by other parties as a result of removal of a nonfunctioning drainage valve in the dam below Tyler Road. Consequently, lower water levels may have changed hydrogeological conditions, particularly with regard to groundwater surface water interface (GSI) pathways, in addition to exposing additional accessible land adjacent to the former Tyler Pond (now Willow Run Creek) at the northern boundary of the Site. The current conditions of Willow Run Creek compared to the former shoreline of Tyler Pond are presented on Figure 1.

In response to the change in conditions, GHD conducted a subsurface investigation in March 2018 in the former Tyler Pond area. The primary purpose of the subsurface investigation was to install monitoring wells between the existing monitoring wells and Willow Run Creek within the area that was previously part of Tyler Pond. The intent was to evaluate whether the impacted groundwater at the northern perimeter of the site had migrated to the vicinity of the new boundary of Willow Run Creek. The secondary purpose of the investigation was to collect soil samples to further characterize the extent of impacts and potential GSI pathways.

During the March 2018 investigation, soil borings were completed at 13 locations. Soil samples exceeded the GSI Protection Criteria (GSIPC) for VOCs (GS-29-SB and GS-31-SB) and SVOCs (GS-24-SB and GS-26-SB). The VOC and SVOC exceedances occurred in two distinct portions of the property. The VOC exceedances occurred in the southeast portion of the newly exposed area and was labeled as the VOC delineation area, as shown on Figure 2. The SVOC exceedances occurred in the northwest portion of the recently exposed area, and was labeled as the SVOC delineation area, as shown on Figure 3. Therefore, GHD recommended additional soil borings to further delineate impacted soil. No water bearing units were encountered during the March 2018 investigation, so no wells were installed.

As a result of these findings, an additional investigation to evaluate the groundwater adjacent to Willow Run Creek and delineate the SVOC and VOC soil impacts was conducted in September 2018. Additionally, several small seeps along the hillside adjacent to Will Run Creek were characterized. The scope of work, analytical results, and conclusions of the September 2018 investigation is presented in this memo.

2. Scope of Work

GHD notified MissDig, Michigan's utility one call service, to arrange for public utility locating of the investigation areas. Ground Penetrating Radar Systems, Inc. (GPRS) was retained by GHD to provide private utility locating services prior to conducting drilling activities on the property is the targeted area adjacent to Willow Run Creek

GHD advanced a total of 17 shallow soil borings (GS-29-SB, GS-35 through GS-42 and SB-43-18 through SB-50-18), nine in the area with the prior VOC exceedances and eight in the area with the prior SVOC exceedances, completed by hand/pneumatic auger. The soil boring locations were completed on the bed of the former Tyler Pond, as shown on Figure 2 and Figure 3. The soil borings were advanced to depths ranging from 1.5 – 10 feet below ground surface (bgs) depending on the location. GS-29-SB is a redrilled location and was completed in order to collect a deeper sample in that location.

Soil samples were examined by GHD personnel for color, soil type, stratigraphy, banding, moisture, visual and olfactory evidence of impact and screened for volatile vapors with a photoionization detector (PID). All soil samples are described and classified in general accordance with the Unified Soil Classification System (USCS). Copies of the soil boring logs are included as Attachment A.

The soil sample intervals were chosen to horizontally and vertically delineate the SVOC and VOC impacts. The number of samples collected at each boring location and the sample intervals are summarized in Tables 1 and 2 shown below.

Table 1 SVOC Delineation Soil Borings

Boring Location	Number of Samples	Sample Intervals (Feet BGS)
GS-35	1	0-2
GS-36	2	0-2, 2-4
GS-37	2	0-2, 3-5
GS-38	1	0-2
GS-39	1	0-2
GS-40	2	0-2, 3-5
GS-41	1	0-2
GS-42	1	0-1.5

Table 2 VOC Delineation Soil Borings

Boring Location	Number of Samples	Sample Intervals (Feet BGS)
GS-29-SB*	1	8-10
GS-43	4	0-2, 3-5, 5-7, 8-10
GS-44	4	0-2, 3-5, 5-7, 8-10
GS-45	4	0-2, 3-5, 5-7, 8-10
GS-46	4	0-2, 3-5, 5-7, 8-10
GS-47	2	0-2, 3-5
GS-48	4	0-2, 3-5, 5-7, 8-10
GS-49	2	0-2, 3-5
* Redrilled location in order to collect a deeper sample interval		

Soil types identified during the investigation included minor topsoil near the surface, silty clay, sandy clay, and clayey sand. However, clay was the predominant soil type and was found essentially throughout the depth of each boring. Water bearing soil units were not encountered during this investigation; therefore, permanent or temporary monitoring wells were not installed.

Soil samples were shipped under chain of custody protocols to TestAmerica Laboratories, Inc. (TestAmerica) in North Canton, Ohio on a normal turnaround time (TAT) and analyzed for total compound list (TCL) volatile organic compounds (VOCs) in the VOC Delineation Area and TCL semi volatile compounds (SVOCs) and the SVOC delineation area.

Three seeps (Seep 1 – Seep 3) were sampled near the SVOC delineation borings and one seep (Seep 4) was sampled near the VOC delineation borings. The seep locations are presented on Figure 4.

Seep samples were shipped under chain of custody protocols to TestAmerica in North Canton, Ohio on a normal TAT. Seeps 1 and 2 were analyzed for both VOCs and SVOCs, while Seeps 3 and 4 could only be analyzed for VOCs due to limited sample volume.

3. Analytical Results Summary

Results were compared to Michigan Department of Environment, Great Lakes, and Energy (EGLE) Generic cleanup criteria for residential and non-residential category pursuant to Part 201 of 1994 PA 451 as amended. A summary of the analytical data is presented in Attachments B and C. Copies of the TestAmerica laboratory analytical reports are provided in Attachment D.

3.1 Semi Volatile Organic Compounds (SVOCs) Delineation Borings

Results from the SVOC investigation indicated no further exceedances of SVOCs in borings (GS-35 through GS-42). Therefore, the SVOCs have been fully delineated

3.2 Volatile Organic Compounds (VOCs) Delineation Borings

Results from the VOC delineation borings (GS-43 through GS-50) show exceedances in Part 201 criteria for various VOCs as shown in Table 3 below.

Table 3 VOC Delineation Boring's Exceedance Summary

Boring Location	Exceedance Intervals (FT BGS)	Volatile Organic Compounds	RDWP	NDWP	GSIP	DC	NDC
GS-29-SB	8-10	Trichloroethene	X	X			
GS-43	0-2	Methylene Chloride	X	X			
	3-5	Methylene Chloride	X	X			
	5-7	Methylene Chloride	X	X			
	8-10	Methylene Chloride	X	X			
GS-44	3-5	Vinyl Chloride	X	X			
	5-7	cis-1,2-Dichloroethene	X	X			
		Trichloroethene	X	X			
		Vinyl chloride	X	X			
GS-45	0-2	cis-1,2-Dichloroethene	X	X			
		Trichloroethene	X	X			
		Vinyl chloride	X	X			
	3-5	Benzene	X	X			
		cis-1,2-Dichloroethene	X	X			
		Trichloroethene	X	X			
		Vinyl chloride	X	X	X		
	5-7	cis-1,2-Dichloroethene	X	X	X		
		Trichloroethene	X	X	X		
		Vinyl chloride	X	X	X	X	
	8-10	cis-1,2-Dichloroethene	X	X	X		
		Trichloroethene	X	X	X		
		Vinyl chloride	X	X	X		
GS-46	3-5	cis-1,2-Dichloroethene	X	X	X		
		trans-1,2-Dichloroethene	X	X			
		Trichloroethene	X	X	X		
		Vinyl chloride	X	X	X		
	5-7	cis-1,2-Dichloroethene	X	X	X		
		Trichloroethene	X	X	X	X	
	8-10	cis-1,2-Dichloroethene	X	X	X		
		Trichloroethene	X	X	X		
		Vinyl chloride	X	X	X		
GS-47	0-2	Trichloroethene	X	X			
	3-5	Trichloroethene	X	X			
		Vinyl chloride	X	X	X		
GS-48	0-2	cis-1,2-dichloroethene	X	X	X		
	3-5	Vinyl chloride	X	X	X		
GS-50	3-5	Trichloroethene	X	X			

Boring Location	Exceedance Intervals (FT BGS)	Volatile Organic Compounds	RDWP	NDWP	GSIP	DC	NDC

Footnotes

RDWP – Residential Drinking Water Protection
NDWP – Nonresidential Drinking Water Protection
GSIP – Groundwater Surface Water Interface Protection
DC – Direct Contact

3.3 Seep Sampling Results

Seep sample results are displayed on Figure 4. Samples from Seep 2 and 4 exceeded the EGLE Part 201 residential and nonresidential drinking water criteria for vinyl chloride. A duplicate sample was collected at Seep 4 and of the two samples, one exceeded the GSI criteria for vinyl chloride. The sample with the exceedance reported vinyl chloride detected at 16 µg/L, just slightly above the EGLE GSI criteria of 13 µg/L. For both Seep 4 sample results, the lab noted the levels of vinyl chloride reported were considered estimated concentrations.

4. Closing Discussion and Recommendations

Based on the 16 soil borings completed, no water bearing units were encountered, which renders the GSI pathway incomplete (without groundwater, a GSI pathway does not exist). Given that the GSI pathway is not relevant, exceedances of GSIPC are not applicable unless the GSIPC exceedances are in direct contact with Willow Run Creek. The soil sample exceedances are not in direct contact with Willow Run Creek. However, the extent of impacts in soil have not been delineated prior to contact with Willow Run Creek.

Results of the additional characterization of the now exposed area adjacent to Willow Run Creek revealed soil exceedances of EGLE Part 201 cleanup criteria for residential and nonresidential drinking water protection in seven of the eight VOC delineation borings. However, the drinking water protection exceedances in soil at the Site are mitigated through the current land use restrictions prohibiting the installation of drinking water wells and groundwater extraction wells with the exception for wells that are part of the MDEQ or USEPA approved response activity.

Four of the VOC borings exceeded the GSIPC for at least one of the following parameters: vinyl chloride, cis-1,2-dichloroethene, and/or trichloroethene. There were no exceedances found in the SVOC delineation borings. Table 3 summarizes the EGLE Part 201 cleanup criteria exceedances observed in the soil borings.

Seeps 2 and 4 had concentrations of vinyl chloride that exceeded the EGLE Part 201 generic cleanup criteria for residential and nonresidential drinking water and Seep 4 exceeded the GSI criteria for vinyl chloride. However, the exceedance at Seep 4 was just above the GSI criteria and was considered an estimated concentration by the lab. Additionally, Seep 4 is approximately 60 feet from the shoreline of Willow Run Creek and given the dense vegetation along the shoreline, water from Seep 4 does not have a clearly defined pathway to enter Willow Run Creek. Lastly, considering the lack of hydraulic connection between the Site's groundwater and Willow Run Creek, it is unlikely the vinyl chloride GSI exceedance at Seep 4 poses a significant risk to the surface water body.

Given that GSIPC exceedances were found in the VOC delineation and that no wells could be installed to evaluate the groundwater adjacent to Willow Run Creek, a further investigation is recommended. GHD recommends additional soil borings to delineate VOC impacts in soil and interval sampling of the pore water adjacent to the Willow Run Creek to assess mixing and/or attenuation.

Please contact the Kaitlyn Trestrail at (248) 915- 8801 if you have any questions regarding the information presented in this report or require further information or clarification.

Regards,

Kaitlyn Trestrail

Kaitlyn Trestrail
Environmental Geologist

Figure 1 – Willow Run Creek Current Conditions
Figure 2 – Soil Boring Results – VOCs
Figure 3 – Soil Boring Results – SVOCs
Figure 4 – Groundwater Seep Results – VOCs & SVOCs
Attachment A – Soil Boring Logs
Attachment B – Analytical Table – Soil Results
Attachment C –Analytical Table – Seep Results
Attachment D – Analytical Laboratory Reports

Figures



SOURCE: BASE ON GOOGLE EARTH APRIL 2019

LEGEND

FORMER EDGE OF TYLER POND (APPROXIMATE BASED ON GOOGLE EARTH APRIL 2016)

SOIL BORING LOCATION - FEBRUARY/MARCH 2018

SOIL BORING LOCATION - SEPTEMBER 2018

SEEP LOCATION - SEPTEMBER 2018

GROUNDWATER SAMPLING LOCATION

MW8 GAUGING LOCATION

IG-E2 INFILTRATION GALLERY LOCATION

0 125 250 ft

1" = 250 ft

Coordinate System: <INSERT HERE>

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GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

WILLOW RUN CREEK
CURRENT CONDITIONS

Project No. **11223983**
Date **July 2021**

FIGURE 1

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GS-46	9/12/2018 (0-2) ft BGS ug/kg	9/12/2018 (3-5) ft BGS ug/kg	9/12/2018 (5-7) ft BGS ug/kg	9/12/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	47 U	570 U	5400 U	1100 U
cis-1,2-Dichloroethene	47 U	45000 {BCD}	120000 {BCD}	63000 {BCD}
Methylene chloride	240 U	2900 U	27000 U	5400 U
trans-1,2-Dichloroethene	47 U	3300 {BC}	5400 U	1100 U
Trichloroethene	47 U	6300 {BCD}	250000 {BCDO}	9800 {BCD}
Vinyl chloride	38 U	2300 {BCD}	4300 U	3000 {BCD}

GS-45	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg	9/13/2018 (5-7) ft BGS ug/kg	9/13/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	48 U	250 {BC}	2800 U	990 U
cis-1,2-Dichloroethene	2400 {BC}	8900 {BC}	90000 {BCD}	45000 {BCD}
Methylene chloride	240 U	1000 U	14000 U	5000 U
trans-1,2-Dichloroethene	420	1900	2800 U	990 U
Trichloroethene	420 {BC}	1100 {BC}	82000 {BCD}	29000 {BCD}
Vinyl chloride	260 {BC}	1600 {BCD}	10000 {BCDO}	4200 {BCDO}

SVOC DELINEATION AREA

VOC DELINEATION AREA

LEGEND

- FENCE LINE
- SANITARY SEWER
- STORM SEWER
- WILLOW RUN CREEK SHORELINE
- BOTTOM OF SLOPE (SURVEYED 2-13-18)
- CB15 CATCH BASIN
- M.H. MANHOLE
- R.S. FENCE GATE POST
- MW19-04 GROUNDWATER SAMPLING LOCATION
- MW8 GAUGING LOCATION
- IG-E2 INFILTRATION GALLERY LOCATION
- OUTFALL #11 SAMPLING LOCATION
- GROUNDWATER FLOW DIRECTION
- SOIL BORING LOCATION FEBRUARY/MARCH 2018
- SOIL BORING LOCATION SEPTEMBER 2018
- SEEP LOCATION SEPTEMBER 2018

EGLE Generic Cleanup Criteria: Residential and Nonresidential (1)

	Drinking Water Protection B	Nonresidential Drinking Water Protection C	Groundwater Surface Water Interface Protection D	Direct Contact O	Nonresidential Direct Contact P
Volatile Organic Compounds (VOCs) (ug/kg)					
Benzene	100	100	4000	180000	840000
cis-1,2-Dichloroethene	1400	1400	12000	2500000	8000000
Methylene chloride	100	100	30000	1300000	5800000
trans-1,2-Dichloroethene	2000	2000	30000	3800000	12000000
Trichloroethene	100	100	4000	110000	660000
Vinyl chloride	40	40	260	3800	34000

Notes:
1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.46 and R 299.48, respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected, associated reporting limit is estimated.

GS-43	9/12/2018 (0-2) ft BGS ug/kg	9/12/2018 (3-5) ft BGS ug/kg	9/12/2018 (5-7) ft BGS ug/kg	9/12/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	52 U	52 U	51 U	49 U
cis-1,2-Dichloroethene	52 U	52 U	51 U	49 U
Methylene chloride	410 {BC}	240 J {BC}	300 {BC}	330 {BC}
trans-1,2-Dichloroethene	52 U	52 U	51 U	49 U
Trichloroethene	52 U	52 U	51 U	49 U
Vinyl chloride	41 U	42 U	41 U	39 U

GS-50	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg
VOCs		
Benzene	53 U	49 U
cis-1,2-Dichloroethene	55	260
Methylene chloride	270 U	240 U
trans-1,2-Dichloroethene	53 U	49 U
Trichloroethene	57	740 {BC}
Vinyl chloride	43 U	39 U

GS-49	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg
VOCs		
Benzene	55 U	51 U
cis-1,2-Dichloroethene	55 U	54
Methylene chloride	280 U	250 U
trans-1,2-Dichloroethene	55 U	51 U
Trichloroethene	55 U	92
Vinyl chloride	44 U	41 U

GS-31-SB	2/27/2018 (0-2.5) ft BGS ug/kg	2/27/2018 (6-7) ft BGS ug/kg	2/27/2018 (19-20) ft BGS ug/kg
VOCs			
Benzene	51 U	58 U	52 U
cis-1,2-Dichloroethene	90	58 U	52 U
Methylene chloride	250 U	290 U	260 U
trans-1,2-Dichloroethene	51 U	58 U	52 U
Trichloroethene	190 {BC}	58 U	52 U
Vinyl chloride	40 U	46 U	41 U

GS-29-SB	2/26/2018 (0-2) ft BGS ug/kg	2/26/2018 (3-5) ft BGS ug/kg	2/26/2018 (5-7.5) ft BGS ug/kg	9/13/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	100 U/46 U	5300 U	55 U	55 U
cis-1,2-Dichloroethene	8400 J {BC}/46 UJ	250000 {BCD}	64	970
Methylene chloride	230 U/510 U	26000 U	270 U	270 U
trans-1,2-Dichloroethene	220/46 U	5300 U	55 U	55 U
Trichloroethene	140 {BC}/46 U	150000 {BCDO}	55 U	990 {BC}
Vinyl chloride	37 UJ/1100 J {BCD}	4500 {BCDO}	1700 {BCD}	44 U

GS-44	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg	9/13/2018 (5-7) ft BGS ug/kg	9/13/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	44 U	47 U/49 U	56 U	51 U
cis-1,2-Dichloroethene	41 J	870/720	2300 {BC}	51 U
Methylene chloride	220 U	240 U/240 U	100 J	250 U
trans-1,2-Dichloroethene	44 U	60/74	62	51 U
Trichloroethene	44 U	100/58	110 {BC}	51 U
Vinyl chloride	36 U	50 {BC}/48 {BC}	300 {BCD}	41 U

GS-30-SB	2/26/2018 (0-2.5) ft BGS ug/kg	2/26/2018 (2.5-5) ft BGS ug/kg
VOCs		
Benzene	130 U	56 U
cis-1,2-Dichloroethene	130 U	56 U
Methylene chloride	630 U	280 U
trans-1,2-Dichloroethene	130 U	56 U
Trichloroethene	130 U	56 U
Vinyl chloride	100 U	45 U

GS-47	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg
VOCs		
Benzene	50 U	76 U
cis-1,2-Dichloroethene	64	300
Methylene chloride	250 U	380 U
trans-1,2-Dichloroethene	50 U	76 U
Trichloroethene	140 {BC}	110 {BC}
Vinyl chloride	40 U	1200 {BCD}

GS-48	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg	9/13/2018 (5-7) ft BGS ug/kg	9/13/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	330 U	50 U	50 U	51 U/49 U
cis-1,2-Dichloroethene	14000 {BCD}	54	50 U	49 U/240
Methylene chloride	1600 U	250 U	250 U	240 U/260 U
trans-1,2-Dichloroethene	750	50 U	50 U	51 U/49 U
Trichloroethene	330 U	50 U	50 U	51 U/49 U
Vinyl chloride	260 U	310 {BCD}	40 U	41 U/39 U

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WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

SOIL BORING RESULTS - VOCS

WILLOW RUN CREEK - ADDITIONAL SOUTHERN BANK INVESTIGATION - DELINEATION OF SVOC AND VOC SOIL IMPACTS - SEPTEMBER 2018

Project No. **11223983**
Date **July 2021**

FIGURE 2

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Data Source

LEGEND

- FENCE LINE
- SANITARY SEWER
- STORM SEWER
- WILLOW RUN CREEK SHORELINE
- BOTTOM OF SLOPE (SURVEYED 2-13-18)
- CB15 CATCH BASIN
- M.H. MANHOLE
- R.S. FENCE GATE POST
- MW19-04 GROUNDWATER SAMPLING LOCATION
- MW8 GAUGING LOCATION
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- OUTFALL #11 SAMPLING LOCATION
- GROUNDWATER FLOW DIRECTION
- SOIL BORING LOCATION FEBRUARY/MARCH 2018
- SOIL BORING LOCATION SEPTEMBER 2018
- SEEP LOCATION SEPTEMBER 2018

EGLE Generic Cleanup Criteria: Residential and Nonresidential [1]

	Drinking Water Protection B	Nonresidential Drinking Water Protection C	Groundwater Surface Water Interface Protection D	Direct Contact O	Nonresidential Direct Contact P
Semi-Volatile Organic Compounds (SVOCs) (ug/kg)					
Benzo(a)anthracene	NLL	NLL	NLL	20000	80000
Carbazole	9400	39000	1100	530000	2400000
Dibenzofuran	ID	ID	1700	ID	ID
Fluoranthene	730000	730000	5500	46000000	130000000
Naphthalene	35000	100000	730	16000000	52000000
Phenanthrene	56000	160000	2100	1600000	5200000

Notes:
1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE). Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.46 and R 299.48, respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended
U - Not detected at the associated reporting limit.
J - Estimated concentration

SVOC DELINEATION AREA

VOC DELINEATION AREA

GS-24-SB	2/26/2018 (0-2) ft BGS ug/kg	3/5/2018 (2-5) ft BGS ug/kg
SVOCs		
Benzo(a)pyrene	2600 J {O}	200 J
Carbazole	2700 U	640 U
Dibenzofuran	82 J	26 J
Fluoranthene	5900 {D}	470 J
Naphthalene	410 J	640 U
Phenanthrene	1900 J	240 J

GS-35	9/12/2018 (0-2) ft BGS ug/kg
SVOCs	
Benzo(a)pyrene	450
Carbazole	130 J
Dibenzofuran	80 J
Fluoranthene	1200
Naphthalene	47 J
Phenanthrene	990

GS-38	9/12/2018 (0-2) ft BGS ug/kg
SVOCs	
Benzo(a)pyrene	810 J
Carbazole	110 J
Dibenzofuran	1300 U
Fluoranthene	1800
Naphthalene	39 J
Phenanthrene	880 J

GS-42	9/12/2018 (0-2) ft BGS ug/kg
SVOCs	
Benzo(a)pyrene	280 J
Carbazole	40 J
Dibenzofuran	34 J
Fluoranthene	490
Naphthalene	29 J
Phenanthrene	340

GS-36	9/12/2018 (0-2) ft BGS ug/kg	9/12/2018 (2-4) ft BGS ug/kg
SVOCs		
Benzo(a)pyrene	37 J	25 J
Carbazole	310 U	320 U
Dibenzofuran	23 J	23 J
Fluoranthene	93 J	55 J
Naphthalene	15 J	14 J
Phenanthrene	160 J	130 J

GS-37	9/12/2018 (0-2) ft BGS ug/kg	9/12/2018 (3-5) ft BGS ug/kg
SVOCs		
Benzo(a)pyrene	100 J	310 U
Carbazole	310 U	310 U
Dibenzofuran	23 J	28 J
Fluoranthene	220 J	16 J
Naphthalene	12 J	26 J
Phenanthrene	190 J	150 J

GS-39	9/12/2018 (0-2) ft BGS ug/kg
SVOCs	
Benzo(a)pyrene	210 J/160 J
Carbazole	34 J/25 J
Dibenzofuran	28 J/41 J
Fluoranthene	330/460
Naphthalene	36 J/24 J
Phenanthrene	340/230 J

GS-40	9/12/2018 (0-2) ft BGS ug/kg	9/12/2018 (3-5) ft BGS ug/kg
SVOCs		
Benzo(a)pyrene	80 J	25 J
Carbazole	290 U	290 U
Dibenzofuran	18 J	25 J
Fluoranthene	180 J	52 J
Naphthalene	11 J	23 J
Phenanthrene	180 J	140 J

GS-26-SB	2/23/2018 (0-2) ft BGS ug/kg	2/23/2018 (3-5) ft BGS ug/kg
SVOCs		
Benzo(a)pyrene	6900 {O}	52 J
Carbazole	3000 J {D}	300 U
Dibenzofuran	2000 J {D}	19 J
Fluoranthene	22000 {D}	88 J
Naphthalene	3600 J {D}	24 J
Phenanthrene	19000 {D}	130 J

GS-41	9/12/2018 (0-2) ft BGS ug/kg
SVOCs	
Benzo(a)pyrene	10 J
Carbazole	290 U
Dibenzofuran	31 J
Fluoranthene	21 J
Naphthalene	39 J
Phenanthrene	150 J

0 60 120 ft

1" = 120 ft

Coordinate System: <INSERT HERE>

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WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN
SOIL BORING RESULTS - SVOCS

WILLOW RUN CREEK - ADDITIONAL SOUTHERN BANK INVESTIGATION - DELINEATION OF SVOCs AND VOC SOIL IMPACTS - SEPTEMBER 2018

Project No. **11223983**
Date **July 2021**

FIGURE 3

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Plot Date: 28 July 2021 3:01 PM

LEGEND

- FENCE LINE
- SANITARY SEWER
- STORM SEWER
- WILLOW RUN CREEK SHORELINE
- BOTTOM OF SLOPE (SURVEYED 2-13-18)
- CB15 — CATCH BASIN
- M.H. — MANHOLE
- R.S. — FENCE GATE POST
- MW19-04 — GROUNDWATER SAMPLING LOCATION
- MW8 — GAUGING LOCATION
- IG-E2 — INFILTRATION GALLERY LOCATION
- OUTFALL #11 — SAMPLING LOCATION
- GROUNDWATER FLOW DIRECTION
- SOIL BORING LOCATION FEBRUARY/MARCH 2018
- SOIL BORING LOCATION SEPTEMBER 2018
- SEEP LOCATION SEPTEMBER 2018

SEEP-2	9/14/2018 ug/L
SVOCs	
Benzo(a)pyrene	0.50 J
Carbazole	10 U
Dibenzofuran	4.1 U
Fluoranthene	0.84 J
Naphthalene	5.1 U
Phenanthrene	0.30 J
VOCs	
Benzene	0.21 J
cis-1,2-Dichloroethene	3.5
Methylene chloride	5.0 U
trans-1,2-Dichloroethene	0.24 J
Trichloroethene	1.0 U
Vinyl chloride	3.4 {AB}
Xylenes (total)	2.0 U

SEEP-3	9/14/2018 ug/L
VOCs	
Benzene	1.0 UJ
cis-1,2-Dichloroethene	1.0 U
Methylene chloride	5.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	1.0 U
Xylenes (total)	2.0 UJ

SEEP-1	9/14/2018 ug/L
SVOCs	
Benzo(a)pyrene	0.37 J
Carbazole	9.7 U
Dibenzofuran	3.9 U
Fluoranthene	0.55 J
Naphthalene	4.9 U
Phenanthrene	0.21 J
VOCs	
Benzene	1.0 UJ
cis-1,2-Dichloroethene	1.0 U
Methylene chloride	5.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	1.0 U
Xylenes (total)	2.0 UJ

SEEP-4	9/14/2018 ug/L
VOCs	
Benzene	1.0 UJ/1.0 UJ
cis-1,2-Dichloroethene	15 J/7.3 J
Methylene chloride	5.0 U/5.0 U
trans-1,2-Dichloroethene	0.47 J/0.36 J
Trichloroethene	1.0 U/1.0 U
Vinyl chloride	8.1 J {AB}/16 J {ABC}
Xylenes (total)	2.0 UJ/2.0 UJ

Volatile Organic Compounds (VOCs) (ug/L)	a	b	c
Benzene	5	5	200
cis-1,2-Dichloroethene	70	70	620
Methylene chloride	5	5	1500
trans-1,2-Dichloroethene	100	100	1500
Tri Nitroethene	5	5	200
Vinyl chloride	2	2	13
Semi-Volatile Organic Compounds (SVOCs) (ug/L)			
Benzo(a)pyrene	5	5	ID
Carbazole	85	350	10
Dibenzofuran	ID	210	4.1
Fluoranthene	210	210	1.6
Naphthalene	520	1500	11
Phenanthrene	20	150	5

Notes:
UJ - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.
R - Rejected.

(1) MDEQ Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.46 and R 299.48, respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

SVOC DELINEATION AREA

VOC DELINEATION AREA

WILLOW RUN CREEK

OVERPASS BRIDGE

SHEET PILE

HAULAWAY BLDG.

GUARD SHACK

FONS LANDFILL

TYLER ROAD

TYLER POND OUT

72-INCH YCUA SEWER

TYLER POND DAM*

BELL M.H.

16" FORCE MAIN (OLD)

36" FORCE MAIN

1FT RIM

SUMP

SHED MH1

STM MH 2

STM MH 7

STM MH 18

STORM M.H.

SAN M.H.

SAN MH

CB 62

CB 64

CB4

CB5

CB8

CB9

CB10

CB11

CB12

CB13

CB14

CB15

CB16

MH 17

OUTFALL #11

OUTFALL #13

OUTFALL #14

DMW1

DMW2

MWOS-05

TW0S-02

MW-6U-93

GS-7

0 60 120 ft

1" = 120 ft

Coordinate System: <INSERT HERE>

N

GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN
GROUNDWATER SEEP RESULTS -VOCs AND SVOCs

WILLOW RUN CREEK - ADDITIONAL SOUTHERN BANK INVESTIGATION - DELINEATION OF SVOC AND VOC IMPACTS - SEPTEMBER 2018

Project No. **11223983**
Date **July 2021**

FIGURE 4

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\MEM-185\11223983-GHD-0000-MEM-EN-0104_DE-185.dwg
Plot Date: 28 July 2021 3:14 PM

Attachments

Attachment A

Soil Boring Logs

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-29SB
DATE COMPLETED: 13 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)		
0	CL-SILTY CLAY, trace fine sand, firm, gra, dry						
10	END OF BOREHOLE @ 10.0ft BGS	10.00					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-35
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CL-SILTY CLAY, some organics, trace small subrounded pebbles, trace fine to medium subangular sand, soft, low plasticity, high dilatancy, gray, moist	2.00	1HA 2' -002				1.9
	END OF BOREHOLE @ 2.0ft BGS						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1HA 2' -002)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-36
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CH-CLAY, with silt, trace subangular gravel, trace fine sand, high plasticity, gray, wet		2' -003 1HA				5.8
4			4' -004				4.7
6	END OF BOREHOLE @ 5.0ft BGS	5.00					
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38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-37
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CH-CLAY, trace silt, trace fine sand, trace subangular grave, high plasticity, gray, wet		2' -005 1HA				2.4
4			3.5' -006				3.9
6	END OF BOREHOLE @ 5.0ft BGS	5.00					
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36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-38
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)		SAMPLE PID (ppm)
2	CH-CLAY, trace organics, very soft, fat, high plasticity, gray/brown, wet - very soft to soft at 1.5ft BGS		1HA				3.6
	END OF BOREHOLE @ 2.0ft BGS	2.00	2' -001				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-39
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CL-SANDY CLAY, with fine sand, trace fine gravel, trace organics, stiff, low plasticity, gray, dry	2.00	1HA (2' 007/ 008)				0.8 5.8
	END OF BOREHOLE @ 2.0ft BGS						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (007/ 008)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-40
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CL-SANDY CLAY, trace fine sand, trace fine gravel, stiff, low plasticity, gray, moist						6.6
			2' -009 1HA				
4	- moist to dry at 3.0ft BGS		3.5' -010				0.9
6	END OF BOREHOLE @ 5.0ft BGS	5.00					
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10							
12							
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28							
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36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-41
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CL-SANDY CLAY, trace fine sand, trace organics, firm, low plasticity, gray, dry	2.00	1HA 1.5 012				6.1
	END OF BOREHOLE @ 2.0ft BGS						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1HA)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-42
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CH-CLAY, trace fine sand, trace organics, soft, medium plasticity, gray, moist - moist to dry at 1.5ft BGS END OF BOREHOLE @ 1.5ft BGS	1.50	1HA 1.5' -011				5.1 5.8

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1HA 1.5' -011)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-43
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
0	CL-CLAY, with fine sand, trace fine gravel, very soft, medium plasticity, gray, wet		0-2' -013				0.6
2			1HA				0.8
4			3-5' -014				1.4
6			5-7' -015				1.3
8			2HA				
10			8-10' -016				1.4
	END OF BOREHOLE @ 10.0ft BGS	10.00					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-44
DATE COMPLETED: 13 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	PID (ppm)
0	SM-SILTY SAND, with clay, trace fine gravel, compact, poorly graded, gray, dry		0-2' -022				2.9
2			1HA				4.2
4			3-5' -023/ 024				17.3
	CL-SILTY SANDY CLAY, firm, poorly graded, gray, dry	4.20					
	SM-SILTY SAND, with clay, trace fine gravel, compact, poorly graded, gray, dry	4.80					
6	CL-SILTY SANDY CLAY, firm, poorly graded, gray, dry	6.00	5-7' -025				12.5
8			2HA				
			7-10' -026				3.8
10	END OF BOREHOLE @ 10.0ft BGS	10.00					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-45
DATE COMPLETED: 13 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	PID (ppm)
2	CL-SILTY CLAY, with fine sand, trace organics, compact, poorly graded, gray, dry		0-2' -027				31.2
			1HA				18.5
4			3-5' -028				
6			5-7' -029				43.5
	CL-SILTY CLAY, trace fine gravel, trace organics, very stiff, gray, dry, no odor, black staining - no black staining at 7.5ft BGS	7.00	2HA				43.1
8			7-10' -030				9.7
10	END OF BOREHOLE @ 10.0ft BGS	10.00					
12							
14							
16							
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36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-46
DATE COMPLETED: 12 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
	CL-CLAY, trace fine sand, trace fine gravel, soft, medium plasticity, gray, wet						
2	SC-SAND, with clay, trace fine gravel, trace organics, poorly graded, brown, dry	1.00	0-2' -017				2.7
	- clay lens, trace fine sand, trace fine gravel, soft, medium plasticity, gray, wet at 2.5ft BGS		1HA				283
4	SC-SILTY CLAYEY SAND, trace fine gravel, trace organics, compact, poorly graded, gray, dry, odor	3.50	3-5' -018				
	CL-SILTY CLAY, trace fine sand, firm, gray, dry	4.80					142
6			5-7' -019				
			2HA				9.6
8			7-10' -020				
							3.2
10	END OF BOREHOLE @ 10.0ft BGS	10.00					
12							
14							
16							
18							
20							
22							
24							
26							
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30							
32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-47
DATE COMPLETED: 13 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
0	CL-SILTY CLAY, with fine sand, trace organics, compact, poorly graded, gray, dry		0-2' -031				6.1
2	CL-SILTY CLAY, with fine sand, soft, medium plasticity, gray, wet, odor, black staining	2.50	1HA				6.0
4			3-5' -032				6.1
5	END OF BOREHOLE @ 5.0ft BGS	5.00					
6							
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-48
DATE COMPLETED: 13 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
0	CL-SILTY CLAY, with fine sand, trace organics, compact, poorly graded, gray, dry	0.60	0-2' -037				23.5
2	CL-SILTY CLAY, trace fine sand, trace organics, stiff, medium plasticity, gray, dry		1HA				14.5
4			3-5' -038				7.8
6	- less cohesive at 5.8ft BGS		5-7' -039				4.6
8			2HA				
10	END OF BOREHOLE @ 10.0ft BGS	10.00	7-10' -040/ 041				2.1
12							
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38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-49
DATE COMPLETED: 13 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CL-SILTY CLAY, with fine sand, trace organics, loose, soft, low plasticity, gray, moist		0-2' -035				2.9
			1HA				6.1
4	- gray to gray/green, minor odor at 4.5ft BGS		3-5' -036				6.4
6	END OF BOREHOLE @ 5.0ft BGS	5.00					
8							
10							
12							
14							
16							
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32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

STRATIGRAPHIC LOG
(OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-50
DATE COMPLETED: 13 September 2018
DRILLING METHOD: HAND/PNEUMATIC AUGER
FIELD PERSONNEL: D. ANTULIS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE	SAMPLE PID (ppm)
2	CL-SILTY CLAY, with fine sand, trace organics, compact, poorly graded, gray, dry		0-2' -033				3.7
			1HA				
4			3-5' -034				7.5
6	END OF BOREHOLE @ 5.0ft BGS	5.00					
8							
10							
12							
14							
16							
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32							
34							
36							
38							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (0-2' -033)

OVERBURDEN LOG 017303-WI.GPJ GHD_Corp 10/30/18

Attachment B

Analytical Table – Soil Results

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:								GS-29-SB	GS-35	GS-36	GS-36	GS-37	GS-37	GS-38	GS-39	GS-39
Sample Identification:		**EGLE Generic Cleanup Criteria: Residential and Nonresidential** [1]						**S-17303-091318-DA-021**	**S-17303-091218-DA-002**	**S-17303-091218-DA-003**	**S-17303-091218-DA-004**	**S-17303-091218-DA-005**	**S-17303-091218-DA-006**	**S-17303-091218-DA-001**	**S-17303-091218-DA-007**	**S-17303-091218-DA-008**
Sample Date:		Background [2]	Drinking	Residential Drir	Groundwater	Direct	Nonresidential Direc	**9/13/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**
Sample Depth:		Table 4-Clay	Water	Water	Surface Water	Contact	Contact	**(8-10) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(2-4) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**
Sample Type:		Huron - Erie Lobe	Protection	Protection	erface Protection											**Duplicate**
Parameters	**Units**	a	b	c	d	o	p									
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	ug/kg		4000	4000	1800	500000000	1000000000	55 U	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg		170	700	1600	53000	240000	55 U	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	ug/kg		100	100	6600	180000	840000	55 U	--	--	--	--	--	--	--	--
1,1-Dichloroethane	ug/kg		18000	50000	15000	27000000	87000000	55 U	--	--	--	--	--	--	--	--
1,1-Dichloroethene	ug/kg		140	140	2600	200000	660000	55 U	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	ug/kg		4200	4200	5900	990000	5800000	270 U	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg		10	10	ID	4400000	20000	270 U	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	ug/kg		20	20	110	92	430	270 U	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	ug/kg		14000	14000	280	19000000	63000000	110 U	--	--	--	--	--	--	--	--
1,2-Dichloroethane	ug/kg		100	100	7200	91000	420000	55 U	--	--	--	--	--	--	--	--
1,2-Dichloropropane	ug/kg		100	100	4600	140000	660000	55 U	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	ug/kg		170	480	680	200000	660000	110 U	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	ug/kg		1700	1700	360	400000	1900000	110 U	--	--	--	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg		260000	760000	44000	120000000	700000000	820 U	--	--	--	--	--	--	--	--
2-Hexanone	ug/kg		20000	58000	ID	32000000	100000000	2700 U	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	ug/kg		36000	100000	ID	56000000	180000000	2700 U	--	--	--	--	--	--	--	--
Acetone	ug/kg		15000	42000	34000	23000000	73000000	820 U	--	--	--	--	--	--	--	--
Benzene	ug/kg		100	100	4000	180000	840000	55 U	--	--	--	--	--	--	--	--
Bromodichloromethane	ug/kg		1600	1600	ID	110000	490000	110 U	--	--	--	--	--	--	--	--
Bromoform	ug/kg		1600	1600	ID	820000	3800000	110 U	--	--	--	--	--	--	--	--
Bromomethane (Methyl bromide)	ug/kg		200	580	100	320000	1000000	270 U	--	--	--	--	--	--	--	--
Carbon disulfide	ug/kg		16000	46000	ID	7200000	43000000	270 U	--	--	--	--	--	--	--	--
Carbon tetrachloride	ug/kg		100	100	760	96000	440000	55 U	--	--	--	--	--	--	--	--
Chlorobenzene	ug/kg		2000	2000	500	4300000	14000000	55 U	--	--	--	--	--	--	--	--
Chloroethane	ug/kg		8600	34000	22000	2600000	12000000	270 U	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	ug/kg		1600	1600	7000	1200000	5500000	55 U	--	--	--	--	--	--	--	--
Chloromethane (Methyl chloride)	ug/kg		5200	22000	ID	1600000	7400000	270 U	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	ug/kg		1400	1400	12000	2500000	8000000	970	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	ug/kg							55 U	--	--	--	--	--	--	--	--
Cyclohexane	ug/kg							1300 U	--	--	--	--	--	--	--	--
Dibromochloromethane	ug/kg		1600	1600	ID	110000	500000	55 U	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	ug/kg		95000	270000	ID	52000000	170000000	110 U	--	--	--	--	--	--	--	--
Ethylbenzene	ug/kg		1500	1500	360	22000000	71000000	55 U	--	--	--	--	--	--	--	--
Isopropyl benzene	ug/kg		91000	260000	3200	25000000	80000000	270 U	--	--	--	--	--	--	--	--
Methyl acetate	ug/kg							1300 U	--	--	--	--	--	--	--	--
Methyl cyclohexane	ug/kg							100 J	--	--	--	--	--	--	--	--
Methyl tert butyl ether (MTBE)	ug/kg		800	800	140000	1500000	7100000	270 U	--	--	--	--	--	--	--	--
Methylene chloride	ug/kg		100	100	30000	1300000	5800000	270 U	--	--	--	--	--	--	--	--
Styrene	ug/kg		2700	2700	2100	400000	1900000	55 U	--	--	--	--	--	--	--	--
Tetrachloroethene	ug/kg		100	100	1200	200000	930000	55 U	--	--	--	--	--	--	--	--
Toluene	ug/kg		16000	16000	5400	50000000	160000000	110 U	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	ug/kg		2000	2000	30000	3800000	12000000	55 U	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	ug/kg							55 U	--	--	--	--	--	--	--	--
Trichloroethene	ug/kg		100	100	4000	110000	660000	**990** [bc]	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	ug/kg		52000	150000		79000000	260000000	110 U	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (CFC-113)	ug/kg		9000000	9000000	1700	1000000000	1000000000	270 U	--	--	--	--	--	--	--	--
Vinyl chloride	ug/kg		40	40	260	3800	34000	44 U	--	--	--	--	--	--	--	--
Xylenes (total)	ug/kg		5600	5600	980	410000000	1000000000	160 U	--	--	--	--	--	--	--	--

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:								GS-29-SB	GS-35	GS-36	GS-36	GS-37	GS-37	GS-38	GS-39	GS-39
Sample Identification:		**EGLE Generic Cleanup Criteria: Residential and Nonresidential** (1)						S-17303-091318-DA-021	S-17303-091218-DA-002	S-17303-091218-DA-003	S-17303-091218-DA-004	S-17303-091218-DA-005	S-17303-091218-DA-006	S-17303-091218-DA-001	S-17303-091218-DA-007	S-17303-091218-DA-008
Sample Date:		Background (2)	Drinking	esidential Dri	Groundwater	Direct	Nonresidential Direc	9/13/2018	9/12/2018	9/12/2018	9/12/2018	9/12/2018	9/12/2018	9/12/2018	9/12/2018	9/12/2018
Sample Depth:		Table 4-Clay	Water	Water	Surface Wate	Contact	Contact	(8-10) ft BGS	(0-2) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(3-5) ft BGS	(0-2) ft BGS	(0-2) ft BGS	(0-2) ft BGS
Sample Type:		Huron - Erie Lobe	Protection	Protection	erface Protection											Duplicate
Parameters	**Units**	a	b	c	d	o	p									
Semi-Volatile Organic Compounds (SVOCs)																
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl)	ug/kg							--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2,4,5-Trichlorophenol	ug/kg		39000	110000		23000000	73000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2,4,6-Trichlorophenol	ug/kg		2400	9400	330	710000	3300000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2,4-Dichlorophenol	ug/kg		1500	4200	330	660000	3900000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2,4-Dimethylphenol	ug/kg		7400	20000	7600	11000000	36000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2,4-Dinitrophenol	ug/kg							--	180 U	180 U	180 U	170 U	170 U	760 U	170 U	170 U
2,4-Dinitrotoluene	ug/kg		430	640		48000	220000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2,6-Dinitrotoluene	ug/kg							--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2-Chloronaphthalene	ug/kg		620000	1800000		56000000	180000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2-Chlorophenol	ug/kg		900	2600	360	1400000	4500000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2-Methylnaphthalene	ug/kg		57000	170000	4200	8100000	26000000	--	49 J	50 J	61 J	50 J	91 J	89 J	120 J	75 J
2-Methylphenol	ug/kg		7400	20000	1000	11000000	36000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
2-Nitroaniline	ug/kg							--	240 U	240 U	240 U	230 U	230 U	1000 U	230 U	220 U
2-Nitrophenol	ug/kg		400	1200	ID	630000	2000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
3&4-Methylphenol	ug/kg		7400	20000	1000	11000000	36000000	--	49 J	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
3,3'-Dichlorobenzidine	ug/kg		2000	2000	2000	6600	30000	--	1900 U	1900 U	1900 U	1900 U	1800 U	8100 U	1800 U	1800 U
3-Nitroaniline	ug/kg							--	240 U	240 U	240 U	230 U	230 U	1000 U	230 U	220 U
4,6-Dinitro-2-methylphenol	ug/kg		830	830		79000	260000	--	180 U	180 U	180 U	170 U	170 U	760 U	170 U	170 U
4-Bromophenyl phenyl ether	ug/kg							--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
4-Chloro-3-methylphenol	ug/kg		5800	16000	280	4500000	15000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
4-Chloroaniline	ug/kg							--	240 U	240 U	240 U	230 U	230 U	1000 U	230 U	220 U
4-Chlorophenyl phenyl ether	ug/kg							--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
4-Nitroaniline	ug/kg							--	240 U	240 U	240 U	230 U	230 U	1000 U	230 U	220 U
4-Nitrophenol	ug/kg							--	390 U	390 U	400 U	380 U	380 U	1700 U	370 U	370 U
Acenaphthene	ug/kg		300000	880000	8700	41000000	130000000	--	130 J	310 U	320 U	20 J	310 U	95 J	40 J	26 J
Acenaphthylene	ug/kg		5900	17000	ID	1600000	5200000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Acetophenone	ug/kg		30000	88000	ID	47000000	150000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Anthracene	ug/kg		41000	41000	ID	230000000	730000000	--	190 J	18 J	15 J	25 J	9.7 J	160 J	53 J	37 J
Atrazine	ug/kg		60	60	150	71000	330000	--	47 U	48 U	48 U	47 U	46 U	200 U	45 U	45 U
Benzaldehyde	ug/kg							--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Benzo(a)anthracene	ug/kg		NLL	NLL	NLL	20000	80000	--	490	33 J	20 J	93 J	310 U	670 J	190 J	140 J
Benzo(a)pyrene	ug/kg		NLL	NLL	NLL	2000	8000	--	450	37 J	25 J	100 J	310 U	810 J	210 J	160 J
Benzo(b)fluoranthene	ug/kg		NLL	NLL	NLL	20000	80000	--	620	61 J	44 J	130 J	17 J	1400	310	230 J
Benzo(g,h,i)perylene	ug/kg		NLL	NLL	NLL	2500000	7000000	--	300 J	45 J	35 J	71 J	27 J	710 J	180 J	130 J
Benzo(k)fluoranthene	ug/kg		NLL	NLL	NLL	200000	800000	--	260 J	27 J	15 J	64 J	310 U	480 J	150 J	100 J
Biphenyl (1,1-Biphenyl)	ug/kg							--	310 U	310 U	320 U	310 U	21 J	1300 U	23 J	290 U
bis(2-Chloroethoxy)methane	ug/kg							--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
bis(2-Chloroethyl)ether	ug/kg		100	170	100	13000	58000	--	95 U	95 U	96 U	93 U	92 U	400 U	90 U	89 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg		NLL	NLL	NLL	2800000	12000000	--	160 J	170 J	78 J	96 J	73 J	430 J	220 J	160 J
Butyl benzylphthalate (BBP)	ug/kg		2200000	5600000	120000	36000000	120000000	--	33 J	310 U	320 U	310 U	310 U	130 J	30 J	290 U
Caprolactam	ug/kg		120000	340000		53000000	310000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Carbazole	ug/kg		9400	39000	1100	530000	2400000	--	130 J	310 U	320 U	310 U	310 U	110 J	34 J	25 J
Chrysene	ug/kg		NLL	NLL	NLL	2000000	8000000	--	560	78 J	61 J	120 J	47 J	980 J	290 J	210 J
Dibenz(a,h)anthracene	ug/kg		NLL	NLL	NLL	2000	8000	--	84 J	310 U	320 U	19 J	310 U	140 J	39 J	30 J
Dibenzofuran	ug/kg		ID	ID	1700	ID	ID	--	80 J	23 J	23 J	23 J	28 J	1300 U	41 J	28 J
Diethyl phthalate	ug/kg		110000	320000	2200	170000000	550000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Dimethyl phthalate	ug/kg		1500000	4200000		1000000000	1000000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Di-n-butylphthalate (DBP)	ug/kg		960000	2700000	11000	27000000	87000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	25 J
Di-n-octyl phthalate (DnOP)	ug/kg		100000000	290000000	ID	6900000	20000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Fluoranthene	ug/kg		730000	730000	5500	46000000	130000000	--	1200	93 J	55 J	220 J	16 J	1800	460	330
Fluorene	ug/kg		390000	890000	5300	27000000	87000000	--	120 J	14 J	11 J	17 J	310 U	84 J	38 J	28 J
Hexachlorobenzene	ug/kg		1800	1800	350	8900	37000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Hexachlorobutadiene	ug/kg		26000	72000	91	100000	470000	--	47 U	48 U	48 U	47 U	46 U	200 U	45 U	45 U
Hexachlorocyclopentadiene	ug/kg		320000	320000	ID	2300000	6700000	--	310 U	310 U	320 U	R	310 U	1300 U	300 U	290 U
Hexachloroethane	ug/kg		430	1200	1800	230000	730000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Indeno(1,2,3-cd)pyrene	ug/kg		NLL	NLL	NLL	20000	80000	--	260 J	26 J	18 J	55 J	310 U	580 J	140 J	100 J
Isophorone	ug/kg		15000	62000	26000	4800000	22000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Naphthalene	ug/kg		35000	100000	730	16000000	52000000	--	47 J	15 J	14 J	12 J	26 J	39 J	36 J	24 J
Nitrobenzene	ug/kg		330	330	3600	100000	340000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
N-Nitrosodi-n-propylamine	ug/kg		330	330		1200	5400	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
N-Nitrosodiphenylamine	ug/kg		5400	22000		1700000	7800000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Pentachlorophenol	ug/kg		22	22	26500	90000	320000	--	180 U	180 U	180 U	170 U	170 U	760 U	170 U	170 U
Phenanthrene	ug/kg		56000	160000	2100	1600000	5200000	--	990	160 J	130 J	190 J	150 J	880 J	340	230 J
Phenol	ug/kg		88000	260000	9000	40000000	230000000	--	310 U	310 U	320 U	310 U	310 U	1300 U	300 U	290 U
Pyrene	ug/kg		480000	480000	ID	29000000	84000000	--	1100	95 J	61 J	210 J	30 J	1700	430	310

Notes:

(1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.46 and R 299.48, respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended
(2) EGLE - EGLE, Remediation and Redevelopment Division, Soil Background and Use of the 2005 Michigan Background Soil Survey, Table 4-Clay, Huron-Erie Lobe, September 2019.

U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.
R - Rejected.

37^{abc} - boxed cell denotes exceedance of cleanup criteria screening level identified by superscript.

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		GS-40	GS-40	GS-41	GS-42	GS-43	GS-43	GS-43	GS-43	GS-44	GS-44	GS-44
Sample Identification:		**S-17303-091218-DA-009**	**S-17303-091218-DA-010**	**S-17303-091218-DA-012**	**S-17303-091218-DA-011**	**S-17303-091218-DA-013**	**S-17303-091218-DA-014**	**S-17303-091218-DA-015**	**S-17303-091218-DA-016**	**S-17303-091318-DA-022**	**S-17303-091318-DA-023**	**S-17303-091318-DA-024**
Sample Date:		**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**
Sample Depth:		**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(3-5) ft BGS**
Sample Type:												**Duplicate**
Parameters	**Units**											
Volatile Organic Compounds (VOCs)												
1,1,1-Trichloroethane	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
1,1,2-Trichloroethane	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
1,1-Dichloroethane	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
1,1-Dichloroethene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
1,2,4-Trichlorobenzene	ug/kg	--	--	--	--	260 UJ	260 UJ	260 UJ	250 UJ	220 U	240 U	240 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
1,2-Dichlorobenzene	ug/kg	--	--	--	--	100 U	100 U	100 U	99 U	89 U	98 U	95 U
1,2-Dichloroethane	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
1,2-Dichloropropane	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
1,3-Dichlorobenzene	ug/kg	--	--	--	--	100 U	100 U	100 U	99 U	89 U	98 U	95 U
1,4-Dichlorobenzene	ug/kg	--	--	--	--	100 U	100 U	100 U	99 U	89 U	98 U	95 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	--	--	--	--	770 U	790 U	770 U	740 U	670 U	730 U	710 U
2-Hexanone	ug/kg	--	--	--	--	2600 U	2600 U	2600 U	2500 U	2200 U	2400 U	2400 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	ug/kg	--	--	--	--	2600 U	2600 U	2600 U	2500 U	2200 U	2400 U	2400 U
Acetone	ug/kg	--	--	--	--	770 U	790 U	770 U	740 U	670 U	730 U	710 U
Benzene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Bromodichloromethane	ug/kg	--	--	--	--	100 U	100 U	100 U	99 U	89 U	98 U	95 U
Bromoform	ug/kg	--	--	--	--	100 U	100 U	100 U	99 U	89 U	98 U	95 U
Bromomethane (Methyl bromide)	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
Carbon disulfide	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
Carbon tetrachloride	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Chlorobenzene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Chloroethane	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
Chloroform (Trichloromethane)	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Chloromethane (Methyl chloride)	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
cis-1,2-Dichloroethene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	41 J	870	720
cis-1,3-Dichloropropene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Cyclohexane	ug/kg	--	--	--	--	1200 U	1300 U	1200 U	1200 U	1100 U	1200 U	1100 U
Dibromochloromethane	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Dichlorodifluoromethane (CFC-12)	ug/kg	--	--	--	--	100 U	100 U	100 U	99 U	89 U	98 U	95 U
Ethylbenzene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Isopropyl benzene	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
Methyl acetate	ug/kg	--	--	--	--	180 J	110 J	1200 U	180 J	1100 U	98 J	1100 U
Methyl cyclohexane	ug/kg	--	--	--	--	1200 U	1300 U	1200 U	1200 U	1100 U	1200 U	1100 U
Methyl tert butyl ether (MTBE)	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
Methylene chloride	ug/kg	--	--	--	--	**410[bc]**	**240 J[bc]**	**300[bc]**	**330[bc]**	220 U	240 U	240 U
Styrene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Tetrachloroethene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Toluene	ug/kg	--	--	--	--	100 U	100 U	100 U	99 U	89 U	98 U	95 U
trans-1,2-Dichloroethene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	74	60
trans-1,3-Dichloropropene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	49 U	47 U
Trichloroethene	ug/kg	--	--	--	--	52 U	52 U	51 U	49 U	44 U	100	58
Trichlorofluoromethane (CFC-11)	ug/kg	--	--	--	--	100 U	100 U	100 U	99 U	89 U	98 U	95 U
Trifluorotrichloroethane (CFC-113)	ug/kg	--	--	--	--	260 U	260 U	260 U	250 U	220 U	240 U	240 U
Vinyl chloride	ug/kg	--	--	--	--	41 U	42 U	41 U	39 U	36 U	**48[bc]**	**50[bc]**
Xylenes (total)	ug/kg	--	--	--	--	150 U	160 U	150 U	150 U	130 U	150 U	140 U

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		GS-40	GS-40	GS-41	GS-42	GS-43	GS-43	GS-43	GS-43	GS-44	GS-44	GS-44
Sample Identification:		**S-17303-091218-DA-009**	**S-17303-091218-DA-010**	**S-17303-091218-DA-012**	**S-17303-091218-DA-011**	**S-17303-091218-DA-013**	**S-17303-091218-DA-014**	**S-17303-091218-DA-015**	**S-17303-091218-DA-016**	**S-17303-091318-DA-022**	**S-17303-091318-DA-023**	**S-17303-091318-DA-024**
Sample Date:		**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**
Sample Depth:		**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(3-5) ft BGS**
Sample Type:												**Duplicate**
Parameters	**Units**											
Semi-Volatile Organic Compounds (SVOCs)												
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl)	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2,4-Dichlorophenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2,4-Dimethylphenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2,4-Dinitrophenol	ug/kg	170 U	170 U	170 U	170 U	--	--	--	--	--	--	--
2,4-Dinitrotoluene	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2,6-Dinitrotoluene	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2-Chloronaphthalene	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2-Chlorophenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2-Methylnaphthalene	ug/kg	49 J	92 J	190 J	92 J	--	--	--	--	--	--	--
2-Methylphenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
2-Nitroaniline	ug/kg	220 U	220 U	220 U	230 U	--	--	--	--	--	--	--
2-Nitrophenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
3&4-Methylphenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ug/kg	1800 U	1800 U	1800 U	1800 U	--	--	--	--	--	--	--
3-Nitroaniline	ug/kg	220 U	220 U	220 U	230 U	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	ug/kg	170 U	170 U	170 U	170 U	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
4-Chloroaniline	ug/kg	220 U	220 U	220 U	230 U	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
4-Nitroaniline	ug/kg	220 U	220 U	220 U	230 U	--	--	--	--	--	--	--
4-Nitrophenol	ug/kg	370 U	370 U	370 U	370 U	--	--	--	--	--	--	--
Acenaphthene	ug/kg	290 U	290 U	16 J	27 J	--	--	--	--	--	--	--
Acenaphthylene	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Acetophenone	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Anthracene	ug/kg	19 J	15 J	8.8 J	58 J	--	--	--	--	--	--	--
Atrazine	ug/kg	45 U	44 U	44 U	45 U	--	--	--	--	--	--	--
Benzaldehyde	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Benzo(a)anthracene	ug/kg	75 J	19 J	8.8 J	200 J	--	--	--	--	--	--	--
Benzo(a)pyrene	ug/kg	80 J	25 J	10 J	280 J	--	--	--	--	--	--	--
Benzo(b)fluoranthene	ug/kg	120 J	41 J	20 J	510	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	ug/kg	69 J	31 J	27 J	250 J	--	--	--	--	--	--	--
Benzo(k)fluoranthene	ug/kg	49 J	11 J	290 U	160 J	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	ug/kg	290 U	290 U	25 J	19 J	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	ug/kg	89 U	89 U	89 U	91 U	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg	100 J	97 J	76 J	270 J	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Caprolactam	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Carbazole	ug/kg	290 U	290 U	290 U	40 J	--	--	--	--	--	--	--
Chrysene	ug/kg	130 J	59 J	50 J	330	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	ug/kg	14 J	290 U	290 U	57 J	--	--	--	--	--	--	--
Dibenzofuran	ug/kg	18 J	25 J	31 J	34 J	--	--	--	--	--	--	--
Diethyl phthalate	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Dimethyl phthalate	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	ug/kg	290 U	290 U	24 J	25 J	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Fluoranthene	ug/kg	180 J	52 J	21 J	490	--	--	--	--	--	--	--
Fluorene	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Hexachlorobenzene	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Hexachlorobutadiene	ug/kg	45 U	44 U	44 U	45 U	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Hexachloroethane	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/kg	48 J	13 J	9.7 J	220 J	--	--	--	--	--	--	--
Isophorone	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Naphthalene	ug/kg	11 J	23 J	39 J	29 J	--	--	--	--	--	--	--
Nitrobenzene	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Pentachlorophenol	ug/kg	170 U	170 U	170 U	170 U	--	--	--	--	--	--	--
Phenanthrene	ug/kg	180 J	140 J	150 J	340	--	--	--	--	--	--	--
Phenol	ug/kg	290 U	290 U	290 U	300 U	--	--	--	--	--	--	--
Pyrene	ug/kg	160 J	62 J	37 J	480	--	--	--	--	--	--	--

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		GS-44	GS-44	GS-45	GS-45	GS-45	GS-45	GS-46	GS-46	GS-46	GS-46	GS-47	GS-47	GS-48
Sample Identification:		**S-17303-091318-DA-025**	**S-17303-091318-DA-026**	**S-17303-091318-DA-027**	**S-17303-091318-DA-028**	**S-17303-091318-DA-029**	**S-17303-091318-DA-030**	**S-17303-091218-DA-017**	**S-17303-091218-DA-018**	**S-17303-091218-DA-019**	**S-17303-091218-DA-020**	**S-17303-091318-DA-031**	**S-17303-091318-DA-032**	**S-17303-091318-DA-037**
Sample Date:		**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**
Sample Depth:		**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**
Sample Type:														
Parameters	**Units**													
Volatile Organic Compounds (VOCs)														
1,1,1-Trichloroethane	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
1,1,2,2-Tetrachloroethane	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
1,1,2-Trichloroethane	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
1,1-Dichloroethane	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
1,1-Dichloroethene	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
1,2,4-Trichlorobenzene	ug/kg	280 U	250 U	130 J	1000 U	14000 U	5000 U	240 UJ	2900 UJ	27000 UJ	5400 UJ	250 U	49 J	1600 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
1,2-Dichlorobenzene	ug/kg	110 U	100 U	97 U	400 U	5500 U	2000 U	94 U	1100 U	11000 U	2100 U	100 U	150 U	650 U
1,2-Dichloroethane	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
1,2-Dichloropropane	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
1,3-Dichlorobenzene	ug/kg	110 U	100 U	97 U	400 U	5500 U	2000 U	94 U	1100 U	11000 U	2100 U	100 U	150 U	650 U
1,4-Dichlorobenzene	ug/kg	110 U	100 U	97 U	400 U	5500 U	2000 U	94 U	1100 U	11000 U	2100 U	100 U	150 U	650 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	850 U	760 U	730 U	3000 U	41000 U	15000 U	710 U	8600 U	80000 U	16000 U	750 U	1100 U	4900 U
2-Hexanone	ug/kg	2800 U	2500 U	2400 U	10000 U	140000 U	50000 U	2400 U	29000 U	270000 U	54000 U	2500 U	3800 U	16000 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	ug/kg	2800 U	2500 U	2400 U	10000 U	140000 U	50000 U	2400 U	29000 U	270000 U	54000 U	2500 U	3800 U	16000 U
Acetone	ug/kg	850 U	760 U	120 J	3000 U	41000 U	15000 U	710 U	8600 U	80000 U	16000 U	750 U	1100 U	4900 U
Benzene	ug/kg	56 U	51 U	48 U	**250**[bc]	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Bromodichloromethane	ug/kg	110 U	100 U	97 U	400 U	5500 U	2000 U	94 U	1100 U	11000 U	2100 U	100 U	150 U	650 U
Bromoform	ug/kg	110 U	100 U	97 U	400 U	5500 U	2000 U	94 U	1100 U	11000 U	2100 U	100 U	150 U	650 U
Bromomethane (Methyl bromide)	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
Carbon disulfide	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
Carbon tetrachloride	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Chlorobenzene	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Chloroethane	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
Chloroform (Trichloromethane)	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Chloromethane (Methyl chloride)	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
cis-1,2-Dichloroethene	ug/kg	**2300**[bc]	51 U	**2400**[bc]	**8900**[bc]	**90000**[bcd]	**45000**[bcd]	47 U	**45000**[bcd]	**120000**[bcd]	**63000**[bcd]	64	300	**14000**[bcd]
cis-1,3-Dichloropropene	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Cyclohexane	ug/kg	1400 U	1200 U	1200 U	4800 U	66000 U	24000 U	1100 U	14000 U	130000 U	26000 U	1200 U	1800 U	7800 U
Dibromochloromethane	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Dichlorodifluoromethane (CFC-12)	ug/kg	110 U	100 U	97 U	400 U	5500 U	2000 U	94 U	1100 U	11000 U	2100 U	100 U	150 U	650 U
Ethylbenzene	ug/kg	56 U	51 U	48 U	180 J	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Isopropyl benzene	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
Methyl acetate	ug/kg	140 J	130 J	200 J	4800 U	66000 U	24000 U	1100 U	14000 U	130000 U	26000 U	310 J	850 J	7800 U
Methyl cyclohexane	ug/kg	110 J	160 J	1200 U	260 J	66000 U	24000 U	1100 U	14000 U	130000 U	26000 U	1200 U	1800 U	7800 U
Methyl tert butyl ether (MTBE)	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
Methylene chloride	ug/kg	100 J	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
Styrene	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Tetrachloroethene	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Toluene	ug/kg	110 U	100 U	97 U	400 U	5500 U	2000 U	94 U	1100 U	11000 U	2100 U	100 U	150 U	650 U
trans-1,2-Dichloroethene	ug/kg	62	51 U	420	1900	2800 U	990 U	47 U	**3300**[bc]	5400 U	1100 U	50 U	76 U	750
trans-1,3-Dichloropropene	ug/kg	56 U	51 U	48 U	200 U	2800 U	990 U	47 U	570 U	5400 U	1100 U	50 U	76 U	330 U
Trichloroethene	ug/kg	**110**[bc]	51 U	**420**[bc]	**1100**[bc]	**82000**[bcd]	**29000**[bcd]	47 U	**6300**[bcd]	**250000**[bcdo]	**9800**[bcd]	**140**[bc]	**110**[bc]	330 U
Trichlorofluoromethane (CFC-11)	ug/kg	110 U	100 U	97 U	400 U	5500 U	2000 U	94 U	1100 U	11000 U	2100 U	100 U	150 U	650 U
Trifluorotrichloroethane (CFC-113)	ug/kg	280 U	250 U	240 U	1000 U	14000 U	5000 U	240 U	2900 U	27000 U	5400 U	250 U	380 U	1600 U
Vinyl chloride	ug/kg	**300**[bcd]	41 U	**260**[bc]	**1600**[bcd]	**10000**[bcdo]	**4200**[bcdo]	38 U	**2300**[bcd]	4300 U	**3000**[bcd]	40 U	**1200**[bcd]	260 U
Xylenes (total)	ug/kg	170 U	150 U	63 J	670	8300 U	3000 U	140 U	1700 U	16000 U	3200 U	150 U	230 U	980 U

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		GS-44	GS-44	GS-45	GS-45	GS-45	GS-45	GS-46	GS-46	GS-46	GS-46	GS-47	GS-47	GS-48
Sample Identification:		**S-17303-091318-DA-025**	**S-17303-091318-DA-026**	**S-17303-091318-DA-027**	**S-17303-091318-DA-028**	**S-17303-091318-DA-029**	**S-17303-091318-DA-030**	**S-17303-091218-DA-017**	**S-17303-091218-DA-018**	**S-17303-091218-DA-019**	**S-17303-091218-DA-020**	**S-17303-091318-DA-031**	**S-17303-091318-DA-032**	**S-17303-091318-DA-037**
Sample Date:		**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/12/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**
Sample Depth:		**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**
Sample Type:														
Parameters	**Units**													
Semi-Volatile Organic Compounds (SVOCs)														
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		**GS-48**	**GS-48**	**GS-48**	**GS-48**	**GS-49**	**GS-49**	**GS-50**	**GS-50**
Sample Identification:		**S-17303-091318-DA-038**	**S-17303-091318-DA-039**	**S-17303-091318-DA-040**	**S-17303-091318-DA-041**	**S-17303-091318-DA-035**	**S-17303-091318-DA-036**	**S-17303-091318-DA-033**	**S-17303-091318-DA-034**
Sample Date:		**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**
Sample Depth:		**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**
Sample Type:					**Duplicate**				
Parameters	**Units**								
Volatile Organic Compounds (VOCs)									
1,1,1-Trichloroethane	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
1,1,2,2-Tetrachloroethane	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
1,1,2-Trichloroethane	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
1,1-Dichloroethane	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
1,1-Dichloroethene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
1,2,4-Trichlorobenzene	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
1,2-Dichlorobenzene	ug/kg	100 U	100 U	98 U	100 U	110 U	100 U	110 U	97 U
1,2-Dichloroethane	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
1,2-Dichloropropane	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
1,3-Dichlorobenzene	ug/kg	100 U	100 U	98 U	100 U	110 U	100 U	110 U	97 U
1,4-Dichlorobenzene	ug/kg	100 U	100 U	98 U	100 U	110 U	100 U	110 U	97 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	760 U	750 U	730 U	770 U	830 U	760 U	800 U	730 U
2-Hexanone	ug/kg	2500 U	2500 U	2400 U	2600 U	2800 U	2500 U	2700 U	2400 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	ug/kg	2500 U	2500 U	2400 U	2600 U	2800 U	2500 U	2700 U	2400 U
Acetone	ug/kg	760 U	750 U	730 U	770 U	830 U	760 U	800 U	730 U
Benzene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Bromodichloromethane	ug/kg	100 U	100 U	98 U	100 U	110 U	100 U	110 U	97 U
Bromoform	ug/kg	100 U	100 U	98 U	100 U	110 U	100 U	110 U	97 U
Bromomethane (Methyl bromide)	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
Carbon disulfide	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
Carbon tetrachloride	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Chlorobenzene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Chloroethane	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
Chloroform (Trichloromethane)	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Chloromethane (Methyl chloride)	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
cis-1,2-Dichloroethene	ug/kg	54	50 U	49 U	240	55 U	54	55	260
cis-1,3-Dichloropropene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Cyclohexane	ug/kg	1200 U	1200 U	1200 U	1200 U	1300 U	1200 U	1300 U	1200 U
Dibromochloromethane	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Dichlorodifluoromethane (CFC-12)	ug/kg	100 U	100 U	98 U	100 U	110 U	100 U	110 U	97 U
Ethylbenzene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Isopropyl benzene	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
Methyl acetate	ug/kg	1200 U	1200 U	1200 U	1200 U	210 J	120 J	1300 U	120 J
Methyl cyclohexane	ug/kg	1200 U	1200 U	1200 U	1200 U	1300 U	1200 U	1300 U	1200 U
Methyl tert butyl ether (MTBE)	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
Methylene chloride	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
Styrene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Tetrachloroethene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Toluene	ug/kg	100 U	100 U	98 U	100 U	110 U	100 U	110 U	97 U
trans-1,2-Dichloroethene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
trans-1,3-Dichloropropene	ug/kg	50 U	50 U	49 U	51 U	55 U	51 U	53 U	49 U
Trichloroethene	ug/kg	50 U	50 U	49 U	51 U	55 U	92	57	**740[bc]**
Trichlorofluoromethane (CFC-11)	ug/kg	100 U	100 U	98 U	100 U	110 U	100 U	110 U	97 U
Trifluorotrichloroethane (CFC-113)	ug/kg	250 U	250 U	240 U	260 U	280 U	250 U	270 U	240 U
Vinyl chloride	ug/kg	**310[bcd]**	40 U	39 U	41 U	44 U	41 U	43 U	39 U
Xylenes (total)	ug/kg	150 U	150 U	150 U	150 U	170 U	150 U	160 U	150 U

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		**GS-48**	**GS-48**	**GS-48**	**GS-48**	**GS-49**	**GS-49**	**GS-50**	**GS-50**
Sample Identification:		**S-17303-091318-DA-038**	**S-17303-091318-DA-039**	**S-17303-091318-DA-040**	**S-17303-091318-DA-041**	**S-17303-091318-DA-035**	**S-17303-091318-DA-036**	**S-17303-091318-DA-033**	**S-17303-091318-DA-034**
Sample Date:		**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**	**9/13/2018**
Sample Depth:		**(3-5) ft BGS**	**(5-7) ft BGS**	**(8-10) ft BGS**	**(8-10) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**
Sample Type:					**Duplicate**				
Parameters	**Units**								
Semi-Volatile Organic Compounds (SVOCs)									
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl)	ug/kg	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	ug/kg	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	ug/kg	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	ug/kg	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	ug/kg	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	ug/kg	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	ug/kg	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	ug/kg	--	--	--	--	--	--	--	--
2-Chloronaphthalene	ug/kg	--	--	--	--	--	--	--	--
2-Chlorophenol	ug/kg	--	--	--	--	--	--	--	--
2-Methylnaphthalene	ug/kg	--	--	--	--	--	--	--	--
2-Methylphenol	ug/kg	--	--	--	--	--	--	--	--
2-Nitroaniline	ug/kg	--	--	--	--	--	--	--	--
2-Nitrophenol	ug/kg	--	--	--	--	--	--	--	--
3&4-Methylphenol	ug/kg	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	ug/kg	--	--	--	--	--	--	--	--
3-Nitroaniline	ug/kg	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	ug/kg	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	ug/kg	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	ug/kg	--	--	--	--	--	--	--	--
4-Chloroaniline	ug/kg	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	ug/kg	--	--	--	--	--	--	--	--
4-Nitroaniline	ug/kg	--	--	--	--	--	--	--	--
4-Nitrophenol	ug/kg	--	--	--	--	--	--	--	--
Acenaphthene	ug/kg	--	--	--	--	--	--	--	--
Acenaphthylene	ug/kg	--	--	--	--	--	--	--	--
Acetophenone	ug/kg	--	--	--	--	--	--	--	--
Anthracene	ug/kg	--	--	--	--	--	--	--	--
Atrazine	ug/kg	--	--	--	--	--	--	--	--
Benzaldehyde	ug/kg	--	--	--	--	--	--	--	--
Benzo(a)anthracene	ug/kg	--	--	--	--	--	--	--	--
Benzo(a)pyrene	ug/kg	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	ug/kg	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	ug/kg	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	ug/kg	--	--	--	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	ug/kg	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	ug/kg	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	ug/kg	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg	--	--	--	--	--	--	--	--
Butyl benzylphthalate (BBP)	ug/kg	--	--	--	--	--	--	--	--
Caprolactam	ug/kg	--	--	--	--	--	--	--	--
Carbazole	ug/kg	--	--	--	--	--	--	--	--
Chrysene	ug/kg	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	ug/kg	--	--	--	--	--	--	--	--
Dibenzofuran	ug/kg	--	--	--	--	--	--	--	--
Diethyl phthalate	ug/kg	--	--	--	--	--	--	--	--
Dimethyl phthalate	ug/kg	--	--	--	--	--	--	--	--
Di-n-butylphthalate (DBP)	ug/kg	--	--	--	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	ug/kg	--	--	--	--	--	--	--	--
Fluoranthene	ug/kg	--	--	--	--	--	--	--	--
Fluorene	ug/kg	--	--	--	--	--	--	--	--
Hexachlorobenzene	ug/kg	--	--	--	--	--	--	--	--
Hexachlorobutadiene	ug/kg	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	ug/kg	--	--	--	--	--	--	--	--
Hexachloroethane	ug/kg	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	--	--	--	--	--
Isophorone	ug/kg	--	--	--	--	--	--	--	--
Naphthalene	ug/kg	--	--	--	--	--	--	--	--
Nitrobenzene	ug/kg	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	ug/kg	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	ug/kg	--	--	--	--	--	--	--	--
Pentachlorophenol	ug/kg	--	--	--	--	--	--	--	--
Phenanthrene	ug/kg	--	--	--	--	--	--	--	--
Phenol	ug/kg	--	--	--	--	--	--	--	--
Pyrene	ug/kg	--	--	--	--	--	--	--	--

Attachment C

Analytical Table – Seep Results

ATTACHMENT C
SEEP WATER SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		EGLE Generic Groundwater Cleanup Criteria: Residential and Nonresid			**SEEP-1**	**SEEP-2**	**SEEP-3**	**SEEP-4**	**SEEP-4**
Sample Identification:		Residential	Non-Residential	Groundwater	**W-17303-091418-DA-001**	**W-17303-091418-DA-002**	**W-17303-091418-DA-003**	**W-17303-091418-DA-004**	**W-17303-091418-DA-005**
Sample Date:		Drinking Water	Drinking Water	Surface Water	**9/14/2018**	**9/14/2018**	**9/14/2018**	**9/14/2018**	**9/14/2018**
Sample Type:				Interface					**Duplicate**
Sample Depth:		**a**	**b**	**c**	**-**	**-**	**-**	**-**	**-**
	Units								
Volatile Organic Compounds (VOCs)									
1,1,1-Trichloroethane	ug/L	200	200	89	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	8.5	35	78	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	5	5	330	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	880	2500	740	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7	7	130	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	70	70	99	1.0 UJ	0.30 J	0.29 J	1.0 UJ	1.0 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	0.2		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.05	0.05	5.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	600	600	13	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
1,2-Dichloroethane	ug/L	5	5	360	1.0 U	1.0 U	1.0 U	0.37 J	0.24 J
1,2-Dichloropropane	ug/L	5	5	230	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	6.6	19	28	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
1,4-Dichlorobenzene	ug/L	75	75	17	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	13000	38000	2200	10 U	1.8 J	1.6 J	10 U	1.2 J
2-Hexanone	ug/L	1000	2900	ID	10 U	0.98 J	0.92 J	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	1800	5200	ID	10 U	0.91 J	0.81 J	10 U	10 U
Acetone	ug/L	730	2100	1700	9.4 J	8.2 J	9.0 J	25 J	21 J
Benzene	ug/L	5	5	200	1.0 UJ	0.21 J	1.0 UJ	1.0 UJ	1.0 UJ
Bromodichloromethane	ug/L	80	80	ID	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	80	80	ID	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	10	29	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	800	2300	ID	5.0 U	5.0 U	5.0 U	0.57 J	0.36 J
Carbon tetrachloride	ug/L	5	5	38	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	100	100	25	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
Chloroethane	ug/L	430	1700	1100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	80	80	350	1.0 U	1.0 U	0.26 J	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	260	1100	ID	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	70	70	620	1.0 U	3.5	1.0 U	15 J	7.3 J
cis-1,3-Dichloropropene	ug/L				1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L				1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	80	80	ID	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1700	4800	ID	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	74	74	18	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
Isopropyl benzene	ug/L	800	2300	28	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
Methyl acetate	ug/L				10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L				1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	40	40	7100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	5	5	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L	100	100	80	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
Tetrachloroethene	ug/L	5	5	60	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	790	790	270	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
trans-1,2-Dichloroethene	ug/L	100	100	1500	1.0 U	0.24 J	1.0 U	0.47 J	0.36 J
trans-1,3-Dichloropropene	ug/L				1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	5	5	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	2600	7300		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	ug/L	170000	170000	32	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	2	2	13	1.0 U	**3.4**[ab]	1.0 U	**16 J**[abc]	**8.1 J**[ab]
Xylenes (total)	ug/L	280	280	49	2.0 UJ	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ

ATTACHMENT C
SEEP WATER SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		EGLE Generic Groundwater Cleanup Criteria: Residential and Nonresidc			**SEEP-1**	**SEEP-2**	**SEEP-3**	**SEEP-4**	**SEEP-4**
Sample Identification:		Residential	Non-Residential	Groundwater	**W-17303-091418-DA-001**	**W-17303-091418-DA-002**	**W-17303-091418-DA-003**	**W-17303-091418-DA-004**	**W-17303-091418-DA-005**
Sample Date:		Drinking Water	Drinking Water	Surface Water	**9/14/2018**	**9/14/2018**	**9/14/2018**	**9/14/2018**	**9/14/2018**
Sample Type:				Interface					**Duplicate**
Sample Depth:		**a**	**b**	**c**	**-**	**-**	**-**	**-**	**-**
	Units								
Semi-Volatile Organic Compounds (SVOCs)									
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L				4.9 U	5.1 U	--	--	--
2,4,5-Trichlorophenol	ug/L	730	2100		4.9 U	5.1 U	--	--	--
2,4,6-Trichlorophenol	ug/L	120	470	5	3.9 U	4.1 U	--	--	--
2,4-Dichlorophenol	ug/L	73	210	11	9.7 U	10 U	--	--	--
2,4-Dimethylphenol	ug/L	370	1000	380	4.9 U	5.1 U	--	--	--
2,4-Dinitrophenol	ug/L				R	20 U	--	--	--
2,4-Dinitrotoluene	ug/L	7.7	32		4.9 U	5.1 U	--	--	--
2,6-Dinitrotoluene	ug/L				4.9 U	5.1 U	--	--	--
2-Chloronaphthalene	ug/L	1800	5200		4.9 U	5.1 U	--	--	--
2-Chlorophenol	ug/L	45	130	18	4.9 U	5.1 U	--	--	--
2-Methylnaphthalene	ug/L	260	750	19	4.9 U	5.1 U	--	--	--
2-Methylphenol	ug/L	370	1000	30	4.9 U	5.1 U	--	--	--
2-Nitroaniline	ug/L				19 U	20 U	--	--	--
2-Nitrophenol	ug/L	20	58	ID	4.9 U	5.1 U	--	--	--
3&4-Methylphenol	ug/L	370	1000	30	4.9 U	5.1 U	--	--	--
3,3'-Dichlorobenzidine	ug/L	1.1	4.3	0.3	4.9 U	5.1 U	--	--	--
3-Nitroaniline	ug/L				19 U	20 U	--	--	--
4,6-Dinitro-2-methylphenol	ug/L	20	20		R	20 U	--	--	--
4-Bromophenyl phenyl ether	ug/L				4.9 U	5.1 U	--	--	--
4-Chloro-3-methylphenol	ug/L	150	420	7.4	4.9 U	5.1 U	--	--	--
4-Chloroaniline	ug/L				9.7 UJ	10 U	--	--	--
4-Chlorophenyl phenyl ether	ug/L				4.9 U	5.1 U	--	--	--
4-Nitroaniline	ug/L				19 U	20 U	--	--	--
4-Nitrophenol	ug/L				19 U	20 U	--	--	--
Acenaphthene	ug/L	1300	3800	38	4.9 U	5.1 U	--	--	--
Acenaphthylene	ug/L	52	150	ID	4.9 U	5.1 U	--	--	--
Acetophenone	ug/L	1500	4400		4.9 U	5.1 U	--	--	--
Anthracene	ug/L	43	43	ID	4.9 U	5.1 U	--	--	--
Atrazine	ug/L	3	3	7.3	2.9 U	3.1 U	--	--	--
Benzaldehyde	ug/L				4.9 U	5.1 U	--	--	--
Benzo(a)anthracene	ug/L	2.1	8.5	ID	0.32 J	0.38 J	--	--	--
Benzo(a)pyrene	ug/L	5	5	ID	0.37 J	0.50 J	--	--	--
Benzo(b)fluoranthene	ug/L	1.5	1.5	ID	0.46 J	0.72 J	--	--	--
Benzo(g,h,i)perylene	ug/L	1	1		0.97 U	0.53 J	--	--	--
Benzo(k)fluoranthene	ug/L	1	1		0.97 U	0.22 J	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L				4.9 U	5.1 U	--	--	--
bis(2-Chloroethoxy)methane	ug/L				4.9 U	5.1 U	--	--	--
bis(2-Chloroethyl)ether	ug/L	2	8.3	1	0.97 U	1.0 U	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	6	6	14	4.9 U	5.1 U	--	--	--
Butyl benzylphthalate (BBP)	ug/L	1200	2700	67	4.9 U	5.1 U	--	--	--
Caprolactam	ug/L	5800	17000		9.7 U	10 U	--	--	--
Carbazole	ug/L	85	350	10	9.7 U	10 U	--	--	--
Chrysene	ug/L	1.6	1.6	ID	0.40 J	0.55 J	--	--	--
Dibenz(a,h)anthracene	ug/L	2	2	ID	1.9 U	2.0 U	--	--	--
Dibenzofuran	ug/L	ID	ID	4	3.9 U	4.1 U	--	--	--
Diethyl phthalate	ug/L	5500	16000	110	4.9 U	5.1 U	--	--	--
Dimethyl phthalate	ug/L	73000	210000		4.9 U	5.1 U	--	--	--
Di-n-butylphthalate (DBP)	ug/L	880	2500	9.7	4.9 U	5.1 U	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	130	380	ID	4.9 U	5.1 U	--	--	--
Fluoranthene	ug/L	210	210	1.6	0.55 J	0.84 J	--	--	--
Fluorene	ug/L	880	2000	12	4.9 U	5.1 U	--	--	--
Hexachlorobenzene	ug/L	1	1	0.2	0.19 U	0.20 U	--	--	--
Hexachlorobutadiene	ug/L	15	42	0.053	0.97 U	1.0 U	--	--	--
Hexachlorocyclopentadiene	ug/L	50	50	ID	R	5.1 U	--	--	--
Hexachloroethane	ug/L	7.3	21	6.7	4.9 U	5.1 U	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L	2	2	ID	1.9 U	0.37 J	--	--	--
Isophorone	ug/L	770	3100	1300	4.9 U	5.1 U	--	--	--
Naphthalene	ug/L	520	1500	11	4.9 U	5.1 U	--	--	--
Nitrobenzene	ug/L	3.4	9.6	180	2.9 U	3.1 U	--	--	--
N-Nitrosodi-n-propylamine	ug/L	5	5		4.9 U	5.1 U	--	--	--
N-Nitrosodiphenylamine	ug/L	270	1100		4.9 U	5.1 U	--	--	--
Pentachlorophenol	ug/L	1	1	2.8	4.9 U	5.1 U	--	--	--
Phenanthrene	ug/L	52	150	2	0.21 J	0.30 J	--	--	--
Phenol	ug/L	4400	13000	450	4.9 U	5.1 U	--	--	--
Pyrene	ug/L	140	140	ID	0.64 J	0.85 J	--	--	--

Notes:

(1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.
R - Rejected.
ID - means insufficient data to develop criterion.

37[abc] - boxed cell denotes exceedance of cleanup criteria screening level identified by superscript.

Attachment D

Analytical Laboratory Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-101212-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
9/29/2018 6:34:03 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Job ID: 240-101212-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-101212-1

Comments
No additional comments.

Receipt
The samples were received on 9/14/2018 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 240-345459 and 240-345459 and analytical batch 240-346461 recovered outside control limits for multiple analytes: These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 240-345459 and analytical batch 240-346654 recovered outside control limits for the following analyte(s): 1,2,4-Trichlorobenzene. 1,2,4-Trichlorobenzene has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C: The laboratory control sample (LCS) for preparation batch 240-345883 and analytical batch 240-346838 recovered outside control limits for the following analyte: Bis(2-ethylhexyl) phthalate. This analyte was biased high in the LCS and was not detected above the reporting limit in the associated samples; therefore, the data have been reported.

Method(s) 8270C: The following sample was diluted due to the nature of the sample matrix: S-17303-071218-DA-001 (240-101212-1). Elevated reporting limits (RLs) are provided.

Method(s) 8270C: The continuing calibration verification (CCV) associated with batch 240-346838 recovered above the upper control limit for Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: S-17303-071218-DA-001 (240-101212-1), S-17303-071218-DA-002 (240-101212-2), S-17303-071218-DA-003 (240-101212-3), S-17303-071218-DA-004 (240-101212-4), S-17303-071218-DA-005 (240-101212-5), S-17303-071218-DA-005 (240-101212-5[DU]), S-17303-071218-DA-005 (240-101212-5[MS]), S-17303-071218-DA-005 (240-101212-5[MSD]), S-17303-071218-DA-006 (240-101212-6), S-17303-071218-DA-007 (240-101212-7), S-17303-071218-DA-008 (240-101212-8), S-17303-071218-DA-009 (240-101212-9), S-17303-071218-DA-010 (240-101212-10), S-17303-071218-DA-011 (240-101212-11) and S-17303-071218-DA-012 (240-101212-12).

Method(s) 8270C: The laboratory control sample (LCS) for preparation batch 240-345883 and analytical batch 240-346838 recovered below control limits for Benzaldehyde.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-101212-1	S-17303-071218-DA-001	Solid	09/12/18 09:50	09/14/18 09:15
240-101212-2	S-17303-071218-DA-002	Solid	09/12/18 10:00	09/14/18 09:15
240-101212-3	S-17303-071218-DA-003	Solid	09/12/18 10:10	09/14/18 09:15
240-101212-4	S-17303-071218-DA-004	Solid	09/12/18 10:15	09/14/18 09:15
240-101212-5	S-17303-071218-DA-005	Solid	09/12/18 10:30	09/14/18 09:15
240-101212-6	S-17303-071218-DA-006	Solid	09/12/18 10:35	09/14/18 09:15
240-101212-7	S-17303-071218-DA-007	Solid	09/12/18 11:15	09/14/18 09:15
240-101212-8	S-17303-071218-DA-008	Solid	09/12/18 11:15	09/14/18 09:15
240-101212-9	S-17303-071218-DA-009	Solid	09/12/18 11:35	09/14/18 09:15
240-101212-10	S-17303-071218-DA-010	Solid	09/12/18 11:40	09/14/18 09:15
240-101212-11	S-17303-071218-DA-011	Solid	09/12/18 11:50	09/14/18 09:15
240-101212-12	S-17303-071218-DA-012	Solid	09/12/18 12:00	09/14/18 09:15
240-101212-13	S-17303-071218-DA-013	Solid	09/12/18 15:00	09/14/18 09:15
240-101212-14	S-17303-071218-DA-014	Solid	09/12/18 15:05	09/14/18 09:15
240-101212-15	S-17303-071218-DA-015	Solid	09/12/18 15:10	09/14/18 09:15
240-101212-16	S-17303-071218-DA-016	Solid	09/12/18 15:15	09/14/18 09:15
240-101212-17	S-17303-071218-DA-017	Solid	09/12/18 16:45	09/14/18 09:15
240-101212-18	S-17303-071218-DA-018	Solid	09/12/18 16:50	09/14/18 09:15
240-101212-19	S-17303-071218-DA-019	Solid	09/12/18 16:55	09/14/18 09:15
240-101212-20	S-17303-071218-DA-020	Solid	09/12/18 16:00	09/14/18 09:15
240-101212-21	TB-17303-071218	Water	09/12/18 00:00	09/14/18 09:15

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Client Sample ID: S-17303-071218-DA-001 — Lab Sample ID: 240-101212-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	89	J	1300	9.9	ug/Kg	4	☼	8270C	Total/NA
Acenaphthene	95	J	1300	14	ug/Kg	4	☼	8270C	Total/NA
Anthracene	160	J	1300	12	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]anthracene	670	J	1300	17	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]pyrene	810	J	1300	47	ug/Kg	4	☼	8270C	Total/NA
Benzo[b]fluoranthene	1400		1300	33	ug/Kg	4	☼	8270C	Total/NA
Benzo[g,h,i]perylene	710	J	1300	36	ug/Kg	4	☼	8270C	Total/NA
Benzo[k]fluoranthene	480	J	1300	35	ug/Kg	4	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	430	J *	1300	260	ug/Kg	4	☼	8270C	Total/NA
Butyl benzyl phthalate	130	J	1300	110	ug/Kg	4	☼	8270C	Total/NA
Carbazole	110	J	1300	96	ug/Kg	4	☼	8270C	Total/NA
Chrysene	980	J	1300	7.5	ug/Kg	4	☼	8270C	Total/NA
Dibenz(a,h)anthracene	140	J	1300	35	ug/Kg	4	☼	8270C	Total/NA
Fluoranthene	1800		1300	22	ug/Kg	4	☼	8270C	Total/NA
Fluorene	84	J	1300	14	ug/Kg	4	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	580	J	1300	37	ug/Kg	4	☼	8270C	Total/NA
Naphthalene	39	J	1300	12	ug/Kg	4	☼	8270C	Total/NA
Phenanthrene	880	J	1300	11	ug/Kg	4	☼	8270C	Total/NA
Pyrene	1700		1300	11	ug/Kg	4	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-002 — Lab Sample ID: 240-101212-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	49	J	310	2.3	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	130	J	310	3.4	ug/Kg	1	☼	8270C	Total/NA
Anthracene	190	J	310	2.9	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	490		310	4.0	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	450		310	11	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	620		310	7.7	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	300	J	310	8.4	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	260	J	310	8.2	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	160	J *	310	61	ug/Kg	1	☼	8270C	Total/NA
Butyl benzyl phthalate	33	J	310	26	ug/Kg	1	☼	8270C	Total/NA
Carbazole	130	J	310	23	ug/Kg	1	☼	8270C	Total/NA
Chrysene	560		310	1.8	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	84	J	310	8.2	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	80	J	310	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	1200		310	5.3	ug/Kg	1	☼	8270C	Total/NA
Fluorene	120	J	310	3.3	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	260	J	310	8.7	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	47	J	310	2.9	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	990		310	2.6	ug/Kg	1	☼	8270C	Total/NA
Pyrene	1100		310	2.5	ug/Kg	1	☼	8270C	Total/NA
3 & 4 Methylphenol	49	J	310	34	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-003 — Lab Sample ID: 240-101212-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	50	J	310	2.3	ug/Kg	1	☼	8270C	Total/NA
Anthracene	18	J	310	2.9	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: S-17303-071218-DA-003 (Continued) — Lab Sample ID: 240-101212-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	33	J	310	4.1	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	37	J	310	11	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	61	J	310	7.7	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	45	J	310	8.4	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	27	J	310	8.2	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	170	J *	310	61	ug/Kg	1	☼	8270C	Total/NA
Chrysene	78	J	310	1.8	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	23	J	310	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	93	J	310	5.3	ug/Kg	1	☼	8270C	Total/NA
Fluorene	14	J	310	3.3	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	26	J	310	8.8	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	15	J	310	2.9	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	160	J	310	2.7	ug/Kg	1	☼	8270C	Total/NA
Pyrene	95	J	310	2.5	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-004 — Lab Sample ID: 240-101212-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	61	J	320	2.4	ug/Kg	1	☼	8270C	Total/NA
Anthracene	15	J	320	2.9	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	20	J	320	4.1	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	25	J	320	11	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	44	J	320	7.8	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	35	J	320	8.6	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	15	J	320	8.4	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	78	J *	320	62	ug/Kg	1	☼	8270C	Total/NA
Chrysene	61	J	320	1.8	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	23	J	320	16	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	55	J	320	5.4	ug/Kg	1	☼	8270C	Total/NA
Fluorene	11	J	320	3.3	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	18	J	320	8.9	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	14	J	320	2.9	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	130	J	320	2.7	ug/Kg	1	☼	8270C	Total/NA
Pyrene	61	J	320	2.6	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-005 — Lab Sample ID: 240-101212-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	50	J	310	2.3	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	20	J	310	3.3	ug/Kg	1	☼	8270C	Total/NA
Anthracene	25	J	310	2.8	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	93	J	310	4.0	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	100	J	310	11	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	130	J	310	7.6	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	71	J	310	8.3	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	64	J	310	8.1	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	96	J *	310	59	ug/Kg	1	☼	8270C	Total/NA
Chrysene	120	J	310	1.7	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	19	J	310	8.0	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	23	J	310	15	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: S-17303-071218-DA-005 (Continued) — Lab Sample ID: 240-101212-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	220	J	310	5.2	ug/Kg	1	☼	8270C	Total/NA
Fluorene	17	J	310	3.2	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	55	J	310	8.6	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	12	J	310	2.8	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	190	J	310	2.6	ug/Kg	1	☼	8270C	Total/NA
Pyrene	210	J	310	2.5	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-006 — Lab Sample ID: 240-101212-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	21	J	310	20	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	91	J	310	2.3	ug/Kg	1	☼	8270C	Total/NA
Anthracene	9.7	J	310	2.8	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	17	J	310	7.5	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	27	J	310	8.2	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	73	J *	310	59	ug/Kg	1	☼	8270C	Total/NA
Chrysene	47	J	310	1.7	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	28	J	310	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	16	J	310	5.1	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	26	J	310	2.8	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	150	J	310	2.6	ug/Kg	1	☼	8270C	Total/NA
Pyrene	30	J	310	2.5	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-007 — Lab Sample ID: 240-101212-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	23	J	300	19	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	120	J	300	2.2	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	40	J	300	3.2	ug/Kg	1	☼	8270C	Total/NA
Anthracene	53	J	300	2.7	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	190	J	300	3.9	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	210	J	300	11	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	310		300	7.3	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	180	J	300	8.0	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	150	J	300	7.8	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	220	J *	300	58	ug/Kg	1	☼	8270C	Total/NA
Butyl benzyl phthalate	30	J	300	25	ug/Kg	1	☼	8270C	Total/NA
Carbazole	34	J	300	21	ug/Kg	1	☼	8270C	Total/NA
Chrysene	290	J	300	1.7	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	39	J	300	7.8	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	41	J	300	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	460		300	5.0	ug/Kg	1	☼	8270C	Total/NA
Fluorene	38	J	300	3.1	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	140	J	300	8.3	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	36	J	300	2.7	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	340		300	2.5	ug/Kg	1	☼	8270C	Total/NA
Pyrene	430		300	2.4	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-008 — Lab Sample ID: 240-101212-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: S-17303-071218-DA-008 (Continued) — Lab Sample ID: 240-101212-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	75	J	290	2.2	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	26	J	290	3.2	ug/Kg	1	☼	8270C	Total/NA
Anthracene	37	J	290	2.7	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	140	J	290	3.8	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	160	J	290	10	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	230	J	290	7.3	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	130	J	290	7.9	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	100	J	290	7.7	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	160	J *	290	57	ug/Kg	1	☼	8270C	Total/NA
Carbazole	25	J	290	21	ug/Kg	1	☼	8270C	Total/NA
Chrysene	210	J	290	1.7	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	30	J	290	7.7	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	28	J	290	15	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	25	J	290	25	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	330		290	5.0	ug/Kg	1	☼	8270C	Total/NA
Fluorene	28	J	290	3.1	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	100	J	290	8.2	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	24	J	290	2.7	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	230	J	290	2.5	ug/Kg	1	☼	8270C	Total/NA
Pyrene	310		290	2.4	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-009 — Lab Sample ID: 240-101212-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	49	J	290	2.2	ug/Kg	1	☼	8270C	Total/NA
Anthracene	19	J	290	2.7	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	75	J	290	3.8	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	80	J	290	10	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	120	J	290	7.2	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	69	J	290	7.9	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	49	J	290	7.7	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	100	J *	290	57	ug/Kg	1	☼	8270C	Total/NA
Chrysene	130	J	290	1.7	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	14	J	290	7.7	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	18	J	290	14	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	180	J	290	5.0	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	48	J	290	8.2	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	11	J	290	2.7	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	180	J	290	2.5	ug/Kg	1	☼	8270C	Total/NA
Pyrene	160	J	290	2.4	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-010 — Lab Sample ID: 240-101212-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	92	J	290	2.2	ug/Kg	1	☼	8270C	Total/NA
Anthracene	15	J	290	2.7	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	19	J	290	3.8	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	25	J	290	10	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	41	J	290	7.2	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	31	J	290	7.9	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: S-17303-071218-DA-010 (Continued) — Lab Sample ID: 240-101212-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	11	J	290	7.7	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	97	J *	290	57	ug/Kg	1	☼	8270C	Total/NA
Chrysene	59	J	290	1.7	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	25	J	290	14	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	52	J	290	4.9	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	13	J	290	8.2	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	23	J	290	2.7	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	140	J	290	2.5	ug/Kg	1	☼	8270C	Total/NA
Pyrene	62	J	290	2.4	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-011 — Lab Sample ID: 240-101212-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	19	J	300	19	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	92	J	300	2.2	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	27	J	300	3.2	ug/Kg	1	☼	8270C	Total/NA
Anthracene	58	J	300	2.7	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	200	J	300	3.9	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	280	J	300	11	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	510		300	7.4	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	250	J	300	8.1	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	160	J	300	7.9	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	270	J *	300	58	ug/Kg	1	☼	8270C	Total/NA
Carbazole	40	J	300	22	ug/Kg	1	☼	8270C	Total/NA
Chrysene	330		300	1.7	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	57	J	300	7.9	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	34	J	300	15	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	25	J	300	25	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	490		300	5.1	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	220	J	300	8.4	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	29	J	300	2.7	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	340		300	2.5	ug/Kg	1	☼	8270C	Total/NA
Pyrene	480		300	2.4	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-012 — Lab Sample ID: 240-101212-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	25	J	290	19	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	190	J	290	2.2	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	16	J	290	3.2	ug/Kg	1	☼	8270C	Total/NA
Anthracene	8.8	J	290	2.7	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	8.8	J	290	3.8	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	10	J	290	10	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	20	J	290	7.2	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	27	J	290	7.9	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	76	J *	290	57	ug/Kg	1	☼	8270C	Total/NA
Chrysene	50	J	290	1.7	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	31	J	290	14	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	24	J	290	24	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	21	J	290	4.9	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: S-17303-071218-DA-012 (Continued) — Lab Sample ID: 240-101212-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	9.7	J	290	8.2	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	39	J	290	2.7	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	150	J	290	2.5	ug/Kg	1	☼	8270C	Total/NA
Pyrene	37	J	290	2.4	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: S-17303-071218-DA-013 — Lab Sample ID: 240-101212-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	410		260	84	ug/Kg	1	☼	8260B	Total/NA
Toluene	32	J B	100	31	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	180	J *	1200	97	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-071218-DA-014 — Lab Sample ID: 240-101212-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	240	J	260	85	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	110	J *	1300	98	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-071218-DA-015 — Lab Sample ID: 240-101212-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	300		260	84	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-071218-DA-016 — Lab Sample ID: 240-101212-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	330		250	80	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	180	J *	1200	92	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-071218-DA-017 — Lab Sample ID: 240-101212-17

No Detections.

Client Sample ID: S-17303-071218-DA-018 — Lab Sample ID: 240-101212-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	6300		570	530	ug/Kg	10	☼	8260B	Total/NA
Vinyl chloride	2300		460	240	ug/Kg	10	☼	8260B	Total/NA
cis-1,2-Dichloroethene	45000		570	500	ug/Kg	10	☼	8260B	Total/NA
trans-1,2-Dichloroethene	3300		570	500	ug/Kg	10	☼	8260B	Total/NA

Client Sample ID: S-17303-071218-DA-019 — Lab Sample ID: 240-101212-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	250000		5400	5000	ug/Kg	100	☼	8260B	Total/NA
cis-1,2-Dichloroethene	120000		5400	4700	ug/Kg	100	☼	8260B	Total/NA

Client Sample ID: S-17303-071218-DA-020 — Lab Sample ID: 240-101212-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	9800		1100	990	ug/Kg	20	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Client Sample ID: S-17303-071218-DA-020 (Continued) — Lab Sample ID: 240-101212-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	3000		860	460	ug/Kg	20	☼	8260B	Total/NA
cis-1,2-Dichloroethene	63000		1100	940	ug/Kg	20	☼	8260B	Total/NA

Client Sample ID: TB-17303-071218 — Lab Sample ID: 240-101212-21

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
3540C	Soxhlet Extraction	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
5035	Closed System Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-013
Date Collected: 09/12/18 15:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-13
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	770	U	770	130	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Benzene	52	U	52	31	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Bromoform	100	U	100	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Bromomethane	260	U	260	36	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
2-Butanone (MEK)	770	U *	770	65	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Carbon disulfide	260	U	260	23	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Carbon tetrachloride	52	U	52	35	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Chlorobenzene	52	U	52	39	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Chloroethane	260	U	260	36	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Chloroform	52	U	52	31	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Chloromethane	260	U	260	23	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,1-Dichloroethane	52	U	52	40	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,2-Dichloroethane	52	U *	52	39	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,1-Dichloroethene	52	U	52	46	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,2-Dichloropropane	52	U *	52	39	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
cis-1,3-Dichloropropene	52	U	52	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
trans-1,3-Dichloropropene	52	U	52	19	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Ethylbenzene	52	U	52	45	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Methylene Chloride	**410**		260	84	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	52	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Styrene	52	U	52	13	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,1,2,2-Tetrachloroethane	52	U	52	31	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Tetrachloroethene	52	U	52	27	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Toluene	**32**	**J B**	100	31	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Trichloroethene	52	U	52	48	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Xylenes, Total	150	U	150	36	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,1,1-Trichloroethane	52	U	52	36	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,1,2-Trichloroethane	52	U	52	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Cyclohexane	1200	U *	1200	39	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,2-Dibromo-3-Chloropropane	260	U	260	62	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
cis-1,2-Dichloroethene	52	U	52	45	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
trans-1,2-Dichloroethene	52	U	52	45	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Isopropylbenzene	260	U	260	44	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Methyl acetate	**180**	**J ***	1200	97	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Methyl tert-butyl ether	260	U	260	34	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,2,4-Trichlorobenzene	260	U *	260	34	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,3-Dichlorobenzene	100	U	100	49	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Trichlorofluoromethane	100	U	100	44	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Dibromochloromethane	52	U	52	44	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1
Methylcyclohexane	1200	U *	1200	48	ug/Kg	☼	09/14/18 18:49	09/21/18 15:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		64 - 144	09/14/18 18:49	09/21/18 15:31	1
4-Bromofluorobenzene (Surr)	86		58 - 142	09/14/18 18:49	09/21/18 15:31	1
Toluene-d8 (Surr)	94		61 - 137	09/14/18 18:49	09/21/18 15:31	1
Dibromofluoromethane (Surr)	83		31 - 155	09/14/18 18:49	09/21/18 15:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-014
Date Collected: 09/12/18 15:05
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-14
Matrix: Solid
Percent Solids: 86.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	790	U	790	130	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Benzene	52	U	52	31	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Bromoform	100	U	100	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Bromomethane	260	U	260	37	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
2-Butanone (MEK)	790	U *	790	66	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Carbon disulfide	260	U	260	24	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Carbon tetrachloride	52	U	52	35	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Chlorobenzene	52	U	52	39	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Chloroethane	260	U	260	37	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Chloroform	52	U	52	31	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Chloromethane	260	U	260	24	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,1-Dichloroethane	52	U	52	41	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,2-Dichloroethane	52	U *	52	39	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,1-Dichloroethene	52	U	52	47	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,2-Dichloropropane	52	U *	52	39	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
cis-1,3-Dichloropropene	52	U	52	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
trans-1,3-Dichloropropene	52	U	52	20	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Ethylbenzene	52	U	52	46	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Methylene Chloride	**240**	**J**	260	85	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	52	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Styrene	52	U	52	13	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,1,2,2-Tetrachloroethane	52	U	52	31	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Tetrachloroethene	52	U	52	28	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Toluene	100	U	100	31	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Trichloroethene	52	U	52	48	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Vinyl chloride	42	U	42	22	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,1,1-Trichloroethane	52	U	52	37	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,1,2-Trichloroethane	52	U	52	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Cyclohexane	1300	U *	1300	39	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,2-Dibromo-3-Chloropropane	260	U	260	63	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Dichlorodifluoromethane	100	U	100	29	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
cis-1,2-Dichloroethene	52	U	52	46	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
trans-1,2-Dichloroethene	52	U	52	46	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Isopropylbenzene	260	U	260	45	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Methyl acetate	**110**	**J ***	1300	98	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Methyl tert-butyl ether	260	U	260	34	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,2,4-Trichlorobenzene	260	U *	260	34	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,2-Dichlorobenzene	100	U	100	24	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,3-Dichlorobenzene	100	U	100	50	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Trichlorofluoromethane	100	U	100	45	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Dibromochloromethane	52	U	52	45	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1
Methylcyclohexane	1300	U *	1300	48	ug/Kg	☼	09/14/18 18:49	09/21/18 15:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 144	09/14/18 18:49	09/21/18 15:55	1
4-Bromofluorobenzene (Surr)	90		58 - 142	09/14/18 18:49	09/21/18 15:55	1
Toluene-d8 (Surr)	99		61 - 137	09/14/18 18:49	09/21/18 15:55	1
Dibromofluoromethane (Surr)	83		31 - 155	09/14/18 18:49	09/21/18 15:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-015
Date Collected: 09/12/18 15:10
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-15
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	770	U	770	120	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Benzene	51	U	51	31	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Bromoform	100	U	100	30	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Bromomethane	260	U	260	36	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
2-Butanone (MEK)	770	U *	770	64	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Carbon disulfide	260	U	260	23	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Carbon tetrachloride	51	U	51	35	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Chlorobenzene	51	U	51	39	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Chloroethane	260	U	260	36	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Chloroform	51	U	51	31	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Chloromethane	260	U	260	23	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,1-Dichloroethane	51	U	51	40	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,2-Dichloroethane	51	U *	51	39	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,1-Dichloroethene	51	U	51	46	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,2-Dichloropropane	51	U *	51	39	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
cis-1,3-Dichloropropene	51	U	51	30	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
trans-1,3-Dichloropropene	51	U	51	19	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Ethylbenzene	51	U	51	45	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Methylene Chloride	**300**		260	84	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	51	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Styrene	51	U	51	13	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,1,2,2-Tetrachloroethane	51	U	51	31	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Tetrachloroethene	51	U	51	27	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Toluene	100	U	100	31	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Trichloroethene	51	U	51	48	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Xylenes, Total	150	U	150	36	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,1,1-Trichloroethane	51	U	51	36	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,1,2-Trichloroethane	51	U	51	30	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Cyclohexane	1200	U *	1200	39	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,2-Dibromo-3-Chloropropane	260	U	260	62	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,2-Dibromoethane	260	U	260	30	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
cis-1,2-Dichloroethene	51	U	51	45	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
trans-1,2-Dichloroethene	51	U	51	45	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Isopropylbenzene	260	U	260	44	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Methyl acetate	1200	U *	1200	96	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Methyl tert-butyl ether	260	U	260	33	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	30	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,2,4-Trichlorobenzene	260	U *	260	33	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,3-Dichlorobenzene	100	U	100	49	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Trichlorofluoromethane	100	U	100	44	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Dibromochloromethane	51	U	51	44	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1
Methylcyclohexane	1200	U *	1200	48	ug/Kg	☼	09/14/18 18:49	09/21/18 16:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 144	09/14/18 18:49	09/21/18 16:19	1
4-Bromofluorobenzene (Surr)	96		58 - 142	09/14/18 18:49	09/21/18 16:19	1
Toluene-d8 (Surr)	102		61 - 137	09/14/18 18:49	09/21/18 16:19	1
Dibromofluoromethane (Surr)	90		31 - 155	09/14/18 18:49	09/21/18 16:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-016
Date Collected: 09/12/18 15:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-16
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	740	U	740	120	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Benzene	49	U	49	30	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Bromodichloromethane	99	U	99	22	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Bromoform	99	U	99	28	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Bromomethane	250	U	250	35	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
2-Butanone (MEK)	740	U *	740	62	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Carbon disulfide	250	U	250	22	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Carbon tetrachloride	49	U	49	33	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Chlorobenzene	49	U	49	37	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Chloroethane	250	U	250	35	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Chloroform	49	U	49	30	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Chloromethane	250	U	250	22	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,1-Dichloroethane	49	U	49	38	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,2-Dichloroethane	49	U *	49	37	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,1-Dichloroethene	49	U	49	44	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,2-Dichloropropane	49	U *	49	37	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
cis-1,3-Dichloropropene	49	U	49	28	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
trans-1,3-Dichloropropene	49	U	49	18	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Ethylbenzene	49	U	49	43	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
2-Hexanone	2500	U	2500	110	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Methylene Chloride	**330**		250	80	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	49	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Styrene	49	U	49	12	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,1,2,2-Tetrachloroethane	49	U	49	30	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Tetrachloroethene	49	U	49	26	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Toluene	99	U	99	30	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Trichloroethene	49	U	49	46	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Vinyl chloride	39	U	39	21	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Xylenes, Total	150	U	150	35	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,1,1-Trichloroethane	49	U	49	35	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,1,2-Trichloroethane	49	U	49	28	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Cyclohexane	1200	U *	1200	37	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,2-Dibromo-3-Chloropropane	250	U	250	59	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,2-Dibromoethane	250	U	250	28	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Dichlorodifluoromethane	99	U	99	27	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
cis-1,2-Dichloroethene	49	U	49	43	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
trans-1,2-Dichloroethene	49	U	49	43	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Isopropylbenzene	250	U	250	42	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Methyl acetate	**180**	**J ***	1200	92	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Methyl tert-butyl ether	250	U	250	32	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	28	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,2,4-Trichlorobenzene	250	U *	250	32	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,2-Dichlorobenzene	99	U	99	22	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,3-Dichlorobenzene	99	U	99	47	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
1,4-Dichlorobenzene	99	U	99	33	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Trichlorofluoromethane	99	U	99	42	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Dibromochloromethane	49	U	49	42	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1
Methylcyclohexane	1200	U *	1200	46	ug/Kg	☼	09/14/18 19:20	09/21/18 16:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 144	09/14/18 19:20	09/21/18 16:42	1
4-Bromofluorobenzene (Surr)	95		58 - 142	09/14/18 19:20	09/21/18 16:42	1
Toluene-d8 (Surr)	104		61 - 137	09/14/18 19:20	09/21/18 16:42	1
Dibromofluoromethane (Surr)	89		31 - 155	09/14/18 19:20	09/21/18 16:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-017
Date Collected: 09/12/18 16:45
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-17
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	710	U	710	110	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Benzene	47	U	47	28	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Bromodichloromethane	94	U	94	21	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Bromoform	94	U	94	27	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Bromomethane	240	U	240	33	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
2-Butanone (MEK)	710	U *	710	59	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Carbon disulfide	240	U	240	21	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Carbon tetrachloride	47	U	47	32	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Chlorobenzene	47	U	47	35	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Chloroethane	240	U	240	33	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Chloroform	47	U	47	28	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Chloromethane	240	U	240	21	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,1-Dichloroethane	47	U	47	37	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,2-Dichloroethane	47	U *	47	35	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,1-Dichloroethene	47	U	47	42	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,2-Dichloropropane	47	U *	47	35	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
cis-1,3-Dichloropropene	47	U	47	27	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
trans-1,3-Dichloropropene	47	U	47	18	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Ethylbenzene	47	U	47	41	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
2-Hexanone	2400	U	2400	100	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Methylene Chloride	240	U	240	77	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	47	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Styrene	47	U	47	12	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,1,2,2-Tetrachloroethane	47	U	47	28	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Tetrachloroethene	47	U	47	25	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Toluene	94	U	94	28	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Trichloroethene	47	U	47	44	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Vinyl chloride	38	U	38	20	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Xylenes, Total	140	U	140	33	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,1,1-Trichloroethane	47	U	47	33	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,1,2-Trichloroethane	47	U	47	27	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Cyclohexane	1100	U *	1100	35	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,2-Dibromo-3-Chloropropane	240	U	240	57	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,2-Dibromoethane	240	U	240	27	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Dichlorodifluoromethane	94	U	94	26	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
cis-1,2-Dichloroethene	47	U	47	41	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
trans-1,2-Dichloroethene	47	U	47	41	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Isopropylbenzene	240	U	240	40	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Methyl acetate	1100	U *	1100	88	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Methyl tert-butyl ether	240	U	240	31	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	27	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,2,4-Trichlorobenzene	240	U *	240	31	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,2-Dichlorobenzene	94	U	94	21	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,3-Dichlorobenzene	94	U	94	45	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
1,4-Dichlorobenzene	94	U	94	32	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Trichlorofluoromethane	94	U	94	40	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Dibromochloromethane	47	U	47	40	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1
Methylcyclohexane	1100	U *	1100	44	ug/Kg	☼	09/14/18 19:20	09/21/18 17:06	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 144	09/14/18 19:20	09/21/18 17:06	1
4-Bromofluorobenzene (Surr)	88		58 - 142	09/14/18 19:20	09/21/18 17:06	1
Toluene-d8 (Surr)	98		61 - 137	09/14/18 19:20	09/21/18 17:06	1
Dibromofluoromethane (Surr)	82		31 - 155	09/14/18 19:20	09/21/18 17:06	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-018
Date Collected: 09/12/18 16:50
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-18
Matrix: Solid
Percent Solids: 89.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	8600	U	8600	1400	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Benzene	570	U	570	340	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Bromodichloromethane	1100	U	1100	260	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Bromoform	1100	U	1100	330	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Bromomethane	2900	U	2900	400	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
2-Butanone (MEK)	8600	U *	8600	720	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Carbon disulfide	2900	U	2900	260	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Carbon tetrachloride	570	U	570	390	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Chlorobenzene	570	U	570	430	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Chloroethane	2900	U	2900	400	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Chloroform	570	U	570	340	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Chloromethane	2900	U	2900	260	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,1-Dichloroethane	570	U	570	440	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,2-Dichloroethane	570	U *	570	430	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,1-Dichloroethene	570	U	570	520	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,2-Dichloropropane	570	U *	570	430	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
cis-1,3-Dichloropropene	570	U	570	330	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
trans-1,3-Dichloropropene	570	U	570	220	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Ethylbenzene	570	U	570	500	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
2-Hexanone	29000	U	29000	1200	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Methylene Chloride	2900	U	2900	930	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
4-Methyl-2-pentanone (MIBK)	29000	U	29000	570	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Styrene	570	U	570	140	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,1,2,2-Tetrachloroethane	570	U	570	340	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Tetrachloroethene	570	U	570	300	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Toluene	1100	U	1100	340	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Trichloroethene	**6300**		570	530	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Vinyl chloride	**2300**		460	240	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Xylenes, Total	1700	U	1700	400	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,1,1-Trichloroethane	570	U	570	400	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,1,2-Trichloroethane	570	U	570	330	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Cyclohexane	14000	U *	14000	430	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,2-Dibromo-3-Chloropropane	2900	U	2900	690	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,2-Dibromoethane	2900	U	2900	330	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Dichlorodifluoromethane	1100	U	1100	320	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
cis-1,2-Dichloroethene	**45000**		570	500	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
trans-1,2-Dichloroethene	**3300**		570	500	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Isopropylbenzene	2900	U	2900	490	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Methyl acetate	14000	U *	14000	1100	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Methyl tert-butyl ether	2900	U	2900	370	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,1,2-Trichloro-1,2,2-trifluoroethane	2900	U	2900	330	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,2,4-Trichlorobenzene	2900	U *	2900	370	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,2-Dichlorobenzene	1100	U	1100	260	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,3-Dichlorobenzene	1100	U	1100	540	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
1,4-Dichlorobenzene	1100	U	1100	390	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Trichlorofluoromethane	1100	U	1100	490	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Dibromochloromethane	570	U	570	490	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10
Methylcyclohexane	14000	U *	14000	530	ug/Kg	☼	09/14/18 19:20	09/22/18 11:46	10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		64 - 144	09/14/18 19:20	09/22/18 11:46	10
4-Bromofluorobenzene (Surr)	96		58 - 142	09/14/18 19:20	09/22/18 11:46	10
Toluene-d8 (Surr)	100		61 - 137	09/14/18 19:20	09/22/18 11:46	10
Dibromofluoromethane (Surr)	96		31 - 155	09/14/18 19:20	09/22/18 11:46	10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-019
Date Collected: 09/12/18 16:55
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-19
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	80000	U	80000	13000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Benzene	5400	U	5400	3200	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Bromodichloromethane	11000	U	11000	2400	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Bromoform	11000	U	11000	3100	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Bromomethane	27000	U	27000	3800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
2-Butanone (MEK)	80000	U *	80000	6700	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Carbon disulfide	27000	U	27000	2400	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Carbon tetrachloride	5400	U	5400	3600	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Chlorobenzene	5400	U	5400	4000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Chloroethane	27000	U	27000	3800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Chloroform	5400	U	5400	3200	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Chloromethane	27000	U	27000	2400	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,1-Dichloroethane	5400	U	5400	4200	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,2-Dichloroethane	5400	U *	5400	4000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,1-Dichloroethene	5400	U	5400	4800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,2-Dichloropropane	5400	U *	5400	4000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
cis-1,3-Dichloropropene	5400	U	5400	3100	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
trans-1,3-Dichloropropene	5400	U	5400	2000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Ethylbenzene	5400	U	5400	4700	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
2-Hexanone	270000	U	270000	12000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Methylene Chloride	27000	U	27000	8700	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
4-Methyl-2-pentanone (MIBK)	270000	U	270000	5400	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Styrene	5400	U	5400	1300	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,1,2,2-Tetrachloroethane	5400	U	5400	3200	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Tetrachloroethene	5400	U	5400	2800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Toluene	11000	U	11000	3200	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Trichloroethene	**250000**		5400	5000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Vinyl chloride	4300	U	4300	2300	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Xylenes, Total	16000	U	16000	3800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,1,1-Trichloroethane	5400	U	5400	3800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,1,2-Trichloroethane	5400	U	5400	3100	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Cyclohexane	130000	U *	130000	4000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,2-Dibromo-3-Chloropropane	27000	U	27000	6400	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,2-Dibromoethane	27000	U	27000	3100	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Dichlorodifluoromethane	11000	U	11000	3000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
cis-1,2-Dichloroethene	**120000**		5400	4700	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
trans-1,2-Dichloroethene	5400	U	5400	4700	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Isopropylbenzene	27000	U	27000	4600	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Methyl acetate	130000	U *	130000	10000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Methyl tert-butyl ether	27000	U	27000	3500	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,1,2-Trichloro-1,2,2-trifluoroethane	27000	U	27000	3100	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,2,4-Trichlorobenzene	27000	U *	27000	3500	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,2-Dichlorobenzene	11000	U	11000	2400	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,3-Dichlorobenzene	11000	U	11000	5100	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
1,4-Dichlorobenzene	11000	U	11000	3600	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Trichlorofluoromethane	11000	U	11000	4600	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Dibromochloromethane	5400	U	5400	4600	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100
Methylcyclohexane	130000	U *	130000	5000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:10	100

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	59	X	64 - 144	09/14/18 19:20	09/22/18 12:10	100
4-Bromofluorobenzene (Surr)	0	X	58 - 142	09/14/18 19:20	09/22/18 12:10	100
Toluene-d8 (Surr)	71		61 - 137	09/14/18 19:20	09/22/18 12:10	100
Dibromofluoromethane (Surr)	0	X	31 - 155	09/14/18 19:20	09/22/18 12:10	100

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-020
Date Collected: 09/12/18 16:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-20
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	16000	U	16000	2600	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Benzene	1100	U	1100	640	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Bromodichloromethane	2100	U	2100	480	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Bromoform	2100	U	2100	620	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Bromomethane	5400	U	5400	750	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
2-Butanone (MEK)	16000	U *	16000	1300	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Carbon disulfide	5400	U	5400	480	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Carbon tetrachloride	1100	U	1100	720	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Chlorobenzene	1100	U	1100	800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Chloroethane	5400	U	5400	750	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Chloroform	1100	U	1100	640	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Chloromethane	5400	U	5400	480	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,1-Dichloroethane	1100	U	1100	830	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,2-Dichloroethane	1100	U *	1100	800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,1-Dichloroethene	1100	U	1100	960	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,2-Dichloropropane	1100	U *	1100	800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
cis-1,3-Dichloropropene	1100	U	1100	620	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
trans-1,3-Dichloropropene	1100	U	1100	400	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Ethylbenzene	1100	U	1100	940	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
2-Hexanone	54000	U	54000	2300	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Methylene Chloride	5400	U	5400	1700	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
4-Methyl-2-pentanone (MIBK)	54000	U	54000	1100	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Styrene	1100	U	1100	270	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,1,2,2-Tetrachloroethane	1100	U	1100	640	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Tetrachloroethene	1100	U	1100	560	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Toluene	2100	U	2100	640	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Trichloroethene	**9800**		1100	990	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Vinyl chloride	**3000**		860	460	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Xylenes, Total	3200	U	3200	750	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,1,1-Trichloroethane	1100	U	1100	750	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,1,2-Trichloroethane	1100	U	1100	620	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Cyclohexane	26000	U *	26000	800	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,2-Dibromo-3-Chloropropane	5400	U	5400	1300	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,2-Dibromoethane	5400	U	5400	620	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Dichlorodifluoromethane	2100	U	2100	590	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
cis-1,2-Dichloroethene	**63000**		1100	940	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
trans-1,2-Dichloroethene	1100	U	1100	940	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Isopropylbenzene	5400	U	5400	910	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Methyl acetate	26000	U *	26000	2000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Methyl tert-butyl ether	5400	U	5400	700	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,1,2-Trichloro-1,2,2-trifluoroethane	5400	U	5400	620	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,2,4-Trichlorobenzene	5400	U *	5400	700	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,2-Dichlorobenzene	2100	U	2100	480	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,3-Dichlorobenzene	2100	U	2100	1000	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
1,4-Dichlorobenzene	2100	U	2100	720	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Trichlorofluoromethane	2100	U	2100	910	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Dibromochloromethane	1100	U	1100	910	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20
Methylcyclohexane	26000	U *	26000	990	ug/Kg	☼	09/14/18 19:20	09/22/18 12:33	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		64 - 144	09/14/18 19:20	09/22/18 12:33	20
4-Bromofluorobenzene (Surr)	78		58 - 142	09/14/18 19:20	09/22/18 12:33	20
Toluene-d8 (Surr)	87		61 - 137	09/14/18 19:20	09/22/18 12:33	20
Dibromofluoromethane (Surr)	95		31 - 155	09/14/18 19:20	09/22/18 12:33	20

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17303-071218
Date Collected: 09/12/18 00:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-21
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			09/22/18 13:19	1
Benzene	1.0	U	1.0	0.13	ug/L			09/22/18 13:19	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/22/18 13:19	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/22/18 13:19	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/22/18 13:19	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/22/18 13:19	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/22/18 13:19	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/22/18 13:19	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/22/18 13:19	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/22/18 13:19	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/22/18 13:19	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/22/18 13:19	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/22/18 13:19	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/22/18 13:19	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/22/18 13:19	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/22/18 13:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/22/18 13:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/22/18 13:19	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/22/18 13:19	1
2-Hexanone	10	U	10	0.54	ug/L			09/22/18 13:19	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/22/18 13:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/22/18 13:19	1
Styrene	1.0	U	1.0	0.10	ug/L			09/22/18 13:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/22/18 13:19	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/22/18 13:19	1
Toluene	1.0	U	1.0	0.14	ug/L			09/22/18 13:19	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/22/18 13:19	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/22/18 13:19	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/22/18 13:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/22/18 13:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/22/18 13:19	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/22/18 13:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/22/18 13:19	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/22/18 13:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/22/18 13:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/22/18 13:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/22/18 13:19	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/22/18 13:19	1
Methyl acetate	10	U	10	1.7	ug/L			09/22/18 13:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/22/18 13:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/22/18 13:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/22/18 13:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/22/18 13:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/22/18 13:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/22/18 13:19	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/22/18 13:19	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/22/18 13:19	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/22/18 13:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	73		61 - 138		09/22/18 13:19	1
4-Bromofluorobenzene (Surr)	96		69 - 120		09/22/18 13:19	1
Toluene-d8 (Surr)	96		73 - 120		09/22/18 13:19	1
Dibromofluoromethane (Surr)	81		69 - 124		09/22/18 13:19	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-001
Date Collected: 09/12/18 09:50
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-1
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1300	U	1300	86	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2,2'-oxybis[1-chloropropane]	1300	U	1300	50	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2,4,5-Trichlorophenol	1300	U	1300	350	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2,4,6-Trichlorophenol	1300	U	1300	320	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2,4-Dichlorophenol	1300	U	1300	220	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2,4-Dimethylphenol	1300	U	1300	200	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2,4-Dinitrophenol	760	U	760	710	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2,4-Dinitrotoluene	1300	U	1300	310	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2,6-Dinitrotoluene	1300	U	1300	280	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2-Chloronaphthalene	1300	U	1300	70	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2-Chlorophenol	1300	U	1300	50	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2-Methylnaphthalene	**89**	**J**	1300	9.9	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2-Methylphenol	1300	U	1300	160	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2-Nitroaniline	1000	U	1000	200	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
2-Nitrophenol	1300	U	1300	65	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
3,3'-Dichlorobenzidine	8100	U	8100	220	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
3-Nitroaniline	1000	U	1000	250	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
4,6-Dinitro-2-methylphenol	760	U	760	400	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
4-Bromophenyl phenyl ether	1300	U	1300	70	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
4-Chloro-3-methylphenol	1300	U	1300	230	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
4-Chloroaniline	1000	U	1000	150	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
4-Chlorophenyl phenyl ether	1300	U	1300	70	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
4-Nitroaniline	1000	U	1000	300	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
4-Nitrophenol	1700	U	1700	470	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Acenaphthene	**95**	**J**	1300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Acenaphthylene	1300	U	1300	20	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Acetophenone	1300	U	1300	55	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Anthracene	**160**	**J**	1300	12	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Atrazine	200	U	200	180	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Benzaldehyde	1300	U *	1300	120	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Benzo[a]anthracene	**670**	**J**	1300	17	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Benzo[a]pyrene	**810**	**J**	1300	47	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Benzo[b]fluoranthene	**1400**		1300	33	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Benzo[g,h,i]perylene	**710**	**J**	1300	36	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Benzo[k]fluoranthene	**480**	**J**	1300	35	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Bis(2-chloroethoxy)methane	1300	U	1300	60	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Bis(2-chloroethyl)ether	400	U	400	60	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Bis(2-ethylhexyl) phthalate	**430**	**J ***	1300	260	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Butyl benzyl phthalate	**130**	**J**	1300	110	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Caprolactam	1300	U	1300	380	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Carbazole	**110**	**J**	1300	96	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Chrysene	**980**	**J**	1300	7.5	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Dibenz(a,h)anthracene	**140**	**J**	1300	35	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Dibenzofuran	1300	U	1300	65	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Diethyl phthalate	1300	U	1300	160	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Dimethyl phthalate	1300	U	1300	70	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Di-n-butyl phthalate	1300	U	1300	110	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Di-n-octyl phthalate	1300	U	1300	140	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Fluoranthene	**1800**		1300	22	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-001
Date Collected: 09/12/18 09:50
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-1
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**84**	**J**	1300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Hexachlorobenzene	1300	U	1300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Hexachlorobutadiene	200	U	200	60	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Hexachlorocyclopentadiene	1300	U	1300	310	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Hexachloroethane	1300	U	1300	45	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Indeno[1,2,3-cd]pyrene	**580**	**J**	1300	37	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Isophorone	1300	U	1300	60	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Naphthalene	**39**	**J**	1300	12	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Nitrobenzene	1300	U	1300	65	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
N-Nitrosodi-n-propylamine	1300	U	1300	55	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
N-Nitrosodiphenylamine	1300	U	1300	60	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Pentachlorophenol	760	U	760	290	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Phenol	1300	U	1300	40	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Phenanthrene	**880**	**J**	1300	11	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
Pyrene	**1700**		1300	11	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4
3 & 4 Methylphenol	1300	U	1300	150	ug/Kg	☼	09/18/18 10:14	09/24/18 14:44	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*32 - 120*	*09/18/18 10:14*	*09/24/18 14:44*	*4*
2-Fluorophenol (Surr)	*56*		*29 - 120*	*09/18/18 10:14*	*09/24/18 14:44*	*4*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 120*	*09/18/18 10:14*	*09/24/18 14:44*	*4*
Nitrobenzene-d5 (Surr)	*50*		*30 - 120*	*09/18/18 10:14*	*09/24/18 14:44*	*4*
Phenol-d5 (Surr)	*60*		*29 - 120*	*09/18/18 10:14*	*09/24/18 14:44*	*4*
Terphenyl-d14 (Surr)	*80*		*41 - 120*	*09/18/18 10:14*	*09/24/18 14:44*	*4*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-002
Date Collected: 09/12/18 10:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-2
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	310	U	310	20	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2,2'-oxybis[1-chloropropane]	310	U	310	12	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2,4,5-Trichlorophenol	310	U	310	82	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2,4,6-Trichlorophenol	310	U	310	76	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2,4-Dichlorophenol	310	U	310	52	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2,4-Dimethylphenol	310	U	310	47	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2,4-Dinitrophenol	180	U	180	170	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2,4-Dinitrotoluene	310	U	310	74	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2,6-Dinitrotoluene	310	U	310	66	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2-Chloronaphthalene	310	U	310	17	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2-Chlorophenol	310	U	310	12	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2-Methylnaphthalene	**49**	**J**	310	2.3	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2-Methylphenol	310	U	310	37	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2-Nitroaniline	240	U	240	47	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
2-Nitrophenol	310	U	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
3,3'-Dichlorobenzidine	1900	U	1900	51	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
3-Nitroaniline	240	U	240	58	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
4,6-Dinitro-2-methylphenol	180	U	180	95	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
4-Bromophenyl phenyl ether	310	U	310	17	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
4-Chloro-3-methylphenol	310	U	310	53	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
4-Chloroaniline	240	U	240	36	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
4-Chlorophenyl phenyl ether	310	U	310	17	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
4-Nitroaniline	240	U	240	71	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
4-Nitrophenol	390	U	390	110	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Acenaphthene	**130**	**J**	310	3.4	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Acenaphthylene	310	U	310	4.8	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Acetophenone	310	U	310	13	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Anthracene	**190**	**J**	310	2.9	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Atrazine	47	U	47	43	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Benzaldehyde	310	U *	310	27	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Benzo[a]anthracene	**490**		310	4.0	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Benzo[a]pyrene	**450**		310	11	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Benzo[b]fluoranthene	**620**		310	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Benzo[g,h,i]perylene	**300**	**J**	310	8.4	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Benzo[k]fluoranthene	**260**	**J**	310	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Bis(2-chloroethoxy)methane	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Bis(2-chloroethyl)ether	95	U	95	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Bis(2-ethylhexyl) phthalate	**160**	**J ***	310	61	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Butyl benzyl phthalate	**33**	**J**	310	26	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Caprolactam	310	U	310	89	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Carbazole	**130**	**J**	310	23	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Chrysene	**560**		310	1.8	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Dibenz(a,h)anthracene	**84**	**J**	310	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Dibenzofuran	**80**	**J**	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Diethyl phthalate	310	U	310	37	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Dimethyl phthalate	310	U	310	17	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Di-n-butyl phthalate	310	U	310	26	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Di-n-octyl phthalate	310	U	310	33	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Fluoranthene	**1200**		310	5.3	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-002
Date Collected: 09/12/18 10:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-2
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**120**	**J**	310	3.3	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Hexachlorobenzene	310	U	310	3.4	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Hexachlorobutadiene	47	U	47	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Hexachlorocyclopentadiene	310	U	310	74	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Hexachloroethane	310	U	310	11	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Indeno[1,2,3-cd]pyrene	**260**	**J**	310	8.7	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Isophorone	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Naphthalene	**47**	**J**	310	2.9	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Nitrobenzene	310	U	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
N-Nitrosodi-n-propylamine	310	U	310	13	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
N-Nitrosodiphenylamine	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Pentachlorophenol	180	U	180	69	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Phenol	310	U	310	9.5	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Phenanthrene	**990**		310	2.6	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
Pyrene	**1100**		310	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1
3 & 4 Methylphenol	**49**	**J**	310	34	ug/Kg	☼	09/18/18 10:14	09/24/18 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*32 - 120*	*09/18/18 10:14*	*09/24/18 16:30*	*1*
2-Fluorophenol (Surr)	*68*		*29 - 120*	*09/18/18 10:14*	*09/24/18 16:30*	*1*
2,4,6-Tribromophenol (Surr)	*56*		*10 - 120*	*09/18/18 10:14*	*09/24/18 16:30*	*1*
Nitrobenzene-d5 (Surr)	*61*		*30 - 120*	*09/18/18 10:14*	*09/24/18 16:30*	*1*
Phenol-d5 (Surr)	*73*		*29 - 120*	*09/18/18 10:14*	*09/24/18 16:30*	*1*
Terphenyl-d14 (Surr)	*95*		*41 - 120*	*09/18/18 10:14*	*09/24/18 16:30*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-003
Date Collected: 09/12/18 10:10
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-3
Matrix: Solid
Percent Solids: 83.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	310	U	310	20	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2,2'-oxybis[1-chloropropane]	310	U	310	12	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2,4,5-Trichlorophenol	310	U	310	82	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2,4,6-Trichlorophenol	310	U	310	76	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2,4-Dichlorophenol	310	U	310	52	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2,4-Dimethylphenol	310	U	310	48	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2,4-Dinitrophenol	180	U	180	170	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2,4-Dinitrotoluene	310	U	310	74	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2,6-Dinitrotoluene	310	U	310	67	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2-Chloronaphthalene	310	U	310	17	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2-Chlorophenol	310	U	310	12	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2-Methylnaphthalene	**50**	**J**	310	2.3	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2-Methylphenol	310	U	310	37	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2-Nitroaniline	240	U	240	48	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
2-Nitrophenol	310	U	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
3,3'-Dichlorobenzidine	1900	U	1900	51	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
3-Nitroaniline	240	U	240	58	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
4,6-Dinitro-2-methylphenol	180	U	180	95	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
4-Bromophenyl phenyl ether	310	U	310	17	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
4-Chloro-3-methylphenol	310	U	310	54	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
4-Chloroaniline	240	U	240	36	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
4-Chlorophenyl phenyl ether	310	U	310	17	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
4-Nitroaniline	240	U	240	71	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
4-Nitrophenol	390	U	390	110	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Acenaphthene	310	U	310	3.4	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Acenaphthylene	310	U	310	4.8	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Acetophenone	310	U	310	13	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Anthracene	**18**	**J**	310	2.9	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Atrazine	48	U	48	43	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Benzaldehyde	310	U *	310	27	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Benzo[a]anthracene	**33**	**J**	310	4.1	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Benzo[a]pyrene	**37**	**J**	310	11	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Benzo[b]fluoranthene	**61**	**J**	310	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Benzo[g,h,i]perylene	**45**	**J**	310	8.4	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Benzo[k]fluoranthene	**27**	**J**	310	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Bis(2-chloroethoxy)methane	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Bis(2-chloroethyl)ether	95	U	95	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Bis(2-ethylhexyl) phthalate	**170**	**J ***	310	61	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Butyl benzyl phthalate	310	U	310	26	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Caprolactam	310	U	310	89	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Carbazole	310	U	310	23	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Chrysene	**78**	**J**	310	1.8	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Dibenz(a,h)anthracene	310	U	310	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Dibenzofuran	**23**	**J**	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Diethyl phthalate	310	U	310	37	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Dimethyl phthalate	310	U	310	17	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Di-n-butyl phthalate	310	U	310	26	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Di-n-octyl phthalate	310	U	310	33	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Fluoranthene	**93**	**J**	310	5.3	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-003
Date Collected: 09/12/18 10:10
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-3
Matrix: Solid
Percent Solids: 83.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**14**	**J**	310	3.3	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Hexachlorobenzene	310	U	310	3.4	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Hexachlorobutadiene	48	U	48	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Hexachlorocyclopentadiene	310	U	310	74	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Hexachloroethane	310	U	310	11	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Indeno[1,2,3-cd]pyrene	**26**	**J**	310	8.8	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Isophorone	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Naphthalene	**15**	**J**	310	2.9	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Nitrobenzene	310	U	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
N-Nitrosodi-n-propylamine	310	U	310	13	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
N-Nitrosodiphenylamine	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Pentachlorophenol	180	U	180	69	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Phenol	310	U	310	9.5	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Phenanthrene	**160**	**J**	310	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
Pyrene	**95**	**J**	310	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1
3 & 4 Methylphenol	310	U	310	35	ug/Kg	☼	09/18/18 10:14	09/24/18 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*32 - 120*	*09/18/18 10:14*	*09/24/18 16:56*	*1*
2-Fluorophenol (Surr)	*65*		*29 - 120*	*09/18/18 10:14*	*09/24/18 16:56*	*1*
2,4,6-Tribromophenol (Surr)	*56*		*10 - 120*	*09/18/18 10:14*	*09/24/18 16:56*	*1*
Nitrobenzene-d5 (Surr)	*59*		*30 - 120*	*09/18/18 10:14*	*09/24/18 16:56*	*1*
Phenol-d5 (Surr)	*67*		*29 - 120*	*09/18/18 10:14*	*09/24/18 16:56*	*1*
Terphenyl-d14 (Surr)	*96*		*41 - 120*	*09/18/18 10:14*	*09/24/18 16:56*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-004
Date Collected: 09/12/18 10:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-4
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	320	U	320	21	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2,2'-oxybis[1-chloropropane]	320	U	320	12	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2,4,5-Trichlorophenol	320	U	320	83	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2,4,6-Trichlorophenol	320	U	320	77	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2,4-Dichlorophenol	320	U	320	53	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2,4-Dimethylphenol	320	U	320	48	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2,4-Dinitrophenol	180	U	180	170	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2,4-Dinitrotoluene	320	U	320	75	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2,6-Dinitrotoluene	320	U	320	68	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2-Chloronaphthalene	320	U	320	17	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2-Chlorophenol	320	U	320	12	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2-Methylnaphthalene	**61**	**J**	320	2.4	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2-Methylphenol	320	U	320	37	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2-Nitroaniline	240	U	240	48	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
2-Nitrophenol	320	U	320	16	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
3,3'-Dichlorobenzidine	1900	U	1900	52	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
3-Nitroaniline	240	U	240	59	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
4,6-Dinitro-2-methylphenol	180	U	180	96	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
4-Bromophenyl phenyl ether	320	U	320	17	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
4-Chloro-3-methylphenol	320	U	320	54	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
4-Chloroaniline	240	U	240	36	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
4-Chlorophenyl phenyl ether	320	U	320	17	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
4-Nitroaniline	240	U	240	72	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
4-Nitrophenol	400	U	400	110	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Acenaphthene	320	U	320	3.4	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Acenaphthylene	320	U	320	4.8	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Acetophenone	320	U	320	13	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Anthracene	**15**	**J**	320	2.9	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Atrazine	48	U	48	43	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Benzaldehyde	320	U *	320	28	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Benzo[a]anthracene	**20**	**J**	320	4.1	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Benzo[a]pyrene	**25**	**J**	320	11	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Benzo[b]fluoranthene	**44**	**J**	320	7.8	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Benzo[g,h,i]perylene	**35**	**J**	320	8.6	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Benzo[k]fluoranthene	**15**	**J**	320	8.4	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Bis(2-chloroethoxy)methane	320	U	320	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Bis(2-chloroethyl)ether	96	U	96	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Bis(2-ethylhexyl) phthalate	**78**	**J ***	320	62	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Butyl benzyl phthalate	320	U	320	27	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Caprolactam	320	U	320	90	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Carbazole	320	U	320	23	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Chrysene	**61**	**J**	320	1.8	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Dibenz(a,h)anthracene	320	U	320	8.3	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Dibenzofuran	**23**	**J**	320	16	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Diethyl phthalate	320	U	320	37	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Dimethyl phthalate	320	U	320	17	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Di-n-butyl phthalate	320	U	320	27	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Di-n-octyl phthalate	320	U	320	34	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Fluoranthene	**55**	**J**	320	5.4	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-004
Date Collected: 09/12/18 10:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-4
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**11**	**J**	320	3.3	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Hexachlorobenzene	320	U	320	3.4	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Hexachlorobutadiene	48	U	48	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Hexachlorocyclopentadiene	320	U	320	75	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Hexachloroethane	320	U	320	11	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Indeno[1,2,3-cd]pyrene	**18**	**J**	320	8.9	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Isophorone	320	U	320	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Naphthalene	**14**	**J**	320	2.9	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Nitrobenzene	320	U	320	16	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
N-Nitrosodi-n-propylamine	320	U	320	13	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
N-Nitrosodiphenylamine	320	U	320	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Pentachlorophenol	180	U	180	70	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Phenol	320	U	320	9.6	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Phenanthrene	**130**	**J**	320	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
Pyrene	**61**	**J**	320	2.6	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1
3 & 4 Methylphenol	320	U	320	35	ug/Kg	☼	09/18/18 10:14	09/24/18 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*32 - 120*	*09/18/18 10:14*	*09/24/18 17:23*	*1*
2-Fluorophenol (Surr)	*71*		*29 - 120*	*09/18/18 10:14*	*09/24/18 17:23*	*1*
2,4,6-Tribromophenol (Surr)	*54*		*10 - 120*	*09/18/18 10:14*	*09/24/18 17:23*	*1*
Nitrobenzene-d5 (Surr)	*56*		*30 - 120*	*09/18/18 10:14*	*09/24/18 17:23*	*1*
Phenol-d5 (Surr)	*67*		*29 - 120*	*09/18/18 10:14*	*09/24/18 17:23*	*1*
Terphenyl-d14 (Surr)	*87*		*41 - 120*	*09/18/18 10:14*	*09/24/18 17:23*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-005
Date Collected: 09/12/18 10:30
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-5
Matrix: Solid
Percent Solids: 85.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	310	U	310	20	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2,2'-oxybis[1-chloropropane]	310	U	310	12	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2,4,5-Trichlorophenol	310	U	310	80	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2,4,6-Trichlorophenol	310	U	310	74	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2,4-Dichlorophenol	310	U	310	51	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2,4-Dimethylphenol	310	U	310	47	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2,4-Dinitrophenol	170	U	170	170	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2,4-Dinitrotoluene	310	U	310	72	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2,6-Dinitrotoluene	310	U	310	65	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2-Chloronaphthalene	310	U	310	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2-Chlorophenol	310	U	310	12	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2-Methylnaphthalene	**50**	**J**	310	2.3	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2-Methylphenol	310	U	310	36	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2-Nitroaniline	230	U	230	47	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
2-Nitrophenol	310	U	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
3,3'-Dichlorobenzidine	1900	U	1900	50	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
3-Nitroaniline	230	U	230	57	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
4,6-Dinitro-2-methylphenol	170	U	170	93	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
4-Bromophenyl phenyl ether	310	U	310	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
4-Chloro-3-methylphenol	310	U	310	52	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
4-Chloroaniline	230	U	230	35	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
4-Chlorophenyl phenyl ether	310	U	310	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
4-Nitroaniline	230	U	230	70	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
4-Nitrophenol	380	U	380	110	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Acenaphthene	**20**	**J**	310	3.3	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Acenaphthylene	310	U	310	4.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Acetophenone	310	U	310	13	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Anthracene	**25**	**J**	310	2.8	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Atrazine	47	U	47	42	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Benzaldehyde	310	U *	310	27	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Benzo[a]anthracene	**93**	**J**	310	4.0	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Benzo[a]pyrene	**100**	**J**	310	11	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Benzo[b]fluoranthene	**130**	**J**	310	7.6	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Benzo[g,h,i]perylene	**71**	**J**	310	8.3	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Benzo[k]fluoranthene	**64**	**J**	310	8.1	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Bis(2-chloroethoxy)methane	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Bis(2-chloroethyl)ether	93	U	93	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Bis(2-ethylhexyl) phthalate	**96**	**J ***	310	59	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Butyl benzyl phthalate	310	U	310	26	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Caprolactam	310	U	310	87	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Carbazole	310	U	310	22	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Chrysene	**120**	**J**	310	1.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Dibenz(a,h)anthracene	**19**	**J**	310	8.0	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Dibenzofuran	**23**	**J**	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Diethyl phthalate	310	U	310	36	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Dimethyl phthalate	310	U	310	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Di-n-butyl phthalate	310	U	310	26	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Di-n-octyl phthalate	310	U	310	33	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Fluoranthene	**220**	**J**	310	5.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-005
Date Collected: 09/12/18 10:30
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-5
Matrix: Solid
Percent Solids: 85.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**17**	**J**	310	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Hexachlorobenzene	310	U	310	3.3	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Hexachlorobutadiene	47	U	47	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Hexachlorocyclopentadiene	310	U F1	310	72	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Hexachloroethane	310	U	310	10	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Indeno[1,2,3-cd]pyrene	**55**	**J**	310	8.6	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Isophorone	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Naphthalene	**12**	**J**	310	2.8	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Nitrobenzene	310	U	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
N-Nitrosodi-n-propylamine	310	U	310	13	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
N-Nitrosodiphenylamine	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Pentachlorophenol	170	U	170	67	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Phenol	310	U	310	9.3	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Phenanthrene	**190**	**J**	310	2.6	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
Pyrene	**210**	**J**	310	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1
3 & 4 Methylphenol	310	U	310	34	ug/Kg	☼	09/18/18 10:14	09/24/18 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*32 - 120*	*09/18/18 10:14*	*09/24/18 20:54*	*1*
2-Fluorophenol (Surr)	*66*		*29 - 120*	*09/18/18 10:14*	*09/24/18 20:54*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*10 - 120*	*09/18/18 10:14*	*09/24/18 20:54*	*1*
Nitrobenzene-d5 (Surr)	*63*		*30 - 120*	*09/18/18 10:14*	*09/24/18 20:54*	*1*
Phenol-d5 (Surr)	*67*		*29 - 120*	*09/18/18 10:14*	*09/24/18 20:54*	*1*
Terphenyl-d14 (Surr)	*92*		*41 - 120*	*09/18/18 10:14*	*09/24/18 20:54*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-006
Date Collected: 09/12/18 10:35
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-6
Matrix: Solid
Percent Solids: 85.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**21**	**J**	310	20	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2,2'-oxybis[1-chloropropane]	310	U	310	12	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2,4,5-Trichlorophenol	310	U	310	80	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2,4,6-Trichlorophenol	310	U	310	74	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2,4-Dichlorophenol	310	U	310	51	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2,4-Dimethylphenol	310	U	310	46	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2,4-Dinitrophenol	170	U	170	160	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2,4-Dinitrotoluene	310	U	310	72	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2,6-Dinitrotoluene	310	U	310	65	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2-Chloronaphthalene	310	U	310	16	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2-Chlorophenol	310	U	310	12	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2-Methylnaphthalene	**91**	**J**	310	2.3	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2-Methylphenol	310	U	310	36	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2-Nitroaniline	230	U	230	46	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
2-Nitrophenol	310	U	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
3,3'-Dichlorobenzidine	1800	U	1800	50	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
3-Nitroaniline	230	U	230	57	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
4,6-Dinitro-2-methylphenol	170	U	170	92	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
4-Bromophenyl phenyl ether	310	U	310	16	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
4-Chloro-3-methylphenol	310	U	310	52	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
4-Chloroaniline	230	U	230	35	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
4-Chlorophenyl phenyl ether	310	U	310	16	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
4-Nitroaniline	230	U	230	69	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
4-Nitrophenol	380	U	380	110	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Acenaphthene	310	U	310	3.3	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Acenaphthylene	310	U	310	4.6	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Acetophenone	310	U	310	13	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Anthracene	**9.7**	**J**	310	2.8	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Atrazine	46	U	46	42	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Benzaldehyde	310	U *	310	27	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Benzo[a]anthracene	310	U	310	3.9	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Benzo[a]pyrene	310	U	310	11	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Benzo[b]fluoranthene	**17**	**J**	310	7.5	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Benzo[g,h,i]perylene	**27**	**J**	310	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Benzo[k]fluoranthene	310	U	310	8.0	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Bis(2-chloroethoxy)methane	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Bis(2-chloroethyl)ether	92	U	92	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Bis(2-ethylhexyl) phthalate	**73**	**J ***	310	59	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Butyl benzyl phthalate	310	U	310	25	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Caprolactam	310	U	310	87	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Carbazole	310	U	310	22	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Chrysene	**47**	**J**	310	1.7	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Dibenz(a,h)anthracene	310	U	310	8.0	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Dibenzofuran	**28**	**J**	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Diethyl phthalate	310	U	310	36	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Dimethyl phthalate	310	U	310	16	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Di-n-butyl phthalate	310	U	310	25	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Di-n-octyl phthalate	310	U	310	32	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Fluoranthene	**16**	**J**	310	5.1	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-006
Date Collected: 09/12/18 10:35
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-6
Matrix: Solid
Percent Solids: 85.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	310	U	310	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Hexachlorobenzene	310	U	310	3.3	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Hexachlorobutadiene	46	U	46	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Hexachlorocyclopentadiene	310	U	310	72	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Hexachloroethane	310	U	310	10	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Indeno[1,2,3-cd]pyrene	310	U	310	8.5	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Isophorone	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Naphthalene	**26**	**J**	310	2.8	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Nitrobenzene	310	U	310	15	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
N-Nitrosodi-n-propylamine	310	U	310	13	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
N-Nitrosodiphenylamine	310	U	310	14	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Pentachlorophenol	170	U	170	67	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Phenol	310	U	310	9.2	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Phenanthrene	**150**	**J**	310	2.6	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
Pyrene	**30**	**J**	310	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1
3 & 4 Methylphenol	310	U	310	34	ug/Kg	☼	09/18/18 10:14	09/24/18 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*32 - 120*	*09/18/18 10:14*	*09/24/18 17:49*	*1*
2-Fluorophenol (Surr)	*64*		*29 - 120*	*09/18/18 10:14*	*09/24/18 17:49*	*1*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 120*	*09/18/18 10:14*	*09/24/18 17:49*	*1*
Nitrobenzene-d5 (Surr)	*59*		*30 - 120*	*09/18/18 10:14*	*09/24/18 17:49*	*1*
Phenol-d5 (Surr)	*68*		*29 - 120*	*09/18/18 10:14*	*09/24/18 17:49*	*1*
Terphenyl-d14 (Surr)	*95*		*41 - 120*	*09/18/18 10:14*	*09/24/18 17:49*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-007
Date Collected: 09/12/18 11:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-7
Matrix: Solid
Percent Solids: 88.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**23**	**J**	300	19	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2,4,5-Trichlorophenol	300	U	300	78	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2,4,6-Trichlorophenol	300	U	300	72	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2,4-Dichlorophenol	300	U	300	50	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2,4-Dimethylphenol	300	U	300	45	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2,4-Dinitrophenol	170	U	170	160	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2,4-Dinitrotoluene	300	U	300	70	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2,6-Dinitrotoluene	300	U	300	63	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2-Chloronaphthalene	300	U	300	16	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2-Chlorophenol	300	U	300	11	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2-Methylnaphthalene	**120**	**J**	300	2.2	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2-Methylphenol	300	U	300	35	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2-Nitroaniline	230	U	230	45	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
2-Nitrophenol	300	U	300	15	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
3,3'-Dichlorobenzidine	1800	U	1800	49	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
3-Nitroaniline	230	U	230	55	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
4,6-Dinitro-2-methylphenol	170	U	170	90	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
4-Bromophenyl phenyl ether	300	U	300	16	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
4-Chloro-3-methylphenol	300	U	300	51	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
4-Chloroaniline	230	U	230	34	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
4-Chlorophenyl phenyl ether	300	U	300	16	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
4-Nitroaniline	230	U	230	68	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
4-Nitrophenol	370	U	370	110	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Acenaphthene	**40**	**J**	300	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Acenaphthylene	300	U	300	4.5	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Acetophenone	300	U	300	12	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Anthracene	**53**	**J**	300	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Atrazine	45	U	45	41	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Benzaldehyde	300	U *	300	26	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Benzo[a]anthracene	**190**	**J**	300	3.9	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Benzo[a]pyrene	**210**	**J**	300	11	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Benzo[b]fluoranthene	**310**		300	7.3	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Benzo[g,h,i]perylene	**180**	**J**	300	8.0	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Benzo[k]fluoranthene	**150**	**J**	300	7.8	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Bis(2-chloroethoxy)methane	300	U	300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Bis(2-chloroethyl)ether	90	U	90	14	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Bis(2-ethylhexyl) phthalate	**220**	**J ***	300	58	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Butyl benzyl phthalate	**30**	**J**	300	25	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Caprolactam	300	U	300	85	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Carbazole	**34**	**J**	300	21	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Chrysene	**290**	**J**	300	1.7	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Dibenz(a,h)anthracene	**39**	**J**	300	7.8	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Dibenzofuran	**41**	**J**	300	15	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Diethyl phthalate	300	U	300	35	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Dimethyl phthalate	300	U	300	16	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Di-n-butyl phthalate	300	U	300	25	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Di-n-octyl phthalate	300	U	300	32	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Fluoranthene	**460**		300	5.0	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-007
Date Collected: 09/12/18 11:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-7
Matrix: Solid
Percent Solids: 88.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**38**	**J**	300	3.1	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Hexachlorobenzene	300	U	300	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Hexachlorobutadiene	45	U	45	14	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Hexachlorocyclopentadiene	300	U	300	70	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Indeno[1,2,3-cd]pyrene	**140**	**J**	300	8.3	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Isophorone	300	U	300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Naphthalene	**36**	**J**	300	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Nitrobenzene	300	U	300	15	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
N-Nitrosodi-n-propylamine	300	U	300	12	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
N-Nitrosodiphenylamine	300	U	300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Pentachlorophenol	170	U	170	66	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Phenol	300	U	300	9.0	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Phenanthrene	**340**		300	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
Pyrene	**430**		300	2.4	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1
3 & 4 Methylphenol	300	U	300	33	ug/Kg	☼	09/18/18 10:14	09/24/18 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*32 - 120*	*09/18/18 10:14*	*09/24/18 18:16*	*1*
2-Fluorophenol (Surr)	*71*		*29 - 120*	*09/18/18 10:14*	*09/24/18 18:16*	*1*
2,4,6-Tribromophenol (Surr)	*61*		*10 - 120*	*09/18/18 10:14*	*09/24/18 18:16*	*1*
Nitrobenzene-d5 (Surr)	*68*		*30 - 120*	*09/18/18 10:14*	*09/24/18 18:16*	*1*
Phenol-d5 (Surr)	*73*		*29 - 120*	*09/18/18 10:14*	*09/24/18 18:16*	*1*
Terphenyl-d14 (Surr)	*90*		*41 - 120*	*09/18/18 10:14*	*09/24/18 18:16*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-008
Date Collected: 09/12/18 11:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-8
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	19	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2,4,5-Trichlorophenol	290	U	290	77	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2,4,6-Trichlorophenol	290	U	290	71	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2,4-Dichlorophenol	290	U	290	49	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2,4-Dimethylphenol	290	U	290	45	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2,4-Dinitrophenol	170	U	170	160	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2,4-Dinitrotoluene	290	U	290	69	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2,6-Dinitrotoluene	290	U	290	63	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2-Chloronaphthalene	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2-Chlorophenol	290	U	290	11	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2-Methylnaphthalene	**75**	**J**	290	2.2	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2-Methylphenol	290	U	290	35	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2-Nitroaniline	220	U	220	45	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
2-Nitrophenol	290	U	290	15	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
3,3'-Dichlorobenzidine	1800	U	1800	48	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
3-Nitroaniline	220	U	220	55	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
4-Bromophenyl phenyl ether	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
4-Chloro-3-methylphenol	290	U	290	50	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
4-Chloroaniline	220	U	220	33	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
4-Chlorophenyl phenyl ether	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
4-Nitroaniline	220	U	220	67	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
4-Nitrophenol	370	U	370	100	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Acenaphthene	**26**	**J**	290	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Acenaphthylene	290	U	290	4.5	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Acetophenone	290	U	290	12	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Anthracene	**37**	**J**	290	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Atrazine	45	U	45	40	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Benzaldehyde	290	U *	290	26	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Benzo[a]anthracene	**140**	**J**	290	3.8	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Benzo[a]pyrene	**160**	**J**	290	10	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Benzo[b]fluoranthene	**230**	**J**	290	7.3	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Benzo[g,h,i]perylene	**130**	**J**	290	7.9	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Benzo[k]fluoranthene	**100**	**J**	290	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Bis(2-chloroethoxy)methane	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Bis(2-chloroethyl)ether	89	U	89	13	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Bis(2-ethylhexyl) phthalate	**160**	**J ***	290	57	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Butyl benzyl phthalate	290	U	290	25	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Caprolactam	290	U	290	84	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Carbazole	**25**	**J**	290	21	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Chrysene	**210**	**J**	290	1.7	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Dibenz(a,h)anthracene	**30**	**J**	290	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Dibenzofuran	**28**	**J**	290	15	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Diethyl phthalate	290	U	290	35	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Dimethyl phthalate	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Di-n-butyl phthalate	**25**	**J**	290	25	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Di-n-octyl phthalate	290	U	290	31	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Fluoranthene	**330**		290	5.0	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-008
Date Collected: 09/12/18 11:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-8
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**28**	**J**	290	3.1	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Hexachlorobenzene	290	U	290	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Hexachlorobutadiene	45	U	45	13	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Hexachlorocyclopentadiene	290	U	290	69	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Indeno[1,2,3-cd]pyrene	**100**	**J**	290	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Isophorone	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Naphthalene	**24**	**J**	290	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Nitrobenzene	290	U	290	15	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
N-Nitrosodi-n-propylamine	290	U	290	12	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
N-Nitrosodiphenylamine	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Pentachlorophenol	170	U	170	65	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Phenol	290	U	290	8.9	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Phenanthrene	**230**	**J**	290	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
Pyrene	**310**		290	2.4	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1
3 & 4 Methylphenol	290	U	290	32	ug/Kg	☼	09/18/18 10:14	09/24/18 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*86*		*32 - 120*	*09/18/18 10:14*	*09/24/18 18:42*	*1*
2-Fluorophenol (Surr)	*74*		*29 - 120*	*09/18/18 10:14*	*09/24/18 18:42*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*10 - 120*	*09/18/18 10:14*	*09/24/18 18:42*	*1*
Nitrobenzene-d5 (Surr)	*65*		*30 - 120*	*09/18/18 10:14*	*09/24/18 18:42*	*1*
Phenol-d5 (Surr)	*75*		*29 - 120*	*09/18/18 10:14*	*09/24/18 18:42*	*1*
Terphenyl-d14 (Surr)	*97*		*41 - 120*	*09/18/18 10:14*	*09/24/18 18:42*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-009
Date Collected: 09/12/18 11:35
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-9
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	19	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2,4,5-Trichlorophenol	290	U	290	77	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2,4,6-Trichlorophenol	290	U	290	71	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2,4-Dichlorophenol	290	U	290	49	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2,4-Dimethylphenol	290	U	290	45	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2,4-Dinitrophenol	170	U	170	160	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2,4-Dinitrotoluene	290	U	290	69	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2,6-Dinitrotoluene	290	U	290	62	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2-Chloronaphthalene	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2-Chlorophenol	290	U	290	11	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2-Methylnaphthalene	**49**	**J**	290	2.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2-Methylphenol	290	U	290	34	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2-Nitroaniline	220	U	220	45	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
2-Nitrophenol	290	U	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
3,3'-Dichlorobenzidine	1800	U	1800	48	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
3-Nitroaniline	220	U	220	55	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
4-Bromophenyl phenyl ether	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
4-Chloro-3-methylphenol	290	U	290	50	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
4-Chloroaniline	220	U	220	33	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
4-Chlorophenyl phenyl ether	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
4-Nitroaniline	220	U	220	67	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
4-Nitrophenol	370	U	370	100	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Acenaphthene	290	U	290	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Acenaphthylene	290	U	290	4.5	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Acetophenone	290	U	290	12	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Anthracene	**19**	**J**	290	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Atrazine	45	U	45	40	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Benzaldehyde	290	U *	290	26	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Benzo[a]anthracene	**75**	**J**	290	3.8	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Benzo[a]pyrene	**80**	**J**	290	10	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Benzo[b]fluoranthene	**120**	**J**	290	7.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Benzo[g,h,i]perylene	**69**	**J**	290	7.9	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Benzo[k]fluoranthene	**49**	**J**	290	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Bis(2-chloroethoxy)methane	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Bis(2-chloroethyl)ether	89	U	89	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Bis(2-ethylhexyl) phthalate	**100**	**J ***	290	57	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Butyl benzyl phthalate	290	U	290	24	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Caprolactam	290	U	290	83	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Carbazole	290	U	290	21	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Chrysene	**130**	**J**	290	1.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Dibenz(a,h)anthracene	**14**	**J**	290	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Dibenzofuran	**18**	**J**	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Diethyl phthalate	290	U	290	34	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Dimethyl phthalate	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Di-n-butyl phthalate	290	U	290	24	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Di-n-octyl phthalate	290	U	290	31	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Fluoranthene	**180**	**J**	290	5.0	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-009
Date Collected: 09/12/18 11:35
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-9
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	290	U	290	3.0	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Hexachlorobenzene	290	U	290	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Hexachlorobutadiene	45	U	45	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Hexachlorocyclopentadiene	290	U	290	69	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Indeno[1,2,3-cd]pyrene	**48**	**J**	290	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Isophorone	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Naphthalene	**11**	**J**	290	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Nitrobenzene	290	U	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
N-Nitrosodi-n-propylamine	290	U	290	12	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
N-Nitrosodiphenylamine	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Pentachlorophenol	170	U	170	65	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Phenol	290	U	290	8.9	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Phenanthrene	**180**	**J**	290	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
Pyrene	**160**	**J**	290	2.4	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1
3 & 4 Methylphenol	290	U	290	32	ug/Kg	☼	09/18/18 10:14	09/24/18 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*32 - 120*	*09/18/18 10:14*	*09/24/18 19:08*	*1*
2-Fluorophenol (Surr)	*84*		*29 - 120*	*09/18/18 10:14*	*09/24/18 19:08*	*1*
2,4,6-Tribromophenol (Surr)	*54*		*10 - 120*	*09/18/18 10:14*	*09/24/18 19:08*	*1*
Nitrobenzene-d5 (Surr)	*62*		*30 - 120*	*09/18/18 10:14*	*09/24/18 19:08*	*1*
Phenol-d5 (Surr)	*81*		*29 - 120*	*09/18/18 10:14*	*09/24/18 19:08*	*1*
Terphenyl-d14 (Surr)	*90*		*41 - 120*	*09/18/18 10:14*	*09/24/18 19:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-010
Date Collected: 09/12/18 11:40
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-10
Matrix: Solid
Percent Solids: 89.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	19	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2,4,5-Trichlorophenol	290	U	290	77	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2,4,6-Trichlorophenol	290	U	290	71	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2,4-Dichlorophenol	290	U	290	49	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2,4-Dimethylphenol	290	U	290	44	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2,4-Dinitrophenol	170	U	170	160	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2,4-Dinitrotoluene	290	U	290	69	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2,6-Dinitrotoluene	290	U	290	62	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2-Chloronaphthalene	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2-Chlorophenol	290	U	290	11	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2-Methylnaphthalene	**92**	**J**	290	2.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2-Methylphenol	290	U	290	34	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2-Nitroaniline	220	U	220	44	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
2-Nitrophenol	290	U	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
3,3'-Dichlorobenzidine	1800	U	1800	48	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
3-Nitroaniline	220	U	220	54	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
4-Bromophenyl phenyl ether	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
4-Chloro-3-methylphenol	290	U	290	50	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
4-Chloroaniline	220	U	220	33	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
4-Chlorophenyl phenyl ether	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
4-Nitroaniline	220	U	220	67	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
4-Nitrophenol	370	U	370	100	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Acenaphthene	290	U	290	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Acenaphthylene	290	U	290	4.5	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Acetophenone	290	U	290	12	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Anthracene	**15**	**J**	290	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Atrazine	44	U	44	40	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Benzaldehyde	290	U *	290	26	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Benzo[a]anthracene	**19**	**J**	290	3.8	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Benzo[a]pyrene	**25**	**J**	290	10	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Benzo[b]fluoranthene	**41**	**J**	290	7.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Benzo[g,h,i]perylene	**31**	**J**	290	7.9	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Benzo[k]fluoranthene	**11**	**J**	290	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Bis(2-chloroethoxy)methane	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Bis(2-chloroethyl)ether	89	U	89	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Bis(2-ethylhexyl) phthalate	**97**	**J ***	290	57	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Butyl benzyl phthalate	290	U	290	24	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Caprolactam	290	U	290	83	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Carbazole	290	U	290	21	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Chrysene	**59**	**J**	290	1.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Dibenz(a,h)anthracene	290	U	290	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Dibenzofuran	**25**	**J**	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Diethyl phthalate	290	U	290	34	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Dimethyl phthalate	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Di-n-butyl phthalate	290	U	290	24	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Di-n-octyl phthalate	290	U	290	31	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Fluoranthene	**52**	**J**	290	4.9	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-010
Date Collected: 09/12/18 11:40
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-10
Matrix: Solid
Percent Solids: 89.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	290	U	290	3.0	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Hexachlorobenzene	290	U	290	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Hexachlorobutadiene	44	U	44	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Hexachlorocyclopentadiene	290	U	290	69	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Indeno[1,2,3-cd]pyrene	**13**	**J**	290	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Isophorone	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Naphthalene	**23**	**J**	290	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Nitrobenzene	290	U	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
N-Nitrosodi-n-propylamine	290	U	290	12	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
N-Nitrosodiphenylamine	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Pentachlorophenol	170	U	170	64	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Phenol	290	U	290	8.9	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Phenanthrene	**140**	**J**	290	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
Pyrene	**62**	**J**	290	2.4	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1
3 & 4 Methylphenol	290	U	290	32	ug/Kg	☼	09/18/18 10:14	09/24/18 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*32 - 120*	*09/18/18 10:14*	*09/24/18 19:35*	*1*
2-Fluorophenol (Surr)	*76*		*29 - 120*	*09/18/18 10:14*	*09/24/18 19:35*	*1*
2,4,6-Tribromophenol (Surr)	*38*		*10 - 120*	*09/18/18 10:14*	*09/24/18 19:35*	*1*
Nitrobenzene-d5 (Surr)	*71*		*30 - 120*	*09/18/18 10:14*	*09/24/18 19:35*	*1*
Phenol-d5 (Surr)	*77*		*29 - 120*	*09/18/18 10:14*	*09/24/18 19:35*	*1*
Terphenyl-d14 (Surr)	*88*		*41 - 120*	*09/18/18 10:14*	*09/24/18 19:35*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-011
Date Collected: 09/12/18 11:50
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-11
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**19**	**J**	300	19	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2,4,5-Trichlorophenol	300	U	300	78	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2,4,6-Trichlorophenol	300	U	300	73	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2,4-Dichlorophenol	300	U	300	50	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2,4-Dimethylphenol	300	U	300	45	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2,4-Dinitrophenol	170	U	170	160	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2,4-Dinitrotoluene	300	U	300	70	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2,6-Dinitrotoluene	300	U	300	64	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2-Chloronaphthalene	300	U	300	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2-Chlorophenol	300	U	300	11	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2-Methylnaphthalene	**92**	**J**	300	2.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2-Methylphenol	300	U	300	35	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2-Nitroaniline	230	U	230	45	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
2-Nitrophenol	300	U	300	15	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
3,3'-Dichlorobenzidine	1800	U	1800	49	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
3-Nitroaniline	230	U	230	56	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
4,6-Dinitro-2-methylphenol	170	U	170	91	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
4-Bromophenyl phenyl ether	300	U	300	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
4-Chloro-3-methylphenol	300	U	300	51	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
4-Chloroaniline	230	U	230	34	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
4-Chlorophenyl phenyl ether	300	U	300	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
4-Nitroaniline	230	U	230	68	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
4-Nitrophenol	370	U	370	110	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Acenaphthene	**27**	**J**	300	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Acenaphthylene	300	U	300	4.6	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Acetophenone	300	U	300	12	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Anthracene	**58**	**J**	300	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Atrazine	45	U	45	41	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Benzaldehyde	300	U *	300	26	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Benzo[a]anthracene	**200**	**J**	300	3.9	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Benzo[a]pyrene	**280**	**J**	300	11	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Benzo[b]fluoranthene	**510**		300	7.4	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Benzo[g,h,i]perylene	**250**	**J**	300	8.1	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Benzo[k]fluoranthene	**160**	**J**	300	7.9	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Bis(2-chloroethoxy)methane	300	U	300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Bis(2-chloroethyl)ether	91	U	91	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Bis(2-ethylhexyl) phthalate	**270**	**J ***	300	58	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Butyl benzyl phthalate	300	U	300	25	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Caprolactam	300	U	300	85	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Carbazole	**40**	**J**	300	22	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Chrysene	**330**		300	1.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Dibenz(a,h)anthracene	**57**	**J**	300	7.9	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Dibenzofuran	**34**	**J**	300	15	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Diethyl phthalate	300	U	300	35	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Dimethyl phthalate	300	U	300	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Di-n-butyl phthalate	**25**	**J**	300	25	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Di-n-octyl phthalate	300	U	300	32	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Fluoranthene	**490**		300	5.1	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-011
Date Collected: 09/12/18 11:50
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-11
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	300	U	300	3.1	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Hexachlorobenzene	300	U	300	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Hexachlorobutadiene	45	U	45	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Hexachlorocyclopentadiene	300	U	300	70	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Indeno[1,2,3-cd]pyrene	**220**	**J**	300	8.4	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Isophorone	300	U	300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Naphthalene	**29**	**J**	300	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Nitrobenzene	300	U	300	15	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
N-Nitrosodi-n-propylamine	300	U	300	12	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
N-Nitrosodiphenylamine	300	U	300	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Pentachlorophenol	170	U	170	66	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Phenol	300	U	300	9.1	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Phenanthrene	**340**		300	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
Pyrene	**480**		300	2.4	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1
3 & 4 Methylphenol	300	U	300	33	ug/Kg	☼	09/18/18 10:14	09/24/18 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*86*		*32 - 120*	*09/18/18 10:14*	*09/24/18 20:01*	*1*
2-Fluorophenol (Surr)	*75*		*29 - 120*	*09/18/18 10:14*	*09/24/18 20:01*	*1*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 120*	*09/18/18 10:14*	*09/24/18 20:01*	*1*
Nitrobenzene-d5 (Surr)	*69*		*30 - 120*	*09/18/18 10:14*	*09/24/18 20:01*	*1*
Phenol-d5 (Surr)	*76*		*29 - 120*	*09/18/18 10:14*	*09/24/18 20:01*	*1*
Terphenyl-d14 (Surr)	*97*		*41 - 120*	*09/18/18 10:14*	*09/24/18 20:01*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-071218-DA-012
Date Collected: 09/12/18 12:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-12
Matrix: Solid
Percent Solids: 89.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**25**	**J**	290	19	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2,4,5-Trichlorophenol	290	U	290	77	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2,4,6-Trichlorophenol	290	U	290	71	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2,4-Dichlorophenol	290	U	290	49	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2,4-Dimethylphenol	290	U	290	44	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2,4-Dinitrophenol	170	U	170	160	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2,4-Dinitrotoluene	290	U	290	69	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2,6-Dinitrotoluene	290	U	290	62	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2-Chloronaphthalene	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2-Chlorophenol	290	U	290	11	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2-Methylnaphthalene	**190**	**J**	290	2.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2-Methylphenol	290	U	290	34	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2-Nitroaniline	220	U	220	44	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
2-Nitrophenol	290	U	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
3,3'-Dichlorobenzidine	1800	U	1800	48	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
3-Nitroaniline	220	U	220	54	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
4-Bromophenyl phenyl ether	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
4-Chloro-3-methylphenol	290	U	290	50	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
4-Chloroaniline	220	U	220	33	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
4-Chlorophenyl phenyl ether	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
4-Nitroaniline	220	U	220	67	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
4-Nitrophenol	370	U	370	100	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Acenaphthene	**16**	**J**	290	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Acenaphthylene	290	U	290	4.5	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Acetophenone	290	U	290	12	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Anthracene	**8.8**	**J**	290	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Atrazine	44	U	44	40	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Benzaldehyde	290	U *	290	26	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Benzo[a]anthracene	**8.8**	**J**	290	3.8	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Benzo[a]pyrene	**10**	**J**	290	10	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Benzo[b]fluoranthene	**20**	**J**	290	7.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Benzo[g,h,i]perylene	**27**	**J**	290	7.9	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Benzo[k]fluoranthene	290	U	290	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Bis(2-chloroethoxy)methane	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Bis(2-chloroethyl)ether	89	U	89	13	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Bis(2-ethylhexyl) phthalate	**76**	**J ***	290	57	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Butyl benzyl phthalate	290	U	290	24	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Caprolactam	290	U	290	83	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Carbazole	290	U	290	21	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Chrysene	**50**	**J**	290	1.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Dibenz(a,h)anthracene	290	U	290	7.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Dibenzofuran	**31**	**J**	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Diethyl phthalate	290	U	290	34	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Dimethyl phthalate	290	U	290	16	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Di-n-butyl phthalate	**24**	**J**	290	24	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Di-n-octyl phthalate	290	U	290	31	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Fluoranthene	**21**	**J**	290	4.9	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-17303-071218-DA-012
Date Collected: 09/12/18 12:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-12
Matrix: Solid
Percent Solids: 89.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	290	U	290	3.0	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Hexachlorobenzene	290	U	290	3.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Hexachlorobutadiene	44	U	44	13	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Hexachlorocyclopentadiene	290	U	290	69	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Indeno[1,2,3-cd]pyrene	**9.7**	**J**	290	8.2	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Isophorone	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Naphthalene	**39**	**J**	290	2.7	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Nitrobenzene	290	U	290	14	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
N-Nitrosodi-n-propylamine	290	U	290	12	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
N-Nitrosodiphenylamine	290	U	290	13	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Pentachlorophenol	170	U	170	64	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Phenol	290	U	290	8.9	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Phenanthrene	**150**	**J**	290	2.5	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
Pyrene	**37**	**J**	290	2.4	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1
3 & 4 Methylphenol	290	U	290	32	ug/Kg	☼	09/18/18 10:14	09/24/18 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*32 - 120*	*09/18/18 10:14*	*09/24/18 20:28*	*1*
2-Fluorophenol (Surr)	*75*		*29 - 120*	*09/18/18 10:14*	*09/24/18 20:28*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 120*	*09/18/18 10:14*	*09/24/18 20:28*	*1*
Nitrobenzene-d5 (Surr)	*73*		*30 - 120*	*09/18/18 10:14*	*09/24/18 20:28*	*1*
Phenol-d5 (Surr)	*75*		*29 - 120*	*09/18/18 10:14*	*09/24/18 20:28*	*1*
Terphenyl-d14 (Surr)	*92*		*41 - 120*	*09/18/18 10:14*	*09/24/18 20:28*	*1*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-001
Date Collected: 09/12/18 09:50
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-1
Matrix: Solid
Percent Solids: 79.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79.0		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	21.0		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-071218-DA-002
Date Collected: 09/12/18 10:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-2
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.2		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	16.8		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-003
Date Collected: 09/12/18 10:10
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-3
Matrix: Solid
Percent Solids: 83.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.1		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	16.9		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-071218-DA-004
Date Collected: 09/12/18 10:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-4
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.0		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	17.0		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-005
Date Collected: 09/12/18 10:30
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-5
Matrix: Solid
Percent Solids: 85.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.7		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	14.3		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-071218-DA-006
Date Collected: 09/12/18 10:35
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-6
Matrix: Solid
Percent Solids: 85.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.6		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	14.4		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-071218-DA-007
Date Collected: 09/12/18 11:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-7
Matrix: Solid
Percent Solids: 88.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.4		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	11.6		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-008
Date Collected: 09/12/18 11:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-8
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.9		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	11.1		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-009
Date Collected: 09/12/18 11:35
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-9
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.5		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	11.5		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-010
Date Collected: 09/12/18 11:40
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-10
Matrix: Solid
Percent Solids: 89.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.7		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	10.3		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-071218-DA-011
Date Collected: 09/12/18 11:50
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-11
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.6		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	12.4		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-012
Date Collected: 09/12/18 12:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-12
Matrix: Solid
Percent Solids: 89.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.6		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	10.4		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-013
Date Collected: 09/12/18 15:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-13
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.2		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	12.8		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-071218-DA-014
Date Collected: 09/12/18 15:05
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-14
Matrix: Solid
Percent Solids: 86.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.5		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	13.5		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-015
Date Collected: 09/12/18 15:10
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-15
Matrix: Solid
Percent Solids: 87.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.3		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	12.7		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-016
Date Collected: 09/12/18 15:15
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-16
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.8		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	11.2		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-017
Date Collected: 09/12/18 16:45
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-17
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.3		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	10.7		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-018
Date Collected: 09/12/18 16:50
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-18
Matrix: Solid
Percent Solids: 89.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.6		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	10.4		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-019
Date Collected: 09/12/18 16:55
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-19
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.3		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	16.7		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

General Chemistry

Client Sample ID: S-17303-071218-DA-020
Date Collected: 09/12/18 16:00
Date Received: 09/14/18 09:15

Lab Sample ID: 240-101212-20
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.7		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	15.3		0.1	0.1	%			09/18/18 09:42	1

GC/MS VOA

Prep Batch: 345459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-13	S-17303-071218-DA-013	Total/NA	Solid	5035	
240-101212-14	S-17303-071218-DA-014	Total/NA	Solid	5035	
240-101212-15	S-17303-071218-DA-015	Total/NA	Solid	5035	
240-101212-16	S-17303-071218-DA-016	Total/NA	Solid	5035	
240-101212-17	S-17303-071218-DA-017	Total/NA	Solid	5035	
240-101212-18	S-17303-071218-DA-018	Total/NA	Solid	5035	
240-101212-19	S-17303-071218-DA-019	Total/NA	Solid	5035	
240-101212-20	S-17303-071218-DA-020	Total/NA	Solid	5035	
MB 240-345459/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-345459/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 240-345459/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 345841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-345459/1-A	Method Blank	Total/NA	Solid	8260B	345459
LCS 240-345459/2-A	Lab Control Sample	Total/NA	Solid	8260B	345459
LCSD 240-345459/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	345459

Analysis Batch: 346461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-13	S-17303-071218-DA-013	Total/NA	Solid	8260B	345459
240-101212-14	S-17303-071218-DA-014	Total/NA	Solid	8260B	345459
240-101212-15	S-17303-071218-DA-015	Total/NA	Solid	8260B	345459
240-101212-16	S-17303-071218-DA-016	Total/NA	Solid	8260B	345459
240-101212-17	S-17303-071218-DA-017	Total/NA	Solid	8260B	345459

Analysis Batch: 346652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-21	TB-17303-071218	Total/NA	Water	8260B	
MB 240-346652/7	Method Blank	Total/NA	Water	8260B	
LCS 240-346652/5	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 346654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-18	S-17303-071218-DA-018	Total/NA	Solid	8260B	345459
240-101212-19	S-17303-071218-DA-019	Total/NA	Solid	8260B	345459
240-101212-20	S-17303-071218-DA-020	Total/NA	Solid	8260B	345459

GC/MS Semi VOA

Prep Batch: 345883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-1	S-17303-071218-DA-001	Total/NA	Solid	3540C	
240-101212-2	S-17303-071218-DA-002	Total/NA	Solid	3540C	
240-101212-3	S-17303-071218-DA-003	Total/NA	Solid	3540C	
240-101212-4	S-17303-071218-DA-004	Total/NA	Solid	3540C	
240-101212-5	S-17303-071218-DA-005	Total/NA	Solid	3540C	
240-101212-6	S-17303-071218-DA-006	Total/NA	Solid	3540C	
240-101212-7	S-17303-071218-DA-007	Total/NA	Solid	3540C	
240-101212-8	S-17303-071218-DA-008	Total/NA	Solid	3540C	

GC/MS Semi VOA (Continued)

Prep Batch: 345883 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-9	S-17303-071218-DA-009	Total/NA	Solid	3540C	
240-101212-10	S-17303-071218-DA-010	Total/NA	Solid	3540C	
240-101212-11	S-17303-071218-DA-011	Total/NA	Solid	3540C	
240-101212-12	S-17303-071218-DA-012	Total/NA	Solid	3540C	
MB 240-345883/18-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-345883/19-A	Lab Control Sample	Total/NA	Solid	3540C	
240-101212-5 MS	S-17303-071218-DA-005	Total/NA	Solid	3540C	
240-101212-5 MSD	S-17303-071218-DA-005	Total/NA	Solid	3540C	

Analysis Batch: 346838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-1	S-17303-071218-DA-001	Total/NA	Solid	8270C	345883
240-101212-2	S-17303-071218-DA-002	Total/NA	Solid	8270C	345883
240-101212-3	S-17303-071218-DA-003	Total/NA	Solid	8270C	345883
240-101212-4	S-17303-071218-DA-004	Total/NA	Solid	8270C	345883
240-101212-5	S-17303-071218-DA-005	Total/NA	Solid	8270C	345883
240-101212-6	S-17303-071218-DA-006	Total/NA	Solid	8270C	345883
240-101212-7	S-17303-071218-DA-007	Total/NA	Solid	8270C	345883
240-101212-8	S-17303-071218-DA-008	Total/NA	Solid	8270C	345883
240-101212-9	S-17303-071218-DA-009	Total/NA	Solid	8270C	345883
240-101212-10	S-17303-071218-DA-010	Total/NA	Solid	8270C	345883
240-101212-11	S-17303-071218-DA-011	Total/NA	Solid	8270C	345883
240-101212-12	S-17303-071218-DA-012	Total/NA	Solid	8270C	345883
MB 240-345883/18-A	Method Blank	Total/NA	Solid	8270C	345883
LCS 240-345883/19-A	Lab Control Sample	Total/NA	Solid	8270C	345883
240-101212-5 MS	S-17303-071218-DA-005	Total/NA	Solid	8270C	345883
240-101212-5 MSD	S-17303-071218-DA-005	Total/NA	Solid	8270C	345883

General Chemistry

Analysis Batch: 345869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-1	S-17303-071218-DA-001	Total/NA	Solid	Moisture	
240-101212-2	S-17303-071218-DA-002	Total/NA	Solid	Moisture	
240-101212-3	S-17303-071218-DA-003	Total/NA	Solid	Moisture	
240-101212-4	S-17303-071218-DA-004	Total/NA	Solid	Moisture	
240-101212-5	S-17303-071218-DA-005	Total/NA	Solid	Moisture	
240-101212-6	S-17303-071218-DA-006	Total/NA	Solid	Moisture	
240-101212-7	S-17303-071218-DA-007	Total/NA	Solid	Moisture	
240-101212-8	S-17303-071218-DA-008	Total/NA	Solid	Moisture	
240-101212-9	S-17303-071218-DA-009	Total/NA	Solid	Moisture	
240-101212-10	S-17303-071218-DA-010	Total/NA	Solid	Moisture	
240-101212-11	S-17303-071218-DA-011	Total/NA	Solid	Moisture	
240-101212-12	S-17303-071218-DA-012	Total/NA	Solid	Moisture	
240-101212-13	S-17303-071218-DA-013	Total/NA	Solid	Moisture	
240-101212-14	S-17303-071218-DA-014	Total/NA	Solid	Moisture	
240-101212-15	S-17303-071218-DA-015	Total/NA	Solid	Moisture	
240-101212-16	S-17303-071218-DA-016	Total/NA	Solid	Moisture	
240-101212-17	S-17303-071218-DA-017	Total/NA	Solid	Moisture	
240-101212-18	S-17303-071218-DA-018	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 345869 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101212-19	S-17303-071218-DA-019	Total/NA	Solid	Moisture	
240-101212-20	S-17303-071218-DA-020	Total/NA	Solid	Moisture	
240-101212-5 DU	S-17303-071218-DA-005	Total/NA	Solid	Moisture	
240-101212-11 DU	S-17303-071218-DA-011	Total/NA	Solid	Moisture	
240-101212-20 DU	S-17303-071218-DA-020	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-345459/1-A
Matrix: Solid
Analysis Batch: 345841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 345459

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	97	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Benzene	40	U	40	24	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Bromodichloromethane	80	U	80	18	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Bromoform	80	U	80	23	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Bromomethane	200	U	200	28	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
2-Butanone (MEK)	184	J	600	50	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Carbon disulfide	200	U	200	18	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Carbon tetrachloride	40	U	40	27	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Chlorobenzene	40	U	40	30	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Chloroethane	200	U	200	28	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Chloroform	40	U	40	24	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Chloromethane	200	U	200	18	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,1-Dichloroethane	40	U	40	31	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,2-Dichloroethane	40	U	40	30	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,1-Dichloroethene	40	U	40	36	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,2-Dichloropropane	40	U	40	30	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
cis-1,3-Dichloropropene	40	U	40	23	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
trans-1,3-Dichloropropene	40	U	40	15	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Ethylbenzene	40	U	40	35	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
2-Hexanone	2000	U	2000	86	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Methylene Chloride	200	U	200	65	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	40	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Styrene	40	U	40	10	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,1,2,2-Tetrachloroethane	40	U	40	24	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Tetrachloroethene	40	U	40	21	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Toluene	28.2	J	80	24	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Trichloroethene	40	U	40	37	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Vinyl chloride	32	U	32	17	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Xylenes, Total	120	U	120	28	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,1,1-Trichloroethane	40	U	40	28	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,1,2-Trichloroethane	40	U	40	23	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Cyclohexane	960	U	960	30	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,2-Dibromo-3-Chloropropane	200	U	200	48	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,2-Dibromoethane	200	U	200	23	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Dichlorodifluoromethane	80	U	80	22	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
cis-1,2-Dichloroethene	40	U	40	35	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
trans-1,2-Dichloroethene	40	U	40	35	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Isopropylbenzene	200	U	200	34	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Methyl acetate	960	U	960	75	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Methyl tert-butyl ether	200	U	200	26	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	23	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,2,4-Trichlorobenzene	200	U	200	26	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,2-Dichlorobenzene	80	U	80	18	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,3-Dichlorobenzene	80	U	80	38	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
1,4-Dichlorobenzene	80	U	80	27	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Trichlorofluoromethane	80	U	80	34	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Dibromochloromethane	40	U	40	34	ug/Kg		09/14/18 18:47	09/18/18 16:17	1
Methylcyclohexane	960	U	960	37	ug/Kg		09/14/18 18:47	09/18/18 16:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127		64 - 144	09/14/18 18:47	09/18/18 16:17	1
4-Bromofluorobenzene (Surr)	92		58 - 142	09/14/18 18:47	09/18/18 16:17	1
Toluene-d8 (Surr)	97		61 - 137	09/14/18 18:47	09/18/18 16:17	1
Dibromofluoromethane (Surr)	106		31 - 155	09/14/18 18:47	09/18/18 16:17	1

Lab Sample ID: LCS 240-345459/2-A
Matrix: Solid
Analysis Batch: 345841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345459

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	2050		ug/Kg		103	24 - 125
Benzene	1000	1140		ug/Kg		114	77 - 120
Bromodichloromethane	1000	954		ug/Kg		95	61 - 132
Bromoform	1000	535		ug/Kg		54	40 - 140
Bromomethane	1000	1140		ug/Kg		114	10 - 153
2-Butanone (MEK)	2000	2540	*	ug/Kg		127	51 - 120
Carbon disulfide	1000	590		ug/Kg		59	17 - 163
Carbon tetrachloride	1000	1040		ug/Kg		104	43 - 144
Chlorobenzene	1000	905		ug/Kg		90	76 - 120
Chloroethane	1000	1200		ug/Kg		120	10 - 166
Chloroform	1000	1130		ug/Kg		113	74 - 120
Chloromethane	1000	870		ug/Kg		87	41 - 124
1,1-Dichloroethane	1000	1130		ug/Kg		113	72 - 120
1,2-Dichloroethane	1000	1170		ug/Kg		117	71 - 120
1,1-Dichloroethene	1000	998		ug/Kg		100	58 - 130
1,2-Dichloropropane	1000	1190		ug/Kg		119	78 - 122
cis-1,3-Dichloropropene	1000	1070		ug/Kg		107	66 - 126
trans-1,3-Dichloropropene	1000	783		ug/Kg		78	55 - 121
Ethylbenzene	1000	921		ug/Kg		92	76 - 120
2-Hexanone	2000	1740	J	ug/Kg		87	52 - 129
Methylene Chloride	1000	954		ug/Kg		95	64 - 126
4-Methyl-2-pentanone (MIBK)	2000	2200		ug/Kg		110	65 - 131
Styrene	1000	904		ug/Kg		90	80 - 120
1,1,2,2-Tetrachloroethane	1000	996		ug/Kg		100	78 - 120
Tetrachloroethene	1000	786		ug/Kg		79	68 - 122
Toluene	1000	1080		ug/Kg		108	74 - 120
Trichloroethene	1000	1070		ug/Kg		107	73 - 123
Vinyl chloride	1000	735		ug/Kg		74	49 - 131
Xylenes, Total	2000	1830		ug/Kg		92	78 - 120
1,1,1-Trichloroethane	1000	1120		ug/Kg		112	60 - 136
1,1,2-Trichloroethane	1000	941		ug/Kg		94	80 - 120
Cyclohexane	1000	1160		ug/Kg		116	66 - 129
1,2-Dibromo-3-Chloropropane	1000	531		ug/Kg		53	40 - 133
1,2-Dibromoethane	1000	894		ug/Kg		89	80 - 120
Dichlorodifluoromethane	1000	798		ug/Kg		80	15 - 127
cis-1,2-Dichloroethene	1000	1090		ug/Kg		109	78 - 120
trans-1,2-Dichloroethene	1000	899		ug/Kg		90	74 - 124
Isopropylbenzene	1000	886		ug/Kg		89	76 - 124
Methyl acetate	2000	2520		ug/Kg		126	63 - 126
Methyl tert-butyl ether	1000	1040		ug/Kg		104	68 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	896		ug/Kg		90	64 - 125
1,2,4-Trichlorobenzene	1000	527	*	ug/Kg		53	60 - 124
1,2-Dichlorobenzene	1000	799		ug/Kg		80	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-345459/2-A
Matrix: Solid
Analysis Batch: 345841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345459

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3-Dichlorobenzene			1000	796		ug/Kg		80	72 - 120		
1,4-Dichlorobenzene			1000	832		ug/Kg		83	71 - 120		
Trichlorofluoromethane			1000	1100		ug/Kg		110	28 - 152		
Dibromochloromethane			1000	700		ug/Kg		70	46 - 125		
Methylcyclohexane			1000	1140		ug/Kg		114	71 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 144*
4-Bromofluorobenzene (Surr)	*84*		*58 - 142*
Toluene-d8 (Surr)	*85*		*61 - 137*
Dibromofluoromethane (Surr)	*99*		*31 - 155*

Lab Sample ID: LCSD 240-345459/3-A
Matrix: Solid
Analysis Batch: 345841

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 345459

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			2000	1980		ug/Kg		99	24 - 125	4	40
Benzene			1000	1160		ug/Kg		116	77 - 120	1	40
Bromodichloromethane			1000	1000		ug/Kg		100	61 - 132	5	40
Bromoform			1000	564		ug/Kg		56	40 - 140	5	40
Bromomethane			1000	1050		ug/Kg		105	10 - 153	8	40
2-Butanone (MEK)			2000	2550	*	ug/Kg		128	51 - 120	0	40
Carbon disulfide			1000	587		ug/Kg		59	17 - 163	1	40
Carbon tetrachloride			1000	1070		ug/Kg		107	43 - 144	4	40
Chlorobenzene			1000	949		ug/Kg		95	76 - 120	5	40
Chloroethane			1000	1180		ug/Kg		118	10 - 166	2	40
Chloroform			1000	1150		ug/Kg		115	74 - 120	2	40
Chloromethane			1000	917		ug/Kg		92	41 - 124	5	40
1,1-Dichloroethane			1000	1150		ug/Kg		115	72 - 120	2	40
1,2-Dichloroethane			1000	1220	*	ug/Kg		122	71 - 120	4	40
1,1-Dichloroethene			1000	1010		ug/Kg		101	58 - 130	1	40
1,2-Dichloropropane			1000	1280	*	ug/Kg		128	78 - 122	7	40
cis-1,3-Dichloropropene			1000	1110		ug/Kg		111	66 - 126	4	40
trans-1,3-Dichloropropene			1000	840		ug/Kg		84	55 - 121	7	40
Ethylbenzene			1000	962		ug/Kg		96	76 - 120	4	40
2-Hexanone			2000	1890	J	ug/Kg		95	52 - 129	8	40
Methylene Chloride			1000	964		ug/Kg		96	64 - 126	1	40
4-Methyl-2-pentanone (MIBK)			2000	2350		ug/Kg		118	65 - 131	7	40
Styrene			1000	940		ug/Kg		94	80 - 120	4	40
1,1,2,2-Tetrachloroethane			1000	1000		ug/Kg		100	78 - 120	1	40
Tetrachloroethene			1000	786		ug/Kg		79	68 - 122	0	40
Toluene			1000	1120		ug/Kg		112	74 - 120	4	40
Trichloroethene			1000	1060		ug/Kg		106	73 - 123	0	40
Vinyl chloride			1000	841		ug/Kg		84	49 - 131	13	40
Xylenes, Total			2000	1900		ug/Kg		95	78 - 120	4	40
1,1,1-Trichloroethane			1000	1150		ug/Kg		115	60 - 136	3	40
1,1,2-Trichloroethane			1000	982		ug/Kg		98	80 - 120	4	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 240-345459/3-A
Matrix: Solid
Analysis Batch: 345841

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 345459

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyclohexane			1000	1310	*	ug/Kg		131	66 - 129	12	40
1,2-Dibromo-3-Chloropropane			1000	562		ug/Kg		56	40 - 133	6	40
1,2-Dibromoethane			1000	947		ug/Kg		95	80 - 120	6	40
Dichlorodifluoromethane			1000	922		ug/Kg		92	15 - 127	14	40
cis-1,2-Dichloroethene			1000	1110		ug/Kg		111	78 - 120	1	40
trans-1,2-Dichloroethene			1000	880		ug/Kg		88	74 - 124	2	40
Isopropylbenzene			1000	915		ug/Kg		92	76 - 124	3	40
Methyl acetate			2000	2580	*	ug/Kg		129	63 - 126	2	40
Methyl tert-butyl ether			1000	1050		ug/Kg		105	68 - 129	1	40
1,1,2-Trichloro-1,2,2-trifluoroethane			1000	958		ug/Kg		96	64 - 125	7	40
1,2,4-Trichlorobenzene			1000	512	*	ug/Kg		51	60 - 124	3	40
1,2-Dichlorobenzene			1000	800		ug/Kg		80	75 - 120	0	40
1,3-Dichlorobenzene			1000	814		ug/Kg		81	72 - 120	2	40
1,4-Dichlorobenzene			1000	866		ug/Kg		87	71 - 120	4	40
Trichlorofluoromethane			1000	1150		ug/Kg		115	28 - 152	4	40
Dibromochloromethane			1000	715		ug/Kg		72	46 - 125	2	40
Methylcyclohexane			1000	1290	*	ug/Kg		129	71 - 126	13	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*64 - 144*
4-Bromofluorobenzene (Surr)	*87*		*58 - 142*
Toluene-d8 (Surr)	*88*		*61 - 137*
Dibromofluoromethane (Surr)	*100*		*31 - 155*

Lab Sample ID: MB 240-346652/7
Matrix: Water
Analysis Batch: 346652

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			09/22/18 09:34	1
Benzene	1.0	U	1.0	0.13	ug/L			09/22/18 09:34	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/22/18 09:34	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/22/18 09:34	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/22/18 09:34	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/22/18 09:34	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/22/18 09:34	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/22/18 09:34	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/22/18 09:34	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/22/18 09:34	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/22/18 09:34	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/22/18 09:34	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/22/18 09:34	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/22/18 09:34	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/22/18 09:34	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/22/18 09:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/22/18 09:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/22/18 09:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-346652/7
Matrix: Water
Analysis Batch: 346652

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/22/18 09:34	1
2-Hexanone	10	U	10	0.54	ug/L			09/22/18 09:34	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/22/18 09:34	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/22/18 09:34	1
Styrene	1.0	U	1.0	0.10	ug/L			09/22/18 09:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/22/18 09:34	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/22/18 09:34	1
Toluene	1.0	U	1.0	0.14	ug/L			09/22/18 09:34	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/22/18 09:34	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/22/18 09:34	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/22/18 09:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/22/18 09:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/22/18 09:34	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/22/18 09:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/22/18 09:34	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/22/18 09:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/22/18 09:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/22/18 09:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/22/18 09:34	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/22/18 09:34	1
Methyl acetate	10	U	10	1.7	ug/L			09/22/18 09:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/22/18 09:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/22/18 09:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/22/18 09:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/22/18 09:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/22/18 09:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/22/18 09:34	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/22/18 09:34	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/22/18 09:34	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/22/18 09:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 138*		*09/22/18 09:34*	*1*
4-Bromofluorobenzene (Surr)	*100*		*69 - 120*		*09/22/18 09:34*	*1*
Toluene-d8 (Surr)	*101*		*73 - 120*		*09/22/18 09:34*	*1*
Dibromofluoromethane (Surr)	*79*		*69 - 124*		*09/22/18 09:34*	*1*

Lab Sample ID: LCS 240-346652/5
Matrix: Water
Analysis Batch: 346652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	19.5		ug/L		98	35 - 131
Benzene	10.0	8.37		ug/L		84	79 - 120
Bromodichloromethane	10.0	8.34		ug/L		83	79 - 125
Bromoform	10.0	9.98		ug/L		100	55 - 145
Bromomethane	10.0	9.44		ug/L		94	17 - 158
2-Butanone (MEK)	20.0	18.8		ug/L		94	43 - 149

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-346652/5
Matrix: Water
Analysis Batch: 346652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	10.0	8.68		ug/L		87	49 - 141
Carbon tetrachloride	10.0	8.68		ug/L		87	55 - 171
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120
Chloroethane	10.0	9.86		ug/L		99	10 - 149
Chloroform	10.0	8.89		ug/L		89	80 - 120
Chloromethane	10.0	9.20		ug/L		92	59 - 124
1,1-Dichloroethane	10.0	8.96		ug/L		90	74 - 120
1,2-Dichloroethane	10.0	8.47		ug/L		85	68 - 133
1,1-Dichloroethene	10.0	9.07		ug/L		91	65 - 127
1,2-Dichloropropane	10.0	8.73		ug/L		87	78 - 127
cis-1,3-Dichloropropene	10.0	8.50		ug/L		85	75 - 120
trans-1,3-Dichloropropene	10.0	9.57		ug/L		96	67 - 120
Ethylbenzene	10.0	9.83		ug/L		98	80 - 120
2-Hexanone	20.0	19.0		ug/L		95	28 - 169
Methylene Chloride	10.0	8.95		ug/L		90	64 - 140
4-Methyl-2-pentanone (MIBK)	20.0	15.8		ug/L		79	53 - 144
Styrene	10.0	9.73		ug/L		97	80 - 121
1,1,2,2-Tetrachloroethane	10.0	11.2		ug/L		112	58 - 122
Tetrachloroethene	10.0	10.2		ug/L		102	80 - 122
Toluene	10.0	10.2		ug/L		102	78 - 120
Trichloroethene	10.0	8.50		ug/L		85	76 - 124
Vinyl chloride	10.0	9.46		ug/L		95	65 - 124
Xylenes, Total	20.0	19.8		ug/L		99	80 - 120
1,1,1-Trichloroethane	10.0	8.54		ug/L		85	64 - 147
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	76 - 121
Cyclohexane	10.0	8.10		ug/L		81	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	13.0		ug/L		130	50 - 130
1,2-Dibromoethane	10.0	10.5		ug/L		105	80 - 120
Dichlorodifluoromethane	10.0	7.55		ug/L		75	42 - 141
cis-1,2-Dichloroethene	10.0	8.71		ug/L		87	77 - 120
trans-1,2-Dichloroethene	10.0	9.17		ug/L		92	74 - 124
Isopropylbenzene	10.0	10.3		ug/L		103	80 - 128
Methyl acetate	20.0	17.4		ug/L		87	63 - 137
Methyl tert-butyl ether	10.0	8.69		ug/L		87	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.11		ug/L		81	65 - 144
1,2,4-Trichlorobenzene	10.0	9.84		ug/L		98	34 - 141
1,2-Dichlorobenzene	10.0	10.8		ug/L		108	80 - 120
1,3-Dichlorobenzene	10.0	10.8		ug/L		108	80 - 120
1,4-Dichlorobenzene	10.0	10.7		ug/L		107	80 - 120
Trichlorofluoromethane	10.0	8.52		ug/L		85	27 - 176
Dibromochloromethane	10.0	10.5		ug/L		105	64 - 129
Methylcyclohexane	10.0	7.30		ug/L		73	63 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 138*
4-Bromofluorobenzene (Surr)	*98*		*69 - 120*
Toluene-d8 (Surr)	*100*		*73 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-346652/5
Matrix: Water
Analysis Batch: 346652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	82		69 - 124

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-345883/18-A
Matrix: Solid
Analysis Batch: 346838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 345883

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	17	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2,2'-oxybis[1-chloropropane]	260	U	260	10	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2,4,5-Trichlorophenol	260	U	260	69	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2,4,6-Trichlorophenol	260	U	260	64	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2,4-Dichlorophenol	260	U	260	44	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2,4-Dimethylphenol	260	U	260	40	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2,4-Dinitrophenol	150	U	150	140	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2,4-Dinitrotoluene	260	U	260	62	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2,6-Dinitrotoluene	260	U	260	56	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2-Chloronaphthalene	260	U	260	14	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2-Chlorophenol	260	U	260	10	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2-Methylnaphthalene	260	U	260	2.0	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2-Methylphenol	260	U	260	31	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2-Nitroaniline	200	U	200	40	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
2-Nitrophenol	260	U	260	13	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
3,3'-Dichlorobenzidine	1600	U	1600	43	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
3-Nitroaniline	200	U	200	49	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
4,6-Dinitro-2-methylphenol	150	U	150	80	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
4-Bromophenyl phenyl ether	260	U	260	14	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
4-Chloro-3-methylphenol	260	U	260	45	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
4-Chloroaniline	200	U	200	30	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
4-Chlorophenyl phenyl ether	260	U	260	14	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
4-Nitroaniline	200	U	200	60	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
4-Nitrophenol	330	U	330	94	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Acenaphthene	260	U	260	2.9	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Acenaphthylene	260	U	260	4.0	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Acetophenone	260	U	260	11	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Anthracene	260	U	260	2.4	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Atrazine	40	U	40	36	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Benzaldehyde	260	U	260	23	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Benzo[a]anthracene	260	U	260	3.4	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Benzo[a]pyrene	260	U	260	9.3	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Benzo[b]fluoranthene	260	U	260	6.5	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Benzo[g,h,i]perylene	260	U	260	7.1	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Benzo[k]fluoranthene	260	U	260	6.9	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Bis(2-chloroethoxy)methane	260	U	260	12	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Bis(2-chloroethyl)ether	80	U	80	12	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Bis(2-ethylhexyl) phthalate	260	U	260	51	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Butyl benzyl phthalate	260	U	260	22	ug/Kg		09/18/18 10:14	09/24/18 11:13	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-345883/18-A
Matrix: Solid
Analysis Batch: 346838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 345883

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	260	U	260	75	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Carbazole	260	U	260	19	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Chrysene	260	U	260	1.5	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Dibenz(a,h)anthracene	260	U	260	6.9	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Dibenzofuran	260	U	260	13	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Diethyl phthalate	260	U	260	31	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Dimethyl phthalate	260	U	260	14	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Di-n-butyl phthalate	260	U	260	22	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Di-n-octyl phthalate	260	U	260	28	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Fluoranthene	260	U	260	4.5	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Fluorene	260	U	260	2.7	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Hexachlorobenzene	260	U	260	2.9	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Hexachlorobutadiene	40	U	40	12	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Hexachlorocyclopentadiene	260	U	260	62	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Hexachloroethane	260	U	260	9.0	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Indeno[1,2,3-cd]pyrene	260	U	260	7.4	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Isophorone	260	U	260	12	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Naphthalene	260	U	260	2.4	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Nitrobenzene	260	U	260	13	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
N-Nitrosodi-n-propylamine	260	U	260	11	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
N-Nitrosodiphenylamine	260	U	260	12	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Pentachlorophenol	150	U	150	58	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Phenol	260	U	260	8.0	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Phenanthrene	260	U	260	2.2	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
Pyrene	260	U	260	2.1	ug/Kg		09/18/18 10:14	09/24/18 11:13	1
3 & 4 Methylphenol	260	U	260	29	ug/Kg		09/18/18 10:14	09/24/18 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*32 - 120*	*09/18/18 10:14*	*09/24/18 11:13*	*1*
2-Fluorophenol (Surr)	*90*		*29 - 120*	*09/18/18 10:14*	*09/24/18 11:13*	*1*
2,4,6-Tribromophenol (Surr)	*21*		*10 - 120*	*09/18/18 10:14*	*09/24/18 11:13*	*1*
Nitrobenzene-d5 (Surr)	*54*		*30 - 120*	*09/18/18 10:14*	*09/24/18 11:13*	*1*
Phenol-d5 (Surr)	*57*		*29 - 120*	*09/18/18 10:14*	*09/24/18 11:13*	*1*
Terphenyl-d14 (Surr)	*86*		*41 - 120*	*09/18/18 10:14*	*09/24/18 11:13*	*1*

Lab Sample ID: LCS 240-345883/19-A
Matrix: Solid
Analysis Batch: 346838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345883

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	621		ug/Kg		93	48 - 120
2,2'-oxybis[1-chloropropane]	667	512		ug/Kg		77	37 - 120
2,4,5-Trichlorophenol	667	522		ug/Kg		78	34 - 120
2,4,6-Trichlorophenol	667	497		ug/Kg		74	19 - 120
2,4-Dichlorophenol	667	556		ug/Kg		83	48 - 120
2,4-Dimethylphenol	667	330		ug/Kg		49	37 - 120
2,4-Dinitrophenol	1330	663		ug/Kg		50	10 - 120
2,4-Dinitrotoluene	667	655		ug/Kg		98	53 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-345883/19-A
Matrix: Solid
Analysis Batch: 346838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345883

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	667	642		ug/Kg		96	54 - 120
2-Chloronaphthalene	667	620		ug/Kg		93	49 - 120
2-Chlorophenol	667	594		ug/Kg		89	50 - 120
2-Methylnaphthalene	667	558		ug/Kg		84	49 - 120
2-Methylphenol	667	535		ug/Kg		80	49 - 120
2-Nitroaniline	667	584		ug/Kg		88	46 - 120
2-Nitrophenol	667	610		ug/Kg		91	46 - 120
3,3'-Dichlorobenzidine	1330	939	J	ug/Kg		70	40 - 120
3-Nitroaniline	667	589		ug/Kg		88	48 - 120
4,6-Dinitro-2-methylphenol	1330	921		ug/Kg		69	18 - 120
4-Bromophenyl phenyl ether	667	503		ug/Kg		76	51 - 120
4-Chloro-3-methylphenol	667	514		ug/Kg		77	47 - 120
4-Chloroaniline	667	413		ug/Kg		62	37 - 120
4-Chlorophenyl phenyl ether	667	521		ug/Kg		78	49 - 120
4-Nitroaniline	667	624		ug/Kg		94	49 - 120
4-Nitrophenol	1330	1010		ug/Kg		76	42 - 120
Acenaphthene	667	611		ug/Kg		92	48 - 120
Acenaphthylene	667	671		ug/Kg		101	46 - 120
Acetophenone	667	542		ug/Kg		81	46 - 120
Anthracene	667	608		ug/Kg		91	51 - 120
Atrazine	1330	1320		ug/Kg		99	57 - 120
Benzaldehyde	1330	587	*	ug/Kg		44	48 - 120
Benzo[a]anthracene	667	650		ug/Kg		97	53 - 120
Benzo[a]pyrene	667	658		ug/Kg		99	50 - 120
Benzo[b]fluoranthene	667	697		ug/Kg		105	48 - 120
Benzo[g,h,i]perylene	667	658		ug/Kg		99	50 - 120
Benzo[k]fluoranthene	667	642		ug/Kg		96	51 - 120
Bis(2-chloroethoxy)methane	667	538		ug/Kg		81	50 - 120
Bis(2-chloroethyl)ether	667	575		ug/Kg		86	48 - 120
Bis(2-ethylhexyl) phthalate	667	873	*	ug/Kg		131	52 - 120
Butyl benzyl phthalate	667	803		ug/Kg		120	53 - 120
Caprolactam	1330	1260		ug/Kg		94	59 - 120
Carbazole	667	660		ug/Kg		99	56 - 120
Chrysene	667	644		ug/Kg		97	54 - 120
Dibenz(a,h)anthracene	667	666		ug/Kg		100	48 - 120
Dibenzofuran	667	574		ug/Kg		86	49 - 120
Diethyl phthalate	667	589		ug/Kg		88	52 - 120
Dimethyl phthalate	667	605		ug/Kg		91	53 - 120
Di-n-butyl phthalate	667	713		ug/Kg		107	56 - 120
Di-n-octyl phthalate	667	802		ug/Kg		120	42 - 120
Fluoranthene	667	630		ug/Kg		95	53 - 120
Fluorene	667	565		ug/Kg		85	50 - 120
Hexachlorobenzene	667	495		ug/Kg		74	46 - 120
Hexachlorobutadiene	667	449		ug/Kg		67	44 - 120
Hexachlorocyclopentadiene	667	347		ug/Kg		52	14 - 120
Hexachloroethane	667	511		ug/Kg		77	45 - 120
Indeno[1,2,3-cd]pyrene	667	670		ug/Kg		101	49 - 120
Isophorone	667	545		ug/Kg		82	47 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-345883/19-A
Matrix: Solid
Analysis Batch: 346838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345883

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	667	581		ug/Kg		87	48 - 120
Nitrobenzene	667	511		ug/Kg		77	48 - 120
N-Nitrosodi-n-propylamine	667	536		ug/Kg		80	49 - 120
N-Nitrosodiphenylamine	667	612		ug/Kg		92	53 - 120
Pentachlorophenol	1330	669		ug/Kg		50	14 - 120
Phenol	667	567		ug/Kg		85	49 - 120
Phenanthrene	667	605		ug/Kg		91	52 - 120
Pyrene	667	748		ug/Kg		112	55 - 120
3 & 4 Methylphenol	667	536		ug/Kg		80	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*91*		*32 - 120*
2-Fluorophenol (Surr)	*86*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*50*		*10 - 120*
Nitrobenzene-d5 (Surr)	*76*		*30 - 120*
Phenol-d5 (Surr)	*86*		*29 - 120*
Terphenyl-d14 (Surr)	*102*		*41 - 120*

Lab Sample ID: 240-101212-5 MS
Matrix: Solid
Analysis Batch: 346838

Client Sample ID: S-17303-071218-DA-005
Prep Type: Total/NA
Prep Batch: 345883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	310	U	766	712		ug/Kg	☼	93	33 - 120
2,2'-oxybis[1-chloropropane]	310	U	766	532		ug/Kg	☼	69	26 - 120
2,4,5-Trichlorophenol	310	U	766	544		ug/Kg	☼	71	20 - 120
2,4,6-Trichlorophenol	310	U	766	571		ug/Kg	☼	75	19 - 120
2,4-Dichlorophenol	310	U	766	720		ug/Kg	☼	94	32 - 120
2,4-Dimethylphenol	310	U	766	684		ug/Kg	☼	89	28 - 120
2,4-Dinitrophenol	170	U	1530	599		ug/Kg	☼	39	10 - 120
2,4-Dinitrotoluene	310	U	766	635		ug/Kg	☼	83	38 - 120
2,6-Dinitrotoluene	310	U	766	724		ug/Kg	☼	95	43 - 120
2-Chloronaphthalene	310	U	766	694		ug/Kg	☼	91	35 - 120
2-Chlorophenol	310	U	766	648		ug/Kg	☼	85	30 - 120
2-Methylnaphthalene	50	J	766	742		ug/Kg	☼	90	31 - 120
2-Methylphenol	310	U	766	644		ug/Kg	☼	84	31 - 120
2-Nitroaniline	230	U	766	656		ug/Kg	☼	86	29 - 120
2-Nitrophenol	310	U	766	734		ug/Kg	☼	96	26 - 120
3,3'-Dichlorobenzidine	1900	U	1530	1250	J	ug/Kg	☼	82	10 - 120
3-Nitroaniline	230	U	766	650		ug/Kg	☼	85	21 - 120
4,6-Dinitro-2-methylphenol	170	U	1530	802		ug/Kg	☼	52	10 - 120
4-Bromophenyl phenyl ether	310	U	766	615		ug/Kg	☼	80	44 - 120
4-Chloro-3-methylphenol	310	U	766	686		ug/Kg	☼	90	31 - 120
4-Chloroaniline	230	U	766	509		ug/Kg	☼	66	15 - 120
4-Chlorophenyl phenyl ether	310	U	766	647		ug/Kg	☼	85	41 - 120
4-Nitroaniline	230	U	766	632		ug/Kg	☼	83	23 - 120
4-Nitrophenol	380	U	1530	895		ug/Kg	☼	58	32 - 120
Acenaphthene	20	J	766	716		ug/Kg	☼	91	36 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101212-5 MS
Matrix: Solid
Analysis Batch: 346838

Client Sample ID: S-17303-071218-DA-005
Prep Type: Total/NA
Prep Batch: 345883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	310	U	766	709		ug/Kg	☼	93	35 - 120
Acetophenone	310	U	766	639		ug/Kg	☼	83	31 - 120
Anthracene	25	J	766	728		ug/Kg	☼	92	42 - 120
Atrazine	47	U	1530	1410		ug/Kg	☼	92	41 - 120
Benzaldehyde	310	U *	1530	531		ug/Kg	☼	35	28 - 120
Benzo[a]anthracene	93	J	766	791		ug/Kg	☼	91	35 - 120
Benzo[a]pyrene	100	J	766	799		ug/Kg	☼	91	33 - 120
Benzo[b]fluoranthene	130	J	766	841		ug/Kg	☼	92	26 - 120
Benzo[g,h,i]perylene	71	J	766	814		ug/Kg	☼	97	16 - 120
Benzo[k]fluoranthene	64	J	766	757		ug/Kg	☼	90	33 - 120
Bis(2-chloroethoxy)methane	310	U	766	631		ug/Kg	☼	82	36 - 120
Bis(2-chloroethyl)ether	93	U	766	652		ug/Kg	☼	85	33 - 120
Bis(2-ethylhexyl) phthalate	96	J *	766	909		ug/Kg	☼	106	40 - 120
Butyl benzyl phthalate	310	U	766	788		ug/Kg	☼	103	46 - 120
Caprolactam	310	U	1530	1870		ug/Kg	☼	122	33 - 128
Carbazole	310	U	766	729		ug/Kg	☼	95	35 - 120
Chrysene	120	J	766	829		ug/Kg	☼	92	33 - 120
Dibenz(a,h)anthracene	19	J	766	792		ug/Kg	☼	101	30 - 120
Dibenzofuran	23	J	766	695		ug/Kg	☼	88	37 - 120
Diethyl phthalate	310	U	766	552		ug/Kg	☼	72	44 - 120
Dimethyl phthalate	310	U	766	673		ug/Kg	☼	88	42 - 120
Di-n-butyl phthalate	310	U	766	732		ug/Kg	☼	96	45 - 120
Di-n-octyl phthalate	310	U	766	772		ug/Kg	☼	101	35 - 120
Fluoranthene	220	J	766	874		ug/Kg	☼	86	26 - 121
Fluorene	17	J	766	673		ug/Kg	☼	86	36 - 120
Hexachlorobenzene	310	U	766	633		ug/Kg	☼	83	36 - 120
Hexachlorobutadiene	47	U	766	556		ug/Kg	☼	73	31 - 120
Hexachlorocyclopentadiene	310	U F1	766	300	U F1	ug/Kg	☼	0	10 - 120
Hexachloroethane	310	U	766	226	J	ug/Kg	☼	30	15 - 120
Indeno[1,2,3-cd]pyrene	55	J	766	813		ug/Kg	☼	99	24 - 120
Isophorone	310	U	766	711		ug/Kg	☼	93	34 - 120
Naphthalene	12	J	766	682		ug/Kg	☼	87	29 - 120
Nitrobenzene	310	U	766	587		ug/Kg	☼	77	33 - 120
N-Nitrosodi-n-propylamine	310	U	766	627		ug/Kg	☼	82	32 - 120
N-Nitrosodiphenylamine	310	U	766	768		ug/Kg	☼	100	29 - 120
Pentachlorophenol	170	U	1530	717		ug/Kg	☼	47	10 - 120
Phenol	310	U	766	625		ug/Kg	☼	82	21 - 120
Phenanthrene	190	J	766	934		ug/Kg	☼	98	28 - 120
Pyrene	210	J	766	880		ug/Kg	☼	87	28 - 120
3 & 4 Methylphenol	310	U	766	637		ug/Kg	☼	83	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*90*		*32 - 120*
2-Fluorophenol (Surr)	*82*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*50*		*10 - 120*
Nitrobenzene-d5 (Surr)	*78*		*30 - 120*
Phenol-d5 (Surr)	*82*		*29 - 120*
Terphenyl-d14 (Surr)	*95*		*41 - 120*

Lab Sample ID: 240-101212-5 MSD
Matrix: Solid
Analysis Batch: 346838

Client Sample ID: S-17303-071218-DA-005
Prep Type: Total/NA
Prep Batch: 345883

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	310	U	772	650		ug/Kg	☼	84	33 - 120	9	33
2,2'-oxybis[1-chloropropane]	310	U	772	466		ug/Kg	☼	60	26 - 120	13	31
2,4,5-Trichlorophenol	310	U	772	549		ug/Kg	☼	71	20 - 120	1	38
2,4,6-Trichlorophenol	310	U	772	519		ug/Kg	☼	67	19 - 120	9	36
2,4-Dichlorophenol	310	U	772	674		ug/Kg	☼	87	32 - 120	7	32
2,4-Dimethylphenol	310	U	772	625		ug/Kg	☼	81	28 - 120	9	35
2,4-Dinitrophenol	170	U	1540	465		ug/Kg	☼	30	10 - 120	25	40
2,4-Dinitrotoluene	310	U	772	734		ug/Kg	☼	95	38 - 120	15	27
2,6-Dinitrotoluene	310	U	772	709		ug/Kg	☼	92	43 - 120	2	31
2-Chloronaphthalene	310	U	772	637		ug/Kg	☼	83	35 - 120	9	30
2-Chlorophenol	310	U	772	566		ug/Kg	☼	73	30 - 120	14	37
2-Methylnaphthalene	50	J	772	687		ug/Kg	☼	82	31 - 120	8	33
2-Methylphenol	310	U	772	647		ug/Kg	☼	84	31 - 120	0	36
2-Nitroaniline	230	U	772	619		ug/Kg	☼	80	29 - 120	6	31
2-Nitrophenol	310	U	772	630		ug/Kg	☼	82	26 - 120	15	38
3,3'-Dichlorobenzidine	1900	U	1540	1250	J	ug/Kg	☼	81	10 - 120	0	40
3-Nitroaniline	230	U	772	692		ug/Kg	☼	90	21 - 120	6	40
4,6-Dinitro-2-methylphenol	170	U	1540	673		ug/Kg	☼	44	10 - 120	18	40
4-Bromophenyl phenyl ether	310	U	772	636		ug/Kg	☼	82	44 - 120	3	40
4-Chloro-3-methylphenol	310	U	772	659		ug/Kg	☼	85	31 - 120	4	25
4-Chloroaniline	230	U	772	473		ug/Kg	☼	61	15 - 120	7	36
4-Chlorophenyl phenyl ether	310	U	772	607		ug/Kg	☼	79	41 - 120	6	40
4-Nitroaniline	230	U	772	632		ug/Kg	☼	82	23 - 120	0	40
4-Nitrophenol	380	U	1540	915		ug/Kg	☼	59	32 - 120	2	31
Acenaphthene	20	J	772	659		ug/Kg	☼	83	36 - 120	8	28
Acenaphthylene	310	U	772	649		ug/Kg	☼	84	35 - 120	9	26
Acetophenone	310	U	772	570		ug/Kg	☼	74	31 - 120	11	40
Anthracene	25	J	772	696		ug/Kg	☼	87	42 - 120	4	32
Atrazine	47	U	1540	1460		ug/Kg	☼	94	41 - 120	3	26
Benzaldehyde	310	U *	1540	605		ug/Kg	☼	39	28 - 120	13	40
Benzo[a]anthracene	93	J	772	775		ug/Kg	☼	88	35 - 120	2	40
Benzo[a]pyrene	100	J	772	742		ug/Kg	☼	83	33 - 120	7	40
Benzo[b]fluoranthene	130	J	772	795		ug/Kg	☼	86	26 - 120	6	40
Benzo[g,h,i]perylene	71	J	772	735		ug/Kg	☼	86	16 - 120	10	40
Benzo[k]fluoranthene	64	J	772	716		ug/Kg	☼	84	33 - 120	6	40
Bis(2-chloroethoxy)methane	310	U	772	554		ug/Kg	☼	72	36 - 120	13	33
Bis(2-chloroethyl)ether	93	U	772	582		ug/Kg	☼	75	33 - 120	11	36
Bis(2-ethylhexyl) phthalate	96	J *	772	917		ug/Kg	☼	106	40 - 120	1	28
Butyl benzyl phthalate	310	U	772	781		ug/Kg	☼	101	46 - 120	1	39
Caprolactam	310	U	1540	1920		ug/Kg	☼	124	33 - 128	2	40
Carbazole	310	U	772	702		ug/Kg	☼	91	35 - 120	4	34
Chrysene	120	J	772	775		ug/Kg	☼	84	33 - 120	7	40
Dibenz(a,h)anthracene	19	J	772	743		ug/Kg	☼	94	30 - 120	6	40
Dibenzofuran	23	J	772	655		ug/Kg	☼	82	37 - 120	6	28
Diethyl phthalate	310	U	772	534		ug/Kg	☼	69	44 - 120	3	26
Dimethyl phthalate	310	U	772	629		ug/Kg	☼	81	42 - 120	7	35
Di-n-butyl phthalate	310	U	772	719		ug/Kg	☼	93	45 - 120	2	28
Di-n-octyl phthalate	310	U	772	770		ug/Kg	☼	100	35 - 120	0	33
Fluoranthene	220	J	772	764		ug/Kg	☼	71	26 - 121	13	40
Fluorene	17	J	772	640		ug/Kg	☼	81	36 - 120	5	28

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101212-5 MSD — **Client Sample ID: S-17303-071218-DA-005**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 346838 — **Prep Batch: 345883**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobenzene	310	U	772	621		ug/Kg	☼	80	36 - 120	2	25
Hexachlorobutadiene	47	U	772	498		ug/Kg	☼	64	31 - 120	11	35
Hexachlorocyclopentadiene	310	U F1	772	310	U F1	ug/Kg	☼	0	10 - 120	NC	40
Hexachloroethane	310	U	772	225	J	ug/Kg	☼	29	15 - 120	1	40
Indeno[1,2,3-cd]pyrene	55	J	772	743		ug/Kg	☼	89	24 - 120	9	40
Isophorone	310	U	772	631		ug/Kg	☼	82	34 - 120	12	32
Naphthalene	12	J	772	623		ug/Kg	☼	79	29 - 120	9	34
Nitrobenzene	310	U	772	519		ug/Kg	☼	67	33 - 120	12	40
N-Nitrosodi-n-propylamine	310	U	772	543		ug/Kg	☼	70	32 - 120	14	32
N-Nitrosodiphenylamine	310	U	772	751		ug/Kg	☼	97	29 - 120	2	30
Pentachlorophenol	170	U	1540	624		ug/Kg	☼	40	10 - 120	14	40
Phenol	310	U	772	546		ug/Kg	☼	71	21 - 120	13	40
Phenanthrene	190	J	772	740		ug/Kg	☼	72	28 - 120	23	40
Pyrene	210	J	772	821		ug/Kg	☼	79	28 - 120	7	40
3 & 4 Methylphenol	310	U	772	582		ug/Kg	☼	75	33 - 120	9	29

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*85*		*32 - 120*
2-Fluorophenol (Surr)	*75*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 120*
Nitrobenzene-d5 (Surr)	*71*		*30 - 120*
Phenol-d5 (Surr)	*76*		*29 - 120*
Terphenyl-d14 (Surr)	*97*		*41 - 120*

Method: Moisture - Percent Moisture

Lab Sample ID: 240-101212-5 DU — **Client Sample ID: S-17303-071218-DA-005**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 345869

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	85.7		85.3		%		0.5	20
Percent Moisture	14.3		14.7		%		3	20

Lab Sample ID: 240-101212-11 DU — **Client Sample ID: S-17303-071218-DA-011**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 345869

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	87.6		88.2		%		0.7	20
Percent Moisture	12.4		11.8		%		5	20

Lab Sample ID: 240-101212-20 DU — **Client Sample ID: S-17303-071218-DA-020**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 345869

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	84.7		85.3		%		0.7	20

Method: Moisture - Percent Moisture (Continued)

Lab Sample ID: 240-101212-20 DU
Matrix: Solid
Analysis Batch: 345869

Client Sample ID: S-17303-071218-DA-020
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	15.3			14.7		%				4	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-144)	(58-142)	(61-137)	(31-155)
240-101212-13	S-17303-071218-DA-013	94	86	94	83
240-101212-14	S-17303-071218-DA-014	96	90	99	83
240-101212-15	S-17303-071218-DA-015	101	96	102	90
240-101212-16	S-17303-071218-DA-016	101	95	104	89
240-101212-17	S-17303-071218-DA-017	97	88	98	82
240-101212-18	S-17303-071218-DA-018	102	96	100	96
240-101212-19	S-17303-071218-DA-019	59 X	0 X	71	0 X
240-101212-20	S-17303-071218-DA-020	92	78	87	95
LCS 240-345459/2-A	Lab Control Sample	107	84	85	99
LCSD 240-345459/3-A	Lab Control Sample Dup	113	87	88	100
MB 240-345459/1-A	Method Blank	127	92	97	106

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)
240-101212-21	TB-17303-071218	73	96	96	81
LCS 240-346652/5	Lab Control Sample	77	98	100	82
MB 240-346652/7	Method Blank	76	100	101	79

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(10-120)	(30-120)	(29-120)	(41-120)
240-101212-1	S-17303-071218-DA-001	71	56	46	50	60	80
240-101212-2	S-17303-071218-DA-002	85	68	56	61	73	95
240-101212-3	S-17303-071218-DA-003	79	65	56	59	67	96
240-101212-4	S-17303-071218-DA-004	77	71	54	56	67	87
240-101212-5	S-17303-071218-DA-005	80	66	41	63	67	92
240-101212-5 MS	S-17303-071218-DA-005	90	82	50	78	82	95
240-101212-5 MSD	S-17303-071218-DA-005	85	75	49	71	76	97
240-101212-6	S-17303-071218-DA-006	80	64	47	59	68	95
240-101212-7	S-17303-071218-DA-007	84	71	61	68	73	90
240-101212-8	S-17303-071218-DA-008	86	74	48	65	75	97

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (32-120)	2FP (29-120)	TBP (10-120)	NBZ (30-120)	PHL (29-120)	TPHL (41-120)
240-101212-9	S-17303-071218-DA-009	84	84	54	62	81	90
240-101212-10	S-17303-071218-DA-010	85	76	38	71	77	88
240-101212-11	S-17303-071218-DA-011	86	75	47	69	76	97
240-101212-12	S-17303-071218-DA-012	88	75	46	73	75	92
LCS 240-345883/19-A	Lab Control Sample	91	86	50	76	86	102
MB 240-345883/18-A	Method Blank	66	90	21	54	57	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Client Sample ID: S-17303-071218-DA-001 — Lab Sample ID: 240-101212-1

Date Collected: 09/12/18 09:50 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-001 — Lab Sample ID: 240-101212-1

Date Collected: 09/12/18 09:50 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 79.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		4	346838	09/24/18 14:44	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-002 — Lab Sample ID: 240-101212-2

Date Collected: 09/12/18 10:00 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-002 — Lab Sample ID: 240-101212-2

Date Collected: 09/12/18 10:00 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 83.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 16:30	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-003 — Lab Sample ID: 240-101212-3

Date Collected: 09/12/18 10:10 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-003 — Lab Sample ID: 240-101212-3

Date Collected: 09/12/18 10:10 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 83.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 16:56	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-004 — **Lab Sample ID: 240-101212-4**
Date Collected: 09/12/18 10:15 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-004 — **Lab Sample ID: 240-101212-4**
Date Collected: 09/12/18 10:15 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 83.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 17:23	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-005 — **Lab Sample ID: 240-101212-5**
Date Collected: 09/12/18 10:30 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-005 — **Lab Sample ID: 240-101212-5**
Date Collected: 09/12/18 10:30 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 85.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 20:54	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-006 — **Lab Sample ID: 240-101212-6**
Date Collected: 09/12/18 10:35 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-006 — **Lab Sample ID: 240-101212-6**
Date Collected: 09/12/18 10:35 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 85.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 17:49	MRU	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Client Sample ID: S-17303-071218-DA-007
Lab Sample ID: 240-101212-7
Date Collected: 09/12/18 11:15
Matrix: Solid
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-007
Lab Sample ID: 240-101212-7
Date Collected: 09/12/18 11:15
Matrix: Solid
Date Received: 09/14/18 09:15
Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 18:16	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-008
Lab Sample ID: 240-101212-8
Date Collected: 09/12/18 11:15
Matrix: Solid
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-008
Lab Sample ID: 240-101212-8
Date Collected: 09/12/18 11:15
Matrix: Solid
Date Received: 09/14/18 09:15
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 18:42	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-009
Lab Sample ID: 240-101212-9
Date Collected: 09/12/18 11:35
Matrix: Solid
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-009
Lab Sample ID: 240-101212-9
Date Collected: 09/12/18 11:35
Matrix: Solid
Date Received: 09/14/18 09:15
Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 19:08	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-010 — **Lab Sample ID: 240-101212-10**
Date Collected: 09/12/18 11:40 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-010 — **Lab Sample ID: 240-101212-10**
Date Collected: 09/12/18 11:40 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 89.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 19:35	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-011 — **Lab Sample ID: 240-101212-11**
Date Collected: 09/12/18 11:50 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-011 — **Lab Sample ID: 240-101212-11**
Date Collected: 09/12/18 11:50 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 87.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 20:01	MRU	TAL CAN

Client Sample ID: S-17303-071218-DA-012 — **Lab Sample ID: 240-101212-12**
Date Collected: 09/12/18 12:00 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-012 — **Lab Sample ID: 240-101212-12**
Date Collected: 09/12/18 12:00 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 89.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			345883	09/18/18 10:14	ZMF	TAL CAN
Total/NA	Analysis	8270C		1	346838	09/24/18 20:28	MRU	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Client Sample ID: S-17303-071218-DA-013
Lab Sample ID: 240-101212-13
Date Collected: 09/12/18 15:00
Matrix: Solid
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-013
Lab Sample ID: 240-101212-13
Date Collected: 09/12/18 15:00
Matrix: Solid
Date Received: 09/14/18 09:15
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			345459	09/14/18 18:49	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346461	09/21/18 15:31	HMB	TAL CAN

Client Sample ID: S-17303-071218-DA-014
Lab Sample ID: 240-101212-14
Date Collected: 09/12/18 15:05
Matrix: Solid
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-014
Lab Sample ID: 240-101212-14
Date Collected: 09/12/18 15:05
Matrix: Solid
Date Received: 09/14/18 09:15
Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			345459	09/14/18 18:49	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346461	09/21/18 15:55	HMB	TAL CAN

Client Sample ID: S-17303-071218-DA-015
Lab Sample ID: 240-101212-15
Date Collected: 09/12/18 15:10
Matrix: Solid
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-015
Lab Sample ID: 240-101212-15
Date Collected: 09/12/18 15:10
Matrix: Solid
Date Received: 09/14/18 09:15
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			345459	09/14/18 18:49	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346461	09/21/18 16:19	HMB	TAL CAN

Client Sample ID: S-17303-071218-DA-016 — **Lab Sample ID: 240-101212-16**
Date Collected: 09/12/18 15:15 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-016 — **Lab Sample ID: 240-101212-16**
Date Collected: 09/12/18 15:15 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 88.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			345459	09/14/18 19:20	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346461	09/21/18 16:42	HMB	TAL CAN

Client Sample ID: S-17303-071218-DA-017 — **Lab Sample ID: 240-101212-17**
Date Collected: 09/12/18 16:45 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-017 — **Lab Sample ID: 240-101212-17**
Date Collected: 09/12/18 16:45 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 89.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			345459	09/14/18 19:20	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346461	09/21/18 17:06	HMB	TAL CAN

Client Sample ID: S-17303-071218-DA-018 — **Lab Sample ID: 240-101212-18**
Date Collected: 09/12/18 16:50 — **Matrix: Solid**
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-018 — **Lab Sample ID: 240-101212-18**
Date Collected: 09/12/18 16:50 — **Matrix: Solid**
Date Received: 09/14/18 09:15 — **Percent Solids: 89.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			345459	09/14/18 19:20	LAM	TAL CAN
Total/NA	Analysis	8260B		10	346654	09/22/18 11:46	HMB	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Client Sample ID: S-17303-071218-DA-019
Lab Sample ID: 240-101212-19
Date Collected: 09/12/18 16:55
Matrix: Solid
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-019
Lab Sample ID: 240-101212-19
Date Collected: 09/12/18 16:55
Matrix: Solid
Date Received: 09/14/18 09:15
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			345459	09/14/18 19:20	LAM	TAL CAN
Total/NA	Analysis	8260B		100	346654	09/22/18 12:10	HMB	TAL CAN

Client Sample ID: S-17303-071218-DA-020
Lab Sample ID: 240-101212-20
Date Collected: 09/12/18 16:00
Matrix: Solid
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-071218-DA-020
Lab Sample ID: 240-101212-20
Date Collected: 09/12/18 16:00
Matrix: Solid
Date Received: 09/14/18 09:15
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			345459	09/14/18 19:20	LAM	TAL CAN
Total/NA	Analysis	8260B		20	346654	09/22/18 12:33	HMB	TAL CAN

Client Sample ID: TB-17303-071218
Lab Sample ID: 240-101212-21
Date Collected: 09/12/18 00:00
Matrix: Water
Date Received: 09/14/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	346652	09/22/18 13:19	HMB	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101212-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN
190

Chain of Custody Record

3.6/4.5

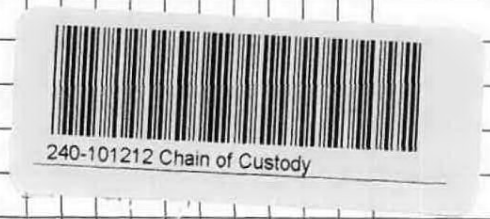
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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: A. BAINS	Site Contact: K. TREDRAIL	Date: 9/12/18	COC No:
Company Name: GHD SERVICES INC	Tel/Fax: 248 893 3400	Lab Contact: D. HECKLER	Carrier: FED EX	1 of 2 COCs
Address: 24850 HAGGERTY RD	Analysis Turnaround Time			Sampler: D. ANTOLIS
City/State/Zip: FARMINGTON HILLS, MI	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248 893 3400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	SVOCs	Sample Specific Notes:
S-17303-091218-DA-001	9/12/18	0950	G	S	2				X	
-002		1000								
-003		1010								
-004		1015								
-005		1030					X			
-006		1035								
-007		1115								
-008		1115								
-009		1135								
-010		1140								
-011		1150								
S-17303-091218-DA-012		1200								



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
SSOW# 17303-TO2-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by: DILLON ANTOLIS	Company: GHD	Date/Time: 9/12/18 1800	Received by:	Company: TA	Date/Time: 9/13/18 915
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN 190

Chain of Custody Record

288247

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: A. BAIN	Site Contact: K. TRESTRAIL	Date: 9/12/18	COC No:
Company Name: GHD SERVICES INC.	Tel/Fax: 248 223 3400	Lab Contact: D. HEINLER	Carrier: FED EX	2 of 2 COCs
Address: 26850 HAGGERTY RD.	Analysis Turnaround Time			Sampler: D. ANTULIS
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248 223 3400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs SVOCs	Sample Specific Notes:
S-17303-09128-DA-013	9/12/18	1500	G	S	2			X	
-014		1505							
-015		1510							
-016		1515							
-017		1545							
-018		1650							
-019		1555							
-020		1600							
TB-17303-091218	—	—	—	W	1			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
SSOW# 17303-T02-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: DILLON ANTULIS	Company: GHD	Date/Time: 9/12/18 1800	Received by:	Company: TA	Date/Time: 9/13/18 915
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

9/29/2018

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 101212**
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: BC

Cooler Received on 9/13/18 Opened on 9/13/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.9 °C) Observed Cooler Temp. 3.6 °C Corrected Cooler Temp. 4.5 °C
   IR GUN #36 (CF +0.6°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849161**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 38125018 Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: GB.

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-101324-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
9/28/2018 10:00:15 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-101324-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-101324-1

Comments
No additional comments.

Receipt
The samples were received on 9/14/2018 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for preparation batch 240-346120 and analytical batch 240-346739 recovered outside control limits for the following analytes: Chloroethane and Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-346127 and analytical batch 240-346774.

Method(s) 8260B: The laboratory control sample (LCS) for 347298 recovered outside control limits for the following analytes: Acetone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-101324-1	S-17303-091318-DA-021	Solid	09/13/18 07:30	09/14/18 09:20
240-101324-2	S-17303-091318-DA-022	Solid	09/13/18 07:45	09/14/18 09:20
240-101324-3	S-17303-091318-DA-023	Solid	09/13/18 07:50	09/14/18 09:20
240-101324-4	S-17303-091318-DA-024	Solid	09/13/18 07:50	09/14/18 09:20
240-101324-5	S-17303-091318-DA-025	Solid	09/13/18 07:55	09/14/18 09:20
240-101324-6	S-17303-091318-DA-026	Solid	09/13/18 08:00	09/14/18 09:20
240-101324-7	S-17303-091318-DA-027	Solid	09/13/18 08:55	09/14/18 09:20
240-101324-8	S-17303-091318-DA-028	Solid	09/13/18 09:00	09/14/18 09:20
240-101324-9	S-17303-091318-DA-029	Solid	09/13/18 09:05	09/14/18 09:20
240-101324-10	S-17303-091318-DA-030	Solid	09/13/18 09:10	09/14/18 09:20
240-101324-11	S-17303-091318-DA-031	Solid	09/13/18 09:30	09/14/18 09:20
240-101324-12	S-17303-091318-DA-032	Solid	09/13/18 09:35	09/14/18 09:20
240-101324-13	S-17303-091318-DA-033	Solid	09/13/18 09:50	09/14/18 09:20
240-101324-14	S-17303-091318-DA-034	Solid	09/13/18 09:55	09/14/18 09:20
240-101324-15	S-17303-091318-DA-035	Solid	09/13/18 10:10	09/14/18 09:20
240-101324-16	S-17303-091318-DA-036	Solid	09/13/18 10:15	09/14/18 09:20
240-101324-17	S-17303-091318-DA-037	Solid	09/13/18 10:30	09/14/18 09:20
240-101324-18	S-17303-091318-DA-038	Solid	09/13/18 10:35	09/14/18 09:20
240-101324-19	S-17303-091318-DA-039	Solid	09/13/18 10:40	09/14/18 09:20
240-101324-20	S-17303-091318-DA-040	Solid	09/13/18 10:45	09/14/18 09:20
240-101324-21	S-17303-091318-DA-041	Solid	09/13/18 10:45	09/14/18 09:20
240-101324-22	TB-17303-091318	Water	09/13/18 00:00	09/14/18 09:20

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Client Sample ID: S-17303-091318-DA-021 — Lab Sample ID: 240-101324-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	990		55	50	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	970		55	48	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	100	J	1300	50	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-022 — Lab Sample ID: 240-101324-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	41	J	44	39	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-023 — Lab Sample ID: 240-101324-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	100		49	45	ug/Kg	1	☼	8260B	Total/NA
Vinyl chloride	48		39	21	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	870		49	43	ug/Kg	1	☼	8260B	Total/NA
trans-1,2-Dichloroethene	74		49	43	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	98	J	1200	92	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-024 — Lab Sample ID: 240-101324-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	58		47	44	ug/Kg	1	☼	8260B	Total/NA
Vinyl chloride	50		38	20	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	720		47	41	ug/Kg	1	☼	8260B	Total/NA
trans-1,2-Dichloroethene	60		47	41	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-025 — Lab Sample ID: 240-101324-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	100	J	280	92	ug/Kg	1	☼	8260B	Total/NA
Trichloroethene	110		56	52	ug/Kg	1	☼	8260B	Total/NA
Vinyl chloride	300		45	24	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	2300		56	49	ug/Kg	1	☼	8260B	Total/NA
trans-1,2-Dichloroethene	62		56	49	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	140	J	1400	110	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	110	J	1400	52	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-026 — Lab Sample ID: 240-101324-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	130	J	1200	95	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	160	J	1200	47	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-027 — Lab Sample ID: 240-101324-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	120	J	730	120	ug/Kg	1	☼	8260B	Total/NA
Trichloroethene	420		48	45	ug/Kg	1	☼	8260B	Total/NA
Vinyl chloride	260		39	21	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	63	J	150	34	ug/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: S-17303-091318-DA-027 (Continued) — Lab Sample ID: 240-101324-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2400		48	42	ug/Kg	1	☼	8260B	Total/NA
trans-1,2-Dichloroethene	420		48	42	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	200	J	1200	91	ug/Kg	1	☼	8260B	Total/NA
1,2,4-Trichlorobenzene	130	J	240	32	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-028 — Lab Sample ID: 240-101324-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	250		200	120	ug/Kg	4	☼	8260B	Total/NA
Ethylbenzene	180	J	200	180	ug/Kg	4	☼	8260B	Total/NA
Toluene	140	J B	400	120	ug/Kg	4	☼	8260B	Total/NA
Trichloroethene	1100		200	190	ug/Kg	4	☼	8260B	Total/NA
Vinyl chloride	1600		160	85	ug/Kg	4	☼	8260B	Total/NA
Xylenes, Total	670		600	140	ug/Kg	4	☼	8260B	Total/NA
cis-1,2-Dichloroethene	8900		200	180	ug/Kg	4	☼	8260B	Total/NA
trans-1,2-Dichloroethene	1900		200	180	ug/Kg	4	☼	8260B	Total/NA
Methylcyclohexane	260	J	4800	190	ug/Kg	4	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-029 — Lab Sample ID: 240-101324-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	82000		2800	2500	ug/Kg	50	☼	8260B	Total/NA
Vinyl chloride	10000		2200	1200	ug/Kg	50	☼	8260B	Total/NA
cis-1,2-Dichloroethene	90000		2800	2400	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-030 — Lab Sample ID: 240-101324-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	29000		990	920	ug/Kg	20	☼	8260B	Total/NA
Vinyl chloride	4200		800	420	ug/Kg	20	☼	8260B	Total/NA
cis-1,2-Dichloroethene	45000		990	870	ug/Kg	20	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-031 — Lab Sample ID: 240-101324-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	140		50	46	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	64		50	44	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	310	J	1200	93	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-032 — Lab Sample ID: 240-101324-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	110		76	70	ug/Kg	1	☼	8260B	Total/NA
Vinyl chloride	1200		61	32	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	300		76	66	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	850	J	1800	140	ug/Kg	1	☼	8260B	Total/NA
1,2,4-Trichlorobenzene	49	J	380	49	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-033 — Lab Sample ID: 240-101324-13

This Detection Summary does not include radiochemical test results.

Client Sample ID: S-17303-091318-DA-033 (Continued) — Lab Sample ID: 240-101324-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	57		53	49	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	55		53	47	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-034 — Lab Sample ID: 240-101324-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	740		49	45	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	260		49	43	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	120	J	1200	91	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-035 — Lab Sample ID: 240-101324-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	210	J	1300	100	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-036 — Lab Sample ID: 240-101324-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	92		51	47	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	54		51	45	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	120	J	1200	96	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-037 — Lab Sample ID: 240-101324-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	200	J B	650	200	ug/Kg	5	☼	8260B	Total/NA
cis-1,2-Dichloroethene	14000		330	290	ug/Kg	5	☼	8260B	Total/NA
trans-1,2-Dichloroethene	750		330	290	ug/Kg	5	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-038 — Lab Sample ID: 240-101324-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	310		40	21	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	54		50	44	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-17303-091318-DA-039 — Lab Sample ID: 240-101324-19

No Detections.

Client Sample ID: S-17303-091318-DA-040 — Lab Sample ID: 240-101324-20

No Detections.

Client Sample ID: S-17303-091318-DA-041 — Lab Sample ID: 240-101324-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	240		51	45	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: TB-17303-091318 — Lab Sample ID: 240-101324-22

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
5035	Closed System Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-021
Date Collected: 09/13/18 07:30
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-1
Matrix: Solid
Percent Solids: 84.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	820	U	820	130	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Benzene	55	U	55	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Bromoform	110	U	110	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Bromomethane	270	U *	270	38	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
2-Butanone (MEK)	820	U	820	68	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Carbon disulfide	270	U	270	25	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Carbon tetrachloride	55	U	55	37	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Chlorobenzene	55	U	55	41	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Chloroethane	270	U *	270	38	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Chloroform	55	U	55	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Chloromethane	270	U	270	25	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,1-Dichloroethane	55	U	55	42	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,2-Dichloroethane	55	U	55	41	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,1-Dichloroethene	55	U	55	49	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,2-Dichloropropane	55	U	55	41	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
cis-1,3-Dichloropropene	55	U	55	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
trans-1,3-Dichloropropene	55	U	55	20	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Ethylbenzene	55	U	55	48	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
2-Hexanone	2700	U	2700	120	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Methylene Chloride	270	U	270	89	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	55	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Styrene	55	U	55	14	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,1,2,2-Tetrachloroethane	55	U	55	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Tetrachloroethene	55	U	55	29	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Toluene	110	U	110	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Trichloroethene	**990**		55	50	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Vinyl chloride	44	U	44	23	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Xylenes, Total	160	U	160	38	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,1,1-Trichloroethane	55	U	55	38	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,1,2-Trichloroethane	55	U	55	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Cyclohexane	1300	U	1300	41	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,2-Dibromo-3-Chloropropane	270	U	270	66	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,2-Dibromoethane	270	U	270	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Dichlorodifluoromethane	110	U	110	30	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
cis-1,2-Dichloroethene	**970**		55	48	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
trans-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Isopropylbenzene	270	U	270	46	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Methyl acetate	1300	U	1300	100	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Methyl tert-butyl ether	270	U	270	35	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,2,4-Trichlorobenzene	270	U	270	35	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,3-Dichlorobenzene	110	U	110	52	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
1,4-Dichlorobenzene	110	U	110	37	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Trichlorofluoromethane	110	U	110	46	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Dibromochloromethane	55	U	55	46	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1
Methylcyclohexane	**100**	**J**	1300	50	ug/Kg	☼	09/19/18 11:40	09/23/18 12:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		64 - 144	09/19/18 11:40	09/23/18 12:00	1
4-Bromofluorobenzene (Surr)	80		58 - 142	09/19/18 11:40	09/23/18 12:00	1
Toluene-d8 (Surr)	92		61 - 137	09/19/18 11:40	09/23/18 12:00	1
Dibromofluoromethane (Surr)	88		31 - 155	09/19/18 11:40	09/23/18 12:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-022
Date Collected: 09/13/18 07:45
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-2
Matrix: Solid
Percent Solids: 93.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U	670	110	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Benzene	44	U	44	27	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Bromodichloromethane	89	U	89	20	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Bromoform	89	U	89	26	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Bromomethane	220	U * F2	220	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
2-Butanone (MEK)	670	U	670	56	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Carbon disulfide	220	U F2	220	20	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Carbon tetrachloride	44	U	44	30	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Chlorobenzene	44	U	44	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Chloroethane	220	U *	220	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Chloroform	44	U	44	27	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Chloromethane	220	U	220	20	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,1-Dichloroethane	44	U	44	34	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,2-Dichloroethane	44	U	44	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,1-Dichloroethene	44	U	44	40	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,2-Dichloropropane	44	U	44	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
cis-1,3-Dichloropropene	44	U	44	26	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
trans-1,3-Dichloropropene	44	U	44	17	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Ethylbenzene	44	U	44	39	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
2-Hexanone	2200	U	2200	96	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Methylene Chloride	220	U	220	72	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	44	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Styrene	44	U	44	11	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,1,2,2-Tetrachloroethane	44	U	44	27	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Tetrachloroethene	44	U	44	23	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Toluene	89	U	89	27	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Trichloroethene	44	U	44	41	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Vinyl chloride	36	U	36	19	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Xylenes, Total	130	U	130	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,1,1-Trichloroethane	44	U	44	31	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,1,2-Trichloroethane	44	U	44	26	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Cyclohexane	1100	U	1100	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,2-Dibromo-3-Chloropropane	220	U	220	53	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,2-Dibromoethane	220	U	220	26	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Dichlorodifluoromethane	89	U	89	24	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
cis-1,2-Dichloroethene	**41**	**J**	44	39	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
trans-1,2-Dichloroethene	44	U	44	39	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Isopropylbenzene	220	U	220	38	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Methyl acetate	1100	U	1100	83	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Methyl tert-butyl ether	220	U	220	29	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	26	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,2,4-Trichlorobenzene	220	U	220	29	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,2-Dichlorobenzene	89	U	89	20	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,3-Dichlorobenzene	89	U	89	42	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
1,4-Dichlorobenzene	89	U	89	30	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Trichlorofluoromethane	89	U	89	38	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Dibromochloromethane	44	U	44	38	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1
Methylcyclohexane	1100	U	1100	41	ug/Kg	☼	09/19/18 11:40	09/23/18 12:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 144	09/19/18 11:40	09/23/18 12:23	1
4-Bromofluorobenzene (Surr)	86		58 - 142	09/19/18 11:40	09/23/18 12:23	1
Toluene-d8 (Surr)	96		61 - 137	09/19/18 11:40	09/23/18 12:23	1
Dibromofluoromethane (Surr)	82		31 - 155	09/19/18 11:40	09/23/18 12:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-023
Date Collected: 09/13/18 07:50
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-3
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	730	U	730	120	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Benzene	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Bromodichloromethane	98	U	98	22	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Bromoform	98	U	98	28	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Bromomethane	240	U *	240	34	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
2-Butanone (MEK)	730	U	730	61	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Carbon disulfide	240	U	240	22	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Carbon tetrachloride	49	U	49	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Chlorobenzene	49	U	49	37	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Chloroethane	240	U *	240	34	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Chloroform	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Chloromethane	240	U	240	22	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,1-Dichloroethane	49	U	49	38	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,2-Dichloroethane	49	U	49	37	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,1-Dichloroethene	49	U	49	44	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,2-Dichloropropane	49	U	49	37	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
cis-1,3-Dichloropropene	49	U	49	28	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
trans-1,3-Dichloropropene	49	U	49	18	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Ethylbenzene	49	U	49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
2-Hexanone	2400	U	2400	110	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Methylene Chloride	240	U	240	79	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	49	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Styrene	49	U	49	12	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,1,2,2-Tetrachloroethane	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Tetrachloroethene	49	U	49	26	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Toluene	98	U	98	29	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Trichloroethene	**100**		49	45	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Vinyl chloride	**48**		39	21	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,1,1-Trichloroethane	49	U	49	34	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,1,2-Trichloroethane	49	U	49	28	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Cyclohexane	1200	U	1200	37	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,2-Dibromo-3-Chloropropane	240	U	240	59	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,2-Dibromoethane	240	U	240	28	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Dichlorodifluoromethane	98	U	98	27	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
cis-1,2-Dichloroethene	**870**		49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
trans-1,2-Dichloroethene	**74**		49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Isopropylbenzene	240	U	240	42	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Methyl acetate	**98**	**J**	1200	92	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Methyl tert-butyl ether	240	U	240	32	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	28	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,2,4-Trichlorobenzene	240	U	240	32	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,2-Dichlorobenzene	98	U	98	22	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,3-Dichlorobenzene	98	U	98	46	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
1,4-Dichlorobenzene	98	U	98	33	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Trichlorofluoromethane	98	U	98	42	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Dibromochloromethane	49	U	49	42	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1
Methylcyclohexane	1200	U	1200	45	ug/Kg	☼	09/19/18 11:40	09/23/18 12:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		64 - 144	09/19/18 11:40	09/23/18 12:46	1
4-Bromofluorobenzene (Surr)	94		58 - 142	09/19/18 11:40	09/23/18 12:46	1
Toluene-d8 (Surr)	105		61 - 137	09/19/18 11:40	09/23/18 12:46	1
Dibromofluoromethane (Surr)	90		31 - 155	09/19/18 11:40	09/23/18 12:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-024
Date Collected: 09/13/18 07:50
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-4
Matrix: Solid
Percent Solids: 89.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	710	U	710	110	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Benzene	47	U	47	28	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Bromodichloromethane	95	U	95	21	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Bromoform	95	U	95	27	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Bromomethane	240	U *	240	33	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
2-Butanone (MEK)	710	U	710	59	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Carbon disulfide	240	U	240	21	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Carbon tetrachloride	47	U	47	32	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Chlorobenzene	47	U	47	36	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Chloroethane	240	U *	240	33	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Chloroform	47	U	47	28	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Chloromethane	240	U	240	21	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,1-Dichloroethane	47	U	47	37	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,2-Dichloroethane	47	U	47	36	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,1-Dichloroethene	47	U	47	43	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,2-Dichloropropane	47	U	47	36	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
cis-1,3-Dichloropropene	47	U	47	27	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
trans-1,3-Dichloropropene	47	U	47	18	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Ethylbenzene	47	U	47	41	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
2-Hexanone	2400	U	2400	100	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Methylene Chloride	240	U	240	77	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	47	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Styrene	47	U	47	12	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,1,2,2-Tetrachloroethane	47	U	47	28	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Tetrachloroethene	47	U	47	25	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Toluene	95	U	95	28	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Trichloroethene	**58**		47	44	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Vinyl chloride	**50**		38	20	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Xylenes, Total	140	U	140	33	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,1,1-Trichloroethane	47	U	47	33	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,1,2-Trichloroethane	47	U	47	27	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Cyclohexane	1100	U	1100	36	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,2-Dibromo-3-Chloropropane	240	U	240	57	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,2-Dibromoethane	240	U	240	27	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Dichlorodifluoromethane	95	U	95	26	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
cis-1,2-Dichloroethene	**720**		47	41	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
trans-1,2-Dichloroethene	**60**		47	41	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Isopropylbenzene	240	U	240	40	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Methyl acetate	1100	U	1100	89	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Methyl tert-butyl ether	240	U	240	31	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	27	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,2,4-Trichlorobenzene	240	U	240	31	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,2-Dichlorobenzene	95	U	95	21	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,3-Dichlorobenzene	95	U	95	45	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
1,4-Dichlorobenzene	95	U	95	32	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Trichlorofluoromethane	95	U	95	40	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Dibromochloromethane	47	U	47	40	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1
Methylcyclohexane	1100	U	1100	44	ug/Kg	☼	09/19/18 11:40	09/23/18 13:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 144	09/19/18 11:40	09/23/18 13:10	1
4-Bromofluorobenzene (Surr)	93		58 - 142	09/19/18 11:40	09/23/18 13:10	1
Toluene-d8 (Surr)	103		61 - 137	09/19/18 11:40	09/23/18 13:10	1
Dibromofluoromethane (Surr)	89		31 - 155	09/19/18 11:40	09/23/18 13:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-025
Date Collected: 09/13/18 07:55
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-5
Matrix: Solid
Percent Solids: 83.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	850	U	850	140	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Benzene	56	U	56	34	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Bromoform	110	U	110	32	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Bromomethane	280	U *	280	40	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
2-Butanone (MEK)	850	U	850	71	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Carbon disulfide	280	U	280	25	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Carbon tetrachloride	56	U	56	38	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Chlorobenzene	56	U	56	42	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Chloroethane	280	U *	280	40	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Chloroform	56	U	56	34	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Chloromethane	280	U	280	25	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,1-Dichloroethane	56	U	56	44	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,2-Dichloroethane	56	U	56	42	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,1-Dichloroethene	56	U	56	51	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,2-Dichloropropane	56	U	56	42	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
cis-1,3-Dichloropropene	56	U	56	32	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
trans-1,3-Dichloropropene	56	U	56	21	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Ethylbenzene	56	U	56	49	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
2-Hexanone	2800	U	2800	120	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Methylene Chloride	**100**	**J**	280	92	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	56	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Styrene	56	U	56	14	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,1,2,2-Tetrachloroethane	56	U	56	34	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Tetrachloroethene	56	U	56	30	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Toluene	110	U	110	34	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Trichloroethene	**110**		56	52	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Vinyl chloride	**300**		45	24	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Xylenes, Total	170	U	170	40	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,1,1-Trichloroethane	56	U	56	40	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,1,2-Trichloroethane	56	U	56	32	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Cyclohexane	1400	U	1400	42	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,2-Dibromo-3-Chloropropane	280	U	280	68	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,2-Dibromoethane	280	U	280	32	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Dichlorodifluoromethane	110	U	110	31	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
cis-1,2-Dichloroethene	**2300**		56	49	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
trans-1,2-Dichloroethene	**62**		56	49	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Isopropylbenzene	280	U	280	48	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Methyl acetate	**140**	**J**	1400	110	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Methyl tert-butyl ether	280	U	280	37	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	32	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,2,4-Trichlorobenzene	280	U	280	37	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,3-Dichlorobenzene	110	U	110	54	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
1,4-Dichlorobenzene	110	U	110	38	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Trichlorofluoromethane	110	U	110	48	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Dibromochloromethane	56	U	56	48	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1
Methylcyclohexane	**110**	**J**	1400	52	ug/Kg	☼	09/19/18 11:40	09/23/18 13:33	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 144	09/19/18 11:40	09/23/18 13:33	1
4-Bromofluorobenzene (Surr)	85		58 - 142	09/19/18 11:40	09/23/18 13:33	1
Toluene-d8 (Surr)	94		61 - 137	09/19/18 11:40	09/23/18 13:33	1
Dibromofluoromethane (Surr)	89		31 - 155	09/19/18 11:40	09/23/18 13:33	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-026
Date Collected: 09/13/18 08:00
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-6
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	760	U	760	120	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Benzene	51	U	51	30	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Bromoform	100	U	100	29	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Bromomethane	250	U *	250	36	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
2-Butanone (MEK)	760	U	760	64	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Carbon disulfide	250	U	250	23	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Carbon tetrachloride	51	U	51	34	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Chlorobenzene	51	U	51	38	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Chloroethane	250	U *	250	36	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Chloroform	51	U	51	30	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Chloromethane	250	U	250	23	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,1-Dichloroethane	51	U	51	39	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,2-Dichloroethane	51	U	51	38	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,1-Dichloroethene	51	U	51	46	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,2-Dichloropropane	51	U	51	38	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
cis-1,3-Dichloropropene	51	U	51	29	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
trans-1,3-Dichloropropene	51	U	51	19	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Ethylbenzene	51	U	51	44	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
2-Hexanone	2500	U	2500	110	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Methylene Chloride	250	U	250	83	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	51	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Styrene	51	U	51	13	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,1,2,2-Tetrachloroethane	51	U	51	30	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Tetrachloroethene	51	U	51	27	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Toluene	100	U	100	30	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Trichloroethene	51	U	51	47	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Xylenes, Total	150	U	150	36	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,1,1-Trichloroethane	51	U	51	36	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,1,2-Trichloroethane	51	U	51	29	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Cyclohexane	1200	U	1200	38	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,2-Dibromo-3-Chloropropane	250	U	250	61	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,2-Dibromoethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
cis-1,2-Dichloroethene	51	U	51	44	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
trans-1,2-Dichloroethene	51	U	51	44	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Isopropylbenzene	250	U	250	43	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Methyl acetate	**130**	**J**	1200	95	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Methyl tert-butyl ether	250	U	250	33	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,2,4-Trichlorobenzene	250	U	250	33	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,3-Dichlorobenzene	100	U	100	48	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
1,4-Dichlorobenzene	100	U	100	34	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Trichlorofluoromethane	100	U	100	43	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Dibromochloromethane	51	U	51	43	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1
Methylcyclohexane	**160**	**J**	1200	47	ug/Kg	☼	09/19/18 11:40	09/23/18 13:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 144	09/19/18 11:40	09/23/18 13:56	1
4-Bromofluorobenzene (Surr)	84		58 - 142	09/19/18 11:40	09/23/18 13:56	1
Toluene-d8 (Surr)	99		61 - 137	09/19/18 11:40	09/23/18 13:56	1
Dibromofluoromethane (Surr)	86		31 - 155	09/19/18 11:40	09/23/18 13:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-027
Date Collected: 09/13/18 08:55
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-7
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**120**	**J**	730	120	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Benzene	48	U	48	29	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Bromodichloromethane	97	U	97	22	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Bromoform	97	U	97	28	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Bromomethane	240	U *	240	34	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
2-Butanone (MEK)	730	U	730	61	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Carbon disulfide	240	U	240	22	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Carbon tetrachloride	48	U	48	33	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Chlorobenzene	48	U	48	36	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Chloroethane	240	U *	240	34	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Chloroform	48	U	48	29	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Chloromethane	240	U	240	22	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,1-Dichloroethane	48	U	48	38	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,2-Dichloroethane	48	U	48	36	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,1-Dichloroethene	48	U	48	44	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,2-Dichloropropane	48	U	48	36	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
cis-1,3-Dichloropropene	48	U	48	28	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
trans-1,3-Dichloropropene	48	U	48	18	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Ethylbenzene	48	U	48	42	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
2-Hexanone	2400	U	2400	100	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Methylene Chloride	240	U	240	79	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	48	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Styrene	48	U	48	12	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,1,2,2-Tetrachloroethane	48	U	48	29	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Tetrachloroethene	48	U	48	25	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Toluene	97	U	97	29	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Trichloroethene	**420**		48	45	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Vinyl chloride	**260**		39	21	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Xylenes, Total	**63**	**J**	150	34	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,1,1-Trichloroethane	48	U	48	34	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,1,2-Trichloroethane	48	U	48	28	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Cyclohexane	1200	U	1200	36	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,2-Dibromo-3-Chloropropane	240	U	240	58	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,2-Dibromoethane	240	U	240	28	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Dichlorodifluoromethane	97	U	97	27	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
cis-1,2-Dichloroethene	**2400**		48	42	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
trans-1,2-Dichloroethene	**420**		48	42	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Isopropylbenzene	240	U	240	41	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Methyl acetate	**200**	**J**	1200	91	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Methyl tert-butyl ether	240	U	240	32	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	28	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,2,4-Trichlorobenzene	**130**	**J**	240	32	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,2-Dichlorobenzene	97	U	97	22	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,3-Dichlorobenzene	97	U	97	46	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
1,4-Dichlorobenzene	97	U	97	33	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Trichlorofluoromethane	97	U	97	41	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Dibromochloromethane	48	U	48	41	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1
Methylcyclohexane	1200	U	1200	45	ug/Kg	☼	09/19/18 11:40	09/23/18 14:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 144	09/19/18 11:40	09/23/18 14:20	1
4-Bromofluorobenzene (Surr)	96		58 - 142	09/19/18 11:40	09/23/18 14:20	1
Toluene-d8 (Surr)	105		61 - 137	09/19/18 11:40	09/23/18 14:20	1
Dibromofluoromethane (Surr)	90		31 - 155	09/19/18 11:40	09/23/18 14:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-028
Date Collected: 09/13/18 09:00
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-8
Matrix: Solid
Percent Solids: 84.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3000	U	3000	490	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Benzene	**250**		200	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Bromodichloromethane	400	U	400	90	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Bromoform	400	U	400	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Bromomethane	1000	U *	1000	140	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
2-Butanone (MEK)	3000	U	3000	250	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Carbon disulfide	1000	U	1000	90	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Carbon tetrachloride	200	U	200	140	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Chlorobenzene	200	U	200	150	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Chloroethane	1000	U *	1000	140	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Chloroform	200	U	200	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Chloromethane	1000	U	1000	90	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,1-Dichloroethane	200	U	200	160	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,2-Dichloroethane	200	U	200	150	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,1-Dichloroethene	200	U	200	180	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,2-Dichloropropane	200	U	200	150	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
cis-1,3-Dichloropropene	200	U	200	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
trans-1,3-Dichloropropene	200	U	200	75	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Ethylbenzene	**180**	**J**	200	180	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
2-Hexanone	10000	U	10000	430	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Methylene Chloride	1000	U	1000	330	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
4-Methyl-2-pentanone (MIBK)	10000	U	10000	200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Styrene	200	U	200	50	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,1,2,2-Tetrachloroethane	200	U	200	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Tetrachloroethene	200	U	200	110	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Toluene	**140**	**J B**	400	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Trichloroethene	**1100**		200	190	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Vinyl chloride	**1600**		160	85	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Xylenes, Total	**670**		600	140	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,1,1-Trichloroethane	200	U	200	140	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,1,2-Trichloroethane	200	U	200	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Cyclohexane	4800	U	4800	150	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,2-Dibromo-3-Chloropropane	1000	U	1000	240	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,2-Dibromoethane	1000	U	1000	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Dichlorodifluoromethane	400	U	400	110	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
cis-1,2-Dichloroethene	**8900**		200	180	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
trans-1,2-Dichloroethene	**1900**		200	180	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Isopropylbenzene	1000	U	1000	170	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Methyl acetate	4800	U	4800	380	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Methyl tert-butyl ether	1000	U	1000	130	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	U	1000	120	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,2,4-Trichlorobenzene	1000	U	1000	130	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,2-Dichlorobenzene	400	U	400	90	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,3-Dichlorobenzene	400	U	400	190	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
1,4-Dichlorobenzene	400	U	400	140	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Trichlorofluoromethane	400	U	400	170	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Dibromochloromethane	200	U	200	170	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4
Methylcyclohexane	**260**	**J**	4800	190	ug/Kg	☼	09/19/18 11:40	09/24/18 15:09	4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 144	09/19/18 11:40	09/24/18 15:09	4
4-Bromofluorobenzene (Surr)	83		58 - 142	09/19/18 11:40	09/24/18 15:09	4
Toluene-d8 (Surr)	95		61 - 137	09/19/18 11:40	09/24/18 15:09	4
Dibromofluoromethane (Surr)	97		31 - 155	09/19/18 11:40	09/24/18 15:09	4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-029
Date Collected: 09/13/18 09:05
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-9
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	41000	U	41000	6700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Benzene	2800	U	2800	1700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Bromodichloromethane	5500	U	5500	1200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Bromoform	5500	U	5500	1600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Bromomethane	14000	U *	14000	1900	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
2-Butanone (MEK)	41000	U	41000	3400	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Carbon disulfide	14000	U	14000	1200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Carbon tetrachloride	2800	U	2800	1900	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Chlorobenzene	2800	U	2800	2100	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Chloroethane	14000	U *	14000	1900	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Chloroform	2800	U	2800	1700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Chloromethane	14000	U	14000	1200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,1-Dichloroethane	2800	U	2800	2100	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,2-Dichloroethane	2800	U	2800	2100	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,1-Dichloroethene	2800	U	2800	2500	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,2-Dichloropropane	2800	U	2800	2100	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
cis-1,3-Dichloropropene	2800	U	2800	1600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
trans-1,3-Dichloropropene	2800	U	2800	1000	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Ethylbenzene	2800	U	2800	2400	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
2-Hexanone	140000	U	140000	5900	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Methylene Chloride	14000	U	14000	4500	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
4-Methyl-2-pentanone (MIBK)	140000	U	140000	2800	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Styrene	2800	U	2800	690	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,1,2,2-Tetrachloroethane	2800	U	2800	1700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Tetrachloroethene	2800	U	2800	1400	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Toluene	5500	U	5500	1700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Trichloroethene	**82000**		2800	2500	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Vinyl chloride	**10000**		2200	1200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Xylenes, Total	8300	U	8300	1900	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,1,1-Trichloroethane	2800	U	2800	1900	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,1,2-Trichloroethane	2800	U	2800	1600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Cyclohexane	66000	U	66000	2100	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,2-Dibromo-3-Chloropropane	14000	U	14000	3300	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,2-Dibromoethane	14000	U	14000	1600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Dichlorodifluoromethane	5500	U	5500	1500	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
cis-1,2-Dichloroethene	**90000**		2800	2400	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
trans-1,2-Dichloroethene	2800	U	2800	2400	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Isopropylbenzene	14000	U	14000	2300	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Methyl acetate	66000	U	66000	5200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Methyl tert-butyl ether	14000	U	14000	1800	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,1,2-Trichloro-1,2,2-trifluoroethane	14000	U	14000	1600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,2,4-Trichlorobenzene	14000	U	14000	1800	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,2-Dichlorobenzene	5500	U	5500	1200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,3-Dichlorobenzene	5500	U	5500	2600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
1,4-Dichlorobenzene	5500	U	5500	1900	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Trichlorofluoromethane	5500	U	5500	2300	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Dibromochloromethane	2800	U	2800	2300	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50
Methylcyclohexane	66000	U	66000	2500	ug/Kg	☼	09/19/18 11:40	09/24/18 15:33	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		64 - 144	09/19/18 11:40	09/24/18 15:33	50
4-Bromofluorobenzene (Surr)	87		58 - 142	09/19/18 11:40	09/24/18 15:33	50
Toluene-d8 (Surr)	89		61 - 137	09/19/18 11:40	09/24/18 15:33	50
Dibromofluoromethane (Surr)	96		31 - 155	09/19/18 11:40	09/24/18 15:33	50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-030
Date Collected: 09/13/18 09:10
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-10
Matrix: Solid
Percent Solids: 85.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	15000	U	15000	2400	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Benzene	990	U	990	600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Bromodichloromethane	2000	U	2000	450	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Bromoform	2000	U	2000	570	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Bromomethane	5000	U *	5000	700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
2-Butanone (MEK)	15000	U	15000	1200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Carbon disulfide	5000	U	5000	450	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Carbon tetrachloride	990	U	990	670	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Chlorobenzene	990	U	990	750	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Chloroethane	5000	U *	5000	700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Chloroform	990	U	990	600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Chloromethane	5000	U	5000	450	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,1-Dichloroethane	990	U	990	770	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,2-Dichloroethane	990	U	990	750	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,1-Dichloroethene	990	U	990	890	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,2-Dichloropropane	990	U	990	750	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
cis-1,3-Dichloropropene	990	U	990	570	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
trans-1,3-Dichloropropene	990	U	990	370	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Ethylbenzene	990	U	990	870	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
2-Hexanone	50000	U	50000	2100	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Methylene Chloride	5000	U	5000	1600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
4-Methyl-2-pentanone (MIBK)	50000	U	50000	990	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Styrene	990	U	990	250	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,1,2,2-Tetrachloroethane	990	U	990	600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Tetrachloroethene	990	U	990	520	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Toluene	2000	U	2000	600	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Trichloroethene	**29000**		990	920	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Vinyl chloride	**4200**		800	420	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Xylenes, Total	3000	U	3000	700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,1,1-Trichloroethane	990	U	990	700	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,1,2-Trichloroethane	990	U	990	570	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Cyclohexane	24000	U	24000	750	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,2-Dibromo-3-Chloropropane	5000	U	5000	1200	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,2-Dibromoethane	5000	U	5000	570	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Dichlorodifluoromethane	2000	U	2000	550	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
cis-1,2-Dichloroethene	**45000**		990	870	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
trans-1,2-Dichloroethene	990	U	990	870	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Isopropylbenzene	5000	U	5000	850	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Methyl acetate	24000	U	24000	1900	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Methyl tert-butyl ether	5000	U	5000	650	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,1,2-Trichloro-1,2,2-trifluoroethane	5000	U	5000	570	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,2,4-Trichlorobenzene	5000	U	5000	650	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,2-Dichlorobenzene	2000	U	2000	450	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,3-Dichlorobenzene	2000	U	2000	940	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
1,4-Dichlorobenzene	2000	U	2000	670	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Trichlorofluoromethane	2000	U	2000	850	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Dibromochloromethane	990	U	990	850	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20
Methylcyclohexane	24000	U	24000	920	ug/Kg	☼	09/19/18 11:40	09/24/18 15:56	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		64 - 144	09/19/18 11:40	09/24/18 15:56	20
4-Bromofluorobenzene (Surr)	69		58 - 142	09/19/18 11:40	09/24/18 15:56	20
Toluene-d8 (Surr)	84		61 - 137	09/19/18 11:40	09/24/18 15:56	20
Dibromofluoromethane (Surr)	87		31 - 155	09/19/18 11:40	09/24/18 15:56	20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-031
Date Collected: 09/13/18 09:30
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-11
Matrix: Solid
Percent Solids: 89.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	750	U	750	120	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Benzene	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Bromodichloromethane	100	U	100	22	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Bromoform	100	U	100	29	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Bromomethane	250	U *	250	35	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
2-Butanone (MEK)	750	U	750	62	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Carbon disulfide	250	U	250	22	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Carbon tetrachloride	50	U	50	34	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Chlorobenzene	50	U	50	37	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Chloroethane	250	U *	250	35	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Chloroform	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Chloromethane	250	U	250	22	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,1-Dichloroethane	50	U	50	39	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,2-Dichloroethane	50	U	50	37	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,1-Dichloroethene	50	U	50	45	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,2-Dichloropropane	50	U	50	37	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
cis-1,3-Dichloropropene	50	U	50	29	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
trans-1,3-Dichloropropene	50	U	50	19	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Ethylbenzene	50	U	50	44	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
2-Hexanone	2500	U	2500	110	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Methylene Chloride	250	U	250	81	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	50	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Styrene	50	U	50	12	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,1,2,2-Tetrachloroethane	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Tetrachloroethene	50	U	50	26	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Toluene	100	U	100	30	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Trichloroethene	**140**		50	46	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Vinyl chloride	40	U	40	21	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Xylenes, Total	150	U	150	35	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,1,1-Trichloroethane	50	U	50	35	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,1,2-Trichloroethane	50	U	50	29	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Cyclohexane	1200	U	1200	37	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,2-Dibromo-3-Chloropropane	250	U	250	60	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,2-Dibromoethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Dichlorodifluoromethane	100	U	100	27	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
cis-1,2-Dichloroethene	**64**		50	44	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
trans-1,2-Dichloroethene	50	U	50	44	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Isopropylbenzene	250	U	250	42	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Methyl acetate	**310**	**J**	1200	93	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Methyl tert-butyl ether	250	U	250	32	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,2,4-Trichlorobenzene	250	U	250	32	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,2-Dichlorobenzene	100	U	100	22	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,3-Dichlorobenzene	100	U	100	47	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
1,4-Dichlorobenzene	100	U	100	34	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Trichlorofluoromethane	100	U	100	42	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Dibromochloromethane	50	U	50	42	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1
Methylcyclohexane	1200	U	1200	46	ug/Kg	☼	09/19/18 11:40	09/24/18 16:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		64 - 144	09/19/18 11:40	09/24/18 16:20	1
4-Bromofluorobenzene (Surr)	83		58 - 142	09/19/18 11:40	09/24/18 16:20	1
Toluene-d8 (Surr)	93		61 - 137	09/19/18 11:40	09/24/18 16:20	1
Dibromofluoromethane (Surr)	83		31 - 155	09/19/18 11:40	09/24/18 16:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-032
Date Collected: 09/13/18 09:35
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-12
Matrix: Solid
Percent Solids: 66.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1100	U	1100	180	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Benzene	76	U	76	45	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Bromodichloromethane	150	U	150	34	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Bromoform	150	U	150	44	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Bromomethane	380	U *	380	53	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
2-Butanone (MEK)	1100	U	1100	95	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Carbon disulfide	380	U	380	34	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Carbon tetrachloride	76	U	76	51	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Chlorobenzene	76	U	76	57	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Chloroethane	380	U *	380	53	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Chloroform	76	U	76	45	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Chloromethane	380	U	380	34	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,1-Dichloroethane	76	U	76	59	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,2-Dichloroethane	76	U	76	57	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,1-Dichloroethene	76	U	76	68	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,2-Dichloropropane	76	U	76	57	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
cis-1,3-Dichloropropene	76	U	76	44	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
trans-1,3-Dichloropropene	76	U	76	28	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Ethylbenzene	76	U	76	66	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
2-Hexanone	3800	U	3800	160	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Methylene Chloride	380	U	380	120	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
4-Methyl-2-pentanone (MIBK)	3800	U	3800	76	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Styrene	76	U	76	19	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,1,2,2-Tetrachloroethane	76	U	76	45	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Tetrachloroethene	76	U	76	40	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Toluene	150	U	150	45	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Trichloroethene	**110**		76	70	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Vinyl chloride	**1200**		61	32	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Xylenes, Total	230	U	230	53	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,1,1-Trichloroethane	76	U	76	53	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,1,2-Trichloroethane	76	U	76	44	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Cyclohexane	1800	U	1800	57	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,2-Dibromo-3-Chloropropane	380	U	380	91	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,2-Dibromoethane	380	U	380	44	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Dichlorodifluoromethane	150	U	150	42	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
cis-1,2-Dichloroethene	**300**		76	66	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
trans-1,2-Dichloroethene	76	U	76	66	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Isopropylbenzene	380	U	380	64	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Methyl acetate	**850**	**J**	1800	140	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Methyl tert-butyl ether	380	U	380	49	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	380	U	380	44	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,2,4-Trichlorobenzene	**49**	**J**	380	49	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,2-Dichlorobenzene	150	U	150	34	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,3-Dichlorobenzene	150	U	150	72	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
1,4-Dichlorobenzene	150	U	150	51	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Trichlorofluoromethane	150	U	150	64	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Dibromochloromethane	76	U	76	64	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1
Methylcyclohexane	1800	U	1800	70	ug/Kg	☼	09/19/18 11:40	09/24/18 16:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 144	09/19/18 11:40	09/24/18 16:44	1
4-Bromofluorobenzene (Surr)	86		58 - 142	09/19/18 11:40	09/24/18 16:44	1
Toluene-d8 (Surr)	97		61 - 137	09/19/18 11:40	09/24/18 16:44	1
Dibromofluoromethane (Surr)	81		31 - 155	09/19/18 11:40	09/24/18 16:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-033
Date Collected: 09/13/18 09:50
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-13
Matrix: Solid
Percent Solids: 85.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	800	U	800	130	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Benzene	53	U	53	32	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Bromodichloromethane	110	U	110	24	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Bromoform	110	U	110	31	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Bromomethane	270	U *	270	37	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
2-Butanone (MEK)	800	U	800	67	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Carbon disulfide	270	U	270	24	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Carbon tetrachloride	53	U	53	36	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Chlorobenzene	53	U	53	40	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Chloroethane	270	U *	270	37	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Chloroform	53	U	53	32	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Chloromethane	270	U	270	24	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,1-Dichloroethane	53	U	53	41	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,2-Dichloroethane	53	U	53	40	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,1-Dichloroethene	53	U	53	48	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,2-Dichloropropane	53	U	53	40	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
cis-1,3-Dichloropropene	53	U	53	31	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
trans-1,3-Dichloropropene	53	U	53	20	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Ethylbenzene	53	U	53	47	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
2-Hexanone	2700	U	2700	110	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Methylene Chloride	270	U	270	87	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	53	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Styrene	53	U	53	13	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,1,2,2-Tetrachloroethane	53	U	53	32	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Tetrachloroethene	53	U	53	28	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Toluene	110	U	110	32	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Trichloroethene	**57**		53	49	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Vinyl chloride	43	U	43	23	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,1,1-Trichloroethane	53	U	53	37	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,1,2-Trichloroethane	53	U	53	31	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Cyclohexane	1300	U	1300	40	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,2-Dibromo-3-Chloropropane	270	U	270	64	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,2-Dibromoethane	270	U	270	31	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Dichlorodifluoromethane	110	U	110	29	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
cis-1,2-Dichloroethene	**55**		53	47	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
trans-1,2-Dichloroethene	53	U	53	47	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Isopropylbenzene	270	U	270	45	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Methyl acetate	1300	U	1300	100	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Methyl tert-butyl ether	270	U	270	35	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	31	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,2,4-Trichlorobenzene	270	U	270	35	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,2-Dichlorobenzene	110	U	110	24	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,3-Dichlorobenzene	110	U	110	51	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
1,4-Dichlorobenzene	110	U	110	36	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Trichlorofluoromethane	110	U	110	45	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Dibromochloromethane	53	U	53	45	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1
Methylcyclohexane	1300	U	1300	49	ug/Kg	☼	09/19/18 11:40	09/23/18 16:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 144	09/19/18 11:40	09/23/18 16:42	1
4-Bromofluorobenzene (Surr)	92		58 - 142	09/19/18 11:40	09/23/18 16:42	1
Toluene-d8 (Surr)	101		61 - 137	09/19/18 11:40	09/23/18 16:42	1
Dibromofluoromethane (Surr)	83		31 - 155	09/19/18 11:40	09/23/18 16:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-034
Date Collected: 09/13/18 09:55
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-14
Matrix: Solid
Percent Solids: 86.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	730	U	730	120	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Benzene	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Bromodichloromethane	97	U	97	22	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Bromoform	97	U	97	28	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Bromomethane	240	U *	240	34	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
2-Butanone (MEK)	730	U	730	61	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Carbon disulfide	240	U	240	22	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Carbon tetrachloride	49	U	49	33	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Chlorobenzene	49	U	49	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Chloroethane	240	U *	240	34	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Chloroform	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Chloromethane	240	U	240	22	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,1-Dichloroethane	49	U	49	38	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,2-Dichloroethane	49	U	49	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,1-Dichloroethene	49	U	49	44	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,2-Dichloropropane	49	U	49	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
cis-1,3-Dichloropropene	49	U	49	28	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
trans-1,3-Dichloropropene	49	U	49	18	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Ethylbenzene	49	U	49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
2-Hexanone	2400	U	2400	100	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Methylene Chloride	240	U	240	79	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	49	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Styrene	49	U	49	12	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,1,2,2-Tetrachloroethane	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Tetrachloroethene	49	U	49	26	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Toluene	97	U	97	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Trichloroethene	**740**		49	45	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Vinyl chloride	39	U	39	21	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,1,1-Trichloroethane	49	U	49	34	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,1,2-Trichloroethane	49	U	49	28	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Cyclohexane	1200	U	1200	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,2-Dibromo-3-Chloropropane	240	U	240	58	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,2-Dibromoethane	240	U	240	28	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Dichlorodifluoromethane	97	U	97	27	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
cis-1,2-Dichloroethene	**260**		49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
trans-1,2-Dichloroethene	49	U	49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Isopropylbenzene	240	U	240	41	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Methyl acetate	**120**	**J**	1200	91	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Methyl tert-butyl ether	240	U	240	32	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	28	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,2,4-Trichlorobenzene	240	U	240	32	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,2-Dichlorobenzene	97	U	97	22	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,3-Dichlorobenzene	97	U	97	46	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
1,4-Dichlorobenzene	97	U	97	33	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Trichlorofluoromethane	97	U	97	41	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Dibromochloromethane	49	U	49	41	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1
Methylcyclohexane	1200	U	1200	45	ug/Kg	☼	09/19/18 11:40	09/23/18 17:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		64 - 144	09/19/18 11:40	09/23/18 17:05	1
4-Bromofluorobenzene (Surr)	92		58 - 142	09/19/18 11:40	09/23/18 17:05	1
Toluene-d8 (Surr)	104		61 - 137	09/19/18 11:40	09/23/18 17:05	1
Dibromofluoromethane (Surr)	87		31 - 155	09/19/18 11:40	09/23/18 17:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-035
Date Collected: 09/13/18 10:10
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-15
Matrix: Solid
Percent Solids: 81.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	830	U	830	130	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Benzene	55	U	55	33	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Bromoform	110	U	110	32	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Bromomethane	280	U *	280	39	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
2-Butanone (MEK)	830	U	830	69	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Carbon disulfide	280	U	280	25	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Carbon tetrachloride	55	U	55	37	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Chlorobenzene	55	U	55	41	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Chloroethane	280	U *	280	39	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Chloroform	55	U	55	33	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Chloromethane	280	U	280	25	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,1-Dichloroethane	55	U	55	43	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,2-Dichloroethane	55	U	55	41	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,1-Dichloroethene	55	U	55	50	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,2-Dichloropropane	55	U	55	41	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
cis-1,3-Dichloropropene	55	U	55	32	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
trans-1,3-Dichloropropene	55	U	55	21	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Ethylbenzene	55	U	55	48	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
2-Hexanone	2800	U	2800	120	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Methylene Chloride	280	U	280	90	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	55	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Styrene	55	U	55	14	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,1,2,2-Tetrachloroethane	55	U	55	33	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Tetrachloroethene	55	U	55	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Toluene	110	U	110	33	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Trichloroethene	55	U	55	51	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Vinyl chloride	44	U	44	23	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Xylenes, Total	170	U	170	39	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,1,1-Trichloroethane	55	U	55	39	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,1,2-Trichloroethane	55	U	55	32	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Cyclohexane	1300	U	1300	41	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,2-Dibromo-3-Chloropropane	280	U	280	66	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,2-Dibromoethane	280	U	280	32	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Dichlorodifluoromethane	110	U	110	30	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
cis-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
trans-1,2-Dichloroethene	55	U	55	48	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Isopropylbenzene	280	U	280	47	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Methyl acetate	**210**	**J**	1300	100	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Methyl tert-butyl ether	280	U	280	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	32	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,2,4-Trichlorobenzene	280	U	280	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,3-Dichlorobenzene	110	U	110	52	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
1,4-Dichlorobenzene	110	U	110	37	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Trichlorofluoromethane	110	U	110	47	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Dibromochloromethane	55	U	55	47	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1
Methylcyclohexane	1300	U	1300	51	ug/Kg	☼	09/19/18 11:40	09/23/18 17:28	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 144	09/19/18 11:40	09/23/18 17:28	1
4-Bromofluorobenzene (Surr)	87		58 - 142	09/19/18 11:40	09/23/18 17:28	1
Toluene-d8 (Surr)	97		61 - 137	09/19/18 11:40	09/23/18 17:28	1
Dibromofluoromethane (Surr)	85		31 - 155	09/19/18 11:40	09/23/18 17:28	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-036
Date Collected: 09/13/18 10:15
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-16
Matrix: Solid
Percent Solids: 88.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	760	U	760	120	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Benzene	51	U	51	31	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Bromoform	100	U	100	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Bromomethane	250	U *	250	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
2-Butanone (MEK)	760	U	760	64	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Carbon disulfide	250	U	250	23	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Carbon tetrachloride	51	U	51	34	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Chlorobenzene	51	U	51	38	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Chloroethane	250	U *	250	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Chloroform	51	U	51	31	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Chloromethane	250	U	250	23	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,1-Dichloroethane	51	U	51	40	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,2-Dichloroethane	51	U	51	38	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,1-Dichloroethene	51	U	51	46	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,2-Dichloropropane	51	U	51	38	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
cis-1,3-Dichloropropene	51	U	51	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
trans-1,3-Dichloropropene	51	U	51	19	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Ethylbenzene	51	U	51	45	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
2-Hexanone	2500	U	2500	110	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Methylene Chloride	250	U	250	83	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	51	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Styrene	51	U	51	13	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,1,2,2-Tetrachloroethane	51	U	51	31	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Tetrachloroethene	51	U	51	27	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Toluene	100	U	100	31	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Trichloroethene	**92**		51	47	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Xylenes, Total	150	U	150	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,1,1-Trichloroethane	51	U	51	36	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,1,2-Trichloroethane	51	U	51	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Cyclohexane	1200	U	1200	38	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,2-Dibromo-3-Chloropropane	250	U	250	61	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,2-Dibromoethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
cis-1,2-Dichloroethene	**54**		51	45	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
trans-1,2-Dichloroethene	51	U	51	45	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Isopropylbenzene	250	U	250	43	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Methyl acetate	**120**	**J**	1200	96	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Methyl tert-butyl ether	250	U	250	33	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,2,4-Trichlorobenzene	250	U	250	33	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,3-Dichlorobenzene	100	U	100	48	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
1,4-Dichlorobenzene	100	U	100	34	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Trichlorofluoromethane	100	U	100	43	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Dibromochloromethane	51	U	51	43	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1
Methylcyclohexane	1200	U	1200	47	ug/Kg	☼	09/19/18 11:40	09/23/18 17:51	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 144	09/19/18 11:40	09/23/18 17:51	1
4-Bromofluorobenzene (Surr)	89		58 - 142	09/19/18 11:40	09/23/18 17:51	1
Toluene-d8 (Surr)	97		61 - 137	09/19/18 11:40	09/23/18 17:51	1
Dibromofluoromethane (Surr)	83		31 - 155	09/19/18 11:40	09/23/18 17:51	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-037
Date Collected: 09/13/18 10:30
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-17
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4900	U	4900	790	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Benzene	330	U	330	200	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Bromodichloromethane	650	U	650	150	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Bromoform	650	U	650	190	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Bromomethane	1600	U *	1600	230	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
2-Butanone (MEK)	4900	U	4900	410	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Carbon disulfide	1600	U	1600	150	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Carbon tetrachloride	330	U	330	220	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Chlorobenzene	330	U	330	240	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Chloroethane	1600	U *	1600	230	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Chloroform	330	U	330	200	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Chloromethane	1600	U	1600	150	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,1-Dichloroethane	330	U	330	250	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,2-Dichloroethane	330	U	330	240	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,1-Dichloroethene	330	U	330	290	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,2-Dichloropropane	330	U	330	240	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
cis-1,3-Dichloropropene	330	U	330	190	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
trans-1,3-Dichloropropene	330	U	330	120	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Ethylbenzene	330	U	330	290	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
2-Hexanone	16000	U	16000	700	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Methylene Chloride	1600	U	1600	530	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
4-Methyl-2-pentanone (MIBK)	16000	U	16000	330	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Styrene	330	U	330	82	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,1,2,2-Tetrachloroethane	330	U	330	200	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Tetrachloroethene	330	U	330	170	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Toluene	**200**	**J B**	650	200	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Trichloroethene	330	U	330	300	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Vinyl chloride	260	U	260	140	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Xylenes, Total	980	U	980	230	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,1,1-Trichloroethane	330	U	330	230	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,1,2-Trichloroethane	330	U	330	190	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Cyclohexane	7800	U	7800	240	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,2-Dibromo-3-Chloropropane	1600	U	1600	390	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,2-Dibromoethane	1600	U	1600	190	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Dichlorodifluoromethane	650	U	650	180	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
cis-1,2-Dichloroethene	**14000**		330	290	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
trans-1,2-Dichloroethene	**750**		330	290	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Isopropylbenzene	1600	U	1600	280	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Methyl acetate	7800	U	7800	610	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Methyl tert-butyl ether	1600	U	1600	210	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1600	U	1600	190	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,2,4-Trichlorobenzene	1600	U	1600	210	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,2-Dichlorobenzene	650	U	650	150	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,3-Dichlorobenzene	650	U	650	310	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
1,4-Dichlorobenzene	650	U	650	220	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Trichlorofluoromethane	650	U	650	280	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Dibromochloromethane	330	U	330	280	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5
Methylcyclohexane	7800	U	7800	300	ug/Kg	☼	09/19/18 11:40	09/24/18 17:08	5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		64 - 144	09/19/18 11:40	09/24/18 17:08	5
4-Bromofluorobenzene (Surr)	84		58 - 142	09/19/18 11:40	09/24/18 17:08	5
Toluene-d8 (Surr)	92		61 - 137	09/19/18 11:40	09/24/18 17:08	5
Dibromofluoromethane (Surr)	83		31 - 155	09/19/18 11:40	09/24/18 17:08	5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-038
Date Collected: 09/13/18 10:35
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-18
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	760	U	760	120	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Benzene	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Bromoform	100	U	100	29	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Bromomethane	250	U *	250	35	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
2-Butanone (MEK)	760	U	760	63	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Carbon disulfide	250	U	250	23	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Carbon tetrachloride	50	U	50	34	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Chlorobenzene	50	U	50	38	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Chloroethane	250	U *	250	35	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Chloroform	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Chloromethane	250	U	250	23	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,1-Dichloroethane	50	U	50	39	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,2-Dichloroethane	50	U	50	38	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,1-Dichloroethene	50	U	50	45	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,2-Dichloropropane	50	U	50	38	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
cis-1,3-Dichloropropene	50	U	50	29	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
trans-1,3-Dichloropropene	50	U	50	19	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Ethylbenzene	50	U	50	44	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
2-Hexanone	2500	U	2500	110	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Methylene Chloride	250	U	250	82	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	50	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Styrene	50	U	50	13	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,1,2,2-Tetrachloroethane	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Tetrachloroethene	50	U	50	26	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Toluene	100	U	100	30	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Trichloroethene	50	U	50	47	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Vinyl chloride	**310**		40	21	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Xylenes, Total	150	U	150	35	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,1,1-Trichloroethane	50	U	50	35	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,1,2-Trichloroethane	50	U	50	29	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Cyclohexane	1200	U	1200	38	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,2-Dibromo-3-Chloropropane	250	U	250	60	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,2-Dibromoethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
cis-1,2-Dichloroethene	**54**		50	44	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
trans-1,2-Dichloroethene	50	U	50	44	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Isopropylbenzene	250	U	250	43	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Methyl acetate	1200	U	1200	94	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Methyl tert-butyl ether	250	U	250	33	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,2,4-Trichlorobenzene	250	U	250	33	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,3-Dichlorobenzene	100	U	100	48	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
1,4-Dichlorobenzene	100	U	100	34	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Trichlorofluoromethane	100	U	100	43	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Dibromochloromethane	50	U	50	43	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1
Methylcyclohexane	1200	U	1200	47	ug/Kg	☼	09/19/18 11:40	09/23/18 18:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		64 - 144	09/19/18 11:40	09/23/18 18:38	1
4-Bromofluorobenzene (Surr)	78		58 - 142	09/19/18 11:40	09/23/18 18:38	1
Toluene-d8 (Surr)	91		61 - 137	09/19/18 11:40	09/23/18 18:38	1
Dibromofluoromethane (Surr)	68		31 - 155	09/19/18 11:40	09/23/18 18:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-039
Date Collected: 09/13/18 10:40
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-19
Matrix: Solid
Percent Solids: 90.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	750	U	750	120	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Benzene	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Bromodichloromethane	100	U	100	22	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Bromoform	100	U	100	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Bromomethane	250	U *	250	35	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
2-Butanone (MEK)	750	U	750	62	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Carbon disulfide	250	U	250	22	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Carbon tetrachloride	50	U	50	34	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Chlorobenzene	50	U	50	37	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Chloroethane	250	U *	250	35	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Chloroform	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Chloromethane	250	U	250	22	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,1-Dichloroethane	50	U	50	39	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,2-Dichloroethane	50	U	50	37	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,1-Dichloroethene	50	U	50	45	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,2-Dichloropropane	50	U	50	37	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
cis-1,3-Dichloropropene	50	U	50	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
trans-1,3-Dichloropropene	50	U	50	19	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Ethylbenzene	50	U	50	44	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
2-Hexanone	2500	U	2500	110	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Methylene Chloride	250	U	250	81	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	50	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Styrene	50	U	50	12	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,1,2,2-Tetrachloroethane	50	U	50	30	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Tetrachloroethene	50	U	50	26	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Toluene	100	U	100	30	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Trichloroethene	50	U	50	46	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Vinyl chloride	40	U	40	21	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Xylenes, Total	150	U	150	35	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,1,1-Trichloroethane	50	U	50	35	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,1,2-Trichloroethane	50	U	50	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Cyclohexane	1200	U	1200	37	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,2-Dibromo-3-Chloropropane	250	U	250	60	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,2-Dibromoethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Dichlorodifluoromethane	100	U	100	27	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
cis-1,2-Dichloroethene	50	U	50	44	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
trans-1,2-Dichloroethene	50	U	50	44	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Isopropylbenzene	250	U	250	42	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Methyl acetate	1200	U	1200	94	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Methyl tert-butyl ether	250	U	250	32	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,2,4-Trichlorobenzene	250	U	250	32	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,2-Dichlorobenzene	100	U	100	22	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,3-Dichlorobenzene	100	U	100	47	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
1,4-Dichlorobenzene	100	U	100	34	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Trichlorofluoromethane	100	U	100	42	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Dibromochloromethane	50	U	50	42	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1
Methylcyclohexane	1200	U	1200	46	ug/Kg	☼	09/19/18 11:40	09/23/18 19:01	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 144	09/19/18 11:40	09/23/18 19:01	1
4-Bromofluorobenzene (Surr)	92		58 - 142	09/19/18 11:40	09/23/18 19:01	1
Toluene-d8 (Surr)	99		61 - 137	09/19/18 11:40	09/23/18 19:01	1
Dibromofluoromethane (Surr)	80		31 - 155	09/19/18 11:40	09/23/18 19:01	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-040
Date Collected: 09/13/18 10:45
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-20
Matrix: Solid
Percent Solids: 90.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	730	U	730	120	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Benzene	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Bromodichloromethane	98	U	98	22	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Bromoform	98	U	98	28	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Bromomethane	240	U *	240	34	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
2-Butanone (MEK)	730	U	730	61	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Carbon disulfide	240	U	240	22	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Carbon tetrachloride	49	U	49	33	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Chlorobenzene	49	U	49	37	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Chloroethane	240	U *	240	34	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Chloroform	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Chloromethane	240	U	240	22	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,1-Dichloroethane	49	U	49	38	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,2-Dichloroethane	49	U	49	37	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,1-Dichloroethene	49	U	49	44	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,2-Dichloropropane	49	U	49	37	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
cis-1,3-Dichloropropene	49	U	49	28	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
trans-1,3-Dichloropropene	49	U	49	18	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Ethylbenzene	49	U	49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
2-Hexanone	2400	U	2400	110	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Methylene Chloride	240	U	240	80	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	49	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Styrene	49	U	49	12	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,1,2,2-Tetrachloroethane	49	U	49	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Tetrachloroethene	49	U	49	26	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Toluene	98	U	98	29	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Trichloroethene	49	U	49	45	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Vinyl chloride	39	U	39	21	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,1,1-Trichloroethane	49	U	49	34	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,1,2-Trichloroethane	49	U	49	28	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Cyclohexane	1200	U	1200	37	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,2-Dibromo-3-Chloropropane	240	U	240	59	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,2-Dibromoethane	240	U	240	28	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Dichlorodifluoromethane	98	U	98	27	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
cis-1,2-Dichloroethene	49	U	49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
trans-1,2-Dichloroethene	49	U	49	43	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Isopropylbenzene	240	U	240	42	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Methyl acetate	1200	U	1200	92	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Methyl tert-butyl ether	240	U	240	32	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	28	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,2,4-Trichlorobenzene	240	U	240	32	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,2-Dichlorobenzene	98	U	98	22	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,3-Dichlorobenzene	98	U	98	46	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
1,4-Dichlorobenzene	98	U	98	33	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Trichlorofluoromethane	98	U	98	42	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Dibromochloromethane	49	U	49	42	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1
Methylcyclohexane	1200	U	1200	45	ug/Kg	☼	09/19/18 11:40	09/23/18 19:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 144	09/19/18 11:40	09/23/18 19:24	1
4-Bromofluorobenzene (Surr)	92		58 - 142	09/19/18 11:40	09/23/18 19:24	1
Toluene-d8 (Surr)	102		61 - 137	09/19/18 11:40	09/23/18 19:24	1
Dibromofluoromethane (Surr)	89		31 - 155	09/19/18 11:40	09/23/18 19:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-17303-091318-DA-041
Date Collected: 09/13/18 10:45
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-21
Matrix: Solid
Percent Solids: 88.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	770	U	770	120	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Benzene	51	U	51	31	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Bromodichloromethane	100	U	100	23	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Bromoform	100	U	100	29	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Bromomethane	260	U	260	36	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
2-Butanone (MEK)	770	U	770	64	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Carbon disulfide	260	U	260	23	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Carbon tetrachloride	51	U	51	35	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Chlorobenzene	51	U	51	38	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Chloroethane	260	U	260	36	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Chloroform	51	U	51	31	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Chloromethane	260	U	260	23	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,1-Dichloroethane	51	U	51	40	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,2-Dichloroethane	51	U	51	38	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,1-Dichloroethene	51	U	51	46	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,2-Dichloropropane	51	U	51	38	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
cis-1,3-Dichloropropene	51	U	51	29	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
trans-1,3-Dichloropropene	51	U	51	19	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Ethylbenzene	51	U	51	45	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Methylene Chloride	260	U	260	83	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	51	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Styrene	51	U	51	13	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,1,2,2-Tetrachloroethane	51	U	51	31	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Tetrachloroethene	51	U	51	27	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Toluene	100	U	100	31	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Trichloroethene	51	U	51	47	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Vinyl chloride	41	U	41	22	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Xylenes, Total	150	U	150	36	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,1,1-Trichloroethane	51	U	51	36	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,1,2-Trichloroethane	51	U	51	29	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Cyclohexane	1200	U	1200	38	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,2-Dibromo-3-Chloropropane	260	U	260	61	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,2-Dibromoethane	260	U	260	29	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Dichlorodifluoromethane	100	U	100	28	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
cis-1,2-Dichloroethene	**240**		51	45	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
trans-1,2-Dichloroethene	51	U	51	45	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Isopropylbenzene	260	U	260	43	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Methyl acetate	1200	U	1200	96	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Methyl tert-butyl ether	260	U	260	33	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	29	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,2,4-Trichlorobenzene	260	U	260	33	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,2-Dichlorobenzene	100	U	100	23	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,3-Dichlorobenzene	100	U	100	49	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
1,4-Dichlorobenzene	100	U	100	35	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Trichlorofluoromethane	100	U	100	43	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Dibromochloromethane	51	U	51	43	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1
Methylcyclohexane	1200	U	1200	47	ug/Kg	☼	09/19/18 12:17	09/24/18 00:37	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 144	09/19/18 12:17	09/24/18 00:37	1
4-Bromofluorobenzene (Surr)	90		58 - 142	09/19/18 12:17	09/24/18 00:37	1
Toluene-d8 (Surr)	97		61 - 137	09/19/18 12:17	09/24/18 00:37	1
Dibromofluoromethane (Surr)	85		31 - 155	09/19/18 12:17	09/24/18 00:37	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17303-091318
Date Collected: 09/13/18 00:00
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-22
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	5.4	ug/L			09/26/18 19:10	1
Benzene	1.0	U	1.0	0.13	ug/L			09/26/18 19:10	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/26/18 19:10	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/26/18 19:10	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/26/18 19:10	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/26/18 19:10	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/26/18 19:10	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/26/18 19:10	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/26/18 19:10	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/26/18 19:10	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/26/18 19:10	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/26/18 19:10	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/26/18 19:10	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/26/18 19:10	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 19:10	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/26/18 19:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/26/18 19:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/26/18 19:10	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/26/18 19:10	1
2-Hexanone	10	U	10	0.54	ug/L			09/26/18 19:10	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/26/18 19:10	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/26/18 19:10	1
Styrene	1.0	U	1.0	0.10	ug/L			09/26/18 19:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/26/18 19:10	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/26/18 19:10	1
Toluene	1.0	U	1.0	0.14	ug/L			09/26/18 19:10	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/26/18 19:10	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/26/18 19:10	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/26/18 19:10	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/26/18 19:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/26/18 19:10	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/26/18 19:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/26/18 19:10	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/26/18 19:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/26/18 19:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/26/18 19:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 19:10	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/26/18 19:10	1
Methyl acetate	10	U	10	1.7	ug/L			09/26/18 19:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/26/18 19:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/26/18 19:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/26/18 19:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 19:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 19:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/26/18 19:10	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/26/18 19:10	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/26/18 19:10	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/26/18 19:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		61 - 138		09/26/18 19:10	1
4-Bromofluorobenzene (Surr)	78		69 - 120		09/26/18 19:10	1
Toluene-d8 (Surr)	81		73 - 120		09/26/18 19:10	1
Dibromofluoromethane (Surr)	108		69 - 124		09/26/18 19:10	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-021
Date Collected: 09/13/18 07:30
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-1
Matrix: Solid
Percent Solids: 84.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.5		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	15.5		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-022
Date Collected: 09/13/18 07:45
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-2
Matrix: Solid
Percent Solids: 93.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93.2		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	6.8		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-023
Date Collected: 09/13/18 07:50
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-3
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.5		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	11.5		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-024
Date Collected: 09/13/18 07:50
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-4
Matrix: Solid
Percent Solids: 89.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.5		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	10.5		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-025
Date Collected: 09/13/18 07:55
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-5
Matrix: Solid
Percent Solids: 83.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.1		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	16.9		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-091318-DA-026
Date Collected: 09/13/18 08:00
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-6
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.8		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	15.2		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-027
Date Collected: 09/13/18 08:55
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-7
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90.4		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	9.6		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-028
Date Collected: 09/13/18 09:00
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-8
Matrix: Solid
Percent Solids: 84.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.6		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	15.4		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-091318-DA-029
Date Collected: 09/13/18 09:05
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-9
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.2		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	16.8		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-091318-DA-030
Date Collected: 09/13/18 09:10
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-10
Matrix: Solid
Percent Solids: 85.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.2		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	14.8		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-091318-DA-031
Date Collected: 09/13/18 09:30
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-11
Matrix: Solid
Percent Solids: 89.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.0		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	11.0		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-032
Date Collected: 09/13/18 09:35
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-12
Matrix: Solid
Percent Solids: 66.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	66.3		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	33.7		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-091318-DA-033
Date Collected: 09/13/18 09:50
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-13
Matrix: Solid
Percent Solids: 85.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.6		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	14.4		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-091318-DA-034
Date Collected: 09/13/18 09:55
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-14
Matrix: Solid
Percent Solids: 86.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.9		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	13.1		0.1	0.1	%			09/18/18 09:42	1

General Chemistry

Client Sample ID: S-17303-091318-DA-035
Date Collected: 09/13/18 10:10
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-15
Matrix: Solid
Percent Solids: 81.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81.4		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	18.6		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-036
Date Collected: 09/13/18 10:15
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-16
Matrix: Solid
Percent Solids: 88.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.0		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	12.0		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-037
Date Collected: 09/13/18 10:30
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-17
Matrix: Solid
Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80.5		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	19.5		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-038
Date Collected: 09/13/18 10:35
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-18
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.5		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	11.5		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-039
Date Collected: 09/13/18 10:40
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-19
Matrix: Solid
Percent Solids: 90.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90.1		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	9.9		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-040
Date Collected: 09/13/18 10:45
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-20
Matrix: Solid
Percent Solids: 90.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90.0		0.1	0.1	%			09/18/18 09:42	1
Percent Moisture	10.0		0.1	0.1	%			09/18/18 09:42	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

General Chemistry

Client Sample ID: S-17303-091318-DA-041
Date Collected: 09/13/18 10:45
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-21
Matrix: Solid
Percent Solids: 88.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.0		0.1	0.1	%			09/18/18 11:09	1
Percent Moisture	12.0		0.1	0.1	%			09/18/18 11:09	1

GC/MS VOA

Prep Batch: 346120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101324-1	S-17303-091318-DA-021	Total/NA	Solid	5035	
240-101324-2	S-17303-091318-DA-022	Total/NA	Solid	5035	
240-101324-3	S-17303-091318-DA-023	Total/NA	Solid	5035	
240-101324-4	S-17303-091318-DA-024	Total/NA	Solid	5035	
240-101324-5	S-17303-091318-DA-025	Total/NA	Solid	5035	
240-101324-6	S-17303-091318-DA-026	Total/NA	Solid	5035	
240-101324-7	S-17303-091318-DA-027	Total/NA	Solid	5035	
240-101324-8	S-17303-091318-DA-028	Total/NA	Solid	5035	
240-101324-9	S-17303-091318-DA-029	Total/NA	Solid	5035	
240-101324-10	S-17303-091318-DA-030	Total/NA	Solid	5035	
240-101324-11	S-17303-091318-DA-031	Total/NA	Solid	5035	
240-101324-12	S-17303-091318-DA-032	Total/NA	Solid	5035	
240-101324-13	S-17303-091318-DA-033	Total/NA	Solid	5035	
240-101324-14	S-17303-091318-DA-034	Total/NA	Solid	5035	
240-101324-15	S-17303-091318-DA-035	Total/NA	Solid	5035	
240-101324-16	S-17303-091318-DA-036	Total/NA	Solid	5035	
240-101324-17	S-17303-091318-DA-037	Total/NA	Solid	5035	
240-101324-18	S-17303-091318-DA-038	Total/NA	Solid	5035	
240-101324-19	S-17303-091318-DA-039	Total/NA	Solid	5035	
240-101324-20	S-17303-091318-DA-040	Total/NA	Solid	5035	
MB 240-346120/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-346120/2-A	Lab Control Sample	Total/NA	Solid	5035	
240-101324-2 MS	S-17303-091318-DA-022	Total/NA	Solid	5035	
240-101324-2 MSD	S-17303-091318-DA-022	Total/NA	Solid	5035	

Prep Batch: 346127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101324-21	S-17303-091318-DA-041	Total/NA	Solid	5035	
MB 240-346127/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-346127/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 346739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101324-1	S-17303-091318-DA-021	Total/NA	Solid	8260B	346120
240-101324-2	S-17303-091318-DA-022	Total/NA	Solid	8260B	346120
240-101324-3	S-17303-091318-DA-023	Total/NA	Solid	8260B	346120
240-101324-4	S-17303-091318-DA-024	Total/NA	Solid	8260B	346120
240-101324-5	S-17303-091318-DA-025	Total/NA	Solid	8260B	346120
240-101324-6	S-17303-091318-DA-026	Total/NA	Solid	8260B	346120
240-101324-7	S-17303-091318-DA-027	Total/NA	Solid	8260B	346120
240-101324-13	S-17303-091318-DA-033	Total/NA	Solid	8260B	346120
240-101324-14	S-17303-091318-DA-034	Total/NA	Solid	8260B	346120
240-101324-15	S-17303-091318-DA-035	Total/NA	Solid	8260B	346120
240-101324-16	S-17303-091318-DA-036	Total/NA	Solid	8260B	346120
240-101324-18	S-17303-091318-DA-038	Total/NA	Solid	8260B	346120
240-101324-19	S-17303-091318-DA-039	Total/NA	Solid	8260B	346120
240-101324-20	S-17303-091318-DA-040	Total/NA	Solid	8260B	346120
MB 240-346120/1-A	Method Blank	Total/NA	Solid	8260B	346120
LCS 240-346120/2-A	Lab Control Sample	Total/NA	Solid	8260B	346120
240-101324-2 MS	S-17303-091318-DA-022	Total/NA	Solid	8260B	346120
240-101324-2 MSD	S-17303-091318-DA-022	Total/NA	Solid	8260B	346120

Analysis Batch: 346774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101324-21	S-17303-091318-DA-041	Total/NA	Solid	8260B	346127
MB 240-346127/1-A	Method Blank	Total/NA	Solid	8260B	346127
LCS 240-346127/2-A	Lab Control Sample	Total/NA	Solid	8260B	346127

Analysis Batch: 346821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101324-8	S-17303-091318-DA-028	Total/NA	Solid	8260B	346120
240-101324-9	S-17303-091318-DA-029	Total/NA	Solid	8260B	346120
240-101324-10	S-17303-091318-DA-030	Total/NA	Solid	8260B	346120
240-101324-11	S-17303-091318-DA-031	Total/NA	Solid	8260B	346120
240-101324-12	S-17303-091318-DA-032	Total/NA	Solid	8260B	346120
240-101324-17	S-17303-091318-DA-037	Total/NA	Solid	8260B	346120

Analysis Batch: 347298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101324-22	TB-17303-091318	Total/NA	Water	8260B	
MB 240-347298/6	Method Blank	Total/NA	Water	8260B	
LCS 240-347298/4	Lab Control Sample	Total/NA	Water	8260B	

General Chemistry

Analysis Batch: 345869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101324-1	S-17303-091318-DA-021	Total/NA	Solid	Moisture	
240-101324-2	S-17303-091318-DA-022	Total/NA	Solid	Moisture	
240-101324-3	S-17303-091318-DA-023	Total/NA	Solid	Moisture	
240-101324-4	S-17303-091318-DA-024	Total/NA	Solid	Moisture	
240-101324-5	S-17303-091318-DA-025	Total/NA	Solid	Moisture	
240-101324-6	S-17303-091318-DA-026	Total/NA	Solid	Moisture	
240-101324-7	S-17303-091318-DA-027	Total/NA	Solid	Moisture	
240-101324-8	S-17303-091318-DA-028	Total/NA	Solid	Moisture	
240-101324-9	S-17303-091318-DA-029	Total/NA	Solid	Moisture	
240-101324-10	S-17303-091318-DA-030	Total/NA	Solid	Moisture	
240-101324-11	S-17303-091318-DA-031	Total/NA	Solid	Moisture	
240-101324-12	S-17303-091318-DA-032	Total/NA	Solid	Moisture	
240-101324-13	S-17303-091318-DA-033	Total/NA	Solid	Moisture	
240-101324-14	S-17303-091318-DA-034	Total/NA	Solid	Moisture	
240-101324-15	S-17303-091318-DA-035	Total/NA	Solid	Moisture	
240-101324-16	S-17303-091318-DA-036	Total/NA	Solid	Moisture	
240-101324-17	S-17303-091318-DA-037	Total/NA	Solid	Moisture	
240-101324-18	S-17303-091318-DA-038	Total/NA	Solid	Moisture	
240-101324-19	S-17303-091318-DA-039	Total/NA	Solid	Moisture	
240-101324-20	S-17303-091318-DA-040	Total/NA	Solid	Moisture	
240-101324-21	S-17303-091318-DA-041	Total/NA	Solid	Moisture	
240-101324-2 DU	S-17303-091318-DA-022	Total/NA	Solid	Moisture	
240-101324-4 DU	S-17303-091318-DA-024	Total/NA	Solid	Moisture	
240-101324-14 DU	S-17303-091318-DA-034	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-346120/1-A
Matrix: Solid
Analysis Batch: 346739

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 346120

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	97	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Benzene	40	U	40	24	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Bromodichloromethane	80	U	80	18	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Bromoform	80	U	80	23	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Bromomethane	200	U	200	28	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
2-Butanone (MEK)	600	U	600	50	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Carbon disulfide	200	U	200	18	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Carbon tetrachloride	40	U	40	27	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Chlorobenzene	40	U	40	30	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Chloroethane	200	U	200	28	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Chloroform	40	U	40	24	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Chloromethane	200	U	200	18	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,1-Dichloroethane	40	U	40	31	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,2-Dichloroethane	40	U	40	30	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,1-Dichloroethene	40	U	40	36	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,2-Dichloropropane	40	U	40	30	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
cis-1,3-Dichloropropene	40	U	40	23	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
trans-1,3-Dichloropropene	40	U	40	15	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Ethylbenzene	40	U	40	35	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
2-Hexanone	2000	U	2000	86	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Methylene Chloride	200	U	200	65	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	40	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Styrene	40	U	40	10	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,1,2,2-Tetrachloroethane	40	U	40	24	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Tetrachloroethene	40	U	40	21	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Toluene	26.0	J	80	24	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Trichloroethene	40	U	40	37	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Vinyl chloride	32	U	32	17	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Xylenes, Total	120	U	120	28	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,1,1-Trichloroethane	40	U	40	28	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,1,2-Trichloroethane	40	U	40	23	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Cyclohexane	960	U	960	30	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,2-Dibromo-3-Chloropropane	200	U	200	48	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,2-Dibromoethane	200	U	200	23	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Dichlorodifluoromethane	80	U	80	22	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
cis-1,2-Dichloroethene	40	U	40	35	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
trans-1,2-Dichloroethene	40	U	40	35	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Isopropylbenzene	200	U	200	34	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Methyl acetate	960	U	960	75	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Methyl tert-butyl ether	200	U	200	26	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	23	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,2,4-Trichlorobenzene	200	U	200	26	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,2-Dichlorobenzene	80	U	80	18	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,3-Dichlorobenzene	80	U	80	38	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
1,4-Dichlorobenzene	80	U	80	27	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Trichlorofluoromethane	80	U	80	34	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Dibromochloromethane	40	U	40	34	ug/Kg		09/19/18 11:40	09/23/18 11:12	1
Methylcyclohexane	960	U	960	37	ug/Kg		09/19/18 11:40	09/23/18 11:12	1

QC Sample Results

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		64 - 144	09/19/18 11:40	09/23/18 11:12	1
4-Bromofluorobenzene (Surr)	86		58 - 142	09/19/18 11:40	09/23/18 11:12	1
Toluene-d8 (Surr)	97		61 - 137	09/19/18 11:40	09/23/18 11:12	1
Dibromofluoromethane (Surr)	86		31 - 155	09/19/18 11:40	09/23/18 11:12	1

Lab Sample ID: LCS 240-346120/2-A
Matrix: Solid
Analysis Batch: 346739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 346120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	1810		ug/Kg		91	24 - 125
Benzene	1000	1010		ug/Kg		101	77 - 120
Bromodichloromethane	1000	833		ug/Kg		83	61 - 132
Bromoform	1000	623		ug/Kg		62	40 - 140
Bromomethane	1000	2590	*	ug/Kg		259	10 - 153
2-Butanone (MEK)	2000	1890		ug/Kg		94	51 - 120
Carbon disulfide	1000	660		ug/Kg		66	17 - 163
Carbon tetrachloride	1000	919		ug/Kg		92	43 - 144
Chlorobenzene	1000	995		ug/Kg		100	76 - 120
Chloroethane	1000	2900	*	ug/Kg		290	10 - 166
Chloroform	1000	986		ug/Kg		99	74 - 120
Chloromethane	1000	702		ug/Kg		70	41 - 124
1,1-Dichloroethane	1000	953		ug/Kg		95	72 - 120
1,2-Dichloroethane	1000	1010		ug/Kg		101	71 - 120
1,1-Dichloroethene	1000	789		ug/Kg		79	58 - 130
1,2-Dichloropropane	1000	1020		ug/Kg		102	78 - 122
cis-1,3-Dichloropropene	1000	913		ug/Kg		91	66 - 126
trans-1,3-Dichloropropene	1000	810		ug/Kg		81	55 - 121
Ethylbenzene	1000	1000		ug/Kg		100	76 - 120
2-Hexanone	2000	1690	J	ug/Kg		84	52 - 129
Methylene Chloride	1000	790		ug/Kg		79	64 - 126
4-Methyl-2-pentanone (MIBK)	2000	1780	J	ug/Kg		89	65 - 131
Styrene	1000	1000		ug/Kg		100	80 - 120
1,1,2,2-Tetrachloroethane	1000	921		ug/Kg		92	78 - 120
Tetrachloroethene	1000	901		ug/Kg		90	68 - 122
Toluene	1000	1160		ug/Kg		116	74 - 120
Trichloroethene	1000	957		ug/Kg		96	73 - 123
Vinyl chloride	1000	703		ug/Kg		70	49 - 131
Xylenes, Total	2000	2010		ug/Kg		100	78 - 120
1,1,1-Trichloroethane	1000	970		ug/Kg		97	60 - 136
1,1,2-Trichloroethane	1000	1030		ug/Kg		103	80 - 120
Cyclohexane	1000	1040		ug/Kg		104	66 - 129
1,2-Dibromo-3-Chloropropane	1000	597		ug/Kg		60	40 - 133
1,2-Dibromoethane	1000	976		ug/Kg		98	80 - 120
Dichlorodifluoromethane	1000	684		ug/Kg		68	15 - 127
cis-1,2-Dichloroethene	1000	943		ug/Kg		94	78 - 120
trans-1,2-Dichloroethene	1000	807		ug/Kg		81	74 - 124
Isopropylbenzene	1000	1010		ug/Kg		101	76 - 124
Methyl acetate	2000	2060		ug/Kg		103	63 - 126
Methyl tert-butyl ether	1000	950		ug/Kg		95	68 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	741		ug/Kg		74	64 - 125
1,2,4-Trichlorobenzene	1000	817		ug/Kg		82	60 - 124
1,2-Dichlorobenzene	1000	941		ug/Kg		94	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-346120/2-A
Matrix: Solid
Analysis Batch: 346739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 346120

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3-Dichlorobenzene			1000	916		ug/Kg		92	72 - 120		
1,4-Dichlorobenzene			1000	950		ug/Kg		95	71 - 120		
Trichlorofluoromethane			1000	846		ug/Kg		85	28 - 152		
Dibromochloromethane			1000	765		ug/Kg		77	46 - 125		
Methylcyclohexane			1000	1030		ug/Kg		103	71 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*64 - 144*
4-Bromofluorobenzene (Surr)	*90*		*58 - 142*
Toluene-d8 (Surr)	*92*		*61 - 137*
Dibromofluoromethane (Surr)	*88*		*31 - 155*

Lab Sample ID: 240-101324-2 MS
Matrix: Solid
Analysis Batch: 346739

Client Sample ID: S-17303-091318-DA-022
Prep Type: Total/NA
Prep Batch: 346120

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetone	670	U	2330	2380		ug/Kg	☼	102	15 - 127		
Benzene	44	U	1160	1210		ug/Kg	☼	104	33 - 127		
Bromodichloromethane	89	U	1160	978		ug/Kg	☼	84	22 - 127		
Bromoform	89	U	1160	655		ug/Kg	☼	56	10 - 120		
Bromomethane	220	U * F2	1160	377		ug/Kg	☼	32	13 - 138		
2-Butanone (MEK)	670	U	2330	2250		ug/Kg	☼	97	29 - 127		
Carbon disulfide	220	U F2	1160	808		ug/Kg	☼	69	15 - 131		
Carbon tetrachloride	44	U	1160	1080		ug/Kg	☼	93	17 - 127		
Chlorobenzene	44	U	1160	1180		ug/Kg	☼	101	15 - 122		
Chloroethane	220	U *	1160	1690		ug/Kg	☼	145	15 - 148		
Chloroform	44	U	1160	1170		ug/Kg	☼	100	41 - 121		
Chloromethane	220	U	1160	990		ug/Kg	☼	85	33 - 122		
1,1-Dichloroethane	44	U	1160	1170		ug/Kg	☼	101	41 - 122		
1,2-Dichloroethane	44	U	1160	1240		ug/Kg	☼	107	35 - 122		
1,1-Dichloroethene	44	U	1160	962		ug/Kg	☼	83	30 - 139		
1,2-Dichloropropane	44	U	1160	1250		ug/Kg	☼	108	38 - 130		
cis-1,3-Dichloropropene	44	U	1160	1060		ug/Kg	☼	91	13 - 127		
trans-1,3-Dichloropropene	44	U	1160	967		ug/Kg	☼	83	11 - 120		
Ethylbenzene	44	U	1160	1160		ug/Kg	☼	99	18 - 126		
2-Hexanone	2200	U	2330	2170	J	ug/Kg	☼	93	21 - 136		
Methylene Chloride	220	U	1160	970		ug/Kg	☼	83	34 - 134		
4-Methyl-2-pentanone (MIBK)	2200	U	2330	2260	J	ug/Kg	☼	97	16 - 164		
Styrene	44	U	1160	1150		ug/Kg	☼	98	10 - 128		
1,1,2,2-Tetrachloroethane	44	U	1160	1160		ug/Kg	☼	99	16 - 157		
Tetrachloroethene	44	U	1160	1040		ug/Kg	☼	90	17 - 126		
Toluene	89	U	1160	1230		ug/Kg	☼	106	29 - 127		
Trichloroethene	44	U	1160	1150		ug/Kg	☼	99	10 - 160		
Vinyl chloride	36	U	1160	963		ug/Kg	☼	83	31 - 134		
Xylenes, Total	130	U	2330	2310		ug/Kg	☼	99	10 - 137		
1,1,1-Trichloroethane	44	U	1160	1150		ug/Kg	☼	99	33 - 130		
1,1,2-Trichloroethane	44	U	1160	1270		ug/Kg	☼	109	19 - 137		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101324-2 MS — **Client Sample ID: S-17303-091318-DA-022**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 346739 — **Prep Batch: 346120**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	1100	U	1160	1210	J	ug/Kg	☼	104	22 - 135
1,2-Dibromo-3-Chloropropane	220	U	1160	708		ug/Kg	☼	61	10 - 128
1,2-Dibromoethane	220	U	1160	1180		ug/Kg	☼	101	25 - 137
Dichlorodifluoromethane	89	U	1160	726		ug/Kg	☼	62	10 - 126
cis-1,2-Dichloroethene	41	J	1160	1270		ug/Kg	☼	105	46 - 120
trans-1,2-Dichloroethene	44	U	1160	1060		ug/Kg	☼	91	32 - 134
Isopropylbenzene	220	U	1160	1200		ug/Kg	☼	103	10 - 128
Methyl acetate	1100	U	2330	2850		ug/Kg	☼	122	14 - 151
Methyl tert-butyl ether	220	U	1160	1200		ug/Kg	☼	103	49 - 134
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	1160	866		ug/Kg	☼	74	26 - 130
1,2,4-Trichlorobenzene	220	U	1160	933		ug/Kg	☼	80	10 - 120
1,2-Dichlorobenzene	89	U	1160	1100		ug/Kg	☼	95	10 - 120
1,3-Dichlorobenzene	89	U	1160	1060		ug/Kg	☼	91	10 - 120
1,4-Dichlorobenzene	89	U	1160	1080		ug/Kg	☼	93	10 - 120
Trichlorofluoromethane	89	U	1160	1070		ug/Kg	☼	92	24 - 137
Dibromochloromethane	44	U	1160	853		ug/Kg	☼	73	19 - 120
Methylcyclohexane	1100	U	1160	1190	J	ug/Kg	☼	102	13 - 134

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*64 - 144*
4-Bromofluorobenzene (Surr)	*94*		*58 - 142*
Toluene-d8 (Surr)	*95*		*61 - 137*
Dibromofluoromethane (Surr)	*86*		*31 - 155*

Lab Sample ID: 240-101324-2 MSD — **Client Sample ID: S-17303-091318-DA-022**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 346739 — **Prep Batch: 346120**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	670	U	2490	2320		ug/Kg	☼	93	15 - 127	2	40
Benzene	44	U	1240	1360		ug/Kg	☼	109	33 - 127	11	40
Bromodichloromethane	89	U	1240	1120		ug/Kg	☼	90	22 - 127	13	40
Bromoform	89	U	1240	796		ug/Kg	☼	64	10 - 120	19	40
Bromomethane	220	U * F2	1240	958	F2	ug/Kg	☼	77	13 - 138	87	40
2-Butanone (MEK)	670	U	2490	2610		ug/Kg	☼	105	29 - 127	15	40
Carbon disulfide	220	U F2	1240	491	F2	ug/Kg	☼	39	15 - 131	49	40
Carbon tetrachloride	44	U	1240	1160		ug/Kg	☼	93	17 - 127	7	40
Chlorobenzene	44	U	1240	1300		ug/Kg	☼	105	15 - 122	10	40
Chloroethane	220	U *	1240	1380		ug/Kg	☼	111	15 - 148	20	40
Chloroform	44	U	1240	1370		ug/Kg	☼	110	41 - 121	16	40
Chloromethane	220	U	1240	979		ug/Kg	☼	79	33 - 122	1	40
1,1-Dichloroethane	44	U	1240	1360		ug/Kg	☼	109	41 - 122	15	40
1,2-Dichloroethane	44	U	1240	1420		ug/Kg	☼	114	35 - 122	13	40
1,1-Dichloroethene	44	U	1240	1030		ug/Kg	☼	83	30 - 139	7	40
1,2-Dichloropropane	44	U	1240	1420		ug/Kg	☼	115	38 - 130	13	40
cis-1,3-Dichloropropene	44	U	1240	1240		ug/Kg	☼	100	13 - 127	16	40
trans-1,3-Dichloropropene	44	U	1240	1140		ug/Kg	☼	92	11 - 120	17	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101324-2 MSD
Matrix: Solid
Analysis Batch: 346739

Client Sample ID: S-17303-091318-DA-022
Prep Type: Total/NA
Prep Batch: 346120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	44	U	1240	1310		ug/Kg	☼	106	18 - 126	13	40
2-Hexanone	2200	U	2490	2450	J	ug/Kg	☼	99	21 - 136	12	40
Methylene Chloride	220	U	1240	1020		ug/Kg	☼	82	34 - 134	5	40
4-Methyl-2-pentanone (MIBK)	2200	U	2490	2580	J	ug/Kg	☼	104	16 - 164	13	40
Styrene	44	U	1240	1310		ug/Kg	☼	105	10 - 128	13	40
1,1,2,2-Tetrachloroethane	44	U	1240	1220		ug/Kg	☼	98	16 - 157	5	40
Tetrachloroethene	44	U	1240	1130		ug/Kg	☼	91	17 - 126	8	40
Toluene	89	U	1240	1400		ug/Kg	☼	112	29 - 127	13	40
Trichloroethene	44	U	1240	1310		ug/Kg	☼	106	10 - 160	13	40
Vinyl chloride	36	U	1240	1020		ug/Kg	☼	82	31 - 134	6	40
Xylenes, Total	130	U	2490	2630		ug/Kg	☼	106	10 - 137	13	40
1,1,1-Trichloroethane	44	U	1240	1280		ug/Kg	☼	103	33 - 130	11	40
1,1,2-Trichloroethane	44	U	1240	1370		ug/Kg	☼	110	19 - 137	7	40
Cyclohexane	1100	U	1240	1300		ug/Kg	☼	105	22 - 135	7	40
1,2-Dibromo-3-Chloropropane	220	U	1240	764		ug/Kg	☼	61	10 - 128	7	40
1,2-Dibromoethane	220	U	1240	1310		ug/Kg	☼	106	25 - 137	11	40
Dichlorodifluoromethane	89	U	1240	743		ug/Kg	☼	60	10 - 126	2	40
cis-1,2-Dichloroethene	41	J	1240	1390		ug/Kg	☼	109	46 - 120	10	40
trans-1,2-Dichloroethene	44	U	1240	1010		ug/Kg	☼	81	32 - 134	6	40
Isopropylbenzene	220	U	1240	1370		ug/Kg	☼	110	10 - 128	13	40
Methyl acetate	1100	U	2490	3150		ug/Kg	☼	127	14 - 151	10	40
Methyl tert-butyl ether	220	U	1240	1230		ug/Kg	☼	99	49 - 134	3	40
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	1240	844		ug/Kg	☼	68	26 - 130	3	40
1,2,4-Trichlorobenzene	220	U	1240	934		ug/Kg	☼	75	10 - 120	0	40
1,2-Dichlorobenzene	89	U	1240	1160		ug/Kg	☼	93	10 - 120	5	40
1,3-Dichlorobenzene	89	U	1240	1130		ug/Kg	☼	91	10 - 120	7	40
1,4-Dichlorobenzene	89	U	1240	1170		ug/Kg	☼	94	10 - 120	8	40
Trichlorofluoromethane	89	U	1240	1130		ug/Kg	☼	91	24 - 137	5	40
Dibromochloromethane	44	U	1240	1010		ug/Kg	☼	81	19 - 120	17	40
Methylcyclohexane	1100	U	1240	1220	J	ug/Kg	☼	98	13 - 134	2	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 144*
4-Bromofluorobenzene (Surr)	*98*		*58 - 142*
Toluene-d8 (Surr)	*98*		*61 - 137*
Dibromofluoromethane (Surr)	*90*		*31 - 155*

Lab Sample ID: MB 240-346127/1-A
Matrix: Solid
Analysis Batch: 346774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 346127

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	97	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Benzene	40	U	40	24	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Bromodichloromethane	80	U	80	18	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Bromoform	80	U	80	23	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Bromomethane	200	U	200	28	ug/Kg		09/19/18 12:17	09/23/18 23:53	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-346127/1-A
Matrix: Solid
Analysis Batch: 346774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 346127

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	600	U	600	50	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Carbon disulfide	200	U	200	18	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Carbon tetrachloride	40	U	40	27	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Chlorobenzene	40	U	40	30	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Chloroethane	200	U	200	28	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Chloroform	40	U	40	24	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Chloromethane	200	U	200	18	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,1-Dichloroethane	40	U	40	31	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,2-Dichloroethane	40	U	40	30	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,1-Dichloroethene	40	U	40	36	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,2-Dichloropropane	40	U	40	30	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
cis-1,3-Dichloropropene	40	U	40	23	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
trans-1,3-Dichloropropene	40	U	40	15	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Ethylbenzene	40	U	40	35	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
2-Hexanone	2000	U	2000	86	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Methylene Chloride	200	U	200	65	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	40	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Styrene	40	U	40	10	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,1,2,2-Tetrachloroethane	40	U	40	24	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Tetrachloroethene	40	U	40	21	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Toluene	26.7	J	80	24	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Trichloroethene	40	U	40	37	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Vinyl chloride	32	U	32	17	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Xylenes, Total	120	U	120	28	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,1,1-Trichloroethane	40	U	40	28	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,1,2-Trichloroethane	40	U	40	23	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Cyclohexane	960	U	960	30	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,2-Dibromo-3-Chloropropane	200	U	200	48	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,2-Dibromoethane	200	U	200	23	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Dichlorodifluoromethane	80	U	80	22	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
cis-1,2-Dichloroethene	40	U	40	35	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
trans-1,2-Dichloroethene	40	U	40	35	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Isopropylbenzene	200	U	200	34	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Methyl acetate	960	U	960	75	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Methyl tert-butyl ether	200	U	200	26	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	23	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,2,4-Trichlorobenzene	200	U	200	26	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,2-Dichlorobenzene	80	U	80	18	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,3-Dichlorobenzene	80	U	80	38	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
1,4-Dichlorobenzene	80	U	80	27	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Trichlorofluoromethane	80	U	80	34	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Dibromochloromethane	40	U	40	34	ug/Kg		09/19/18 12:17	09/23/18 23:53	1
Methylcyclohexane	960	U	960	37	ug/Kg		09/19/18 12:17	09/23/18 23:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 144*	*09/19/18 12:17*	*09/23/18 23:53*	*1*
4-Bromofluorobenzene (Surr)	*89*		*58 - 142*	*09/19/18 12:17*	*09/23/18 23:53*	*1*
Toluene-d8 (Surr)	*97*		*61 - 137*	*09/19/18 12:17*	*09/23/18 23:53*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-346127/1-A
Matrix: Solid
Analysis Batch: 346774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 346127

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	95		31 - 155	09/19/18 12:17	09/23/18 23:53	1

Lab Sample ID: LCS 240-346127/2-A
Matrix: Solid
Analysis Batch: 346774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 346127

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	1700		ug/Kg		85	24 - 125
Benzene	1000	1000		ug/Kg		100	77 - 120
Bromodichloromethane	1000	885		ug/Kg		89	61 - 132
Bromoform	1000	812		ug/Kg		81	40 - 140
Bromomethane	1000	1010		ug/Kg		101	10 - 153
2-Butanone (MEK)	2000	1450		ug/Kg		72	51 - 120
Carbon disulfide	1000	776		ug/Kg		78	17 - 163
Carbon tetrachloride	1000	883		ug/Kg		88	43 - 144
Chlorobenzene	1000	988		ug/Kg		99	76 - 120
Chloroethane	1000	1060		ug/Kg		106	10 - 166
Chloroform	1000	1000		ug/Kg		100	74 - 120
Chloromethane	1000	781		ug/Kg		78	41 - 124
1,1-Dichloroethane	1000	1000		ug/Kg		100	72 - 120
1,2-Dichloroethane	1000	887		ug/Kg		89	71 - 120
1,1-Dichloroethene	1000	1000		ug/Kg		100	58 - 130
1,2-Dichloropropane	1000	971		ug/Kg		97	78 - 122
cis-1,3-Dichloropropene	1000	858		ug/Kg		86	66 - 126
trans-1,3-Dichloropropene	1000	805		ug/Kg		80	55 - 121
Ethylbenzene	1000	1020		ug/Kg		102	76 - 120
2-Hexanone	2000	1750	J	ug/Kg		87	52 - 129
Methylene Chloride	1000	991		ug/Kg		99	64 - 126
4-Methyl-2-pentanone (MIBK)	2000	1610	J	ug/Kg		80	65 - 131
Styrene	1000	988		ug/Kg		99	80 - 120
1,1,2,2-Tetrachloroethane	1000	1000		ug/Kg		100	78 - 120
Tetrachloroethene	1000	984		ug/Kg		98	68 - 122
Toluene	1000	1130		ug/Kg		113	74 - 120
Trichloroethene	1000	956		ug/Kg		96	73 - 123
Vinyl chloride	1000	866		ug/Kg		87	49 - 131
Xylenes, Total	2000	2090		ug/Kg		105	78 - 120
1,1,1-Trichloroethane	1000	925		ug/Kg		92	60 - 136
1,1,2-Trichloroethane	1000	1010		ug/Kg		101	80 - 120
Cyclohexane	1000	906	J	ug/Kg		91	66 - 129
1,2-Dibromo-3-Chloropropane	1000	900		ug/Kg		90	40 - 133
1,2-Dibromoethane	1000	931		ug/Kg		93	80 - 120
Dichlorodifluoromethane	1000	582		ug/Kg		58	15 - 127
cis-1,2-Dichloroethene	1000	985		ug/Kg		98	78 - 120
trans-1,2-Dichloroethene	1000	992		ug/Kg		99	74 - 124
Isopropylbenzene	1000	1020		ug/Kg		102	76 - 124
Methyl acetate	2000	1730		ug/Kg		87	63 - 126
Methyl tert-butyl ether	1000	753		ug/Kg		75	68 - 129

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-346127/2-A
Matrix: Solid
Analysis Batch: 346774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 346127

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	934		ug/Kg		93	64 - 125
1,2,4-Trichlorobenzene	1000	941		ug/Kg		94	60 - 124
1,2-Dichlorobenzene	1000	1010		ug/Kg		101	75 - 120
1,3-Dichlorobenzene	1000	961		ug/Kg		96	72 - 120
1,4-Dichlorobenzene	1000	955		ug/Kg		96	71 - 120
Trichlorofluoromethane	1000	829		ug/Kg		83	28 - 152
Dibromochloromethane	1000	916		ug/Kg		92	46 - 125
Methylcyclohexane	1000	840	J	ug/Kg		84	71 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*64 - 144*
4-Bromofluorobenzene (Surr)	*90*		*58 - 142*
Toluene-d8 (Surr)	*94*		*61 - 137*
Dibromofluoromethane (Surr)	*91*		*31 - 155*

Lab Sample ID: MB 240-347298/6
Matrix: Water
Analysis Batch: 347298

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			09/26/18 11:47	1
Benzene	1.0	U	1.0	0.13	ug/L			09/26/18 11:47	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/26/18 11:47	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/26/18 11:47	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/26/18 11:47	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/26/18 11:47	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/26/18 11:47	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/26/18 11:47	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/26/18 11:47	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/26/18 11:47	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/26/18 11:47	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/26/18 11:47	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/26/18 11:47	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/26/18 11:47	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 11:47	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/26/18 11:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/26/18 11:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/26/18 11:47	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/26/18 11:47	1
2-Hexanone	10	U	10	0.54	ug/L			09/26/18 11:47	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/26/18 11:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/26/18 11:47	1
Styrene	1.0	U	1.0	0.10	ug/L			09/26/18 11:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/26/18 11:47	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/26/18 11:47	1
Toluene	1.0	U	1.0	0.14	ug/L			09/26/18 11:47	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/26/18 11:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-347298/6
Matrix: Water
Analysis Batch: 347298

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/26/18 11:47	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/26/18 11:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/26/18 11:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/26/18 11:47	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/26/18 11:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/26/18 11:47	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/26/18 11:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/26/18 11:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/26/18 11:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 11:47	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/26/18 11:47	1
Methyl acetate	10	U	10	1.7	ug/L			09/26/18 11:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/26/18 11:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/26/18 11:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/26/18 11:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 11:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 11:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/26/18 11:47	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/26/18 11:47	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/26/18 11:47	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/26/18 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*61 - 138*		*09/26/18 11:47*	*1*
4-Bromofluorobenzene (Surr)	*86*		*69 - 120*		*09/26/18 11:47*	*1*
Toluene-d8 (Surr)	*86*		*73 - 120*		*09/26/18 11:47*	*1*
Dibromofluoromethane (Surr)	*115*		*69 - 124*		*09/26/18 11:47*	*1*

Lab Sample ID: LCS 240-347298/4
Matrix: Water
Analysis Batch: 347298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	26.3	*	ug/L		132	35 - 131
Benzene	10.0	10.3		ug/L		103	79 - 120
Bromodichloromethane	10.0	10.2		ug/L		102	79 - 125
Bromoform	10.0	10.2		ug/L		102	55 - 145
Bromomethane	10.0	8.69		ug/L		87	17 - 158
2-Butanone (MEK)	20.0	19.3		ug/L		97	43 - 149
Carbon disulfide	10.0	9.96		ug/L		100	49 - 141
Carbon tetrachloride	10.0	10.8		ug/L		108	55 - 171
Chlorobenzene	10.0	9.38		ug/L		94	80 - 120
Chloroethane	10.0	9.26		ug/L		93	10 - 149
Chloroform	10.0	10.9		ug/L		109	80 - 120
Chloromethane	10.0	10.3		ug/L		103	59 - 124
1,1-Dichloroethane	10.0	11.0		ug/L		110	74 - 120
1,2-Dichloroethane	10.0	10.7		ug/L		107	68 - 133
1,1-Dichloroethene	10.0	9.74		ug/L		97	65 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-347298/4
Matrix: Water
Analysis Batch: 347298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	10.0	10.7		ug/L		107	78 - 127
cis-1,3-Dichloropropene	10.0	8.96		ug/L		90	75 - 120
trans-1,3-Dichloropropene	10.0	8.31		ug/L		83	67 - 120
Ethylbenzene	10.0	8.53		ug/L		85	80 - 120
2-Hexanone	20.0	17.4		ug/L		87	28 - 169
Methylene Chloride	10.0	10.8		ug/L		108	64 - 140
4-Methyl-2-pentanone (MIBK)	20.0	19.9		ug/L		99	53 - 144
Styrene	10.0	9.11		ug/L		91	80 - 121
1,1,2,2-Tetrachloroethane	10.0	9.66		ug/L		97	58 - 122
Tetrachloroethene	10.0	10.3		ug/L		103	80 - 122
Toluene	10.0	9.17		ug/L		92	78 - 120
Trichloroethene	10.0	10.3		ug/L		103	76 - 124
Vinyl chloride	10.0	9.82		ug/L		98	65 - 124
Xylenes, Total	20.0	18.1		ug/L		91	80 - 120
1,1,1-Trichloroethane	10.0	11.1		ug/L		111	64 - 147
1,1,2-Trichloroethane	10.0	9.51		ug/L		95	76 - 121
Cyclohexane	10.0	10.4		ug/L		104	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	9.29		ug/L		93	50 - 130
1,2-Dibromoethane	10.0	9.41		ug/L		94	80 - 120
Dichlorodifluoromethane	10.0	10.8		ug/L		108	42 - 141
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	77 - 120
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	74 - 124
Isopropylbenzene	10.0	8.81		ug/L		88	80 - 128
Methyl acetate	20.0	23.5		ug/L		118	63 - 137
Methyl tert-butyl ether	10.0	9.36		ug/L		94	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.2		ug/L		112	65 - 144
1,2,4-Trichlorobenzene	10.0	9.72		ug/L		97	34 - 141
1,2-Dichlorobenzene	10.0	9.77		ug/L		98	80 - 120
1,3-Dichlorobenzene	10.0	9.57		ug/L		96	80 - 120
1,4-Dichlorobenzene	10.0	9.50		ug/L		95	80 - 120
Trichlorofluoromethane	10.0	10.2		ug/L		102	27 - 176
Dibromochloromethane	10.0	9.70		ug/L		97	64 - 129
Methylcyclohexane	10.0	9.10		ug/L		91	63 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 138*
4-Bromofluorobenzene (Surr)	*92*		*69 - 120*
Toluene-d8 (Surr)	*86*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*69 - 124*

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Method: Moisture - Percent Moisture

Lab Sample ID: 240-101324-2 DU
Matrix: Solid
Analysis Batch: 345869

Client Sample ID: S-17303-091318-DA-022
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	93.2			90.3		%				3	20
Percent Moisture	6.8			9.7	F3	%				35	20

Lab Sample ID: 240-101324-4 DU
Matrix: Solid
Analysis Batch: 345869

Client Sample ID: S-17303-091318-DA-024
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	89.5			88.3		%				1	20
Percent Moisture	10.5			11.7		%				10	20

Lab Sample ID: 240-101324-14 DU
Matrix: Solid
Analysis Batch: 345869

Client Sample ID: S-17303-091318-DA-034
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	86.9			88.2		%				1	20
Percent Moisture	13.1			11.8		%				10	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-144)	(58-142)	(61-137)	(31-155)
240-101324-1	S-17303-091318-DA-021	95	80	92	88
240-101324-2	S-17303-091318-DA-022	98	86	96	82
240-101324-2 MS	S-17303-091318-DA-022	93	94	95	86
240-101324-2 MSD	S-17303-091318-DA-022	101	98	98	90
240-101324-3	S-17303-091318-DA-023	102	94	105	90
240-101324-4	S-17303-091318-DA-024	98	93	103	89
240-101324-5	S-17303-091318-DA-025	99	85	94	89
240-101324-6	S-17303-091318-DA-026	99	84	99	86
240-101324-7	S-17303-091318-DA-027	104	96	105	90
240-101324-8	S-17303-091318-DA-028	104	83	95	97
240-101324-9	S-17303-091318-DA-029	89	87	89	96
240-101324-10	S-17303-091318-DA-030	95	69	84	87
240-101324-11	S-17303-091318-DA-031	93	83	93	83
240-101324-12	S-17303-091318-DA-032	98	86	97	81
240-101324-13	S-17303-091318-DA-033	96	92	101	83
240-101324-14	S-17303-091318-DA-034	100	92	104	87
240-101324-15	S-17303-091318-DA-035	96	87	97	85
240-101324-16	S-17303-091318-DA-036	97	89	97	83
240-101324-17	S-17303-091318-DA-037	95	84	92	83
240-101324-18	S-17303-091318-DA-038	93	78	91	68
240-101324-19	S-17303-091318-DA-039	99	92	99	80
240-101324-20	S-17303-091318-DA-040	101	92	102	89
240-101324-21	S-17303-091318-DA-041	96	90	97	85
LCS 240-346120/2-A	Lab Control Sample	92	90	92	88
LCS 240-346127/2-A	Lab Control Sample	86	90	94	91
MB 240-346120/1-A	Method Blank	95	86	97	86
MB 240-346127/1-A	Method Blank	96	89	97	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)
240-101324-22	TB-17303-091318	103	78	81	108
LCS 240-347298/4	Lab Control Sample	106	92	86	107
MB 240-347298/6	Method Blank	110	86	86	115

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Client Sample ID: S-17303-091318-DA-021
Lab Sample ID: 240-101324-1
Date Collected: 09/13/18 07:30
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-021
Lab Sample ID: 240-101324-1
Date Collected: 09/13/18 07:30
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 12:00	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-022
Lab Sample ID: 240-101324-2
Date Collected: 09/13/18 07:45
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-022
Lab Sample ID: 240-101324-2
Date Collected: 09/13/18 07:45
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 12:23	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-023
Lab Sample ID: 240-101324-3
Date Collected: 09/13/18 07:50
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-023
Lab Sample ID: 240-101324-3
Date Collected: 09/13/18 07:50
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 12:46	HMB	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Client Sample ID: S-17303-091318-DA-024 — **Lab Sample ID: 240-101324-4**
Date Collected: 09/13/18 07:50 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-024 — **Lab Sample ID: 240-101324-4**
Date Collected: 09/13/18 07:50 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 89.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 13:10	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-025 — **Lab Sample ID: 240-101324-5**
Date Collected: 09/13/18 07:55 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-025 — **Lab Sample ID: 240-101324-5**
Date Collected: 09/13/18 07:55 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 83.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 13:33	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-026 — **Lab Sample ID: 240-101324-6**
Date Collected: 09/13/18 08:00 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-026 — **Lab Sample ID: 240-101324-6**
Date Collected: 09/13/18 08:00 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 84.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 13:56	HMB	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Client Sample ID: S-17303-091318-DA-027
Lab Sample ID: 240-101324-7
Date Collected: 09/13/18 08:55
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-027
Lab Sample ID: 240-101324-7
Date Collected: 09/13/18 08:55
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 14:20	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-028
Lab Sample ID: 240-101324-8
Date Collected: 09/13/18 09:00
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-028
Lab Sample ID: 240-101324-8
Date Collected: 09/13/18 09:00
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		4	346821	09/24/18 15:09	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-029
Lab Sample ID: 240-101324-9
Date Collected: 09/13/18 09:05
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-029
Lab Sample ID: 240-101324-9
Date Collected: 09/13/18 09:05
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		50	346821	09/24/18 15:33	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-030 — **Lab Sample ID: 240-101324-10**
Date Collected: 09/13/18 09:10 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-030 — **Lab Sample ID: 240-101324-10**
Date Collected: 09/13/18 09:10 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 85.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		20	346821	09/24/18 15:56	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-031 — **Lab Sample ID: 240-101324-11**
Date Collected: 09/13/18 09:30 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-031 — **Lab Sample ID: 240-101324-11**
Date Collected: 09/13/18 09:30 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 89.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346821	09/24/18 16:20	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-032 — **Lab Sample ID: 240-101324-12**
Date Collected: 09/13/18 09:35 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-032 — **Lab Sample ID: 240-101324-12**
Date Collected: 09/13/18 09:35 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 66.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346821	09/24/18 16:44	HMB	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Client Sample ID: S-17303-091318-DA-033
Lab Sample ID: 240-101324-13
Date Collected: 09/13/18 09:50
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-033
Lab Sample ID: 240-101324-13
Date Collected: 09/13/18 09:50
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 16:42	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-034
Lab Sample ID: 240-101324-14
Date Collected: 09/13/18 09:55
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-034
Lab Sample ID: 240-101324-14
Date Collected: 09/13/18 09:55
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 17:05	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-035
Lab Sample ID: 240-101324-15
Date Collected: 09/13/18 10:10
Matrix: Solid
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-035
Lab Sample ID: 240-101324-15
Date Collected: 09/13/18 10:10
Matrix: Solid
Date Received: 09/14/18 09:20
Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 17:28	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-036 — **Lab Sample ID: 240-101324-16**
Date Collected: 09/13/18 10:15 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-036 — **Lab Sample ID: 240-101324-16**
Date Collected: 09/13/18 10:15 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 88.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 17:51	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-037 — **Lab Sample ID: 240-101324-17**
Date Collected: 09/13/18 10:30 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-037 — **Lab Sample ID: 240-101324-17**
Date Collected: 09/13/18 10:30 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 80.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		5	346821	09/24/18 17:08	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-038 — **Lab Sample ID: 240-101324-18**
Date Collected: 09/13/18 10:35 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-038 — **Lab Sample ID: 240-101324-18**
Date Collected: 09/13/18 10:35 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 88.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 18:38	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-039 — **Lab Sample ID: 240-101324-19**
Date Collected: 09/13/18 10:40 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-039 — **Lab Sample ID: 240-101324-19**
Date Collected: 09/13/18 10:40 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 90.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 19:01	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-040 — **Lab Sample ID: 240-101324-20**
Date Collected: 09/13/18 10:45 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 09:42	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-040 — **Lab Sample ID: 240-101324-20**
Date Collected: 09/13/18 10:45 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 90.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346120	09/19/18 11:40	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346739	09/23/18 19:24	HMB	TAL CAN

Client Sample ID: S-17303-091318-DA-041 — **Lab Sample ID: 240-101324-21**
Date Collected: 09/13/18 10:45 — **Matrix: Solid**
Date Received: 09/14/18 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	345869	09/18/18 11:09	JMB	TAL CAN

Client Sample ID: S-17303-091318-DA-041 — **Lab Sample ID: 240-101324-21**
Date Collected: 09/13/18 10:45 — **Matrix: Solid**
Date Received: 09/14/18 09:20 — **Percent Solids: 88.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			346127	09/19/18 12:17	LAM	TAL CAN
Total/NA	Analysis	8260B		1	346774	09/24/18 00:37	HMB	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Client Sample ID: TB-17303-091318
Date Collected: 09/13/18 00:00
Date Received: 09/14/18 09:20

Lab Sample ID: 240-101324-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	347298	09/26/18 19:10	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101324-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN
190

Chain of Custody Record

3614.5

288246

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: A. BAINS	Site Contact: K. TRESTRAIL	Date: 9/13/18	COC No:
Company Name: GHD SERVICES INC	Tel/Fax: 248 893 3400	Lab Contact: P. HELICKER	Carrier: FEDEX	1 of 2 COCs
Address: 26850 HAGGERTY RD	Analysis Turnaround Time			Sampler: D. ANTULS
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone: 248 893 3400	TAT if different from Below			Walk-in Client:
Fax:	☑ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	Sample Specific Notes:
S-17303-091318-DA-021	9/13/18	0730	G	S	2			X	
-022		0745							
-023		0750							
-024		0750							
-025		0755							
-026		0800							
-027		0855							
-028		0900							
-029		0905							
-030		0910							
-031		0930							
S-17303-091318-DA-032	9/13/18	0935	G	S	2			X	



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
SSOW # 17303-TAL-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
DILLON ANTULS	GHD	9/13/18 1300	POP	TAL	9-14-18 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

9/28/2018

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN
190

Chain of Custody Record

288256

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210 (0713)

Client Contact	Project Manager: A BAINS	Site Contact: K. TRESTRAIL	Date: 9/13/18	COC No:
Company Name: GHD SERVICES INC.	Tel/Fax: 248 893 3408	Lab Contact: D. HECKLER	Carrier: FED EX	2 of 2 COCs
Address: 26850 HAGGERTY	Analysis Turnaround Time			Sampler: D ANTULIS
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248 893 3408	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	SVOCs	Sample Specific Notes:
S-17303-091318-DA-033	9/13/18	0950	G	S	2			X		
-034		0955								
-035		1010								
-036		1015								
-037		1030								
-038		1035								
-039		1040								
S-17303-091318-DA-040		1045								
S-17303-091318-DA-041		1045								
FB-17303-091318		—	—	W	1			X		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
SSOW# 17303-TO2-04-2018-01

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
DILLON ANTULIS	GHD	9/13/18 1300	[illegible]	TAL	9-14-18 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 101324**
Canton Facility

Client GHD Site Name —
Cooler Received on 9-14-18 Opened on 9-14-18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Cooler unpacked by: POP

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN# IR-8 (CF +0.9 °C) Observed Cooler Temp. 3.6 °C Corrected Cooler Temp. 4.5 °C
IR GUN #36 (CF +0.6°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC849161
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B80730VB	Yes	No POP
16. Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: JR.

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-101356-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
9/29/2018 6:40:41 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-101356-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-101356-1

Comments
No additional comments.

Receipt
The samples were received on 9/15/2018 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 347542 recovered outside control limits for the following analyte(s): Acetone. Acetone is identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method(s) 8260B: The pH of samples: W-17303-091418-DA-001 (240-101356-1) and W-17303-091418-DA-005 (240-101356-5), W-17303-091418-DA-003 (240-101356-3) and W-17303-091418-DA-004 (240-101356-4) was greater than 2. The samples were analyzed within the normal 14 day holding time; however, experimental evidence suggests that some aromatic compounds in wastewater samples, notably, Benzene, Toluene, and Ethylbenzene are susceptible to biological degradation if samples are not preserved to a pH of 2.

Method(s) 8260B: There is no MS/MSD in batch 347159 due to a spiking error.

Method(s) 8260B: The laboratory control sample (LCS) for 347159 recovered outside control limits for the following analyte(s): Acetone. Acetone has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method(s) 3510C, 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-345818.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-101356-1	W-17303-091418-DA-001	Water	09/14/18 07:45	09/15/18 09:45
240-101356-2	W-17303-091418-DA-002	Water	09/14/18 08:20	09/15/18 09:45
240-101356-3	W-17303-091418-DA-003	Water	09/14/18 09:00	09/15/18 09:45
240-101356-4	W-17303-091418-DA-004	Water	09/14/18 09:45	09/15/18 09:45
240-101356-5	W-17303-091418-DA-005	Water	09/14/18 09:50	09/15/18 09:45
240-101356-6	FB-17303-091418	Water	09/14/18 00:00	09/15/18 09:45

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Client Sample ID: W-17303-091418-DA-001 — Lab Sample ID: 240-101356-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.4	J *	10	5.4	ug/L	1		8260B	Total/NA
Benzo[a]anthracene	0.32	J	0.97	0.17	ug/L	1		8270C	Total/NA
Benzo[a]pyrene	0.37	J	0.97	0.17	ug/L	1		8270C	Total/NA
Benzo[b]fluoranthene	0.46	J	0.97	0.15	ug/L	1		8270C	Total/NA
Chrysene	0.40	J	0.97	0.18	ug/L	1		8270C	Total/NA
Fluoranthene	0.55	J	0.97	0.16	ug/L	1		8270C	Total/NA
Phenanthrene	0.21	J	1.9	0.16	ug/L	1		8270C	Total/NA
Pyrene	0.64	J	4.9	0.17	ug/L	1		8270C	Total/NA

Client Sample ID: W-17303-091418-DA-002 — Lab Sample ID: 240-101356-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.2	J *	10	5.4	ug/L	1		8260B	Total/NA
Benzene	0.21	J	1.0	0.13	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.8	J	10	1.2	ug/L	1		8260B	Total/NA
2-Hexanone	0.98	J	10	0.54	ug/L	1		8260B	Total/NA
4-Methyl-2-pentanone (MIBK)	0.91	J	10	0.42	ug/L	1		8260B	Total/NA
Vinyl chloride	3.4		1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	3.5		1.0	0.16	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.24	J	1.0	0.19	ug/L	1		8260B	Total/NA
1,2,4-Trichlorobenzene	0.30	J	1.0	0.26	ug/L	1		8260B	Total/NA
Benzo[a]anthracene	0.38	J	1.0	0.17	ug/L	1		8270C	Total/NA
Benzo[a]pyrene	0.50	J	1.0	0.18	ug/L	1		8270C	Total/NA
Benzo[b]fluoranthene	0.72	J	1.0	0.16	ug/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	0.53	J	1.0	0.18	ug/L	1		8270C	Total/NA
Benzo[k]fluoranthene	0.22	J	1.0	0.14	ug/L	1		8270C	Total/NA
Chrysene	0.55	J	1.0	0.19	ug/L	1		8270C	Total/NA
Fluoranthene	0.84	J	1.0	0.16	ug/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	0.37	J	2.0	0.14	ug/L	1		8270C	Total/NA
Phenanthrene	0.30	J	2.0	0.17	ug/L	1		8270C	Total/NA
Pyrene	0.85	J	5.1	0.18	ug/L	1		8270C	Total/NA

Client Sample ID: W-17303-091418-DA-003 — Lab Sample ID: 240-101356-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.0	J *	10	5.4	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.6	J	10	1.2	ug/L	1		8260B	Total/NA
Chloroform	0.26	J	1.0	0.13	ug/L	1		8260B	Total/NA
2-Hexanone	0.92	J	10	0.54	ug/L	1		8260B	Total/NA
4-Methyl-2-pentanone (MIBK)	0.81	J	10	0.42	ug/L	1		8260B	Total/NA
1,1,2,2-Tetrachloroethane	0.20	J	1.0	0.13	ug/L	1		8260B	Total/NA
1,2,4-Trichlorobenzene	0.29	J	1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: W-17303-091418-DA-004 — Lab Sample ID: 240-101356-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	25	*	10	5.4	ug/L	1		8260B	Total/NA
Carbon disulfide	0.57	J	5.0	0.28	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	0.37	J	1.0	0.21	ug/L	1		8260B	Total/NA
Vinyl chloride	16		1.0	0.20	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Client Sample ID: W-17303-091418-DA-004 (Continued) — Lab Sample ID: 240-101356-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	15		1.0	0.16	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.47	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: W-17303-091418-DA-005 — Lab Sample ID: 240-101356-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	21	*	10	5.4	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.2	J	10	1.2	ug/L	1		8260B	Total/NA
Carbon disulfide	0.36	J	5.0	0.28	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	0.24	J	1.0	0.21	ug/L	1		8260B	Total/NA
Vinyl chloride	8.1		1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	7.3		1.0	0.16	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.36	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: FB-17303-091418 — Lab Sample ID: 240-101356-6

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-17303-091418-DA-001
Date Collected: 09/14/18 07:45
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.4**	**J ***	10	5.4	ug/L			09/27/18 19:19	1
Benzene	1.0	U F2	1.0	0.13	ug/L			09/27/18 19:19	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/27/18 19:19	1
Bromoform	1.0	U F2	1.0	0.76	ug/L			09/27/18 19:19	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/27/18 19:19	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/27/18 19:19	1
Carbon disulfide	5.0	U F2	5.0	0.28	ug/L			09/27/18 19:19	1
Carbon tetrachloride	1.0	U F2	1.0	0.26	ug/L			09/27/18 19:19	1
Chlorobenzene	1.0	U F2	1.0	0.14	ug/L			09/27/18 19:19	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/27/18 19:19	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/27/18 19:19	1
Chloromethane	1.0	U F2 F1	1.0	0.20	ug/L			09/27/18 19:19	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/27/18 19:19	1
1,2-Dichloroethane	1.0	U F2	1.0	0.21	ug/L			09/27/18 19:19	1
1,1-Dichloroethene	1.0	U F2	1.0	0.19	ug/L			09/27/18 19:19	1
1,2-Dichloropropane	1.0	U F2	1.0	0.15	ug/L			09/27/18 19:19	1
cis-1,3-Dichloropropene	1.0	U F2	1.0	0.61	ug/L			09/27/18 19:19	1
trans-1,3-Dichloropropene	1.0	U F2	1.0	0.67	ug/L			09/27/18 19:19	1
Ethylbenzene	1.0	U F2 F1	1.0	0.11	ug/L			09/27/18 19:19	1
2-Hexanone	10	U F2	10	0.54	ug/L			09/27/18 19:19	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/27/18 19:19	1
4-Methyl-2-pentanone (MIBK)	10	U F2	10	0.42	ug/L			09/27/18 19:19	1
Styrene	1.0	U F2 F1	1.0	0.10	ug/L			09/27/18 19:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/27/18 19:19	1
Tetrachloroethene	1.0	U F2	1.0	0.15	ug/L			09/27/18 19:19	1
Toluene	1.0	U F2	1.0	0.14	ug/L			09/27/18 19:19	1
Trichloroethene	1.0	U F2	1.0	0.10	ug/L			09/27/18 19:19	1
Vinyl chloride	1.0	U F2	1.0	0.20	ug/L			09/27/18 19:19	1
Xylenes, Total	2.0	U F2	2.0	0.15	ug/L			09/27/18 19:19	1
1,1,1-Trichloroethane	1.0	U F2	1.0	0.24	ug/L			09/27/18 19:19	1
1,1,2-Trichloroethane	1.0	U F2	1.0	0.090	ug/L			09/27/18 19:19	1
Cyclohexane	1.0	U F2 F1	1.0	0.24	ug/L			09/27/18 19:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/27/18 19:19	1
1,2-Dibromoethane	1.0	U F2	1.0	0.12	ug/L			09/27/18 19:19	1
Dichlorodifluoromethane	1.0	U F2	1.0	0.35	ug/L			09/27/18 19:19	1
cis-1,2-Dichloroethene	1.0	U F2	1.0	0.16	ug/L			09/27/18 19:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/27/18 19:19	1
Isopropylbenzene	1.0	U F2 F1	1.0	0.090	ug/L			09/27/18 19:19	1
Methyl acetate	10	U F2	10	1.7	ug/L			09/27/18 19:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/27/18 19:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U F2 F1	1.0	0.41	ug/L			09/27/18 19:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/27/18 19:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/27/18 19:19	1
1,3-Dichlorobenzene	1.0	U F1	1.0	0.15	ug/L			09/27/18 19:19	1
1,4-Dichlorobenzene	1.0	U F1	1.0	0.16	ug/L			09/27/18 19:19	1
Trichlorofluoromethane	1.0	U F2	1.0	0.45	ug/L			09/27/18 19:19	1
Dibromochloromethane	1.0	U F2	1.0	0.39	ug/L			09/27/18 19:19	1
Methylcyclohexane	1.0	U F2 F1	1.0	0.33	ug/L			09/27/18 19:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		61 - 138		09/27/18 19:19	1
4-Bromofluorobenzene (Surr)	77		69 - 120		09/27/18 19:19	1
Toluene-d8 (Surr)	80		73 - 120		09/27/18 19:19	1
Dibromofluoromethane (Surr)	104		69 - 124		09/27/18 19:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-17303-091418-DA-002
Date Collected: 09/14/18 08:20
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.2**	**J ***	10	5.4	ug/L			09/27/18 20:24	1
Benzene	**0.21**	**J**	1.0	0.13	ug/L			09/27/18 20:24	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/27/18 20:24	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/27/18 20:24	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/27/18 20:24	1
2-Butanone (MEK)	**1.8**	**J**	10	1.2	ug/L			09/27/18 20:24	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/27/18 20:24	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/27/18 20:24	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/27/18 20:24	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/27/18 20:24	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/27/18 20:24	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/27/18 20:24	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/27/18 20:24	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/27/18 20:24	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/27/18 20:24	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/27/18 20:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/27/18 20:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/27/18 20:24	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/27/18 20:24	1
2-Hexanone	**0.98**	**J**	10	0.54	ug/L			09/27/18 20:24	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/27/18 20:24	1
4-Methyl-2-pentanone (MIBK)	**0.91**	**J**	10	0.42	ug/L			09/27/18 20:24	1
Styrene	1.0	U	1.0	0.10	ug/L			09/27/18 20:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/27/18 20:24	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/27/18 20:24	1
Toluene	1.0	U	1.0	0.14	ug/L			09/27/18 20:24	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/27/18 20:24	1
Vinyl chloride	**3.4**		1.0	0.20	ug/L			09/27/18 20:24	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/27/18 20:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/27/18 20:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/27/18 20:24	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/27/18 20:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/27/18 20:24	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/27/18 20:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/27/18 20:24	1
cis-1,2-Dichloroethene	**3.5**		1.0	0.16	ug/L			09/27/18 20:24	1
trans-1,2-Dichloroethene	**0.24**	**J**	1.0	0.19	ug/L			09/27/18 20:24	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/27/18 20:24	1
Methyl acetate	10	U	10	1.7	ug/L			09/27/18 20:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/27/18 20:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/27/18 20:24	1
1,2,4-Trichlorobenzene	**0.30**	**J**	1.0	0.26	ug/L			09/27/18 20:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/27/18 20:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/27/18 20:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/27/18 20:24	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/27/18 20:24	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/27/18 20:24	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/27/18 20:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		61 - 138		09/27/18 20:24	1
4-Bromofluorobenzene (Surr)	85		69 - 120		09/27/18 20:24	1
Toluene-d8 (Surr)	85		73 - 120		09/27/18 20:24	1
Dibromofluoromethane (Surr)	108		69 - 124		09/27/18 20:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-17303-091418-DA-003
Date Collected: 09/14/18 09:00
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.0**	**J ***	10	5.4	ug/L			09/26/18 00:50	1
Benzene	1.0	U	1.0	0.13	ug/L			09/26/18 00:50	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/26/18 00:50	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/26/18 00:50	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/26/18 00:50	1
2-Butanone (MEK)	**1.6**	**J**	10	1.2	ug/L			09/26/18 00:50	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/26/18 00:50	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/26/18 00:50	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/26/18 00:50	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/26/18 00:50	1
Chloroform	**0.26**	**J**	1.0	0.13	ug/L			09/26/18 00:50	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/26/18 00:50	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/26/18 00:50	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/26/18 00:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 00:50	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/26/18 00:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/26/18 00:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/26/18 00:50	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/26/18 00:50	1
2-Hexanone	**0.92**	**J**	10	0.54	ug/L			09/26/18 00:50	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/26/18 00:50	1
4-Methyl-2-pentanone (MIBK)	**0.81**	**J**	10	0.42	ug/L			09/26/18 00:50	1
Styrene	1.0	U	1.0	0.10	ug/L			09/26/18 00:50	1
1,1,2,2-Tetrachloroethane	**0.20**	**J**	1.0	0.13	ug/L			09/26/18 00:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/26/18 00:50	1
Toluene	1.0	U	1.0	0.14	ug/L			09/26/18 00:50	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/26/18 00:50	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/26/18 00:50	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/26/18 00:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/26/18 00:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/26/18 00:50	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/26/18 00:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/26/18 00:50	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/26/18 00:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/26/18 00:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/26/18 00:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 00:50	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/26/18 00:50	1
Methyl acetate	10	U	10	1.7	ug/L			09/26/18 00:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/26/18 00:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/26/18 00:50	1
1,2,4-Trichlorobenzene	**0.29**	**J**	1.0	0.26	ug/L			09/26/18 00:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 00:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 00:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/26/18 00:50	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/26/18 00:50	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/26/18 00:50	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/26/18 00:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		61 - 138		09/26/18 00:50	1
4-Bromofluorobenzene (Surr)	70		69 - 120		09/26/18 00:50	1
Toluene-d8 (Surr)	75		73 - 120		09/26/18 00:50	1
Dibromofluoromethane (Surr)	97		69 - 124		09/26/18 00:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-17303-091418-DA-004
Date Collected: 09/14/18 09:45
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**25**	*	10	5.4	ug/L			09/26/18 01:12	1
Benzene	1.0	U	1.0	0.13	ug/L			09/26/18 01:12	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/26/18 01:12	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/26/18 01:12	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/26/18 01:12	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/26/18 01:12	1
Carbon disulfide	**0.57**	**J**	5.0	0.28	ug/L			09/26/18 01:12	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/26/18 01:12	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/26/18 01:12	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/26/18 01:12	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/26/18 01:12	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/26/18 01:12	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/26/18 01:12	1
1,2-Dichloroethane	**0.37**	**J**	1.0	0.21	ug/L			09/26/18 01:12	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 01:12	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/26/18 01:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/26/18 01:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/26/18 01:12	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/26/18 01:12	1
2-Hexanone	10	U	10	0.54	ug/L			09/26/18 01:12	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/26/18 01:12	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/26/18 01:12	1
Styrene	1.0	U	1.0	0.10	ug/L			09/26/18 01:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/26/18 01:12	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/26/18 01:12	1
Toluene	1.0	U	1.0	0.14	ug/L			09/26/18 01:12	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/26/18 01:12	1
Vinyl chloride	**16**		1.0	0.20	ug/L			09/26/18 01:12	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/26/18 01:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/26/18 01:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/26/18 01:12	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/26/18 01:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/26/18 01:12	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/26/18 01:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/26/18 01:12	1
cis-1,2-Dichloroethene	**15**		1.0	0.16	ug/L			09/26/18 01:12	1
trans-1,2-Dichloroethene	**0.47**	**J**	1.0	0.19	ug/L			09/26/18 01:12	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/26/18 01:12	1
Methyl acetate	10	U	10	1.7	ug/L			09/26/18 01:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/26/18 01:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/26/18 01:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/26/18 01:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 01:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 01:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/26/18 01:12	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/26/18 01:12	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/26/18 01:12	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/26/18 01:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		61 - 138		09/26/18 01:12	1
4-Bromofluorobenzene (Surr)	70		69 - 120		09/26/18 01:12	1
Toluene-d8 (Surr)	77		73 - 120		09/26/18 01:12	1
Dibromofluoromethane (Surr)	105		69 - 124		09/26/18 01:12	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-17303-091418-DA-005
Date Collected: 09/14/18 09:50
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**21**	*	10	5.4	ug/L			09/27/18 20:46	1
Benzene	1.0	U	1.0	0.13	ug/L			09/27/18 20:46	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/27/18 20:46	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/27/18 20:46	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/27/18 20:46	1
2-Butanone (MEK)	**1.2**	J	10	1.2	ug/L			09/27/18 20:46	1
Carbon disulfide	**0.36**	J	5.0	0.28	ug/L			09/27/18 20:46	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/27/18 20:46	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/27/18 20:46	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/27/18 20:46	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/27/18 20:46	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/27/18 20:46	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/27/18 20:46	1
1,2-Dichloroethane	**0.24**	J	1.0	0.21	ug/L			09/27/18 20:46	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/27/18 20:46	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/27/18 20:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/27/18 20:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/27/18 20:46	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/27/18 20:46	1
2-Hexanone	10	U	10	0.54	ug/L			09/27/18 20:46	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/27/18 20:46	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/27/18 20:46	1
Styrene	1.0	U	1.0	0.10	ug/L			09/27/18 20:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/27/18 20:46	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/27/18 20:46	1
Toluene	1.0	U	1.0	0.14	ug/L			09/27/18 20:46	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/27/18 20:46	1
Vinyl chloride	**8.1**		1.0	0.20	ug/L			09/27/18 20:46	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/27/18 20:46	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/27/18 20:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/27/18 20:46	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/27/18 20:46	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/27/18 20:46	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/27/18 20:46	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/27/18 20:46	1
cis-1,2-Dichloroethene	**7.3**		1.0	0.16	ug/L			09/27/18 20:46	1
trans-1,2-Dichloroethene	**0.36**	J	1.0	0.19	ug/L			09/27/18 20:46	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/27/18 20:46	1
Methyl acetate	10	U	10	1.7	ug/L			09/27/18 20:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/27/18 20:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/27/18 20:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/27/18 20:46	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/27/18 20:46	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/27/18 20:46	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/27/18 20:46	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/27/18 20:46	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/27/18 20:46	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/27/18 20:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		61 - 138		09/27/18 20:46	1
4-Bromofluorobenzene (Surr)	86		69 - 120		09/27/18 20:46	1
Toluene-d8 (Surr)	87		73 - 120		09/27/18 20:46	1
Dibromofluoromethane (Surr)	110		69 - 124		09/27/18 20:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: FB-17303-091418
Date Collected: 09/14/18 00:00
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	5.4	ug/L			09/26/18 01:56	1
Benzene	1.0	U	1.0	0.13	ug/L			09/26/18 01:56	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/26/18 01:56	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/26/18 01:56	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/26/18 01:56	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/26/18 01:56	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/26/18 01:56	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/26/18 01:56	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/26/18 01:56	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/26/18 01:56	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/26/18 01:56	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/26/18 01:56	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/26/18 01:56	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/26/18 01:56	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 01:56	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/26/18 01:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/26/18 01:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/26/18 01:56	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/26/18 01:56	1
2-Hexanone	10	U	10	0.54	ug/L			09/26/18 01:56	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/26/18 01:56	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/26/18 01:56	1
Styrene	1.0	U	1.0	0.10	ug/L			09/26/18 01:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/26/18 01:56	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/26/18 01:56	1
Toluene	1.0	U	1.0	0.14	ug/L			09/26/18 01:56	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/26/18 01:56	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/26/18 01:56	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/26/18 01:56	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/26/18 01:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/26/18 01:56	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/26/18 01:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/26/18 01:56	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/26/18 01:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/26/18 01:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/26/18 01:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/26/18 01:56	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/26/18 01:56	1
Methyl acetate	10	U	10	1.7	ug/L			09/26/18 01:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/26/18 01:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/26/18 01:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/26/18 01:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 01:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/18 01:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/26/18 01:56	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/26/18 01:56	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/26/18 01:56	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/26/18 01:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		61 - 138		09/26/18 01:56	1
4-Bromofluorobenzene (Surr)	78		69 - 120		09/26/18 01:56	1
Toluene-d8 (Surr)	78		73 - 120		09/26/18 01:56	1
Dibromofluoromethane (Surr)	107		69 - 124		09/26/18 01:56	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: W-17303-091418-DA-001
Date Collected: 09/14/18 07:45
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.9	U	4.9	0.48	ug/L		09/18/18 07:09	09/21/18 14:37	1
2,2'-oxybis[1-chloropropane]	4.9	U	4.9	0.53	ug/L		09/18/18 07:09	09/21/18 14:37	1
2,4,5-Trichlorophenol	4.9	U	4.9	1.9	ug/L		09/18/18 07:09	09/21/18 14:37	1
2,4,6-Trichlorophenol	3.9	U	3.9	1.7	ug/L		09/18/18 07:09	09/21/18 14:37	1
2,4-Dichlorophenol	9.7	U	9.7	0.25	ug/L		09/18/18 07:09	09/21/18 14:37	1
2,4-Dimethylphenol	4.9	U	4.9	0.50	ug/L		09/18/18 07:09	09/21/18 14:37	1
2,4-Dinitrophenol	19	U F1	19	6.0	ug/L		09/18/18 07:09	09/21/18 14:37	1
2,4-Dinitrotoluene	4.9	U	4.9	2.0	ug/L		09/18/18 07:09	09/21/18 14:37	1
2,6-Dinitrotoluene	4.9	U	4.9	2.1	ug/L		09/18/18 07:09	09/21/18 14:37	1
2-Chloronaphthalene	4.9	U	4.9	0.47	ug/L		09/18/18 07:09	09/21/18 14:37	1
2-Chlorophenol	4.9	U	4.9	0.27	ug/L		09/18/18 07:09	09/21/18 14:37	1
2-Methylnaphthalene	4.9	U	4.9	0.11	ug/L		09/18/18 07:09	09/21/18 14:37	1
2-Methylphenol	4.9	U	4.9	0.20	ug/L		09/18/18 07:09	09/21/18 14:37	1
2-Nitroaniline	19	U	19	0.50	ug/L		09/18/18 07:09	09/21/18 14:37	1
2-Nitrophenol	4.9	U	4.9	0.55	ug/L		09/18/18 07:09	09/21/18 14:37	1
3,3'-Dichlorobenzidine	4.9	U	4.9	1.1	ug/L		09/18/18 07:09	09/21/18 14:37	1
3-Nitroaniline	19	U	19	0.55	ug/L		09/18/18 07:09	09/21/18 14:37	1
4,6-Dinitro-2-methylphenol	19	U F1	19	2.7	ug/L		09/18/18 07:09	09/21/18 14:37	1
4-Bromophenyl phenyl ether	4.9	U	4.9	0.48	ug/L		09/18/18 07:09	09/21/18 14:37	1
4-Chloro-3-methylphenol	4.9	U	4.9	0.29	ug/L		09/18/18 07:09	09/21/18 14:37	1
4-Chloroaniline	9.7	U F2	9.7	0.31	ug/L		09/18/18 07:09	09/21/18 14:37	1
4-Chlorophenyl phenyl ether	4.9	U	4.9	0.53	ug/L		09/18/18 07:09	09/21/18 14:37	1
4-Nitroaniline	19	U	19	0.89	ug/L		09/18/18 07:09	09/21/18 14:37	1
4-Nitrophenol	19	U	19	2.1	ug/L		09/18/18 07:09	09/21/18 14:37	1
Acenaphthene	4.9	U	4.9	0.17	ug/L		09/18/18 07:09	09/21/18 14:37	1
Acenaphthylene	4.9	U	4.9	0.12	ug/L		09/18/18 07:09	09/21/18 14:37	1
Acetophenone	4.9	U	4.9	0.36	ug/L		09/18/18 07:09	09/21/18 14:37	1
Anthracene	4.9	U	4.9	0.13	ug/L		09/18/18 07:09	09/21/18 14:37	1
Atrazine	2.9	U	2.9	0.92	ug/L		09/18/18 07:09	09/21/18 14:37	1
Benzaldehyde	4.9	U	4.9	0.74	ug/L		09/18/18 07:09	09/21/18 14:37	1
Benzo[a]anthracene	**0.32**	**J**	0.97	0.17	ug/L		09/18/18 07:09	09/21/18 14:37	1
Benzo[a]pyrene	**0.37**	**J**	0.97	0.17	ug/L		09/18/18 07:09	09/21/18 14:37	1
Benzo[b]fluoranthene	**0.46**	**J**	0.97	0.15	ug/L		09/18/18 07:09	09/21/18 14:37	1
Benzo[g,h,i]perylene	0.97	U	0.97	0.17	ug/L		09/18/18 07:09	09/21/18 14:37	1
Benzo[k]fluoranthene	0.97	U	0.97	0.14	ug/L		09/18/18 07:09	09/21/18 14:37	1
Bis(2-chloroethoxy)methane	4.9	U	4.9	0.44	ug/L		09/18/18 07:09	09/21/18 14:37	1
Bis(2-chloroethyl)ether	0.97	U	0.97	0.39	ug/L		09/18/18 07:09	09/21/18 14:37	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9	2.2	ug/L		09/18/18 07:09	09/21/18 14:37	1
Butyl benzyl phthalate	4.9	U	4.9	0.65	ug/L		09/18/18 07:09	09/21/18 14:37	1
Caprolactam	9.7	U	9.7	0.91	ug/L		09/18/18 07:09	09/21/18 14:37	1
Carbazole	9.7	U	9.7	0.48	ug/L		09/18/18 07:09	09/21/18 14:37	1
Chrysene	**0.40**	**J**	0.97	0.18	ug/L		09/18/18 07:09	09/21/18 14:37	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.15	ug/L		09/18/18 07:09	09/21/18 14:37	1
Dibenzofuran	3.9	U	3.9	0.54	ug/L		09/18/18 07:09	09/21/18 14:37	1
Diethyl phthalate	4.9	U	4.9	3.7	ug/L		09/18/18 07:09	09/21/18 14:37	1
Dimethyl phthalate	4.9	U	4.9	0.50	ug/L		09/18/18 07:09	09/21/18 14:37	1
Di-n-butyl phthalate	4.9	U	4.9	1.8	ug/L		09/18/18 07:09	09/21/18 14:37	1
Di-n-octyl phthalate	4.9	U F1	4.9	0.80	ug/L		09/18/18 07:09	09/21/18 14:37	1
Fluoranthene	**0.55**	**J**	0.97	0.16	ug/L		09/18/18 07:09	09/21/18 14:37	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: W-17303-091418-DA-001
Date Collected: 09/14/18 07:45
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.9	U	4.9	0.16	ug/L		09/18/18 07:09	09/21/18 14:37	1
Hexachlorobenzene	0.19	U	0.19	0.16	ug/L		09/18/18 07:09	09/21/18 14:37	1
Hexachlorobutadiene	0.97	U	0.97	0.53	ug/L		09/18/18 07:09	09/21/18 14:37	1
Hexachlorocyclopentadiene	4.9	U F1	4.9	1.7	ug/L		09/18/18 07:09	09/21/18 14:37	1
Hexachloroethane	4.9	U	4.9	0.38	ug/L		09/18/18 07:09	09/21/18 14:37	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.13	ug/L		09/18/18 07:09	09/21/18 14:37	1
Isophorone	4.9	U	4.9	0.31	ug/L		09/18/18 07:09	09/21/18 14:37	1
Naphthalene	4.9	U	4.9	0.11	ug/L		09/18/18 07:09	09/21/18 14:37	1
Nitrobenzene	2.9	U	2.9	0.50	ug/L		09/18/18 07:09	09/21/18 14:37	1
N-Nitrosodi-n-propylamine	4.9	U	4.9	0.25	ug/L		09/18/18 07:09	09/21/18 14:37	1
N-Nitrosodiphenylamine	4.9	U	4.9	0.43	ug/L		09/18/18 07:09	09/21/18 14:37	1
Pentachlorophenol	4.9	U F2	4.9	3.0	ug/L		09/18/18 07:09	09/21/18 14:37	1
Phenol	4.9	U	4.9	0.12	ug/L		09/18/18 07:09	09/21/18 14:37	1
Phenanthrene	**0.21**	**J**	1.9	0.16	ug/L		09/18/18 07:09	09/21/18 14:37	1
Pyrene	**0.64**	**J**	4.9	0.17	ug/L		09/18/18 07:09	09/21/18 14:37	1
3 & 4 Methylphenol	4.9	U	4.9	0.19	ug/L		09/18/18 07:09	09/21/18 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*38 - 120*	*09/18/18 07:09*	*09/21/18 14:37*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 120*	*09/18/18 07:09*	*09/21/18 14:37*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*28 - 120*	*09/18/18 07:09*	*09/21/18 14:37*	*1*
Nitrobenzene-d5 (Surr)	*73*		*32 - 120*	*09/18/18 07:09*	*09/21/18 14:37*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*09/18/18 07:09*	*09/21/18 14:37*	*1*
Terphenyl-d14 (Surr)	*62*		*23 - 127*	*09/18/18 07:09*	*09/21/18 14:37*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: W-17303-091418-DA-002
Date Collected: 09/14/18 08:20
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.50	ug/L		09/18/18 07:09	09/24/18 19:37	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.56	ug/L		09/18/18 07:09	09/24/18 19:37	1
2,4,5-Trichlorophenol	5.1	U	5.1	2.0	ug/L		09/18/18 07:09	09/24/18 19:37	1
2,4,6-Trichlorophenol	4.1	U	4.1	1.8	ug/L		09/18/18 07:09	09/24/18 19:37	1
2,4-Dichlorophenol	10	U	10	0.27	ug/L		09/18/18 07:09	09/24/18 19:37	1
2,4-Dimethylphenol	5.1	U	5.1	0.53	ug/L		09/18/18 07:09	09/24/18 19:37	1
2,4-Dinitrophenol	20	U	20	6.3	ug/L		09/18/18 07:09	09/24/18 19:37	1
2,4-Dinitrotoluene	5.1	U	5.1	2.1	ug/L		09/18/18 07:09	09/24/18 19:37	1
2,6-Dinitrotoluene	5.1	U	5.1	2.2	ug/L		09/18/18 07:09	09/24/18 19:37	1
2-Chloronaphthalene	5.1	U	5.1	0.49	ug/L		09/18/18 07:09	09/24/18 19:37	1
2-Chlorophenol	5.1	U	5.1	0.28	ug/L		09/18/18 07:09	09/24/18 19:37	1
2-Methylnaphthalene	5.1	U	5.1	0.11	ug/L		09/18/18 07:09	09/24/18 19:37	1
2-Methylphenol	5.1	U	5.1	0.21	ug/L		09/18/18 07:09	09/24/18 19:37	1
2-Nitroaniline	20	U	20	0.52	ug/L		09/18/18 07:09	09/24/18 19:37	1
2-Nitrophenol	5.1	U	5.1	0.58	ug/L		09/18/18 07:09	09/24/18 19:37	1
3,3'-Dichlorobenzidine	5.1	U	5.1	1.2	ug/L		09/18/18 07:09	09/24/18 19:37	1
3-Nitroaniline	20	U	20	0.58	ug/L		09/18/18 07:09	09/24/18 19:37	1
4,6-Dinitro-2-methylphenol	20	U	20	2.9	ug/L		09/18/18 07:09	09/24/18 19:37	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.51	ug/L		09/18/18 07:09	09/24/18 19:37	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.30	ug/L		09/18/18 07:09	09/24/18 19:37	1
4-Chloroaniline	10	U	10	0.32	ug/L		09/18/18 07:09	09/24/18 19:37	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.56	ug/L		09/18/18 07:09	09/24/18 19:37	1
4-Nitroaniline	20	U	20	0.94	ug/L		09/18/18 07:09	09/24/18 19:37	1
4-Nitrophenol	20	U	20	2.2	ug/L		09/18/18 07:09	09/24/18 19:37	1
Acenaphthene	5.1	U	5.1	0.18	ug/L		09/18/18 07:09	09/24/18 19:37	1
Acenaphthylene	5.1	U	5.1	0.13	ug/L		09/18/18 07:09	09/24/18 19:37	1
Acetophenone	5.1	U	5.1	0.37	ug/L		09/18/18 07:09	09/24/18 19:37	1
Anthracene	5.1	U	5.1	0.14	ug/L		09/18/18 07:09	09/24/18 19:37	1
Atrazine	3.1	U	3.1	0.97	ug/L		09/18/18 07:09	09/24/18 19:37	1
Benzaldehyde	5.1	U	5.1	0.77	ug/L		09/18/18 07:09	09/24/18 19:37	1
Benzo[a]anthracene	**0.38**	**J**	1.0	0.17	ug/L		09/18/18 07:09	09/24/18 19:37	1
Benzo[a]pyrene	**0.50**	**J**	1.0	0.18	ug/L		09/18/18 07:09	09/24/18 19:37	1
Benzo[b]fluoranthene	**0.72**	**J**	1.0	0.16	ug/L		09/18/18 07:09	09/24/18 19:37	1
Benzo[g,h,i]perylene	**0.53**	**J**	1.0	0.18	ug/L		09/18/18 07:09	09/24/18 19:37	1
Benzo[k]fluoranthene	**0.22**	**J**	1.0	0.14	ug/L		09/18/18 07:09	09/24/18 19:37	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.46	ug/L		09/18/18 07:09	09/24/18 19:37	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.41	ug/L		09/18/18 07:09	09/24/18 19:37	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	2.3	ug/L		09/18/18 07:09	09/24/18 19:37	1
Butyl benzyl phthalate	5.1	U	5.1	0.68	ug/L		09/18/18 07:09	09/24/18 19:37	1
Caprolactam	10	U	10	0.95	ug/L		09/18/18 07:09	09/24/18 19:37	1
Carbazole	10	U	10	0.50	ug/L		09/18/18 07:09	09/24/18 19:37	1
Chrysene	**0.55**	**J**	1.0	0.19	ug/L		09/18/18 07:09	09/24/18 19:37	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.15	ug/L		09/18/18 07:09	09/24/18 19:37	1
Dibenzofuran	4.1	U	4.1	0.57	ug/L		09/18/18 07:09	09/24/18 19:37	1
Diethyl phthalate	5.1	U	5.1	3.9	ug/L		09/18/18 07:09	09/24/18 19:37	1
Dimethyl phthalate	5.1	U	5.1	0.53	ug/L		09/18/18 07:09	09/24/18 19:37	1
Di-n-butyl phthalate	5.1	U	5.1	1.8	ug/L		09/18/18 07:09	09/24/18 19:37	1
Di-n-octyl phthalate	5.1	U	5.1	0.84	ug/L		09/18/18 07:09	09/24/18 19:37	1
Fluoranthene	**0.84**	**J**	1.0	0.16	ug/L		09/18/18 07:09	09/24/18 19:37	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: W-17303-091418-DA-002
Date Collected: 09/14/18 08:20
Date Received: 09/15/18 09:45

Lab Sample ID: 240-101356-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.17	ug/L		09/18/18 07:09	09/24/18 19:37	1
Hexachlorobenzene	0.20	U	0.20	0.16	ug/L		09/18/18 07:09	09/24/18 19:37	1
Hexachlorobutadiene	1.0	U	1.0	0.55	ug/L		09/18/18 07:09	09/24/18 19:37	1
Hexachlorocyclopentadiene	5.1	U	5.1	1.8	ug/L		09/18/18 07:09	09/24/18 19:37	1
Hexachloroethane	5.1	U	5.1	0.40	ug/L		09/18/18 07:09	09/24/18 19:37	1
Indeno[1,2,3-cd]pyrene	**0.37**	**J**	2.0	0.14	ug/L		09/18/18 07:09	09/24/18 19:37	1
Isophorone	5.1	U	5.1	0.33	ug/L		09/18/18 07:09	09/24/18 19:37	1
Naphthalene	5.1	U	5.1	0.11	ug/L		09/18/18 07:09	09/24/18 19:37	1
Nitrobenzene	3.1	U	3.1	0.52	ug/L		09/18/18 07:09	09/24/18 19:37	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.26	ug/L		09/18/18 07:09	09/24/18 19:37	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.45	ug/L		09/18/18 07:09	09/24/18 19:37	1
Pentachlorophenol	5.1	U	5.1	3.2	ug/L		09/18/18 07:09	09/24/18 19:37	1
Phenol	5.1	U	5.1	0.13	ug/L		09/18/18 07:09	09/24/18 19:37	1
Phenanthrene	**0.30**	**J**	2.0	0.17	ug/L		09/18/18 07:09	09/24/18 19:37	1
Pyrene	**0.85**	**J**	5.1	0.18	ug/L		09/18/18 07:09	09/24/18 19:37	1
3 & 4 Methylphenol	5.1	U	5.1	0.19	ug/L		09/18/18 07:09	09/24/18 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*38 - 120*	*09/18/18 07:09*	*09/24/18 19:37*	*1*
2-Fluorophenol (Surr)	*31*		*10 - 120*	*09/18/18 07:09*	*09/24/18 19:37*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*28 - 120*	*09/18/18 07:09*	*09/24/18 19:37*	*1*
Nitrobenzene-d5 (Surr)	*55*		*32 - 120*	*09/18/18 07:09*	*09/24/18 19:37*	*1*
Phenol-d5 (Surr)	*18*		*10 - 120*	*09/18/18 07:09*	*09/24/18 19:37*	*1*
Terphenyl-d14 (Surr)	*41*		*23 - 127*	*09/18/18 07:09*	*09/24/18 19:37*	*1*

GC/MS VOA

Analysis Batch: 347159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101356-3	W-17303-091418-DA-003	Total/NA	Water	8260B	
240-101356-4	W-17303-091418-DA-004	Total/NA	Water	8260B	
240-101356-6	FB-17303-091418	Total/NA	Water	8260B	
MB 240-347159/6	Method Blank	Total/NA	Water	8260B	
LCS 240-347159/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 347542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101356-1	W-17303-091418-DA-001	Total/NA	Water	8260B	
240-101356-2	W-17303-091418-DA-002	Total/NA	Water	8260B	
240-101356-5	W-17303-091418-DA-005	Total/NA	Water	8260B	
MB 240-347542/6	Method Blank	Total/NA	Water	8260B	
LCS 240-347542/4	Lab Control Sample	Total/NA	Water	8260B	
240-101356-1 MS	W-17303-091418-DA-001	Total/NA	Water	8260B	
240-101356-1 MSD	W-17303-091418-DA-001	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 345818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101356-1	W-17303-091418-DA-001	Total/NA	Water	3510C	
240-101356-2	W-17303-091418-DA-002	Total/NA	Water	3510C	
MB 240-345818/9-A	Method Blank	Total/NA	Water	3510C	
LCS 240-345818/10-A	Lab Control Sample	Total/NA	Water	3510C	
240-101356-1 MS	W-17303-091418-DA-001	Total/NA	Water	3510C	
240-101356-1 MSD	W-17303-091418-DA-001	Total/NA	Water	3510C	

Analysis Batch: 346495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101356-1	W-17303-091418-DA-001	Total/NA	Water	8270C	345818
MB 240-345818/9-A	Method Blank	Total/NA	Water	8270C	345818
LCS 240-345818/10-A	Lab Control Sample	Total/NA	Water	8270C	345818
240-101356-1 MS	W-17303-091418-DA-001	Total/NA	Water	8270C	345818
240-101356-1 MSD	W-17303-091418-DA-001	Total/NA	Water	8270C	345818

Analysis Batch: 346864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-101356-2	W-17303-091418-DA-002	Total/NA	Water	8270C	345818

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-347159/6
Matrix: Water
Analysis Batch: 347159

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			09/25/18 20:24	1
Benzene	1.0	U	1.0	0.13	ug/L			09/25/18 20:24	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/25/18 20:24	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/25/18 20:24	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/25/18 20:24	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/25/18 20:24	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/25/18 20:24	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/25/18 20:24	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/25/18 20:24	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/25/18 20:24	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/25/18 20:24	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/25/18 20:24	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/25/18 20:24	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/25/18 20:24	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/25/18 20:24	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/25/18 20:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/25/18 20:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/25/18 20:24	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/25/18 20:24	1
2-Hexanone	10	U	10	0.54	ug/L			09/25/18 20:24	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/25/18 20:24	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/25/18 20:24	1
Styrene	1.0	U	1.0	0.10	ug/L			09/25/18 20:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/25/18 20:24	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/25/18 20:24	1
Toluene	1.0	U	1.0	0.14	ug/L			09/25/18 20:24	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/25/18 20:24	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/25/18 20:24	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/25/18 20:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/25/18 20:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/25/18 20:24	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/25/18 20:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/25/18 20:24	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/25/18 20:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/25/18 20:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/25/18 20:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/25/18 20:24	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/25/18 20:24	1
Methyl acetate	10	U	10	1.7	ug/L			09/25/18 20:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/25/18 20:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/25/18 20:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/25/18 20:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/25/18 20:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/25/18 20:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/25/18 20:24	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/25/18 20:24	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/25/18 20:24	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/25/18 20:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*112*		*61 - 138*		*09/25/18 20:24*	*1*
4-Bromofluorobenzene (Surr)	*82*		*69 - 120*		*09/25/18 20:24*	*1*
Toluene-d8 (Surr)	*86*		*73 - 120*		*09/25/18 20:24*	*1*
Dibromofluoromethane (Surr)	*116*		*69 - 124*		*09/25/18 20:24*	*1*

Lab Sample ID: LCS 240-347159/4
Matrix: Water
Analysis Batch: 347159

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	26.5	*	ug/L		133	35 - 131
Benzene	10.0	10.7		ug/L		107	79 - 120
Bromodichloromethane	10.0	11.0		ug/L		110	79 - 125
Bromoform	10.0	12.1		ug/L		121	55 - 145
Bromomethane	10.0	8.68		ug/L		87	17 - 158
2-Butanone (MEK)	20.0	18.6		ug/L		93	43 - 149
Carbon disulfide	10.0	10.2		ug/L		102	49 - 141
Carbon tetrachloride	10.0	11.4		ug/L		114	55 - 171
Chlorobenzene	10.0	9.97		ug/L		100	80 - 120
Chloroethane	10.0	8.75		ug/L		88	10 - 149
Chloroform	10.0	11.8		ug/L		118	80 - 120
Chloromethane	10.0	10.7		ug/L		107	59 - 124
1,1-Dichloroethane	10.0	11.5		ug/L		115	74 - 120
1,2-Dichloroethane	10.0	11.3		ug/L		113	68 - 133
1,1-Dichloroethene	10.0	10.2		ug/L		102	65 - 127
1,2-Dichloropropane	10.0	11.4		ug/L		114	78 - 127
cis-1,3-Dichloropropene	10.0	9.61		ug/L		96	75 - 120
trans-1,3-Dichloropropene	10.0	9.07		ug/L		91	67 - 120
Ethylbenzene	10.0	8.96		ug/L		90	80 - 120
2-Hexanone	20.0	18.5		ug/L		93	28 - 169
Methylene Chloride	10.0	11.3		ug/L		113	64 - 140
4-Methyl-2-pentanone (MIBK)	20.0	20.2		ug/L		101	53 - 144
Styrene	10.0	9.65		ug/L		96	80 - 121
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	58 - 122
Tetrachloroethene	10.0	10.7		ug/L		107	80 - 122
Toluene	10.0	9.99		ug/L		100	78 - 120
Trichloroethene	10.0	10.7		ug/L		107	76 - 124
Vinyl chloride	10.0	9.61		ug/L		96	65 - 124
Xylenes, Total	20.0	19.6		ug/L		98	80 - 120
1,1,1-Trichloroethane	10.0	11.4		ug/L		114	64 - 147
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	76 - 121
Cyclohexane	10.0	10.2		ug/L		102	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	9.47		ug/L		95	50 - 130
1,2-Dibromoethane	10.0	10.3		ug/L		103	80 - 120
Dichlorodifluoromethane	10.0	10.1		ug/L		101	42 - 141
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	77 - 120
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	74 - 124
Isopropylbenzene	10.0	9.52		ug/L		95	80 - 128
Methyl acetate	20.0	24.0		ug/L		120	63 - 137
Methyl tert-butyl ether	10.0	9.92		ug/L		99	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.5		ug/L		105	65 - 144
1,2,4-Trichlorobenzene	10.0	9.67		ug/L		97	34 - 141
1,2-Dichlorobenzene	10.0	10.3		ug/L		103	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-347159/4
Matrix: Water
Analysis Batch: 347159

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	10.0	9.95		ug/L		100	80 - 120
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	80 - 120
Trichlorofluoromethane	10.0	9.66		ug/L		97	27 - 176
Dibromochloromethane	10.0	11.3		ug/L		113	64 - 129
Methylcyclohexane	10.0	9.26		ug/L		93	63 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 138*
4-Bromofluorobenzene (Surr)	*89*		*69 - 120*
Toluene-d8 (Surr)	*89*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*69 - 124*

Lab Sample ID: MB 240-347542/6
Matrix: Water
Analysis Batch: 347542

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			09/27/18 13:25	1
Benzene	1.0	U	1.0	0.13	ug/L			09/27/18 13:25	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			09/27/18 13:25	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/27/18 13:25	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/27/18 13:25	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/27/18 13:25	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			09/27/18 13:25	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/27/18 13:25	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/27/18 13:25	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/27/18 13:25	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/27/18 13:25	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/27/18 13:25	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/27/18 13:25	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/27/18 13:25	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/27/18 13:25	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/27/18 13:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/27/18 13:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/27/18 13:25	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/27/18 13:25	1
2-Hexanone	10	U	10	0.54	ug/L			09/27/18 13:25	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/27/18 13:25	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/27/18 13:25	1
Styrene	1.0	U	1.0	0.10	ug/L			09/27/18 13:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/27/18 13:25	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/27/18 13:25	1
Toluene	1.0	U	1.0	0.14	ug/L			09/27/18 13:25	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/27/18 13:25	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/27/18 13:25	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/27/18 13:25	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/27/18 13:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/27/18 13:25	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-347542/6
Matrix: Water
Analysis Batch: 347542

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/27/18 13:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			09/27/18 13:25	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			09/27/18 13:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/27/18 13:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/27/18 13:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/27/18 13:25	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/27/18 13:25	1
Methyl acetate	10	U	10	1.7	ug/L			09/27/18 13:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/27/18 13:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/27/18 13:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/27/18 13:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/27/18 13:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/27/18 13:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/27/18 13:25	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/27/18 13:25	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			09/27/18 13:25	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/27/18 13:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 138*		*09/27/18 13:25*	*1*
4-Bromofluorobenzene (Surr)	*86*		*69 - 120*		*09/27/18 13:25*	*1*
Toluene-d8 (Surr)	*84*		*73 - 120*		*09/27/18 13:25*	*1*
Dibromofluoromethane (Surr)	*108*		*69 - 124*		*09/27/18 13:25*	*1*

Lab Sample ID: LCS 240-347542/4
Matrix: Water
Analysis Batch: 347542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	30.4	*	ug/L		152	35 - 131
Benzene	10.0	10.5		ug/L		105	79 - 120
Bromodichloromethane	10.0	10.5		ug/L		105	79 - 125
Bromoform	10.0	11.9		ug/L		119	55 - 145
Bromomethane	10.0	8.30		ug/L		83	17 - 158
2-Butanone (MEK)	20.0	21.6		ug/L		108	43 - 149
Carbon disulfide	10.0	10.1		ug/L		101	49 - 141
Carbon tetrachloride	10.0	11.2		ug/L		112	55 - 171
Chlorobenzene	10.0	9.92		ug/L		99	80 - 120
Chloroethane	10.0	8.66		ug/L		87	10 - 149
Chloroform	10.0	11.0		ug/L		110	80 - 120
Chloromethane	10.0	10.9		ug/L		109	59 - 124
1,1-Dichloroethane	10.0	11.3		ug/L		113	74 - 120
1,2-Dichloroethane	10.0	10.6		ug/L		106	68 - 133
1,1-Dichloroethene	10.0	9.79		ug/L		98	65 - 127
1,2-Dichloropropane	10.0	11.2		ug/L		112	78 - 127
cis-1,3-Dichloropropene	10.0	9.97		ug/L		100	75 - 120
trans-1,3-Dichloropropene	10.0	9.24		ug/L		92	67 - 120
Ethylbenzene	10.0	9.45		ug/L		95	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-347542/4
Matrix: Water
Analysis Batch: 347542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	20.0	20.8		ug/L		104	28 - 169
Methylene Chloride	10.0	11.1		ug/L		111	64 - 140
4-Methyl-2-pentanone (MIBK)	20.0	21.5		ug/L		107	53 - 144
Styrene	10.0	9.83		ug/L		98	80 - 121
1,1,2,2-Tetrachloroethane	10.0	9.58		ug/L		96	58 - 122
Tetrachloroethene	10.0	10.5		ug/L		105	80 - 122
Toluene	10.0	9.81		ug/L		98	78 - 120
Trichloroethene	10.0	10.7		ug/L		107	76 - 124
Vinyl chloride	10.0	9.43		ug/L		94	65 - 124
Xylenes, Total	20.0	19.3		ug/L		97	80 - 120
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	64 - 147
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	76 - 121
Cyclohexane	10.0	10.2		ug/L		102	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	10.1		ug/L		101	50 - 130
1,2-Dibromoethane	10.0	9.88		ug/L		99	80 - 120
Dichlorodifluoromethane	10.0	10.0		ug/L		100	42 - 141
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	77 - 120
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	74 - 124
Isopropylbenzene	10.0	9.37		ug/L		94	80 - 128
Methyl acetate	20.0	24.4		ug/L		122	63 - 137
Methyl tert-butyl ether	10.0	9.29		ug/L		93	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.6		ug/L		106	65 - 144
1,2,4-Trichlorobenzene	10.0	9.50		ug/L		95	34 - 141
1,2-Dichlorobenzene	10.0	9.69		ug/L		97	80 - 120
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	80 - 120
1,4-Dichlorobenzene	10.0	9.85		ug/L		99	80 - 120
Trichlorofluoromethane	10.0	9.54		ug/L		95	27 - 176
Dibromochloromethane	10.0	10.5		ug/L		105	64 - 129
Methylcyclohexane	10.0	9.51		ug/L		95	63 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 138*
4-Bromofluorobenzene (Surr)	*92*		*69 - 120*
Toluene-d8 (Surr)	*91*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*69 - 124*

Lab Sample ID: 240-101356-1 MS
Matrix: Water
Analysis Batch: 347542

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	9.4	J *	20.0	28.3		ug/L		94	19 - 133
Benzene	1.0	U F2	10.0	8.32		ug/L		83	69 - 127
Bromodichloromethane	1.0	U	10.0	8.89		ug/L		89	75 - 128
Bromoform	1.0	U F2	10.0	8.85		ug/L		89	61 - 135
Bromomethane	1.0	U	10.0	6.70		ug/L		67	10 - 148
2-Butanone (MEK)	10	U	20.0	16.9		ug/L		85	34 - 153

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101356-1 MS
Matrix: Water
Analysis Batch: 347542

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	5.0	U F2	10.0	7.64		ug/L		76	46 - 143
Carbon tetrachloride	1.0	U F2	10.0	7.62		ug/L		76	53 - 175
Chlorobenzene	1.0	U F2	10.0	7.66		ug/L		77	76 - 120
Chloroethane	1.0	U	10.0	6.30		ug/L		63	10 - 141
Chloroform	1.0	U	10.0	8.82		ug/L		88	74 - 125
Chloromethane	1.0	U F2 F1	10.0	8.64		ug/L		86	34 - 127
1,1-Dichloroethane	1.0	U	10.0	8.97		ug/L		90	69 - 122
1,2-Dichloroethane	1.0	U F2	10.0	8.96		ug/L		90	64 - 138
1,1-Dichloroethene	1.0	U F2	10.0	6.77		ug/L		68	62 - 127
1,2-Dichloropropane	1.0	U F2	10.0	8.68		ug/L		87	72 - 131
cis-1,3-Dichloropropene	1.0	U F2	10.0	7.90		ug/L		79	68 - 120
trans-1,3-Dichloropropene	1.0	U F2	10.0	7.09		ug/L		71	59 - 120
Ethylbenzene	1.0	U F2 F1	10.0	7.04	F1	ug/L		70	72 - 121
2-Hexanone	10	U F2	20.0	14.6		ug/L		73	21 - 184
Methylene Chloride	5.0	U	10.0	8.73		ug/L		87	52 - 137
4-Methyl-2-pentanone (MIBK)	10	U F2	20.0	16.6		ug/L		83	53 - 147
Styrene	1.0	U F2 F1	10.0	7.32	F1	ug/L		73	74 - 125
1,1,2,2-Tetrachloroethane	1.0	U	10.0	7.95		ug/L		79	51 - 123
Tetrachloroethene	1.0	U F2	10.0	7.73		ug/L		77	69 - 126
Toluene	1.0	U F2	10.0	7.69		ug/L		77	69 - 125
Trichloroethene	1.0	U F2	10.0	8.14		ug/L		81	68 - 129
Vinyl chloride	1.0	U F2	10.0	6.73		ug/L		67	55 - 123
Xylenes, Total	2.0	U F2	20.0	14.9		ug/L		74	71 - 122
1,1,1-Trichloroethane	1.0	U F2	10.0	8.82		ug/L		88	57 - 156
1,1,2-Trichloroethane	1.0	U F2	10.0	7.76		ug/L		78	68 - 127
Cyclohexane	1.0	U F2 F1	10.0	4.77	F1	ug/L		48	56 - 135
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	7.59		ug/L		76	48 - 130
1,2-Dibromoethane	1.0	U F2	10.0	8.01		ug/L		80	73 - 121
Dichlorodifluoromethane	1.0	U F2	10.0	5.93		ug/L		59	45 - 130
cis-1,2-Dichloroethene	1.0	U F2	10.0	8.13		ug/L		81	69 - 127
trans-1,2-Dichloroethene	1.0	U	10.0	8.49		ug/L		85	66 - 131
Isopropylbenzene	1.0	U F2 F1	10.0	6.82	F1	ug/L		68	70 - 132
Methyl acetate	10	U F2	20.0	19.3		ug/L		97	52 - 139
Methyl tert-butyl ether	1.0	U	10.0	7.77		ug/L		78	67 - 125
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U F2 F1	10.0	4.63	F1	ug/L		46	58 - 137
1,2,4-Trichlorobenzene	1.0	U	10.0	6.44		ug/L		64	26 - 138
1,2-Dichlorobenzene	1.0	U	10.0	7.58		ug/L		76	70 - 120
1,3-Dichlorobenzene	1.0	U F1	10.0	7.03	F1	ug/L		70	71 - 120
1,4-Dichlorobenzene	1.0	U F1	10.0	7.14	F1	ug/L		71	72 - 120
Trichlorofluoromethane	1.0	U F2	10.0	6.12		ug/L		61	28 - 172
Dibromochloromethane	1.0	U F2	10.0	8.27		ug/L		83	62 - 131
Methylcyclohexane	1.0	U F2 F1	10.0	4.27	F1	ug/L		43	46 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 138*
4-Bromofluorobenzene (Surr)	*80*		*69 - 120*
Toluene-d8 (Surr)	*81*		*73 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101356-1 MS
Matrix: Water
Analysis Batch: 347542

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	95		69 - 124

Lab Sample ID: 240-101356-1 MSD
Matrix: Water
Analysis Batch: 347542

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	9.4	J *	20.0	30.1		ug/L		103	19 - 133	6	35
Benzene	1.0	U F2	10.0	9.70	F2	ug/L		97	69 - 127	15	10
Bromodichloromethane	1.0	U	10.0	10.1		ug/L		101	75 - 128	13	13
Bromoform	1.0	U F2	10.0	10.6	F2	ug/L		106	61 - 135	18	13
Bromomethane	1.0	U	10.0	7.85		ug/L		78	10 - 148	16	35
2-Butanone (MEK)	10	U	20.0	21.1		ug/L		106	34 - 153	22	23
Carbon disulfide	5.0	U F2	10.0	9.85	F2	ug/L		99	46 - 143	25	18
Carbon tetrachloride	1.0	U F2	10.0	9.83	F2	ug/L		98	53 - 175	25	17
Chlorobenzene	1.0	U F2	10.0	9.38	F2	ug/L		94	76 - 120	20	12
Chloroethane	1.0	U	10.0	7.83		ug/L		78	10 - 141	22	35
Chloroform	1.0	U	10.0	9.87		ug/L		99	74 - 125	11	11
Chloromethane	1.0	U F2 F1	10.0	13.7	F1 F2	ug/L		137	34 - 127	45	25
1,1-Dichloroethane	1.0	U	10.0	10.0		ug/L		100	69 - 122	11	11
1,2-Dichloroethane	1.0	U F2	10.0	10.1	F2	ug/L		101	64 - 138	12	11
1,1-Dichloroethene	1.0	U F2	10.0	8.44	F2	ug/L		84	62 - 127	22	14
1,2-Dichloropropane	1.0	U F2	10.0	10.6	F2	ug/L		106	72 - 131	20	12
cis-1,3-Dichloropropene	1.0	U F2	10.0	9.45	F2	ug/L		94	68 - 120	18	13
trans-1,3-Dichloropropene	1.0	U F2	10.0	8.75	F2	ug/L		88	59 - 120	21	14
Ethylbenzene	1.0	U F2 F1	10.0	8.47	F2	ug/L		85	72 - 121	18	15
2-Hexanone	10	U F2	20.0	19.1	F2	ug/L		96	21 - 184	27	12
Methylene Chloride	5.0	U	10.0	9.65		ug/L		97	52 - 137	10	12
4-Methyl-2-pentanone (MIBK)	10	U F2	20.0	20.6	F2	ug/L		103	53 - 147	22	16
Styrene	1.0	U F2 F1	10.0	8.87	F2	ug/L		89	74 - 125	19	14
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.05		ug/L		90	51 - 123	13	17
Tetrachloroethene	1.0	U F2	10.0	9.70	F2	ug/L		97	69 - 126	23	18
Toluene	1.0	U F2	10.0	8.94	F2	ug/L		89	69 - 125	15	14
Trichloroethene	1.0	U F2	10.0	9.74	F2	ug/L		97	68 - 129	18	12
Vinyl chloride	1.0	U F2	10.0	9.25	F2	ug/L		93	55 - 123	32	12
Xylenes, Total	2.0	U F2	20.0	17.5	F2	ug/L		88	71 - 122	16	14
1,1,1-Trichloroethane	1.0	U F2	10.0	10.2	F2	ug/L		102	57 - 156	14	13
1,1,2-Trichloroethane	1.0	U F2	10.0	9.35	F2	ug/L		94	68 - 127	19	11
Cyclohexane	1.0	U F2 F1	10.0	9.32	F2	ug/L		93	56 - 135	65	35
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	9.56		ug/L		96	48 - 130	23	31
1,2-Dibromoethane	1.0	U F2	10.0	9.64	F2	ug/L		96	73 - 121	18	12
Dichlorodifluoromethane	1.0	U F2	10.0	8.81	F2	ug/L		88	45 - 130	39	34
cis-1,2-Dichloroethene	1.0	U F2	10.0	9.26	F2	ug/L		93	69 - 127	13	11
trans-1,2-Dichloroethene	1.0	U	10.0	9.43		ug/L		94	66 - 131	10	11
Isopropylbenzene	1.0	U F2 F1	10.0	8.33	F2	ug/L		83	70 - 132	20	16
Methyl acetate	10	U F2	20.0	23.2	F2	ug/L		116	52 - 139	18	14
Methyl tert-butyl ether	1.0	U	10.0	8.64		ug/L		86	67 - 125	11	12

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101356-1 MSD
Matrix: Water
Analysis Batch: 347542

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U F2 F1	10.0	10.2	F2	ug/L		102	58 - 137	75	35
1,2,4-Trichlorobenzene	1.0	U	10.0	7.47		ug/L		75	26 - 138	15	35
1,2-Dichlorobenzene	1.0	U	10.0	8.86		ug/L		89	70 - 120	16	19
1,3-Dichlorobenzene	1.0	U F1	10.0	8.33		ug/L		83	71 - 120	17	18
1,4-Dichlorobenzene	1.0	U F1	10.0	8.44		ug/L		84	72 - 120	17	17
Trichlorofluoromethane	1.0	U F2	10.0	8.49	F2	ug/L		85	28 - 172	32	26
Dibromochloromethane	1.0	U F2	10.0	10.1	F2	ug/L		101	62 - 131	20	15
Methylcyclohexane	1.0	U F2 F1	10.0	8.27	F2	ug/L		83	46 - 139	64	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 138*
4-Bromofluorobenzene (Surr)	*86*		*69 - 120*
Toluene-d8 (Surr)	*86*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*69 - 124*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-345818/9-A
Matrix: Water
Analysis Batch: 346495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 345818

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.49	ug/L		09/18/18 07:09	09/21/18 09:05	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.55	ug/L		09/18/18 07:09	09/21/18 09:05	1
2,4,5-Trichlorophenol	5.0	U	5.0	2.0	ug/L		09/18/18 07:09	09/21/18 09:05	1
2,4,6-Trichlorophenol	4.0	U	4.0	1.8	ug/L		09/18/18 07:09	09/21/18 09:05	1
2,4-Dichlorophenol	10	U	10	0.26	ug/L		09/18/18 07:09	09/21/18 09:05	1
2,4-Dimethylphenol	5.0	U	5.0	0.52	ug/L		09/18/18 07:09	09/21/18 09:05	1
2,4-Dinitrophenol	20	U	20	6.2	ug/L		09/18/18 07:09	09/21/18 09:05	1
2,4-Dinitrotoluene	5.0	U	5.0	2.1	ug/L		09/18/18 07:09	09/21/18 09:05	1
2,6-Dinitrotoluene	5.0	U	5.0	2.1	ug/L		09/18/18 07:09	09/21/18 09:05	1
2-Chloronaphthalene	5.0	U	5.0	0.48	ug/L		09/18/18 07:09	09/21/18 09:05	1
2-Chlorophenol	5.0	U	5.0	0.27	ug/L		09/18/18 07:09	09/21/18 09:05	1
2-Methylnaphthalene	5.0	U	5.0	0.11	ug/L		09/18/18 07:09	09/21/18 09:05	1
2-Methylphenol	5.0	U	5.0	0.21	ug/L		09/18/18 07:09	09/21/18 09:05	1
2-Nitroaniline	20	U	20	0.51	ug/L		09/18/18 07:09	09/21/18 09:05	1
2-Nitrophenol	5.0	U	5.0	0.56	ug/L		09/18/18 07:09	09/21/18 09:05	1
3,3'-Dichlorobenzidine	5.0	U	5.0	1.2	ug/L		09/18/18 07:09	09/21/18 09:05	1
3-Nitroaniline	20	U	20	0.57	ug/L		09/18/18 07:09	09/21/18 09:05	1
4,6-Dinitro-2-methylphenol	20	U	20	2.8	ug/L		09/18/18 07:09	09/21/18 09:05	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.50	ug/L		09/18/18 07:09	09/21/18 09:05	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.30	ug/L		09/18/18 07:09	09/21/18 09:05	1
4-Chloroaniline	10	U	10	0.32	ug/L		09/18/18 07:09	09/21/18 09:05	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.55	ug/L		09/18/18 07:09	09/21/18 09:05	1
4-Nitroaniline	20	U	20	0.92	ug/L		09/18/18 07:09	09/21/18 09:05	1
4-Nitrophenol	20	U	20	2.2	ug/L		09/18/18 07:09	09/21/18 09:05	1
Acenaphthene	5.0	U	5.0	0.17	ug/L		09/18/18 07:09	09/21/18 09:05	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-345818/9-A
Matrix: Water
Analysis Batch: 346495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 345818

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	5.0	U	5.0	0.13	ug/L		09/18/18 07:09	09/21/18 09:05	1
Acetophenone	5.0	U	5.0	0.37	ug/L		09/18/18 07:09	09/21/18 09:05	1
Anthracene	5.0	U	5.0	0.14	ug/L		09/18/18 07:09	09/21/18 09:05	1
Atrazine	3.0	U	3.0	0.95	ug/L		09/18/18 07:09	09/21/18 09:05	1
Benzaldehyde	5.0	U	5.0	0.76	ug/L		09/18/18 07:09	09/21/18 09:05	1
Benzo[a]anthracene	1.0	U	1.0	0.17	ug/L		09/18/18 07:09	09/21/18 09:05	1
Benzo[a]pyrene	1.0	U	1.0	0.17	ug/L		09/18/18 07:09	09/21/18 09:05	1
Benzo[b]fluoranthene	1.0	U	1.0	0.15	ug/L		09/18/18 07:09	09/21/18 09:05	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.18	ug/L		09/18/18 07:09	09/21/18 09:05	1
Benzo[k]fluoranthene	1.0	U	1.0	0.14	ug/L		09/18/18 07:09	09/21/18 09:05	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.46	ug/L		09/18/18 07:09	09/21/18 09:05	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.40	ug/L		09/18/18 07:09	09/21/18 09:05	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		09/18/18 07:09	09/21/18 09:05	1
Butyl benzyl phthalate	5.0	U	5.0	0.67	ug/L		09/18/18 07:09	09/21/18 09:05	1
Caprolactam	10	U	10	0.93	ug/L		09/18/18 07:09	09/21/18 09:05	1
Carbazole	10	U	10	0.49	ug/L		09/18/18 07:09	09/21/18 09:05	1
Chrysene	1.0	U	1.0	0.19	ug/L		09/18/18 07:09	09/21/18 09:05	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.15	ug/L		09/18/18 07:09	09/21/18 09:05	1
Dibenzofuran	4.0	U	4.0	0.56	ug/L		09/18/18 07:09	09/21/18 09:05	1
Diethyl phthalate	5.0	U	5.0	3.8	ug/L		09/18/18 07:09	09/21/18 09:05	1
Dimethyl phthalate	5.0	U	5.0	0.52	ug/L		09/18/18 07:09	09/21/18 09:05	1
Di-n-butyl phthalate	5.0	U	5.0	1.8	ug/L		09/18/18 07:09	09/21/18 09:05	1
Di-n-octyl phthalate	5.0	U	5.0	0.82	ug/L		09/18/18 07:09	09/21/18 09:05	1
Fluoranthene	1.0	U	1.0	0.16	ug/L		09/18/18 07:09	09/21/18 09:05	1
Fluorene	5.0	U	5.0	0.17	ug/L		09/18/18 07:09	09/21/18 09:05	1
Hexachlorobenzene	0.20	U	0.20	0.16	ug/L		09/18/18 07:09	09/21/18 09:05	1
Hexachlorobutadiene	1.0	U	1.0	0.54	ug/L		09/18/18 07:09	09/21/18 09:05	1
Hexachlorocyclopentadiene	5.0	U	5.0	1.8	ug/L		09/18/18 07:09	09/21/18 09:05	1
Hexachloroethane	5.0	U	5.0	0.40	ug/L		09/18/18 07:09	09/21/18 09:05	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.14	ug/L		09/18/18 07:09	09/21/18 09:05	1
Isophorone	5.0	U	5.0	0.32	ug/L		09/18/18 07:09	09/21/18 09:05	1
Naphthalene	5.0	U	5.0	0.11	ug/L		09/18/18 07:09	09/21/18 09:05	1
Nitrobenzene	3.0	U	3.0	0.51	ug/L		09/18/18 07:09	09/21/18 09:05	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.25	ug/L		09/18/18 07:09	09/21/18 09:05	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.44	ug/L		09/18/18 07:09	09/21/18 09:05	1
Pentachlorophenol	5.0	U	5.0	3.1	ug/L		09/18/18 07:09	09/21/18 09:05	1
Phenol	5.0	U	5.0	0.13	ug/L		09/18/18 07:09	09/21/18 09:05	1
Phenanthrene	2.0	U	2.0	0.17	ug/L		09/18/18 07:09	09/21/18 09:05	1
Pyrene	5.0	U	5.0	0.18	ug/L		09/18/18 07:09	09/21/18 09:05	1
3 & 4 Methylphenol	5.0	U	5.0	0.19	ug/L		09/18/18 07:09	09/21/18 09:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*38 - 120*	*09/18/18 07:09*	*09/21/18 09:05*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 120*	*09/18/18 07:09*	*09/21/18 09:05*	*1*
2,4,6-Tribromophenol (Surr)	*57*		*28 - 120*	*09/18/18 07:09*	*09/21/18 09:05*	*1*
Nitrobenzene-d5 (Surr)	*70*		*32 - 120*	*09/18/18 07:09*	*09/21/18 09:05*	*1*
Phenol-d5 (Surr)	*34*		*10 - 120*	*09/18/18 07:09*	*09/21/18 09:05*	*1*
Terphenyl-d14 (Surr)	*83*		*23 - 127*	*09/18/18 07:09*	*09/21/18 09:05*	*1*

Lab Sample ID: LCS 240-345818/10-A
Matrix: Water
Analysis Batch: 346495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345818

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	14.3		ug/L		71	53 - 120
2,2'-oxybis[1-chloropropane]	20.0	17.8		ug/L		89	45 - 120
2,4,5-Trichlorophenol	20.0	13.5		ug/L		67	54 - 120
2,4,6-Trichlorophenol	20.0	14.2		ug/L		71	54 - 120
2,4-Dichlorophenol	20.0	14.9		ug/L		75	55 - 120
2,4-Dimethylphenol	20.0	17.0		ug/L		85	52 - 120
2,4-Dinitrophenol	40.0	15.7	J	ug/L		39	12 - 120
2,4-Dinitrotoluene	20.0	17.4		ug/L		87	60 - 120
2,6-Dinitrotoluene	20.0	16.3		ug/L		81	60 - 120
2-Chloronaphthalene	20.0	14.6		ug/L		73	53 - 120
2-Chlorophenol	20.0	15.3		ug/L		76	53 - 120
2-Methylnaphthalene	20.0	15.2		ug/L		76	54 - 120
2-Methylphenol	20.0	14.2		ug/L		71	46 - 120
2-Nitroaniline	20.0	17.1	J	ug/L		86	51 - 120
2-Nitrophenol	20.0	16.9		ug/L		84	54 - 120
3,3'-Dichlorobenzidine	40.0	35.0		ug/L		87	57 - 120
3-Nitroaniline	20.0	14.5	J	ug/L		72	53 - 120
4,6-Dinitro-2-methylphenol	40.0	23.9		ug/L		60	36 - 120
4-Bromophenyl phenyl ether	20.0	15.7		ug/L		78	54 - 120
4-Chloro-3-methylphenol	20.0	17.5		ug/L		88	54 - 120
4-Chloroaniline	20.0	9.31	J	ug/L		47	10 - 120
4-Chlorophenyl phenyl ether	20.0	15.2		ug/L		76	56 - 120
4-Nitroaniline	20.0	13.9	J	ug/L		69	55 - 120
4-Nitrophenol	40.0	19.0	J	ug/L		48	10 - 120
Acenaphthene	20.0	14.5		ug/L		72	54 - 120
Acenaphthylene	20.0	17.0		ug/L		85	53 - 120
Acetophenone	20.0	16.4		ug/L		82	56 - 120
Anthracene	20.0	15.1		ug/L		76	56 - 120
Atrazine	40.0	34.5		ug/L		86	61 - 127
Benzaldehyde	40.0	30.7		ug/L		77	47 - 134
Benzo[a]anthracene	20.0	15.3		ug/L		77	54 - 120
Benzo[a]pyrene	20.0	16.5		ug/L		83	54 - 120
Benzo[b]fluoranthene	20.0	16.2		ug/L		81	53 - 120
Benzo[g,h,i]perylene	20.0	14.0		ug/L		70	55 - 120
Benzo[k]fluoranthene	20.0	16.2		ug/L		81	55 - 120
Bis(2-chloroethoxy)methane	20.0	15.9		ug/L		79	56 - 120
Bis(2-chloroethyl)ether	20.0	14.9		ug/L		74	51 - 120
Bis(2-ethylhexyl) phthalate	20.0	18.8		ug/L		94	50 - 120
Butyl benzyl phthalate	20.0	19.1		ug/L		96	51 - 120
Caprolactam	40.0	6.78	J	ug/L		17	10 - 120
Carbazole	20.0	15.8		ug/L		79	62 - 120
Chrysene	20.0	15.9		ug/L		79	56 - 120
Dibenz(a,h)anthracene	20.0	14.5		ug/L		73	52 - 120
Dibenzofuran	20.0	15.4		ug/L		77	55 - 120
Diethyl phthalate	20.0	18.0		ug/L		90	42 - 132
Dimethyl phthalate	20.0	16.1		ug/L		81	56 - 120
Di-n-butyl phthalate	20.0	18.1		ug/L		91	61 - 120
Di-n-octyl phthalate	20.0	18.3		ug/L		92	58 - 120
Fluoranthene	20.0	15.4		ug/L		77	58 - 120
Fluorene	20.0	15.5		ug/L		78	56 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-345818/10-A
Matrix: Water
Analysis Batch: 346495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345818

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	20.0	14.4		ug/L		72	51 - 120
Hexachlorobutadiene	20.0	13.7		ug/L		68	44 - 120
Hexachlorocyclopentadiene	20.0	8.98		ug/L		45	19 - 120
Hexachloroethane	20.0	14.2		ug/L		71	44 - 120
Indeno[1,2,3-cd]pyrene	20.0	14.4		ug/L		72	54 - 120
Isophorone	20.0	17.5		ug/L		87	55 - 120
Naphthalene	20.0	15.9		ug/L		80	53 - 120
Nitrobenzene	20.0	15.9		ug/L		79	55 - 120
N-Nitrosodi-n-propylamine	20.0	16.4		ug/L		82	53 - 120
N-Nitrosodiphenylamine	20.0	16.2		ug/L		81	55 - 120
Pentachlorophenol	40.0	25.1		ug/L		63	30 - 120
Phenol	20.0	7.03		ug/L		35	10 - 120
Phenanthrene	20.0	15.7		ug/L		78	55 - 120
Pyrene	20.0	16.8		ug/L		84	57 - 120
3 & 4 Methylphenol	20.0	13.7		ug/L		68	40 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*76*		*38 - 120*
2-Fluorophenol (Surr)	*55*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*73*		*28 - 120*
Nitrobenzene-d5 (Surr)	*83*		*32 - 120*
Phenol-d5 (Surr)	*36*		*10 - 120*
Terphenyl-d14 (Surr)	*87*		*23 - 127*

Lab Sample ID: 240-101356-1 MS
Matrix: Water
Analysis Batch: 346495

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA
Prep Batch: 345818

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	4.9	U	19.0	10.2		ug/L		53	45 - 120
2,2'-oxybis[1-chloropropane]	4.9	U	19.0	13.6		ug/L		72	44 - 120
2,4,5-Trichlorophenol	4.9	U	19.0	11.2		ug/L		59	20 - 120
2,4,6-Trichlorophenol	3.9	U	19.0	11.1		ug/L		58	40 - 120
2,4-Dichlorophenol	9.7	U	19.0	11.8		ug/L		62	19 - 121
2,4-Dimethylphenol	4.9	U	19.0	13.0		ug/L		68	16 - 120
2,4-Dinitrophenol	19	U F1	38.1	19	U F1	ug/L		0	10 - 120
2,4-Dinitrotoluene	4.9	U	19.0	12.0		ug/L		63	49 - 120
2,6-Dinitrotoluene	4.9	U	19.0	11.8		ug/L		62	48 - 120
2-Chloronaphthalene	4.9	U	19.0	10.2		ug/L		53	42 - 120
2-Chlorophenol	4.9	U	19.0	11.4		ug/L		60	29 - 120
2-Methylnaphthalene	4.9	U	19.0	11.4		ug/L		60	43 - 120
2-Methylphenol	4.9	U	19.0	10.1		ug/L		53	18 - 120
2-Nitroaniline	19	U	19.0	13.4	J	ug/L		70	35 - 120
2-Nitrophenol	4.9	U	19.0	9.20		ug/L		48	43 - 120
3,3'-Dichlorobenzidine	4.9	U	38.1	21.5		ug/L		56	10 - 120
3-Nitroaniline	19	U	19.0	13.2	J	ug/L		69	10 - 120
4,6-Dinitro-2-methylphenol	19	U F1	38.1	19	U F1	ug/L		0	10 - 120
4-Bromophenyl phenyl ether	4.9	U	19.0	10.0		ug/L		53	41 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101356-1 MS | **Client Sample ID: W-17303-091418-DA-001**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 346495 | **Prep Batch: 345818**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	4.9	U	19.0	14.1		ug/L		74	32 - 120
4-Chloroaniline	9.7	U F2	19.0	12.0		ug/L		63	10 - 120
4-Chlorophenyl phenyl ether	4.9	U	19.0	10.8		ug/L		57	43 - 120
4-Nitroaniline	19	U	19.0	11.9	J	ug/L		62	10 - 120
4-Nitrophenol	19	U	38.1	11.2	J	ug/L		29	10 - 120
Acenaphthene	4.9	U	19.0	11.1		ug/L		58	35 - 120
Acenaphthylene	4.9	U	19.0	12.5		ug/L		65	36 - 120
Acetophenone	4.9	U	19.0	12.7		ug/L		67	42 - 120
Anthracene	4.9	U	19.0	10.5		ug/L		55	35 - 120
Atrazine	2.9	U	38.1	26.9		ug/L		71	47 - 121
Benzaldehyde	4.9	U	38.1	20.0		ug/L		53	46 - 120
Benzo[a]anthracene	0.32	J	19.0	11.4		ug/L		58	16 - 120
Benzo[a]pyrene	0.37	J	19.0	12.9		ug/L		66	10 - 120
Benzo[b]fluoranthene	0.46	J	19.0	14.7		ug/L		75	10 - 120
Benzo[g,h,i]perylene	0.97	U	19.0	5.62		ug/L		29	10 - 120
Benzo[k]fluoranthene	0.97	U	19.0	14.2		ug/L		74	10 - 120
Bis(2-chloroethoxy)methane	4.9	U	19.0	12.1		ug/L		63	44 - 120
Bis(2-chloroethyl)ether	0.97	U	19.0	11.7		ug/L		61	42 - 120
Bis(2-ethylhexyl) phthalate	4.9	U	19.0	16.4		ug/L		86	15 - 120
Butyl benzyl phthalate	4.9	U	19.0	14.4		ug/L		75	39 - 120
Caprolactam	9.7	U	38.1	4.65	J	ug/L		12	10 - 120
Carbazole	9.7	U	19.0	12.3		ug/L		65	55 - 120
Chrysene	0.40	J	19.0	11.6		ug/L		59	14 - 120
Dibenz(a,h)anthracene	1.9	U	19.0	6.75		ug/L		35	10 - 120
Dibenzofuran	3.9	U	19.0	11.8		ug/L		62	46 - 120
Diethyl phthalate	4.9	U	19.0	15.1		ug/L		79	49 - 120
Dimethyl phthalate	4.9	U	19.0	13.3		ug/L		70	47 - 120
Di-n-butyl phthalate	4.9	U	19.0	11.8		ug/L		62	42 - 120
Di-n-octyl phthalate	4.9	U F1	19.0	22.4		ug/L		117	13 - 120
Fluoranthene	0.55	J	19.0	11.4		ug/L		57	28 - 120
Fluorene	4.9	U	19.0	11.6		ug/L		61	36 - 120
Hexachlorobenzene	0.19	U	19.0	9.85		ug/L		52	31 - 120
Hexachlorobutadiene	0.97	U	19.0	9.04		ug/L		47	30 - 120
Hexachlorocyclopentadiene	4.9	U F1	19.0	4.8	U F1	ug/L		0	10 - 120
Hexachloroethane	4.9	U	19.0	6.80		ug/L		36	12 - 120
Indeno[1,2,3-cd]pyrene	1.9	U	19.0	6.95		ug/L		36	10 - 120
Isophorone	4.9	U	19.0	13.9		ug/L		73	45 - 120
Naphthalene	4.9	U	19.0	12.1		ug/L		63	32 - 120
Nitrobenzene	2.9	U	19.0	11.9		ug/L		63	48 - 120
N-Nitrosodi-n-propylamine	4.9	U	19.0	12.4		ug/L		65	45 - 120
N-Nitrosodiphenylamine	4.9	U	19.0	11.8		ug/L		62	39 - 120
Pentachlorophenol	4.9	U F2	38.1	13.2		ug/L		35	20 - 120
Phenol	4.9	U	19.0	4.97		ug/L		26	10 - 120
Phenanthrene	0.21	J	19.0	11.2		ug/L		58	36 - 120
Pyrene	0.64	J	19.0	13.1		ug/L		65	28 - 120
3 & 4 Methylphenol	4.9	U	19.0	9.73		ug/L		51	15 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101356-1 MS
Matrix: Water
Analysis Batch: 346495

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA
Prep Batch: 345818

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*54*		*38 - 120*
2-Fluorophenol (Surr)	*38*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*61*		*28 - 120*
Nitrobenzene-d5 (Surr)	*65*		*32 - 120*
Phenol-d5 (Surr)	*23*		*10 - 120*
Terphenyl-d14 (Surr)	*39*		*23 - 127*

Lab Sample ID: 240-101356-1 MSD
Matrix: Water
Analysis Batch: 346495

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA
Prep Batch: 345818

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	4.9	U	19.4	13.1		ug/L		68	45 - 120	25	26
2,2'-oxybis[1-chloropropane]	4.9	U	19.4	17.4		ug/L		89	44 - 120	24	34
2,4,5-Trichlorophenol	4.9	U	19.4	13.5		ug/L		69	20 - 120	18	33
2,4,6-Trichlorophenol	3.9	U	19.4	13.5		ug/L		69	40 - 120	19	29
2,4-Dichlorophenol	9.7	U	19.4	14.1		ug/L		73	19 - 121	17	34
2,4-Dimethylphenol	4.9	U	19.4	15.2		ug/L		78	16 - 120	15	35
2,4-Dinitrophenol	19	U F1	38.8	19	U F1	ug/L		0	10 - 120	NC	35
2,4-Dinitrotoluene	4.9	U	19.4	14.3		ug/L		73	49 - 120	17	26
2,6-Dinitrotoluene	4.9	U	19.4	14.1		ug/L		73	48 - 120	18	25
2-Chloronaphthalene	4.9	U	19.4	13.3		ug/L		69	42 - 120	27	28
2-Chlorophenol	4.9	U	19.4	14.2		ug/L		73	29 - 120	22	35
2-Methylnaphthalene	4.9	U	19.4	14.1		ug/L		73	43 - 120	21	30
2-Methylphenol	4.9	U	19.4	12.4		ug/L		64	18 - 120	20	35
2-Nitroaniline	19	U	19.4	15.7	J	ug/L		81	35 - 120	16	28
2-Nitrophenol	4.9	U	19.4	13.0		ug/L		67	43 - 120	34	35
3,3'-Dichlorobenzidine	4.9	U	38.8	17.7		ug/L		46	10 - 120	20	35
3-Nitroaniline	19	U	19.4	13.8	J	ug/L		71	10 - 120	5	35
4,6-Dinitro-2-methylphenol	19	U F1	38.8	2.81	J F1	ug/L		7	10 - 120	NC	35
4-Bromophenyl phenyl ether	4.9	U	19.4	12.6		ug/L		65	41 - 120	23	27
4-Chloro-3-methylphenol	4.9	U	19.4	16.0		ug/L		83	32 - 120	13	32
4-Chloroaniline	9.7	U F2	19.4	7.03	J F2	ug/L		36	10 - 120	53	35
4-Chlorophenyl phenyl ether	4.9	U	19.4	13.4		ug/L		69	43 - 120	21	27
4-Nitroaniline	19	U	19.4	13.3	J	ug/L		69	10 - 120	11	35
4-Nitrophenol	19	U	38.8	13.8	J	ug/L		35	10 - 120	21	35
Acenaphthene	4.9	U	19.4	13.3		ug/L		69	35 - 120	18	35
Acenaphthylene	4.9	U	19.4	15.3		ug/L		79	36 - 120	20	35
Acetophenone	4.9	U	19.4	15.9		ug/L		82	42 - 120	23	31
Anthracene	4.9	U	19.4	13.0		ug/L		67	35 - 120	21	35
Atrazine	2.9	U	38.8	29.5		ug/L		76	47 - 121	9	25
Benzaldehyde	4.9	U	38.8	27.9		ug/L		72	46 - 120	33	35
Benzo[a]anthracene	0.32	J	19.4	13.6		ug/L		69	16 - 120	18	35
Benzo[a]pyrene	0.37	J	19.4	15.0		ug/L		75	10 - 120	15	35
Benzo[b]fluoranthene	0.46	J	19.4	17.4		ug/L		87	10 - 120	17	35
Benzo[g,h,i]perylene	0.97	U	19.4	6.28		ug/L		32	10 - 120	11	35
Benzo[k]fluoranthene	0.97	U	19.4	17.9		ug/L		92	10 - 120	23	35
Bis(2-chloroethoxy)methane	4.9	U	19.4	14.6		ug/L		75	44 - 120	19	32

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-101356-1 MSD
Matrix: Water
Analysis Batch: 346495

Client Sample ID: W-17303-091418-DA-001
Prep Type: Total/NA
Prep Batch: 345818

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	0.97	U	19.4	14.3		ug/L		73	42 - 120	20	35
Bis(2-ethylhexyl) phthalate	4.9	U	19.4	19.7		ug/L		102	15 - 120	19	35
Butyl benzyl phthalate	4.9	U	19.4	18.6		ug/L		96	39 - 120	26	30
Caprolactam	9.7	U	38.8	4.84	J	ug/L		12	10 - 120	4	33
Carbazole	9.7	U	19.4	13.8		ug/L		71	55 - 120	12	24
Chrysene	0.40	J	19.4	14.1		ug/L		70	14 - 120	19	35
Dibenz(a,h)anthracene	1.9	U	19.4	7.52		ug/L		39	10 - 120	11	35
Dibenzofuran	3.9	U	19.4	14.0		ug/L		72	46 - 120	17	25
Diethyl phthalate	4.9	U	19.4	17.1		ug/L		88	49 - 120	12	24
Dimethyl phthalate	4.9	U	19.4	15.0		ug/L		77	47 - 120	12	24
Di-n-butyl phthalate	4.9	U	19.4	15.4		ug/L		79	42 - 120	26	27
Di-n-octyl phthalate	4.9	U F1	19.4	28.6	F1	ug/L		147	13 - 120	24	35
Fluoranthene	0.55	J	19.4	13.5		ug/L		67	28 - 120	17	35
Fluorene	4.9	U	19.4	13.9		ug/L		71	36 - 120	18	35
Hexachlorobenzene	0.19	U	19.4	12.4		ug/L		64	31 - 120	23	26
Hexachlorobutadiene	0.97	U	19.4	12.1		ug/L		63	30 - 120	29	35
Hexachlorocyclopentadiene	4.9	U F1	19.4	4.9	U F1	ug/L		0	10 - 120	NC	35
Hexachloroethane	4.9	U	19.4	9.27		ug/L		48	12 - 120	31	35
Indeno[1,2,3-cd]pyrene	1.9	U	19.4	7.49		ug/L		39	10 - 120	7	35
Isophorone	4.9	U	19.4	16.0		ug/L		82	45 - 120	14	33
Naphthalene	4.9	U	19.4	15.5		ug/L		80	32 - 120	25	35
Nitrobenzene	2.9	U	19.4	14.8		ug/L		76	48 - 120	22	35
N-Nitrosodi-n-propylamine	4.9	U	19.4	15.3		ug/L		79	45 - 120	21	33
N-Nitrosodiphenylamine	4.9	U	19.4	13.6		ug/L		70	39 - 120	14	35
Pentachlorophenol	4.9	U F2	38.8	20.9	F2	ug/L		54	20 - 120	46	24
Phenol	4.9	U	19.4	5.43		ug/L		28	10 - 120	9	35
Phenanthrene	0.21	J	19.4	13.6		ug/L		69	36 - 120	19	35
Pyrene	0.64	J	19.4	15.8		ug/L		78	28 - 120	19	35
3 & 4 Methylphenol	4.9	U	19.4	11.8		ug/L		61	15 - 120	19	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*71*		*38 - 120*
2-Fluorophenol (Surr)	*45*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*70*		*28 - 120*
Nitrobenzene-d5 (Surr)	*75*		*32 - 120*
Phenol-d5 (Surr)	*29*		*10 - 120*
Terphenyl-d14 (Surr)	*52*		*23 - 127*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)
240-101356-1	W-17303-091418-DA-001	104	77	80	104
240-101356-1 MS	W-17303-091418-DA-001	96	80	81	95
240-101356-1 MSD	W-17303-091418-DA-001	96	86	86	98
240-101356-2	W-17303-091418-DA-002	105	85	85	108
240-101356-3	W-17303-091418-DA-003	101	70	75	97
240-101356-4	W-17303-091418-DA-004	105	70	77	105
240-101356-5	W-17303-091418-DA-005	106	86	87	110
240-101356-6	FB-17303-091418	106	78	78	107
LCS 240-347159/4	Lab Control Sample	101	89	89	103
LCS 240-347542/4	Lab Control Sample	100	92	91	102
MB 240-347159/6	Method Blank	112	82	86	116
MB 240-347542/6	Method Blank	106	86	84	108

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(38-120)	(10-120)	(28-120)	(32-120)	(10-120)	(23-127)
240-101356-1	W-17303-091418-DA-001	66	42	65	73	25	62
240-101356-1 MS	W-17303-091418-DA-001	54	38	61	65	23	39
240-101356-1 MSD	W-17303-091418-DA-001	71	45	70	75	29	52
240-101356-2	W-17303-091418-DA-002	48	31	53	55	18	41
LCS 240-345818/10-A	Lab Control Sample	76	55	73	83	36	87
MB 240-345818/9-A	Method Blank	64	53	57	70	34	83

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Client Sample ID: W-17303-091418-DA-001
Lab Sample ID: 240-101356-1
Date Collected: 09/14/18 07:45
Matrix: Water
Date Received: 09/15/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	347542	09/27/18 19:19	LEE	TAL CAN
Total/NA	Prep	3510C			345818	09/18/18 07:09	SDE	TAL CAN
Total/NA	Analysis	8270C		1	346495	09/21/18 14:37	JMG	TAL CAN

Client Sample ID: W-17303-091418-DA-002
Lab Sample ID: 240-101356-2
Date Collected: 09/14/18 08:20
Matrix: Water
Date Received: 09/15/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	347542	09/27/18 20:24	LEE	TAL CAN
Total/NA	Prep	3510C			345818	09/18/18 07:09	SDE	TAL CAN
Total/NA	Analysis	8270C		1	346864	09/24/18 19:37	JMG	TAL CAN

Client Sample ID: W-17303-091418-DA-003
Lab Sample ID: 240-101356-3
Date Collected: 09/14/18 09:00
Matrix: Water
Date Received: 09/15/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	347159	09/26/18 00:50	LEE	TAL CAN

Client Sample ID: W-17303-091418-DA-004
Lab Sample ID: 240-101356-4
Date Collected: 09/14/18 09:45
Matrix: Water
Date Received: 09/15/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	347159	09/26/18 01:12	LEE	TAL CAN

Client Sample ID: W-17303-091418-DA-005
Lab Sample ID: 240-101356-5
Date Collected: 09/14/18 09:50
Matrix: Water
Date Received: 09/15/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	347542	09/27/18 20:46	LEE	TAL CAN

Client Sample ID: FB-17303-091418
Lab Sample ID: 240-101356-6
Date Collected: 09/14/18 00:00
Matrix: Water
Date Received: 09/15/18 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	347159	09/26/18 01:56	LEE	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

TestAmerica Job ID: 240-101356-1

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN 190

Chain of Custody Record

3.4 | C#3

288272

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210 (0713)

Client Contact	Project Manager: A. BAINS	Site Contact: L. THESTRAIL	Date: 9/19/18	COC No:
Company Name: GHD SERVICES INC	Tel/Fax: 248 893 3408	Lab Contact: D. HELLER	Carrier: FED EX	1 of 1 COCs
Address: 26850 HAGGERTY RD	Analysis Turnaround Time			Sampler: D. ANTULIS
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248 893 3408	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	SVOCs	Sample Specific Notes:
W-17303-09/14/18-DA-001	9/14/18	0745	G	W	13		X	X	X	
-002		0820			5				X	
-003		0908			3					
-004		0945			3					
-005	↓	0950	↓	↓	3			↓	↓	
FB-17303-09/14/18	—	—	—	W	1					

240-101356 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
SSOW: 17303 - T02-04-2019-01

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
DILLON ANTULIS	GHD	9/14/18		TA	9/15/18 9:45
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

9/29/2018

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 101356**
Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 9/15/18 Opened on 9/17/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 11 Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.9 °C) Observed Cooler Temp. 3.4 °C Corrected Cooler Temp. 4.3 °C
   IR GUN #36 (CF +0.6°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes No	NA pH Strip Lot# HC849161
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 57160	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: JS

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Appendix D

Willow Run Creek - Evaluation of Groundwater Surface Water Interface Pathway - Spring 2019

Memorandum

August 11, 2021

To	Mr. Grant Trigger, RACER Trust		
Copy to	Tom Kinney, Beth Landale, Sam Belisle		
From	Kaitlyn Trestrail/mk/3	**Tel**	(248) 915 8801
Subject	Willow Run Creek - Evaluation of Groundwater Surface Water Interface Pathway - Spring 2019 Willow Run Company Vehicle Operations (CVO) Ypsilanti, Michigan	**Project no.**	11223983

1. Introduction, Background and Summary of Results

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), GHD has prepared this summary memo for the Willow Run Company Vehicle Operations (CVO) property located in Ypsilanti, Michigan (Site). This memorandum summarizes the procedures and findings of the supplemental investigation that occurred in April and May 2019 at the Site.

Due to historical fill and dumping activities at the Site, many environmental investigations have been completed to characterize and delineate the impacts within soils and groundwater. Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), inorganics, and polychlorinated biphenyls (PCBs) impacts within soils have been observed, while VOCs, primarily chlorinated VOCs, are predominantly the concern in groundwater at the Site. A number of Interim Response Actions (IRAs) and Deed Restrictions have been implemented at the Site to address these contaminants of concern and protect human health and the environment. However, the VOCs in groundwater, particularly vinyl chloride, still remain a potential concern for off-Site migration into Willow Run Creek (formerly Tyler Pond).

In the spring of 2017, Tyler Pond water levels were lowered by other parties as a result of removal of a non-functioning drainage valve in the dam below Tyler Road. Consequently, lower water levels may have changed hydrogeologic conditions, particularly with regard to groundwater surface water interface (GSI) pathways, in addition to exposing additional accessible land adjacent to the former Tyler Pond (now Willow Run Creek) at the northern boundary of the Site. The current conditions of Willow Run Creek compared to the former shoreline of Tyler Pond are presented on Figure 1.

In response to the change in conditions, GHD conducted a subsurface investigation in March 2018 in the former Tyler Pond area. The primary purpose of the subsurface investigation was to install monitoring wells between the existing monitoring wells and Willow Run Creek within the area that was previously part of Tyler Pond. The intent was to evaluate whether the impacted groundwater at the northern perimeter of the site had migrated to the vicinity of the new boundary of Willow Run Creek. The secondary potential purpose of the investigation was to collect soil samples to further characterize the extent of impacts and GSI pathways.

The results of the March 2018 investigation showed exceedances of VOCs, at GS-29-SB and GS-31-SB, and SVOCs at GS-24-SB and GS-26-SB. The VOC and SVOC exceedances occurred in two distinct portions of the property. The VOC exceedances occurred in the southeast portion of the newly exposed area and was labeled as the VOC delineation area. The SVOC exceedances occurred in the northwest portion of the recently exposed area and was labeled as the SVOC delineation area. The locations of the two delineation areas are

presented on Figure 1. Water bearing units were not encountered during the March 2018 investigation, so no wells could be installed to evaluate groundwater.

As a result of these findings, an additional investigation to evaluate the groundwater adjacent to Willow Run Creek and delineate the SVOC and VOC soil impacts was recommended. During the September 2018 investigation, 16 shallow soil borings were completed in the bed of the former Tyler Pond and four small seeps along the hillside adjacent to Tyler Creek were characterized. The investigation horizontally and vertically delineated the SVOC impacted area on the Site. However, the soil borings were insufficient in delineating the extent of VOC impacted soil as additional VOC exceedances were found. No water bearing units were encountered during the investigation, so no wells could be installed to evaluate groundwater.

Based on these findings, additional soil borings and wells were installed in April and May 2019 to further delineate the VOC impacts to soil and groundwater adjacent to the shoreline of Willow Run Creek and north of the existing sheet pile wall. The existing sheet pile wall was previously installed in 2004 in effort to eliminate DNAPL contamination migrating into Tyler Pond. GHD also performed interval sampling of the pore water adjacent to the modified boundary of Willow Run Creek in the exposed bottom of Tyler Pond to assess mixing and/or attenuation. The scope of work, analytical results, and conclusions of the April and May 2019 investigation is presented in this memo.

2. Scope of Work

Prior to the additional investigation, GHD updated the Site-specific Health and Safety Plan (HASP) and notified MissDig, Michigan's utility one call service, to arrange for public utility locating of the investigation areas.

GHD advanced a total of eight shallow soil borings (SB-51-19 through SB-56-19, MW-20I-19 and MW-21I-19), four in the VOC delineation zone and four around the sheet pile wall, completed by hand/pneumatic auger and a direct push drilling machine (i.e., Geoprobe® machine). Borings SB-51-19 through SB-54-19 were installed to horizontally and vertically delineate the VOC contamination in the former Tyler Pond bottom area, while borings SB-55-19, SB-56-19, MW-20I-19 and MW-21I-19 were advanced to evaluate the effectiveness of the sheet pile wall in eliminating DNAPL contamination into the creek. The soil boring locations were placed in accordance with the approved proposal.

The soil borings completed were advanced to depths ranging from 11 – 20 feet below ground surface (bgs) depending on the location. Soil samples were examined by GHD personnel for color, soil type, stratigraphy, banding, moisture, visual and olfactory evidence of impact and screened for volatile vapors with a photoionization detector (PID). All soil samples were described and classified in general accordance with the Unified Soil Classification System (USCS). Copies of the soil boring logs are included as Attachment A.

The soil sample intervals were chosen to horizontally and vertically delineate VOC impacts. The number of soil samples collected at each boring location and the sample intervals are summarized in Tables 1.

Table 1 Soil Borings

Boring Location	Number of Samples	Sample Intervals (Feet BGS)
SB-51-19	4	0-2, 3-5, 6-8, 9-11
SB-52-19	5	0-2, 3-5, 6-8, 9-11, 12-14
SB-53-19	4	0-2, 3-5, 6-8, 9-11
SB-54-19	7	0-2, 3-5, 6-8, 9-11, 12-14, 15-17, 18-20
SB-55-19	5	0-2, 3-5, 6-8, 9-11, 12-14
SB-56-19	4	0-2, 3-5, 6-8, 9-11
MW-20I-19	7	0-2, 3-5, 6-8, 9-11, 12-14, 15-17, 18-20
MW-21I-19	7	0-2, 3-5, 6-8, 9-11, 12-14, 15-17, 18-20

Soil types identified during the investigation included clay, silty clay, and sandy clay. Clay was the dominant soil type and was found throughout the depth of each boring. Free product was not encountered in any of the soil borings. Soil samples were shipped under chain-of-custody protocols to Eurofins-TestAmerica Laboratories, Inc. (TestAmerica) in North Canton, Ohio on a normal turn-around time (TAT) and analyzed for total compound list (TCL)-volatile organic compounds (VOCs).

Water bearing soil units were encountered during the investigation adjacent to the sheet pile wall; therefore, permanent monitoring wells (MW-20I-19 and MW-21I-19) were installed. Groundwater samples were collected from MW-20S-19, MW-21S-19 and MW-21I-19. MW- 20I-19 did not produce enough water and therefore, could not be sampled. Three locations (PW-01-19 through PW-03-19) were used to collect pore water samples from the soil. These samples were collected below the surface water of Willow Run Creek. PW-01-19 was sampled at three different intervals and PW-02-19 and PW-03-19 were both sampled at one interval for a total of 5 samples. Deeper water samples at PW-02-19 and PW-03-19 could not be collected due to fine silts and clays clogging the sampling device. Refer to Figure 2 for the locations of the water samples collected.

Water samples were shipped under chain-of-custody protocols to TestAmerica in North Canton, Ohio on a normal turnaround time (TAT) and analyzed for VOCs.

3. Results

Results were compared to Michigan Department of Environment, Great Lakes, and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category pursuant to Part 201 of 1994 PA 451, as amended. A summary of the analytical data is presented in Attachment B and C. Copies of the TestAmerica laboratory analytical report are provided in Attachment D.

Results from the VOC delineation borings, monitoring wells, and pore water samples show exceedances in Part 201 criteria for various VOCs. VOCs and criteria exceeded are shown in Tables 2 and 3 below. The results are also shown on Figures 1 and 2.

Table 2 Delineation Borings Exceedance Summary

Boring Location	Exceedance Intervals (FT BGS)	Volatile Organic Compounds	RDWP	NDWP	GSIP	DC
SB-52-19	0-2	Cis-1,2-Dichloroethene	X	X	X	
		Trichloroethene	X	X	X	
		Vinyl Chloride	X	X	X	
	3-5	Vinyl Chloride	X	X		
SB-53-19	0-2	Trichloroethene	X	X		
		Vinyl Chloride	X	X		
SB-55-19	0-2	Cis-1,2-Dichloroethene	X	X		
		Trichloroethene	X	X		
		Vinyl Chloride	X	X		
	3-5	Cis-1,2-Dichloroethene	X	X	X	
		Vinyl Chloride	X	X	X	X
	9-11	Vinyl Chloride	X	X		
	12-14	Vinyl Chloride	X	X		
SB-56-19	0-2	Cis-1,2-Dichloroethene	X	X		
		Trichloroethene	X	X		
	3-5	Cis-1,2-Dichloroethene	X	X		

Boring Location	Exceedance Intervals (FT BGS)	Volatile Organic Compounds	RDWP	NDWP	GSIP	DC
		Trichloroethene	X	X	X	
		Vinyl Chloride	X	X	X	
		Xylenes (total)			X	
MW-20I-19	6-8	Vinyl Chloride	X	X	X	

Footnotes

RDWP – Residential Drinking Water Protection
NDWP – Nonresidential Drinking Water Protection
GSIP – Groundwater Surface Water Interface Protection
DC – Direct Contact

Groundwater and pore water samples were collected and showed exceedances compared to the EGLE Part 201 groundwater cleanup criteria. Sample locations that showed exceedances are summarized in Table 3 below.

Table 3 Groundwater and Pore Water Exceedance Summary

Boring Location	Exceedance Intervals (FT BGS)	Volatile Organic Compounds	RDWP	NDWP	GSIP	DC
MW-20S-18	-	Cis-1,2-Dichloroethene	X	X	X	
		Trichloroethene	X	X		
		Vinyl Chloride	X	X	X	
MW-21S-18	-	Vinyl Chloride	X	X		
MW-21I-19	-	Cis-1,2-Dichloroethene	X	X		
		Vinyl Chloride	X	X	X	
PW-01-19	0.5	Vinyl Chloride	X	X	X	
	1.5	Cis-1,2-Dichloroethene	X	X	X	
		Trichloroethene	X	X		
		Vinyl Chloride	X	X	X	
	2.5	Cis-1,2-Dichloroethene	X	X	X	
		Trans-1 ,2-Dichloroethene	X	X		
		Trichloroethene	X	X		
		Vinyl Chloride	X	X	X	

4. Closing Discussion and Recommendations

Soil samples from the VOC delineation borings exceeded the EGLE residential and nonresidential drinking water protection criteria and/or the Groundwater Surface Water Interface Protection Criteria (GSIPC) for vinyl chloride, TCE, cis-1,2-dichloroethene, and total xylenes. Refer to Figure 2 for the soil sample locations and exceedances.

Volatile organic compounds were detected above EGLE Part 201 criteria in three of the four borings completed adjacent to the sheet pile wall (MW-20I-19, SB-56-19, and SB-55-19). The soil samples with the highest concentrations were collected at depths of 3 to 5 feet bgs. This indicates DNAPL is not actively going under or over the sheet pile wall, as the peak concentrations would have been detected at samples collected from the shallowest or deepest portion of the soil boring. Additionally, the VOC concentrations detected in the soil adjacent to the sheet pile wall were lower than detections found in soil further north towards Willow Run Creek.

The VOC contamination north of the sheet pile wall is likely residual DNAPL from the original historical release. However, when the sheet pile wall was installed in 2004, it was placed along the existing south shoreline of Tyler Pond, and as a result, analytical data for the soil north of the sheet pile wall could not be collected. Due to the lack of historical analytical data, verification that the exceedances adjacent to the sheet pile wall are the result of residual contamination cannot be confirmed.

Groundwater samples from two wells installed in water-bearing units near the sheet pile wall exceeded EGLE's residential and nonresidential drinking water criteria for vinyl chloride, TCE, and cis-1,2-dichloroethene. The groundwater samples also exceeded the GSI criteria for in cis-1,2-dichloroethene and vinyl chloride. The drinking water exceedances in soil and groundwater at the Site along the northern boundary are mitigated through the current land use restrictions prohibiting the installation of drinking water wells and groundwater extraction wells with the exception for wells that are part of the MDEQ or USEPA approved response activity.

All three pore water samples from PW-01-19 exceeded the GSI criteria for vinyl chloride and two of the samples exceeded the GSI criteria for cis-1,2-dichloroethene. The concentration of VOCs increased as the sample depth increased, indicating natural attenuation and/or the mixing with the surface water is occurring. Pore water samples PW-02-19 and PW-03-19 did not exceed criteria. Refer to Figure 3 for the pore water and groundwater sample locations and exceedances.

Given that Groundwater Surface Water Interface Protection (GSIP) exceedances were found in the VOC step out boring samples and GSI exceedances were found in the groundwater and pore water samples, a comprehensive evaluation of the Site's GSI pathway based on the three recent investigations and historical data for the Site is recommended.

Please contact Kaitlyn Trestrail at (248) 915-8801 if you have any questions regarding the information presented in this report or require further information or clarification.

Regards,

Kaitlyn Trestrail

Kaitlyn Trestrail
Environmental Geologist

Figure 1 - Willow Run Creek Current Conditions
Figure 2 - Soil Boring Results – VOCs
Figure 3 - Groundwater Investigation Results – VOCs
Attachment A –Soil Boring Logs
Attachment B – Analytical Table – Soil Results
Attachment C – Analytical Table – Water Results
Attachment D – Analytical Laboratory Reports

Figures



SOURCE: BASE ON GOOGLE EARTH APRIL 2019

LEGEND

FORMER EDGE OF TYLER POND (APPROXIMATE BASED ON GOOGLE EARTH APRIL 2016)

SOIL BORING LOCATION - FEBRUARY/MARCH 2018

SOIL BORING LOCATION - SEPTEMBER 2018

SEEP LOCATION - SEPTEMBER 2018

GROUNDWATER SAMPLING LOCATION

MW8 GAUGING LOCATION

IG-E2 INFILTRATION GALLERY LOCATION

0 125 250 ft

1" = 250 ft

Coordinate System: <INSERT HERE>

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GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN

WILLOW RUN CREEK CURRENT CONDITIONS

Project No. **11223983**
Date **July 2021**

FIGURE 1

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\MEM-186\11223983-GHD-0000-MEM-EN-0101_DE-186.dwg
Plot Date: 28 July 2021 3:31 PM

EGLE Generic Cleanup Criteria: Residential and Nonresidential (1)

	Drinking Water Protection B	Nonresidential Drinking Water Protection C	Groundwater Surface Water Interface Protection D	Direct Contact O	Nonresidential Direct Contact P
Volatile Organic Compounds (VOCs) (ug/kg)					
Benzene	100	100	4000	180000	840000
cis-1,2-Dichloroethene	1400	1400	12000	2500000	8000000
Methylene chloride	100	100	30000	1300000	5800000
trans-1,2-Dichloroethene	2000	2000	30000	3800000	12000000
Trichloroethene	100	100	4000	110000	660000
Vinyl chloride	40	40	260	3800	34000
Xylenes (total)	5600	5600	980	410000000	1000000000

Notes:

(1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.46 and R 299.48, respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

U - Not detected at the associated reporting limit.
J - Estimated concentration.

LEGEND

- FENCE LINE
- SANITARY SEWER
- STORM SEWER
- WILLOW RUN CREEK SHORELINE
- BOTTOM OF SLOPE (SURVEYED 2-13-18)
- CB15 CATCH BASIN
- M.H. MANHOLE
- R.S. FENCE GATE POST
- MW19-04 GROUNDWATER SAMPLING LOCATION
- MW8 GAUGING LOCATION
- IG-E2 INFILTRATION GALLERY LOCATION
- OUTFALL #11 SAMPLING LOCATION
- SOIL BORING LOCATION
- 2018 SEEP LOCATION
- POREWATER SAMPLE LOCATION

SB-51-19	4/29/2019 (0-2) ft BGS ug/kg	4/29/2019 (3-5) ft BGS ug/kg	4/29/2019 (6-8) ft BGS ug/kg	4/29/2019 (9-11) ft BGS ug/kg
VOCs				
Benzene	60 U	65 U	56 U	56 U
cis-1,2-Dichloroethene	60 U	65 U	56 U	56 U
Methylene chloride	740 U	810 U	700 U	700 U
trans-1,2-Dichloroethene	60 U	65 U	56 U	56 U
Trichloroethene	60 U	65 U	56 U	56 U
Vinyl chloride	48 U	52 U	45 U	45 U
Xylenes (total)	180 U	190 U	170 U	170 U

GS-43	9/12/2018 (0-2) ft BGS ug/kg	9/12/2018 (3-5) ft BGS ug/kg	9/12/2018 (5-7) ft BGS ug/kg	9/12/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	52 U	52 U	51 U	49 U
cis-1,2-Dichloroethene	52 U	52 U	51 U	49 U
Methylene chloride	410 {BC}	240 J {BC}	300 {BC}	330 {BC}
trans-1,2-Dichloroethene	52 U	52 U	51 U	49 U
Trichloroethene	52 U	52 U	51 U	49 U
Vinyl chloride	41 U	42 U	41 U	39 U
Xylenes (total)	150 U	160 U	150 U	150 U

GS-46	9/12/2018 (0-2) ft BGS ug/kg	9/12/2018 (3-5) ft BGS ug/kg	9/12/2018 (5-7) ft BGS ug/kg	9/12/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	47 U	570 U	5400 U	1100 U
cis-1,2-Dichloroethene	47 U	45000 {BCD}	120000 {BCD}	63000 {BCD}
Methylene chloride	240 U	2900 U	27000 U	5400 U
trans-1,2-Dichloroethene	47 U	3300 {BC}	5400 U	1100 U
Trichloroethene	47 U	6300 {BCD}	250000 {BCDO}	9800 {BCD}
Vinyl chloride	38 U	2300 {BCD}	4300 U	3000 {BCD}
Xylenes (total)	140 U	1700 U	16000 U	3200 U

GS-30-SB	2/26/2018 (0-2.5) ft BGS ug/kg	2/26/2018 (2.5-5) ft BGS ug/kg
VOCs		
Benzene	130 U	56 U
cis-1,2-Dichloroethene	130 U	56 U
Methylene chloride	630 U	280 U
trans-1,2-Dichloroethene	130 U	56 U
Trichloroethene	130 U	56 U
Vinyl chloride	100 U	45 U
Xylenes (total)	380 U	170 U

SB-53-19	4/29/2019 (0-2) ft BGS ug/kg	4/29/2019 (3-5) ft BGS ug/kg	4/29/2019 (6-8) ft BGS ug/kg	4/29/2019 (9-11) ft BGS ug/kg
VOCs				
Benzene	53 U	55 U	55 U	57 U
cis-1,2-Dichloroethene	770	55 U	55 U	57 U
Methylene chloride	660 U	690 U	680 U	710 U
trans-1,2-Dichloroethene	120	55 U	55 U	57 U
Trichloroethene	530 {BC}	55 U	55 U	57 U
Vinyl chloride	41 J {BC}	44 U	44 U	45 U
Xylenes (total)	160 U	160 U	160 U	170 U

GS-50	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg
VOCs		
Benzene	53 U	49 U
cis-1,2-Dichloroethene	55	260
Methylene chloride	270 U	240 U
trans-1,2-Dichloroethene	53 U	49 U
Trichloroethene	57	740 {BC}
Vinyl chloride	43 U	39 U
Xylenes (total)	160 U	150 U

GS-47	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg
VOCs		
Benzene	50 U	76 U
cis-1,2-Dichloroethene	64	300
Methylene chloride	250 U	380 U
trans-1,2-Dichloroethene	50 U	76 U
Trichloroethene	140 {BC}	110 {BC}
Vinyl chloride	40 U	1200 {BCD}
Xylenes (total)	150 U	230 U

GS-32-SB	2/27/2018 (0-2) ft BGS ug/kg	2/27/2018 (3-5) ft BGS ug/kg
VOCs		
Benzene	63 U	65 U
cis-1,2-Dichloroethene	63 U	65 U
Methylene chloride	310 U	320 U
trans-1,2-Dichloroethene	63 U	65 U
Trichloroethene	63 U	65 U
Vinyl chloride	50 U	52 U
Xylenes (total)	190 U	190 U

GS-49	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg
VOCs		
Benzene	55 U	51 U
cis-1,2-Dichloroethene	55 U	54
Methylene chloride	280 U	250 U
trans-1,2-Dichloroethene	55 U	51 U
Trichloroethene	55 U	92
Vinyl chloride	44 U	41 U
Xylenes (total)	170 U	150 U

MW-20I-19	4/30/2019 (0-2) ft BGS ug/kg	4/30/2019 (3-5) ft BGS ug/kg	4/30/2019 (6-8) ft BGS ug/kg	4/30/2019 (9-11) ft BGS ug/kg	4/30/2019 (12-14) ft BGS ug/kg	4/30/2019 (15-17) ft BGS ug/kg	4/30/2019 (18-20) ft BGS ug/kg
VOCs							
Benzene	51 U	50 U	56 U	52 U	55 U	54 U	55 U
cis-1,2-Dichloroethene	51 U	50 U	54 J	52 U	55 U	54 U	55 U
Methylene chloride	640 U	630 U	700 U	650 U	690 U	670 U	690 U
trans-1,2-Dichloroethene	51 U	50 U	56 U	52 U	55 U	54 U	55 U
Trichloroethene	51 U	50 U	56 U	52 U	55 U	54 U	55 U
Vinyl chloride	41 U	40 U	370 {BCD}	41 U	44 U	43 U	44 U
Xylenes (total)	150 U	150 U	170 U	160 U	160 U	71 J	170 U

SB-54-19	4/30/2019 (0-2) ft BGS ug/kg	4/30/2019 (3-5) ft BGS ug/kg	4/30/2019 (6-8) ft BGS ug/kg	4/30/2019 (9-11) ft BGS ug/kg	4/30/2019 (12-14) ft BGS ug/kg	4/30/2019 (15-17) ft BGS ug/kg	4/30/2019 (18-20) ft BGS ug/kg
VOCs							
Benzene	55 U	50 U	55 U	56 U	55 U	54 U	53 U
cis-1,2-Dichloroethene	55 U	25 J	55 U	56 U	55 U	54 U	53 U
Methylene chloride	690 U	630 U	690 U	700 U	680 U	680 U	660 U
trans-1,2-Dichloroethene	55 U	50 U	55 U	56 U	55 U	54 U	53 U
Trichloroethene	55 U	50 U	55 U	56 U	55 U	54 U	53 U
Vinyl chloride	44 U	40 U	44 U	45 U	44 U	43 U	42 U
Xylenes (total)	170 U	150 U	160 U	170 U	160 U	160 U	160 U

GS-44	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg	9/13/2018 (5-7) ft BGS ug/kg	9/13/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	44 U	47 U/49 U	56 U	51 U
cis-1,2-Dichloroethene	41 J	870/720	2300 {BC}	51 U
Methylene chloride	220 U	240 U/240 U	100 J	250 U
trans-1,2-Dichloroethene	44 U	74/60	62	51 U
Trichloroethene	44 U	58/100	110 {BC}	51 U
Vinyl chloride	36 U	48 {BC}/50 {BC}	300 {BCD}	41 U
Xylenes (total)	130 U	150 U/140 U	170 U	150 U

SB-56-19	4/30/2019 (0-2) ft BGS ug/kg	4/30/2019 (3-5) ft BGS ug/kg	4/30/2019 (6-8) ft BGS ug/kg	4/30/2019 (9-11) ft BGS ug/kg
VOCs				
Benzene	50 U	1200 U	63 U	53 U
cis-1,2-Dichloroethene	3400 {BC}	9200 {BC}	22 J	13 J
Methylene chloride	630 U	14000 U	780 U	660 U
trans-1,2-Dichloroethene	430	1200 U	63 U	53 U
Trichloroethene	1400 {BC}	51000 {BCD}	82	41 J
Vinyl chloride	37 J	350 J {BCD}	50 U	42 U
Xylenes (total)	67 J	1300 J {D}	81 J	44 J

GS-29-SB	2/26/2018 (0-2) ft BGS ug/kg	2/26/2018 (3-5) ft BGS ug/kg	2/26/2018 (5-7.5) ft BGS ug/kg	9/13/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	46 U/100 U	5300 U	55 U	55 U
cis-1,2-Dichloroethene	46 UJ/8400 J {BC}	250000 {BCD}	64	970
Methylene chloride	510 U/230 U	26000 U	270 U	270 U
trans-1,2-Dichloroethene	220/46 U	5300 U	55 U	55 U
Trichloroethene	140 {BC}/46 U	150000 {BCDO}	55 U	990 {BC}
Vinyl chloride	1100 J {BCD}/37 UJ	4500 {BCDO}	1700 {BCD}	44 U
Xylenes (total)	310 U/140 U	16000 U	160 U	160 U

GS-45	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg	9/13/2018 (5-7) ft BGS ug/kg	9/13/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	48 U	250 {BC}	2800 U	990 U
cis-1,2-Dichloroethene	2400 {BC}	8900 {BC}	90000 {BCD}	45000 {BCD}
Methylene chloride	240 U	1000 U	14000 U	5000 U
trans-1,2-Dichloroethene	420	1900	2800 U	990 U
Trichloroethene	420 {BC}	1100 {BC}	82000 {BCD}	29000 {BCD}
Vinyl chloride	260 {BC}	1600 {BCD}	10000 {BCDO}	4200 {BCDO}
Xylenes (total)	63 J	670	8300 U	3000 U

SB-52-19	4/29/2019 (0-2) ft BGS ug/kg	4/29/2019 (3-5) ft BGS ug/kg	4/29/2019 (6-8) ft BGS ug/kg	4/29/2019 (9-11) ft BGS ug/kg	4/29/2019 (12-14) ft BGS ug/kg
VOCs					
Benzene	270 U	64 U	55 U	57 U	54 U
cis-1,2-Dichloroethene	13000 {BCD}	980	55 U	61	47 J
Methylene chloride	3400 U	800 U	690 U	710 U	670 U
trans-1,2-Dichloroethene	620	16 J	55 U	57 U	54 U
Trichloroethene	6100 {BCD}	49 J	55 U	33 J	17 J
Vinyl chloride	380 {BCD}	230 {BC}	44 U	46 U	43 U
Xylenes (total)	590 J	190 U	170 U	170 U	160 U

GS-48	9/13/2018 (0-2) ft BGS ug/kg	9/13/2018 (3-5) ft BGS ug/kg	9/13/2018 (5-7) ft BGS ug/kg	9/13/2018 (8-10) ft BGS ug/kg
VOCs				
Benzene	330 U	50 U	50 U	49 U/51 U
cis-1,2-Dichloroethene	14000 {BCD}	54	50 U	240/49 U
Methylene chloride	1600 U	250 U	250 U	240 U/260 U
trans-1,2-Dichloroethene	750	50 U	50 U	51 U/49 U
Trichloroethene	330 U	50 U	50 U	49 U/51 U
Vinyl chloride	260 U	310 {BCD}	40 U	41 U/39 U
Xylenes (total)	980 U	150 U	150 U	150 U/150 U

GS-31-SB	2/27/2018 (0-2.5) ft BGS ug/kg	2/27/2018 (6-7) ft BGS ug/kg	2/27/2018 (19-20) ft BGS ug/kg
VOCs			
Benzene	51 U	58 U	52 U
cis-1,2-Dichloroethene	90	58 U	52 U
Methylene chloride	250 U	290 U	260 U
trans-1,2-Dichloroethene	51 U	58 U	52 U
Trichloroethene	190 {BC}	58 U	52 U
Vinyl chloride	40 U	46 U	41 U
Xylenes (total)	150 U	170 U	160 U

MW-21I-19	5/1/2019 (0-2) ft BGS ug/kg	5/1/2019 (3-5) ft BGS ug/kg	5/1/2019 (6-8) ft BGS ug/kg	5/1/2019 (9-11) ft BGS ug/kg	5/1/2019 (12-14) ft BGS ug/kg	5/1/2019 (15-17) ft BGS ug/kg	5/1/2019 (18-20) ft BGS ug/kg
VOCs							
Benzene	51 U	50 U	53 U	51 U	47 U	52 U	54 U
cis-1,2-Dichloroethene	51 U	50 U	73	51 U	47 U	52 U	54 U
Methylene chloride	640 U	630 U	660 U	640 U	590 U	640 U	670 U
trans-1,2-Dichloroethene	51 U	50 U	53 U	51 U	47 U	52 U	54 U
Trichloroethene	17 J	15 J	24 J	51 U	47 U	52 U	54 U
Vinyl chloride	41 U	40 U	36 J	41 U	38 U	41 U	43 U
Xylenes (total)	150 U	150 U	160 U	150 U	140 U	150 U	65 J

SB-55-19	4/30/2019 (0-2) ft BGS ug/kg	4/30/2019 (3-5) ft BGS ug/kg	4/30/2019 (6-8) ft BGS ug/kg	4/30/2019 (9-11) ft BGS ug/kg	4/30/2019 (12-14) ft BGS ug/kg
VOCs					
Benzene	55 U	280 U	50 U	60 U	59 U
cis-1,2-Dichloroethene	2600 {BC}	17000 {BCD}	11 J	130	200
Methylene chloride	690 U	3400 U	630 U	760 U	730 U
trans-1,2-Dichloroethene	220	330	50 U	60 U	59 U
Trichloroethene	390 {BC}	280 U	50 U	60 U	59 U
Vinyl chloride	80 {BC}	23000 {BCDO}	40 U	120 {BC}	160 {BC}
Xylenes (total)	280	830 U	150 U	180 U	180 U

WILLOW RUN CREEK
SHEET PILE WALL
SEEP-4
OUTFALL #13
SUMP
STM MH 18
CB-15
CB 11
GS-28-SB
SB-51-19
PW-01-19
PW-02-19
PW-03-19
SB-52-19
SB-53-19
GS-30-SB
GS-46
GS-43
SB-54-19
GS-29-SB
SB-45-18
GS-45
GS-44
MW-20I-19
MW-20S-18
MW-19-16
SB-56-19
SB-55-19
GS-47
GS-50
GS-34
GS-32-SB
GS-33-SB
GS-31-SB
GS-49
GS-48
MW-21S-18
MW-21I-19
MW-19-40
MW-19-41
MW-13
IG-A1
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GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN
SOIL BORING RESULTS - VOCs

WILLOW RUN CREEK - EVALUATION OF GROUNDWATER SURFACE WATER INTERFACE PATHWAY - SPRING 2019

Project No. **11223983**
Date **July 2021**

FIGURE 2

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\MEM-186\11223983-GHD-0000-MEM-EN-0102_DE-186.dwg
Plot Date: 28 July 2021 4:13 PM

EGLE Generic Groundwater Cleanup Criteria: Residential and Nonresidential (1)	Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface
	a	b	c
Volatile Organic Compounds (VOCs) (ug/L)			
Benzene	5	5	200
cis-1,2-Dichloroethene	70	70	620
Methylene chloride	5	5	1500
trans-1,2-Dichloroethene	100	100	1500
Trichloroethene	5	5	200
Vinyl chloride	2	2	13
Xylenes (total)	280	280	49

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.
(1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended

LEGEND

- FENCE LINE
- SANITARY SEWER
- STORM SEWER
- WILLOW RUN CREEK SHORELINE
- BOTTOM OF SLOPE (SURVEYED 2-13-18)
- CB15 CATCH BASIN
- M.H. MANHOLE
- R.S. FENCE GATE POST
- MW19-04 GROUNDWATER SAMPLING LOCATION
- MW8 GAUGING LOCATION
- IG-E2 INFILTRATION GALLERY LOCATION
- OUTFALL #11 SAMPLING LOCATION
- SOIL BORING LOCATION
- 2018 SEEP LOCATION
- POREWATER SAMPLE LOCATION

PW-01-19	5/6/2019 (0.5) ft BGS ug/L	5/6/2019 (1.5) ft BGS ug/L	5/6/2019 (2.5) ft BGS ug/L
VOCs			
Benzene	1.0 U	50 U	100 U
cis-1,2-Dichloroethene	7.2	1400 {ABC}	1800 {ABC}
Methylene chloride	5.0 U	250 U	500 U
trans-1,2-Dichloroethene	0.39 J	81	130 {AB}
Trichloroethene	1.0 U	7.8 J {AB}	36 J {AB}
Vinyl chloride	37 {ABC}	1800 {ABC}	2100 {ABC}
Xylenes (total)	2.0 U	100 U	200 U

PW-02-19	5/6/2019 (0.5) ft BGS ug/L
VOCs	
Benzene	1.0 U
cis-1,2-Dichloroethene	1.7
Methylene chloride	5.0 U
trans-1,2-Dichloroethene	0.24 J
Trichloroethene	0.15 J
Vinyl chloride	1.9
Xylenes (total)	2.0 U

PW-03-19	5/6/2019 (0.5) ft BGS ug/L
VOCs	
Benzene	1.0 U
cis-1,2-Dichloroethene	0.89 J
Methylene chloride	5.0 U
trans-1,2-Dichloroethene	0.21 J
Trichloroethene	1.0 U
Vinyl chloride	1.6
Xylenes (total)	2.0 U

SEEP-4	9/14/2018 - ug/L
VOCs	
Benzene	1.0 UJ/1.0 UJ
cis-1,2-Dichloroethene	15 J/7.3 J
Methylene chloride	5.0 U/5.0 U
trans-1,2-Dichloroethene	0.36 J/0.47 J
Trichloroethene	1.0 U/1.0 U
Vinyl chloride	16 J {ABC}/8.1 J {AB}
Xylenes (total)	2.0 UJ/2.0 UJ

MW-20S-18	6/22/2016 - ug/L	10/31/2016 - ug/L	10/6/2017 - ug/L	5/7/2019 - ug/L
VOCs				
Benzene	10 U	17 U	25 U	67 U
cis-1,2-Dichloroethene	200 {AB}	440 {AB}	1000 {ABC}	1000 {ABC}
Methylene chloride	50 U	83 U	130 U	330 U
trans-1,2-Dichloroethene	27	32	60	57 J
Trichloroethene	5.6 J {AB}	5.7 J {AB}	9.6 J {AB}	11 J {AB}
Vinyl chloride	82 {ABC}	100 {ABC}	1200 {ABC}	1700 {ABC}
Xylenes (total)	20 U	33 U	50 U	130 U

MW-21S-18	6/22/2016 - ug/L	10/31/2016 - ug/L	5/7/2019 - ug/L
VOCs			
Benzene	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	11	25	14
Methylene chloride	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	0.64 J	1.4	1.3
Trichloroethene	0.81 J	1.8	0.52 J
Vinyl chloride	5.0 {AB}	11 {AB}	13 {AB}
Xylenes (total)	2.0 U	2.0 U	2.0 U

MW-21I-19	5/2/2019 - ug/L
VOCs	
Benzene	6.7 U
cis-1,2-Dichloroethene	140 {AB}
Methylene chloride	33 U
trans-1,2-Dichloroethene	6.0 J
Trichloroethene	6.7 U
Vinyl chloride	210 {ABC}
Xylenes (total)	13 U

WILLOW RUN CREEK
SHEET PILE WALL
SUMP
OUTFALL #14
OUTFALL #13
STM MH 18
SAN M.H.
M.H.
CB 11
CB-15
CB 14
12"ø

0 25 50 ft

Coordinate System: <INSERT HERE>

N

GHD

WILLOW RUN COMPANY VEHICLE OPERATIONS
YPSILANTI, MICHIGAN
GROUNDWATER INVESTIGATION RESULTS - VOCs

WILLOW RUN CREEK - EVALUATION OF GROUNDWATER SURFACE WATER INTERFACE PATHWAY - SPRING 2019

Project No. **11223983**
Date **July 2021**

FIGURE 3

Filename: N:\US\Detroit\Projects\563\11223983\Digital_Design\ACAD\Figures\MEM-186\11223983-GHD-0000-MEM-EN-0103_DE-186.dwg
Plot Date: 28 July 2021 4:25 PM

Attachments

Attachment A

Soil Boring Logs

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER CVO
PROJECT NUMBER: 017303a
CLIENT: RACER Trust, LLC
LOCATION: 2901Tyler Road, Ypsilani, Michigan

HOLE DESIGNATION: MW-20I-19
DATE COMPLETED: April 30, 2019
DRILLING METHOD: Hand Auger/Direct Push
FIELD PERSONNEL: D. Antulis

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CL-SANDY CLAY, with fine gravel, soft, low plasticity, gray/tan, wet			0-2' -030		50		0.2
2			Bentonite					
4				3-5' -031		90		0.5
6								
8				6-8' -032		90		0.8
10			Well Screen	9-11' -033		70		0.6
12	CH-SILTY CLAY, with fine gravel and coarse sand, high plasticity, dense, gray	10.50	Sand Pack	12-14' -034		70		0.8
14								
16				15-17' -035		100		1.0
18								
20	END OF BOREHOLE @ 20.0ft BGS	20.00		18-20' -036		100		1.1
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
7.00 to 12.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: #10
Material: PVC
Sand Pack:
5.00 to 20.00ft BGS
Material: #5 Silica

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303.GPJ CRA_CORP.GDT 10/17/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER CVO
PROJECT NUMBER: 017303a
CLIENT: RACER Trust, LLC
LOCATION: 2901Tyler Road, Ypsilani, Michigan

HOLE DESIGNATION: MW-21I-19
DATE COMPLETED: May 1, 2019
DRILLING METHOD: Hand Auger/Direct Push
FIELD PERSONNEL: D. Antulis

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SC-CLAYEY SAND, with fine gravel, medium to coarse sand, loose, poorly graded, light brown, wet			0-2' -037		60		79.5
1.30	CL-SANDY CLAY, with trace fine gravel and coarse sand, soft, low plasticity, gray/brown, wet		Bentonite	3-5' -038		50		1.4
				6-8' -039		50		0.8
8.50	CH-SILTY CLAY, with fine gravel and coarse sand, high plasticity, dense, gray		Well Screen	9-11' -040		100		0.7
			Sand Pack	12-14' -041		100		0.5
				15-17' -042		100		0.8
				18-20' -043		100		0.9
20.00	END OF BOREHOLE @ 20.0ft BGS							

WELL DETAILS
Screened interval:
6.00 to 11.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: #10
Material: PVC
Sand Pack:
4.00 to 20.00ft BGS
Material: #5 Silica

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303.GPJ CRA_CORP.GDT 10/17/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER CVO
PROJECT NUMBER: 017303a
CLIENT: RACER Trust, LLC
LOCATION: 2901Tyler Road, Ypsilani, Michigan

HOLE DESIGNATION: SB-51-19
DATE COMPLETED: April 29, 2019
DRILLING METHOD: Hand Auger/Direct Push
FIELD PERSONNEL: D. Antulis

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CL-SILTY CLAY, with fine gravel, soft, medium plasticity, tan, wet	1.00		0-2' -001		100		0.7
2	CL-SILTY CLAY, with fine gravel, soft, low plasticity, gray to black, wet, some organic material							
4				3-5' -002		95		1.0
5		5.00						
6	CH-SILTY CLAY, with fine gravel and coarse sand, high plasticity, dense, gray		Bentonite					
8				6-8' -003		20		1.7
10				9-11' -004		80		1.2
11	END OF BOREHOLE @ 11.0ft BGS	11.00						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 017303.GPJ CRA_CORP.GDT 10/17/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER CVO
PROJECT NUMBER: 017303a
CLIENT: RACER Trust, LLC
LOCATION: 2901Tyler Road, Ypsilani, Michigan

HOLE DESIGNATION: SB-52-19
DATE COMPLETED: April 29, 2019
DRILLING METHOD: Hand Auger/Direct Push
FIELD PERSONNEL: D. Antulis

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
2	CL-SILTY CLAY, with fine gravel, soft, low plasticity, gray to black, wet, some organic material			0-2' -005		100		9.9
4	CH-SILTY CLAY, with fine gravel and coarse sand, high plasticity, dense, gray	3.40		3-5' -006		100		8.9
6								
8			Bentonite	6-8' -007		100		3.4
10				9-11' -008		100		4.3
12				12-14' -009		80		2.7
14	END OF BOREHOLE @ 14.0ft BGS	14.00						
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ⬭

OVERBURDEN LOG 017303.GPJ CRA_CORP.GDT 10/17/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER CVO
PROJECT NUMBER: 017303a
CLIENT: RACER Trust, LLC
LOCATION: 2901Tyler Road, Ypsilani, Michigan

HOLE DESIGNATION: SB-53-19
DATE COMPLETED: April 29, 2019
DRILLING METHOD: Hand Auger/Direct Push
FIELD PERSONNEL: D. Antulis

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CL-SILTY CLAY, with fine gravel, soft, low plasticity, gray to black, wet, some organic material			0-2' -010		100		0.6
3.50	CH-SILTY CLAY, with fine gravel and coarse sand, high plasticity, dense, gray		Bentonite	3-5' -011		100		1.2
				6-8' -012		100		0.4
				9-11' -013		30		1.3
11.00	END OF BOREHOLE @ 11.0ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303.GPJ CRA_CORP.GDT 10/17/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER CVO
PROJECT NUMBER: 017303a
CLIENT: RACER Trust, LLC
LOCATION: 2901Tyler Road, Ypsilani, Michigan

HOLE DESIGNATION: SB-54-19
DATE COMPLETED: April 30, 2019
DRILLING METHOD: Hand Auger/Direct Push
FIELD PERSONNEL: D. Antulis

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CL-SANDY CLAY, with fine gravel, soft, low plasticity, gray/tan, wet - black organic staining at 1.5ft BGS			0-2' -023		50		0.6
2								
4				3-5' -024		100		1.1
6								
8				6-8' -025		100		0.8
10			Bentonite	9-11' -026		100		0.5
12								
14	CH-SILTY CLAY, with fine gravel and coarse sand, high plasticity, dense, gray	13.50		12-14' -027		100		0.8
16				15-17' -028		100		0.9
18								
20	END OF BOREHOLE @ 20.0ft BGS	20.00		18-20' -029		100		0.8
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303.GPJ CRA_CORP.GDT 10/17/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER CVO
PROJECT NUMBER: 017303a
CLIENT: RACER Trust, LLC
LOCATION: 2901Tyler Road, Ypsilani, Michigan

HOLE DESIGNATION: SB-55-19
DATE COMPLETED: April 30, 2019
DRILLING METHOD: Hand Auger/Direct Push
FIELD PERSONNEL: D. Antulis

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CL-SILTY CLAY, with fine gravel and coarse sand, dense, low to medium plasticity, tan/gray, dry			0-2' -014		100		1.4
2	CL-SILTY CLAY, with fine gravel and coarse sand, dense, high plasticity, gray, moist	2.50		3-5' -015		100		6.6
4								
6			Bentonite	6-8' -016		80		1.3
8								
10				9-11' -017		85		1.4
12				12-14' -018		60		3.1
14	END OF BOREHOLE @ 14.0ft BGS	14.00						
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ⬭

OVERBURDEN LOG 017303.GPJ CRA_CORP.GDT 10/17/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER CVO
PROJECT NUMBER: 017303a
CLIENT: RACER Trust, LLC
LOCATION: 2901Tyler Road, Ypsilani, Michigan

HOLE DESIGNATION: SB-56-19
DATE COMPLETED: April 30, 2019
DRILLING METHOD: Hand Auger/Direct Push
FIELD PERSONNEL: D. Antulis

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CL-SILTY CLAY, with fine gravel and coarse sand, dense, low to medium plasticity, tan/gray, dry			0-2' -019				5.9
2								
4	- black staining, strong odor at 3.4ft BGS			3-5' -020				39.8
6	CL-SILTY CLAY, with fine gravel and coarse sand, dense, high plasticity, gray, moist	6.00	Bentonite	6-8' -021				0.6
8								
10				9-11' -022				0.9
11	END OF BOREHOLE @ 11.0ft BGS	11.00						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 017303.GPJ CRA_CORP.GDT 10/17/19

Attachment B

Analytical Table – Soil Results

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:								MW-20I-19	MW-20I-19	MW-20I-19	MW-20I-19	MW-20I-19	MW-20I-19
Sample Identification:		**EGLE Generic Cleanup Criteria: Residential and Nonresidential** [1]						**SO-017303A-043019-DA-030**	**SO-017303A-043019-DA-031**	**SO-017303A-043019-DA-032**	**SO-017303A-043019-DA-033**	**SO-017303A-043019-DA-034**	**SO-017303A-043019-DA-035**
Sample Date:		Background [2]	Drinking	Nonresidential Drinking	Groundwater	Direct	Nonresidential Direct	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**
Sample Depth:		Table 4-Clay	Water	Water	Surface Water	Contact	Contact	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**	**(12-14) ft BGS**	**(15-17) ft BGS**
Sample Type:		Huron - Erie Lobe	Protection	Protection	Interface Protection								
Parameters	**Units**	a	b	c	d	o	p						
Volatile Organic Compounds (VOCs)													
1,2-Dichlorobenzene	ug/kg		14000	14000	280	19000000	63000000	100 U	100 U	110 U	100 U	110 U	110 U
1,2-Dichloroethane	ug/kg		100	100	7200	91000	420000	51 U	50 U	56 U	52 U	55 U	54 U
1,2-Dichloropropane	ug/kg		100	100	4600	140000	660000	51 U	50 U	56 U	52 U	55 U	54 U
1,3-Dichlorobenzene	ug/kg		170	480	680	200000	660000	100 U	100 U	110 U	100 U	110 U	110 U
1,4-Dichlorobenzene	ug/kg		1700	1700	360	400000	1900000	100 U	100 U	110 U	100 U	110 U	110 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg		260000	760000	44000	120000000	700000000	760 U	760 U	840 U	780 U	820 U	810 U
2-Hexanone	ug/kg		20000	58000	ID	32000000	100000000	2500 U	2500 U	2800 U	2600 U	2700 U	2700 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg		36000	100000	ID	56000000	180000000	2500 U	2500 U	2800 U	2600 U	2700 U	2700 U
Acetone	ug/kg		15000	42000	34000	23000000	73000000	760 U	760 U	840 U	780 U	820 U	810 U
Benzene	ug/kg		100	100	4000	180000	840000	51 U	50 U	56 U	52 U	55 U	54 U
Bromodichloromethane	ug/kg		1600	1600	ID	110000	490000	100 U	100 U	110 U	100 U	110 U	110 U
Bromoform	ug/kg		1600	1600	ID	820000	3800000	100 U	100 U	110 U	100 U	110 U	110 U
Bromomethane (Methyl bromide)	ug/kg		200	580	100	320000	1000000	320 U	320 U	350 U	320 U	340 U	340 U
Carbon disulfide	ug/kg		16000	46000	ID	7200000	43000000	250 U	250 U	280 U	260 U	270 U	270 U
Carbon tetrachloride	ug/kg		100	100	760	96000	440000	51 U	50 U	56 U	52 U	55 U	54 U
Chlorobenzene	ug/kg		2000	2000	500	4300000	14000000	51 U	50 U	56 U	52 U	55 U	54 U
Chloroethane	ug/kg		8600	34000	22000	2600000	12000000	250 U	250 U	280 U	260 U	270 U	270 U
Chloroform (Trichloromethane)	ug/kg		1600	1600	7000	1200000	5500000	51 U	50 U	56 U	52 U	55 U	54 U
Chloromethane (Methyl chloride)	ug/kg		5200	22000	ID	1600000	7400000	250 U	250 U	280 U	260 U	270 U	270 U
cis-1,2-Dichloroethene	ug/kg		1400	1400	12000	2500000	8000000	51 U	50 U	54 J	52 U	55 U	54 U
cis-1,3-Dichloropropene	ug/kg							51 U	50 U	56 U	52 U	55 U	54 U
Cyclohexane	ug/kg							1200 U	1200 U	1300 U	1200 U	1300 U	1300 U
Dibromochloromethane	ug/kg		1600	1600	ID	110000	500000	51 U	50 U	56 U	52 U	55 U	54 U
Dichlorodifluoromethane (CFC-12)	ug/kg		95000	270000	ID	52000000	170000000	100 U	100 U	110 U	100 U	110 U	110 U
Ethylbenzene	ug/kg		1500	1500	360	22000000	71000000	51 U	50 U	56 U	52 U	55 U	54 U
Isopropyl benzene	ug/kg		91000	260000	3200	25000000	80000000	250 U	250 U	280 U	260 U	270 U	270 U
Methyl acetate	ug/kg							1200 U	1200 U	1300 U	1200 U	1300 U	1300 U
Methyl cyclohexane	ug/kg							1200 U	1200 U	1300 U	1200 U	190 J	200 J
Methyl tert butyl ether (MTBE)	ug/kg		800	800	140000	1500000	7100000	250 U	250 U	280 U	260 U	270 U	270 U
Methylene chloride	ug/kg		100	100	30000	1300000	5800000	640 U	630 U	700 U	650 U	690 U	670 U
Styrene	ug/kg		2700	2700	2100	400000	1900000	51 U	50 U	56 U	52 U	55 U	54 U
Tetrachloroethene	ug/kg		100	100	1200	200000	930000	51 U	50 U	56 U	52 U	55 U	54 U
Toluene	ug/kg		16000	16000	5400	50000000	160000000	100 U	100 U	110 U	100 U	110 U	110 U
trans-1,2-Dichloroethene	ug/kg		2000	2000	30000	3800000	12000000	51 U	50 U	56 U	52 U	55 U	54 U
trans-1,3-Dichloropropene	ug/kg							51 U	50 U	56 U	52 U	55 U	54 U
Trichloroethene	ug/kg		100	100	4000	110000	660000	51 U	50 U	56 U	52 U	55 U	54 U
Trichlorofluoromethane (CFC-11)	ug/kg		52000	150000		79000000	260000000	100 U	100 U	110 U	100 U	110 U	110 U
Trifluorotrichloroethane (CFC-113)	ug/kg		9000000	9000000	1700	1000000000	1000000000	250 U	250 U	280 U	260 U	270 U	270 U
Vinyl chloride	ug/kg		40	40	260	3800	34000	41 U	40 U	**370 [bcd]**	41 U	44 U	43 U
Xylenes (total)	ug/kg		5600	5600	980	410000000	1000000000	150 U	150 U	170 U	160 U	160 U	71 J

Notes:

(1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.46 and R 299.48, respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended
(2) EGLE - EGLE, Remediation and Redevelopment Division, Soil Background and Use of the 2005 Michigan Background Soil Survey, Table 4-Clay, Huron-Erie Lobe, September 2019.

U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.
R - Rejected.

37 [abc] - boxed cell denotes exceedance of cleanup criteria screening level identified by superscript.

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		MW-20I-19	MW-21I-19	MW-21I-19	MW-21I-19	MW-21I-19	MW-21I-19	MW-21I-19	MW-21I-19	SB-51-19	SB-51-19
Sample Identification:		**SO-017303A-043019-DA-036**	**SO-017303A-050119-DA-037**	**SO-017303A-050119-DA-038**	**SO-017303A-050119-DA-039**	**SO-017303A-050119-DA-040**	**SO-017303A-050119-DA-041**	**SO-017303A-050119-DA-042**	**SO-017303A-050119-DA-043**	**017303A-042919-DA-001**	**017303A-042919-DA-002**
Sample Date:		**4/30/2019**	**5/1/2019**	**5/1/2019**	**5/1/2019**	**5/1/2019**	**5/1/2019**	**5/1/2019**	**5/1/2019**	**4/29/2019**	**4/29/2019**
Sample Depth:		**(18-20) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**	**(12-14) ft BGS**	**(15-17) ft BGS**	**(18-20) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**
Sample Type:											
Parameters	**Units**										
Volatile Organic Compounds (VOCs)											
1,2-Dichlorobenzene	ug/kg	110 U	100 U	100 U	110 U	100 U	94 U	100 U	110 U	120 U	130 U
1,2-Dichloroethane	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
1,2-Dichloropropane	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
1,3-Dichlorobenzene	ug/kg	110 U	100 U	100 U	110 U	100 U	94 U	100 U	110 U	120 U	130 U
1,4-Dichlorobenzene	ug/kg	110 U	100 U	100 U	110 U	100 U	94 U	100 U	110 U	120 U	130 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	830 U	760 U	750 U	790 U	760 U	710 U	770 U	800 U	890 U	970 U
2-Hexanone	ug/kg	2800 U	2500 U	2500 U	2600 U	2500 U	2400 U	2600 U	2700 U	3000 U	3200 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg	2800 U	2500 U	2500 U	2600 U	2500 U	2400 U	2600 U	2700 U	3000 U	3200 U
Acetone	ug/kg	830 U	760 U	750 U	790 U	760 U	710 U	770 U	800 U	890 U	970 U
Benzene	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Bromodichloromethane	ug/kg	110 U	100 U	100 U	110 U	100 U	94 U	100 U	110 U	120 U	130 U
Bromoform	ug/kg	110 U	100 U	100 U	110 U	100 U	94 U	100 U	110 U	120 U	130 U
Bromomethane (Methyl bromide)	ug/kg	350 U	320 U	310 U	330 U	320 U	290 U	320 U	330 U	370 U	400 U
Carbon disulfide	ug/kg	280 U	250 U	250 U	260 U	250 U	240 U	260 U	270 U	300 U	320 U
Carbon tetrachloride	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Chlorobenzene	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Chloroethane	ug/kg	280 U	250 U	250 U	260 U	250 U	240 U	260 U	270 U	300 U	320 U
Chloroform (Trichloromethane)	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Chloromethane (Methyl chloride)	ug/kg	280 U	250 U	250 U	260 U	250 U	240 U	260 U	270 U	300 U	320 U
cis-1,2-Dichloroethene	ug/kg	55 U	51 U	50 U	73	51 U	47 U	52 U	54 U	60 U	65 U
cis-1,3-Dichloropropene	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Cyclohexane	ug/kg	1300 U	1200 U	1200 U	1300 U	1200 U	1100 U	1200 U	1300 U	1400 U	1600 U
Dibromochloromethane	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Dichlorodifluoromethane (CFC-12)	ug/kg	110 U	100 U	100 U	110 U	100 U	94 U	100 U	110 U	120 U	130 U
Ethylbenzene	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Isopropyl benzene	ug/kg	280 U	250 U	250 U	260 U	250 U	240 U	260 U	270 U	300 U	320 U
Methyl acetate	ug/kg	1300 U	1200 U	1200 U	1300 U	1200 U	1100 U	1200 U	1300 U	1400 U	1600 U
Methyl cyclohexane	ug/kg	170 J	1200 U	1200 U	1300 U	1200 U	1100 U	170 J	210 J	1400 U	1600 U
Methyl tert butyl ether (MTBE)	ug/kg	280 U	250 U	250 U	260 U	250 U	240 U	260 U	270 U	300 U	320 U
Methylene chloride	ug/kg	690 U	640 U	630 U	660 U	640 U	590 U	640 U	670 U	740 U	810 U
Styrene	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Tetrachloroethene	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Toluene	ug/kg	110 U	100 U	100 U	110 U	100 U	94 U	100 U	110 U	120 U	130 U
trans-1,2-Dichloroethene	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
trans-1,3-Dichloropropene	ug/kg	55 U	51 U	50 U	53 U	51 U	47 U	52 U	54 U	60 U	65 U
Trichloroethene	ug/kg	55 U	17 J	15 J	24 J	51 U	47 U	52 U	54 U	60 U	65 U
Trichlorofluoromethane (CFC-11)	ug/kg	110 U	100 U	100 U	110 U	100 U	94 U	100 U	110 U	120 U	130 U
Trifluorotrichloroethane (CFC-113)	ug/kg	280 U	250 U	250 U	260 U	250 U	240 U	260 U	270 U	300 U	320 U
Vinyl chloride	ug/kg	44 U	41 U	40 U	36 J	41 U	38 U	41 U	43 U	48 U	52 U
Xylenes (total)	ug/kg	170 U	150 U	150 U	160 U	150 U	140 U	150 U	65 J	180 U	190 U

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		**SB-51-19**	**SB-51-19**	**SB-52-19**	**SB-52-19**	**SB-52-19**	**SB-52-19**	**SB-52-19**	**SB-53-19**	**SB-53-19**	**SB-53-19**	**SB-53-19**
Sample Identification:		**017303A-042919-DA-003**	**017303A-042919-DA-004**	**017303A-042919-DA-005**	**017303A-042919-DA-006**	**017303A-042919-DA-007**	**017303A-042919-DA-008**	**017303A-042919-DA-009**	**017303A-042919-DA-010**	**017303A-042919-DA-011**	**017303A-042919-DA-012**	**017303A-042919-DA-013**
Sample Date:		**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**	**4/29/2019**
Sample Depth:		**(6-8) ft BGS**	**(9-11) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**	**(12-14) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**
Sample Type:												
Parameters	**Units**											
Volatile Organic Compounds (VOCs)												
1,2-Dichlorobenzene	ug/kg	110 U	110 U	540 U	130 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
1,2-Dichloroethane	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
1,2-Dichloropropane	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
1,3-Dichlorobenzene	ug/kg	110 U	110 U	540 U	130 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
1,4-Dichlorobenzene	ug/kg	110 U	110 U	540 U	130 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	840 U	840 U	4000 U	960 U	830 U	860 U	810 U	790 U	820 U	820 U	850 U
2-Hexanone	ug/kg	2800 U	2800 U	13000 U	3200 U	2800 U	2900 U	2700 U	2600 U	2700 U	2700 U	2800 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg	2800 U	2800 U	13000 U	3200 U	2800 U	2900 U	2700 U	2600 U	2700 U	2700 U	2800 U
Acetone	ug/kg	840 U	840 U	4000 U	960 U	830 U	860 U	810 U	790 U	820 U	820 U	850 U
Benzene	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Bromodichloromethane	ug/kg	110 U	110 U	540 U	130 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
Bromoform	ug/kg	110 U	110 U	540 U	130 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
Bromomethane (Methyl bromide)	ug/kg	350 U	350 U	1700 U	400 U	350 U	360 U	340 U	330 U	340 U	340 U	350 U
Carbon disulfide	ug/kg	280 U	280 U	1300 U	320 U	280 U	290 U	270 U	260 U	270 U	270 U	280 U
Carbon tetrachloride	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Chlorobenzene	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Chloroethane	ug/kg	280 U	280 U	1300 U	320 U	280 U	290 U	270 U	260 U	270 U	270 U	280 U
Chloroform (Trichloromethane)	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Chloromethane (Methyl chloride)	ug/kg	280 U	280 U	1300 U	320 U	280 U	290 U	270 U	260 U	270 U	270 U	280 U
cis-1,2-Dichloroethene	ug/kg	56 U	56 U	**13000**[bcd]	980	55 U	61	47 J	770	55 U	55 U	57 U
cis-1,3-Dichloropropene	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Cyclohexane	ug/kg	1300 U	1400 U	6500 U	1500 U	1300 U	1400 U	1300 U	1300 U	1300 U	1300 U	1400 U
Dibromochloromethane	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Dichlorodifluoromethane (CFC-12)	ug/kg	110 U	110 U	540 U	130 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
Ethylbenzene	ug/kg	56 U	56 U	120 J	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Isopropyl benzene	ug/kg	280 U	280 U	1300 U	320 U	280 U	290 U	270 U	260 U	270 U	270 U	280 U
Methyl acetate	ug/kg	1300 U	1400 U	6500 U	1500 U	1300 U	1400 U	1300 U	1300 U	1300 U	1300 U	1400 U
Methyl cyclohexane	ug/kg	1300 U	1400 U	6500 U	1500 U	1300 U	180 J	1300 U	1300 U	120 J	140 J	1400 U
Methyl tert butyl ether (MTBE)	ug/kg	280 U	280 U	1300 U	320 U	280 U	290 U	270 U	260 U	270 U	270 U	280 U
Methylene chloride	ug/kg	700 U	700 U	3400 U	800 U	690 U	710 U	670 U	660 U	690 U	680 U	710 U
Styrene	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Tetrachloroethene	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Toluene	ug/kg	110 U	110 U	540 U	130 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
trans-1,2-Dichloroethene	ug/kg	56 U	56 U	620	16 J	55 U	57 U	54 U	120	55 U	55 U	57 U
trans-1,3-Dichloropropene	ug/kg	56 U	56 U	270 U	64 U	55 U	57 U	54 U	53 U	55 U	55 U	57 U
Trichloroethene	ug/kg	56 U	56 U	**6100**[bcd]	49 J	55 U	33 J	17 J	**530**[bc]	55 U	55 U	57 U
Trichlorofluoromethane (CFC-11)	ug/kg	110 U	110 U	540 U	130 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
Trifluorotrichloroethane (CFC-113)	ug/kg	280 U	280 U	1300 U	320 U	280 U	290 U	270 U	260 U	270 U	270 U	280 U
Vinyl chloride	ug/kg	45 U	45 U	**380**[bcd]	**230**[bc]	44 U	46 U	43 U	**41 J**[bc]	44 U	44 U	45 U
Xylenes (total)	ug/kg	170 U	170 U	590 J	190 U	170 U	170 U	160 U	160 U	160 U	160 U	170 U

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		SB-54-19	SB-54-19	SB-54-19	SB-54-19	SB-54-19	SB-54-19	SB-54-19	SB-55-19	SB-55-19	SB-55-19
Sample Identification:		**SO-017303A-043019-DA-023**	**SO-017303A-043019-DA-024**	**SO-017303A-043019-DA-025**	**SO-017303A-043019-DA-026**	**SO-017303A-043019-DA-027**	**SO-017303A-043019-DA-028**	**SO-017303A-043019-DA-029**	**SO-017303A-043019-DA-014**	**SO-017303A-043019-DA-015**	**SO-017303A-043019-DA-016**
Sample Date:		**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**
Sample Depth:		**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**	**(12-14) ft BGS**	**(15-17) ft BGS**	**(18-20) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**
Sample Type:											
Parameters	**Units**										
Volatile Organic Compounds (VOCs)											
1,2-Dichlorobenzene	ug/kg	110 U	100 U	110 U	110 U	110 U	110 U	110 U	110 U	550 U	100 U
1,2-Dichloroethane	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
1,2-Dichloropropane	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
1,3-Dichlorobenzene	ug/kg	110 U	100 U	110 U	110 U	110 U	110 U	110 U	38 J	550 U	100 U
1,4-Dichlorobenzene	ug/kg	110 U	100 U	110 U	110 U	110 U	110 U	110 U	96 J	550 U	100 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	830 U	750 U	820 U	850 U	820 U	810 U	790 U	830 U	4100 U	750 U
2-Hexanone	ug/kg	2800 U	2500 U	2700 U	2800 U	2700 U	2700 U	2600 U	2800 U	14000 U	2500 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg	2800 U	2500 U	2700 U	2800 U	2700 U	2700 U	2600 U	2800 U	14000 U	2500 U
Acetone	ug/kg	830 U	750 U	820 U	850 U	820 U	810 U	790 U	830 U	4100 U	750 U
Benzene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Bromodichloromethane	ug/kg	110 U	100 U	110 U	110 U	110 U	110 U	110 U	110 U	550 U	100 U
Bromoform	ug/kg	110 U	100 U	110 U	110 U	110 U	110 U	110 U	110 U	550 U	100 U
Bromomethane (Methyl bromide)	ug/kg	350 U	310 U	340 U	350 U	340 U	340 U	330 U	350 U	1700 U	310 U
Carbon disulfide	ug/kg	280 U	250 U	270 U	280 U	270 U	270 U	260 U	280 U	1400 U	250 U
Carbon tetrachloride	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Chlorobenzene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Chloroethane	ug/kg	280 U	250 U	270 U	280 U	270 U	270 U	260 U	280 U	1400 U	250 U
Chloroform (Trichloromethane)	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Chloromethane (Methyl chloride)	ug/kg	280 U	250 U	270 U	280 U	270 U	270 U	260 U	280 U	1400 U	250 U
cis-1,2-Dichloroethene	ug/kg	55 U	25 J	55 U	56 U	55 U	54 U	53 U	**2600[bc]**	**17000[bcd]**	11 J
cis-1,3-Dichloropropene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Cyclohexane	ug/kg	1300 U	1200 U	1300 U	1400 U	1300 U	1300 U	1300 U	1300 U	6600 U	1200 U
Dibromochloromethane	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Dichlorodifluoromethane (CFC-12)	ug/kg	110 U	100 U	110 U	110 U	110 U	110 U	110 U	110 U	550 U	100 U
Ethylbenzene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	53 J	280 U	50 U
Isopropyl benzene	ug/kg	280 U	250 U	270 U	280 U	270 U	270 U	260 U	280 U	1400 U	250 U
Methyl acetate	ug/kg	1300 U	1200 U	1300 U	1400 U	1300 U	1300 U	1300 U	1300 U	6600 U	1200 U
Methyl cyclohexane	ug/kg	1300 U	1200 U	1300 U	1400 U	120 J	1300 U	110 J	1300 U	6600 U	170 J
Methyl tert butyl ether (MTBE)	ug/kg	280 U	250 U	270 U	280 U	270 U	270 U	260 U	280 U	1400 U	250 U
Methylene chloride	ug/kg	690 U	630 U	690 U	700 U	680 U	680 U	660 U	690 U	3400 U	630 U
Styrene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Tetrachloroethene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Toluene	ug/kg	110 U	100 U	110 U	110 U	110 U	110 U	110 U	110 U	550 U	100 U
trans-1,2-Dichloroethene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	220	330	50 U
trans-1,3-Dichloropropene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	55 U	280 U	50 U
Trichloroethene	ug/kg	55 U	50 U	55 U	56 U	55 U	54 U	53 U	**390[bc]**	280 U	50 U
Trichlorofluoromethane (CFC-11)	ug/kg	110 U	100 U	110 U	110 U	110 U	110 U	110 U	110 U	550 U	100 U
Trifluorotrichloroethane (CFC-113)	ug/kg	280 U	250 U	270 U	280 U	270 U	270 U	260 U	280 U	1400 U	250 U
Vinyl chloride	ug/kg	44 U	40 U	44 U	45 U	44 U	43 U	42 U	**80[bc]**	**23000[bcdo]**	40 U
Xylenes (total)	ug/kg	170 U	150 U	160 U	170 U	160 U	160 U	160 U	280	830 U	150 U

ATTACHMENT B
SOIL SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		**SB-55-19**	**SB-55-19**	**SB-56-19**	**SB-56-19**	**SB-56-19**	**SB-56-19**
Sample Identification:		**SO-017303A-043019-DA-017**	**SO-017303A-043019-DA-018**	**SO-017303A-043019-DA-019**	**SO-017303A-043019-DA-020**	**SO-017303A-043019-DA-021**	**SO-017303A-043019-DA-022**
Sample Date:		**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**	**4/30/2019**
Sample Depth:		**(9-11) ft BGS**	**(12-14) ft BGS**	**(0-2) ft BGS**	**(3-5) ft BGS**	**(6-8) ft BGS**	**(9-11) ft BGS**
Sample Type:							
Parameters	**Units**						
Volatile Organic Compounds (VOCs)							
1,2-Dichlorobenzene	ug/kg	120 U	120 U	100 U	2300 U	130 U	110 U
1,2-Dichloroethane	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
1,2-Dichloropropane	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
1,3-Dichlorobenzene	ug/kg	120 U	120 U	100 U	2300 U	130 U	110 U
1,4-Dichlorobenzene	ug/kg	120 U	120 U	100 U	2300 U	130 U	110 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	910 U	880 U	750 U	17000 U	940 U	790 U
2-Hexanone	ug/kg	3000 U	2900 U	2500 U	58000 U	3100 U	2600 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg	3000 U	2900 U	2500 U	58000 U	3100 U	2600 U
Acetone	ug/kg	910 U	880 U	750 U	17000 U	940 U	790 U
Benzene	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Bromodichloromethane	ug/kg	120 U	120 U	100 U	2300 U	130 U	110 U
Bromoform	ug/kg	120 U	120 U	100 U	2300 U	130 U	110 U
Bromomethane (Methyl bromide)	ug/kg	380 U	370 U	310 U	7200 U	390 U	330 U
Carbon disulfide	ug/kg	300 U	290 U	250 U	5800 U	310 U	260 U
Carbon tetrachloride	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Chlorobenzene	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Chloroethane	ug/kg	300 U	290 U	250 U	5800 U	310 U	260 U
Chloroform (Trichloromethane)	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Chloromethane (Methyl chloride)	ug/kg	300 U	290 U	250 U	5800 U	310 U	260 U
cis-1,2-Dichloroethene	ug/kg	130	200	**3400[bc]**	**9200[bc]**	22 J	13 J
cis-1,3-Dichloropropene	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Cyclohexane	ug/kg	1500 U	1400 U	1200 U	28000 U	1500 U	1300 U
Dibromochloromethane	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Dichlorodifluoromethane (CFC-12)	ug/kg	120 U	120 U	100 U	2300 U	130 U	110 U
Ethylbenzene	ug/kg	60 U	59 U	16 J	1200 U	63 U	53 U
Isopropyl benzene	ug/kg	300 U	290 U	250 U	5800 U	310 U	260 U
Methyl acetate	ug/kg	1500 U	1400 U	1200 U	28000 U	1500 U	1300 U
Methyl cyclohexane	ug/kg	180 J	130 J	1200 U	28000 U	160 J	1300 U
Methyl tert butyl ether (MTBE)	ug/kg	300 U	290 U	250 U	5800 U	310 U	260 U
Methylene chloride	ug/kg	760 U	730 U	630 U	14000 U	780 U	660 U
Styrene	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Tetrachloroethene	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Toluene	ug/kg	120 U	120 U	34 J	2300 U	42 J	110 U
trans-1,2-Dichloroethene	ug/kg	60 U	59 U	430	1200 U	63 U	53 U
trans-1,3-Dichloropropene	ug/kg	60 U	59 U	50 U	1200 U	63 U	53 U
Trichloroethene	ug/kg	60 U	59 U	**1400[bc]**	**51000[bcd]**	82	41 J
Trichlorofluoromethane (CFC-11)	ug/kg	120 U	120 U	100 U	2300 U	130 U	110 U
Trifluorotrichloroethane (CFC-113)	ug/kg	300 U	290 U	250 U	5800 U	310 U	260 U
Vinyl chloride	ug/kg	**120[bc]**	**160[bc]**	37 J	**350 J[bcd]**	50 U	42 U
Xylenes (total)	ug/kg	180 U	180 U	67 J	**1300 J[d]**	81 J	44 J

Attachment C

Analytical Table – Water Results

ATTACHMENT C
WATER SAMPLING ANALYTICAL RESULTS
RACER- COMMERCIAL VEHICLE OPERATIONS (CVO)
YPSILANTI, MI

Sample Location:		EGLE Generic Groundwater Cleanup Criteria: Residential and Nonreside			**MW-21I-19**	**MW-20S-18**	**MW-21S-18**	**PW-01-19**	**PW-01-19**	**PW-01-19**	**PW-02-19**	**PW-03-19**
Sample Identification:		Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface	**GW-017303A-050219-DA-001**	**GW-017303A-050719-DA-001**	**GW-017303A-050719-DA-002**	**PW-17303-050619-KT-001**	**PW-17303-050619-KT-002**	**PW-17303-050619-KT-003**	**PW-17303-050619-KT-004**	**PW-17303-050619-KT-006**
Sample Date:					**5/2/2019**	**5/7/2019**	**5/7/2019**	**5/6/2019**	**5/6/2019**	**5/6/2019**	**5/6/2019**	**5/6/2019**
Sample Type:												
Sample Depth:		**a**	**b**	**c**	**-**	**-**	**-**	**(0.5) ft BGS**	**(1.5) ft BGS**	**(2.5) ft BGS**	**(0.5) ft BGS**	**(0.5) ft BGS**
	Units											
Volatile Organic Compounds (VOCs)												
1,1,1-Trichloroethane	ug/L	200	200	89	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	8.5	35	78	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	5	5	330	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	880	2500	740	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7	7	130	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	70	70	99	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	0.2		6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.05	0.05	5.7	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	600	600	13	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	5	5	360	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	5	5	230	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	6.6	19	28	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	75	75	17	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	13000	38000	2200	67 U	670 U	10 U	10 U	500 U	1000 U	10 U	10 U
2-Hexanone	ug/L	1000	2900	ID	67 U	670 U	10 U	10 U	500 U	1000 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	1800	5200	ID	67 U	670 U	10 U	10 U	500 U	1000 U	10 U	10 U
Acetone	ug/L	730	2100	1700	67 U	670 U	10 U	18	500 U	1000 U	15	32
Benzene	ug/L	5	5	200	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	80	80	ID	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Bromoform	ug/L	80	80	ID	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	10	29	5	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Carbon disulfide	ug/L	800	2300	ID	33 U	330 U	5.0 U	5.0 U	250 U	500 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L	5	5	38	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Chlorobenzene	ug/L	100	100	25	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Chloroethane	ug/L	430	1700	1100	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	80	80	350	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	260	1100	ID	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	70	70	620	**140[ab]**	**1000[abc]**	14	7.2	**1400[abc]**	**1800[abc]**	1.7	0.89 J
cis-1,3-Dichloropropene	ug/L				6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Cyclohexane	ug/L				6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	80	80	ID	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1700	4800	ID	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Ethylbenzene	ug/L	74	74	18	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Isopropyl benzene	ug/L	800	2300	28	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Methyl acetate	ug/L				67 U	670 U	10 U	10 U	500 U	1000 U	10 U	10 U
Methyl cyclohexane	ug/L				6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	40	40	7100	1.6 J	67 U	1.0 U	0.11 J	50 U	100 U	1.0 U	1.0 U
Methylene chloride	ug/L	5	5	1500	33 U	330 U	5.0 U	5.0 U	250 U	500 U	5.0 U	5.0 U
Styrene	ug/L	100	100	80	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	5	5	60	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Toluene	ug/L	790	790	270	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	100	100	1500	6.0 J	57 J	1.3	0.39 J	81	**130[ab]**	0.24 J	0.21 J
trans-1,3-Dichloropropene	ug/L				6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Trichloroethene	ug/L	5	5	200	6.7 U	**11 J[ab]**	0.52 J	1.0 U	**7.8 J[ab]**	**36 J[ab]**	0.15 J	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	2600	7300		6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	ug/L	170000	170000	32	6.7 U	67 U	1.0 U	1.0 U	50 U	100 U	1.0 U	1.0 U
Vinyl chloride	ug/L	2	2	13	**210[abc]**	**1700[abc]**	**13[ab]**	**37[abc]**	**1800[abc]**	**2100[abc]**	1.9	1.6
Xylenes (total)	ug/L	280	280	49	13 U	130 U	2.0 U	2.0 U	100 U	200 U	2.0 U	2.0 U

Notes:

(1) EGLE - Michigan Department of Environment, Great Lakes and Energy (EGLE) Generic cleanup criteria for residential and nonresidential category, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.
R - Rejected.
ID - means insufficient data to develop criterion.

37[abc] - boxed cell denotes exceedance of cleanup criteria screening level identified by superscript.

Attachment D

Analytical Laboratory Reports

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-112020-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Authorized for release by:
5/20/2019 9:22:04 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Chain of Custody 24

Job ID: 240-112020-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-112020-1

Comments
No additional comments.

Receipt
The samples were received on 5/3/2019 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 381381 recovered outside control limits for the following analyte(s): 1,2-Dibromo-3-Chloropropane. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112020-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112020-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-112020-1	GW-017303A-050219-DA-001	Water	05/02/19 08:15	05/03/19 09:30
240-112020-2	TB-017303A-050219-DA	Water	05/02/19 00:00	05/03/19 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112020-1

Client Sample ID: GW-017303A-050219-DA-001 — Lab Sample ID: 240-112020-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	210	F1	6.7	1.3	ug/L	6.67		8260B	Total/NA
cis-1,2-Dichloroethene	140		6.7	1.1	ug/L	6.67		8260B	Total/NA
trans-1,2-Dichloroethene	6.0	J	6.7	1.3	ug/L	6.67		8260B	Total/NA
Methyl tert-butyl ether	1.6	J	6.7	0.47	ug/L	6.67		8260B	Total/NA

Client Sample ID: TB-017303A-050219-DA — Lab Sample ID: 240-112020-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.46	J	1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.20	J	1.0	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112020-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-017303A-050219-DA-001
Date Collected: 05/02/19 08:15
Date Received: 05/03/19 09:30

Lab Sample ID: 240-112020-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	67	U	67	36	ug/L			05/16/19 12:19	6.67
Benzene	6.7	U	6.7	0.87	ug/L			05/16/19 12:19	6.67
Bromodichloromethane	6.7	U	6.7	1.1	ug/L			05/16/19 12:19	6.67
Bromoform	6.7	U	6.7	5.1	ug/L			05/16/19 12:19	6.67
Bromomethane	6.7	U	6.7	2.8	ug/L			05/16/19 12:19	6.67
2-Butanone (MEK)	67	U	67	7.7	ug/L			05/16/19 12:19	6.67
Carbon disulfide	33	U	33	1.9	ug/L			05/16/19 12:19	6.67
Carbon tetrachloride	6.7	U	6.7	1.7	ug/L			05/16/19 12:19	6.67
Chlorobenzene	6.7	U	6.7	0.93	ug/L			05/16/19 12:19	6.67
Chloroethane	6.7	U	6.7	5.5	ug/L			05/16/19 12:19	6.67
Chloroform	6.7	U	6.7	0.87	ug/L			05/16/19 12:19	6.67
Chloromethane	6.7	U	6.7	1.3	ug/L			05/16/19 12:19	6.67
1,1-Dichloroethane	6.7	U	6.7	1.1	ug/L			05/16/19 12:19	6.67
1,2-Dichloroethane	6.7	U	6.7	1.4	ug/L			05/16/19 12:19	6.67
1,1-Dichloroethene	6.7	U	6.7	1.3	ug/L			05/16/19 12:19	6.67
1,2-Dichloropropane	6.7	U	6.7	1.0	ug/L			05/16/19 12:19	6.67
cis-1,3-Dichloropropene	6.7	U	6.7	4.1	ug/L			05/16/19 12:19	6.67
trans-1,3-Dichloropropene	6.7	U	6.7	4.5	ug/L			05/16/19 12:19	6.67
Ethylbenzene	6.7	U	6.7	0.73	ug/L			05/16/19 12:19	6.67
2-Hexanone	67	U	67	3.6	ug/L			05/16/19 12:19	6.67
Methylene Chloride	33	U	33	17	ug/L			05/16/19 12:19	6.67
4-Methyl-2-pentanone (MIBK)	67	U	67	2.8	ug/L			05/16/19 12:19	6.67
Styrene	6.7	U	6.7	0.67	ug/L			05/16/19 12:19	6.67
1,1,2,2-Tetrachloroethane	6.7	U	6.7	0.87	ug/L			05/16/19 12:19	6.67
Tetrachloroethene	6.7	U	6.7	1.0	ug/L			05/16/19 12:19	6.67
Toluene	6.7	U	6.7	0.93	ug/L			05/16/19 12:19	6.67
Trichloroethene	6.7	U	6.7	0.67	ug/L			05/16/19 12:19	6.67
Vinyl chloride	**210**	**F1**	6.7	1.3	ug/L			05/16/19 12:19	6.67
Xylenes, Total	13	U	13	1.0	ug/L			05/16/19 12:19	6.67
1,1,1-Trichloroethane	6.7	U	6.7	1.6	ug/L			05/16/19 12:19	6.67
1,1,2-Trichloroethane	6.7	U	6.7	0.60	ug/L			05/16/19 12:19	6.67
Cyclohexane	6.7	U	6.7	1.6	ug/L			05/16/19 12:19	6.67
1,2-Dibromo-3-Chloropropane	6.7	U	6.7	6.1	ug/L			05/16/19 12:19	6.67
1,2-Dibromoethane	6.7	U	6.7	0.80	ug/L			05/16/19 12:19	6.67
Dichlorodifluoromethane	6.7	U	6.7	2.3	ug/L			05/16/19 12:19	6.67
cis-1,2-Dichloroethene	**140**		6.7	1.1	ug/L			05/16/19 12:19	6.67
trans-1,2-Dichloroethene	**6.0**	**J**	6.7	1.3	ug/L			05/16/19 12:19	6.67
Isopropylbenzene	6.7	U	6.7	0.60	ug/L			05/16/19 12:19	6.67
Methyl acetate	67	U	67	11	ug/L			05/16/19 12:19	6.67
Methyl tert-butyl ether	**1.6**	**J**	6.7	0.47	ug/L			05/16/19 12:19	6.67
1,1,2-Trichloro-1,2,2-trifluoroethane	6.7	U	6.7	2.7	ug/L			05/16/19 12:19	6.67
1,2,4-Trichlorobenzene	6.7	U	6.7	1.7	ug/L			05/16/19 12:19	6.67
1,2-Dichlorobenzene	6.7	U	6.7	1.0	ug/L			05/16/19 12:19	6.67
1,3-Dichlorobenzene	6.7	U	6.7	1.0	ug/L			05/16/19 12:19	6.67
1,4-Dichlorobenzene	6.7	U	6.7	1.1	ug/L			05/16/19 12:19	6.67
Trichlorofluoromethane	6.7	U	6.7	3.0	ug/L			05/16/19 12:19	6.67
Dibromochloromethane	6.7	U	6.7	2.6	ug/L			05/16/19 12:19	6.67
Methylcyclohexane	6.7	U	6.7	2.2	ug/L			05/16/19 12:19	6.67

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 121		05/16/19 12:19	6.67
4-Bromofluorobenzene (Surr)	93		59 - 120		05/16/19 12:19	6.67
Toluene-d8 (Surr)	107		70 - 123		05/16/19 12:19	6.67
Dibromofluoromethane (Surr)	113		75 - 128		05/16/19 12:19	6.67

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-017303A-050219-DA
Date Collected: 05/02/19 00:00
Date Received: 05/03/19 09:30

Lab Sample ID: 240-112020-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/15/19 14:22	1
Benzene	1.0	U	1.0	0.13	ug/L			05/15/19 14:22	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/15/19 14:22	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/15/19 14:22	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/15/19 14:22	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/15/19 14:22	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/15/19 14:22	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/15/19 14:22	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/15/19 14:22	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/15/19 14:22	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/15/19 14:22	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/15/19 14:22	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/15/19 14:22	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/15/19 14:22	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/15/19 14:22	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/15/19 14:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/15/19 14:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/15/19 14:22	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/15/19 14:22	1
2-Hexanone	10	U	10	0.54	ug/L			05/15/19 14:22	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/15/19 14:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/15/19 14:22	1
Styrene	1.0	U	1.0	0.10	ug/L			05/15/19 14:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/15/19 14:22	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/15/19 14:22	1
Toluene	1.0	U	1.0	0.14	ug/L			05/15/19 14:22	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/15/19 14:22	1
Vinyl chloride	**0.46**	**J**	1.0	0.20	ug/L			05/15/19 14:22	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/15/19 14:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/15/19 14:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/15/19 14:22	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/15/19 14:22	1
1,2-Dibromo-3-Chloropropane	1.0	U *	1.0	0.91	ug/L			05/15/19 14:22	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/15/19 14:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/15/19 14:22	1
cis-1,2-Dichloroethene	**0.20**	**J**	1.0	0.16	ug/L			05/15/19 14:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/15/19 14:22	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/15/19 14:22	1
Methyl acetate	10	U	10	1.7	ug/L			05/15/19 14:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/15/19 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/15/19 14:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/15/19 14:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/15/19 14:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/15/19 14:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/15/19 14:22	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/15/19 14:22	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/15/19 14:22	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/15/19 14:22	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 121		05/15/19 14:22	1
4-Bromofluorobenzene (Surr)	106		59 - 120		05/15/19 14:22	1
Toluene-d8 (Surr)	115		70 - 123		05/15/19 14:22	1
Dibromofluoromethane (Surr)	117		75 - 128		05/15/19 14:22	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112020-1

GC/MS VOA

Analysis Batch: 381381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-112020-2	TB-017303A-050219-DA	Total/NA	Water	8260B	
MB 240-381381/6	Method Blank	Total/NA	Water	8260B	
LCS 240-381381/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 381637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-112020-1	GW-017303A-050219-DA-001	Total/NA	Water	8260B	
MB 240-381637/6	Method Blank	Total/NA	Water	8260B	
LCS 240-381637/4	Lab Control Sample	Total/NA	Water	8260B	
240-112020-1 MS	GW-017303A-050219-DA-001	Total/NA	Water	8260B	
240-112020-1 MSD	GW-017303A-050219-DA-001	Total/NA	Water	8260B	

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112020-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-381381/6
Matrix: Water
Analysis Batch: 381381

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/15/19 11:05	1
Benzene	1.0	U	1.0	0.13	ug/L			05/15/19 11:05	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/15/19 11:05	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/15/19 11:05	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/15/19 11:05	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/15/19 11:05	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/15/19 11:05	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/15/19 11:05	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/15/19 11:05	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/15/19 11:05	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/15/19 11:05	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/15/19 11:05	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/15/19 11:05	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/15/19 11:05	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/15/19 11:05	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/15/19 11:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/15/19 11:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/15/19 11:05	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/15/19 11:05	1
2-Hexanone	10	U	10	0.54	ug/L			05/15/19 11:05	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/15/19 11:05	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/15/19 11:05	1
Styrene	1.0	U	1.0	0.10	ug/L			05/15/19 11:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/15/19 11:05	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/15/19 11:05	1
Toluene	1.0	U	1.0	0.14	ug/L			05/15/19 11:05	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/15/19 11:05	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/15/19 11:05	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/15/19 11:05	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/15/19 11:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/15/19 11:05	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/15/19 11:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/15/19 11:05	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/15/19 11:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/15/19 11:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/15/19 11:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/15/19 11:05	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/15/19 11:05	1
Methyl acetate	10	U	10	1.7	ug/L			05/15/19 11:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/15/19 11:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/15/19 11:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/15/19 11:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/15/19 11:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/15/19 11:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/15/19 11:05	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/15/19 11:05	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/15/19 11:05	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/15/19 11:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-381381/6
Matrix: Water
Analysis Batch: 381381

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 121*		*05/15/19 11:05*	*1*
4-Bromofluorobenzene (Surr)	*83*		*59 - 120*		*05/15/19 11:05*	*1*
Toluene-d8 (Surr)	*104*		*70 - 123*		*05/15/19 11:05*	*1*
Dibromofluoromethane (Surr)	*118*		*75 - 128*		*05/15/19 11:05*	*1*

Lab Sample ID: LCS 240-381381/4
Matrix: Water
Analysis Batch: 381381

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.9		ug/L		84	21 - 162
Benzene	10.0	10.4		ug/L		104	80 - 123
Bromodichloromethane	10.0	8.48		ug/L		85	77 - 125
Bromoform	10.0	5.48		ug/L		55	49 - 141
Bromomethane	10.0	7.99		ug/L		80	41 - 175
2-Butanone (MEK)	20.0	14.1		ug/L		71	39 - 163
Carbon disulfide	10.0	7.38		ug/L		74	60 - 138
Carbon tetrachloride	10.0	9.79		ug/L		98	63 - 140
Chlorobenzene	10.0	10.5		ug/L		105	80 - 121
Chloroethane	10.0	7.59		ug/L		76	33 - 173
Chloroform	10.0	10.7		ug/L		107	79 - 127
Chloromethane	10.0	9.18		ug/L		92	54 - 143
1,1-Dichloroethane	10.0	10.4		ug/L		104	75 - 133
1,2-Dichloroethane	10.0	9.74		ug/L		97	71 - 135
1,1-Dichloroethene	10.0	8.45		ug/L		85	65 - 139
1,2-Dichloropropane	10.0	9.64		ug/L		96	78 - 133
cis-1,3-Dichloropropene	10.0	7.68		ug/L		77	64 - 132
trans-1,3-Dichloropropene	10.0	7.03		ug/L		70	55 - 128
Ethylbenzene	10.0	9.92		ug/L		99	80 - 120
2-Hexanone	20.0	12.0		ug/L		60	43 - 148
Methylene Chloride	10.0	11.5		ug/L		115	70 - 134
4-Methyl-2-pentanone (MIBK)	20.0	11.3		ug/L		56	49 - 143
Styrene	10.0	9.47		ug/L		95	79 - 120
1,1,2,2-Tetrachloroethane	10.0	7.96		ug/L		80	65 - 139
Tetrachloroethene	10.0	10.2		ug/L		102	74 - 130
Toluene	10.0	10.5		ug/L		105	78 - 129
Trichloroethene	10.0	9.56		ug/L		96	76 - 125
Vinyl chloride	10.0	8.81		ug/L		88	58 - 143
Xylenes, Total	20.0	19.8		ug/L		99	80 - 120
1,1,1-Trichloroethane	10.0	10.8		ug/L		108	69 - 134
1,1,2-Trichloroethane	10.0	9.99		ug/L		100	78 - 133
Cyclohexane	10.0	9.28		ug/L		93	58 - 145
1,2-Dibromo-3-Chloropropane	10.0	4.47	*	ug/L		45	46 - 132
1,2-Dibromoethane	10.0	8.22		ug/L		82	77 - 123
Dichlorodifluoromethane	10.0	10.1		ug/L		101	29 - 148
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	76 - 128
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	78 - 133
Isopropylbenzene	10.0	9.83		ug/L		98	74 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-381381/4
Matrix: Water
Analysis Batch: 381381

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	20.0	13.7		ug/L		68	52 - 145
Methyl tert-butyl ether	10.0	7.24		ug/L		72	51 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.20		ug/L		92	50 - 156
1,2,4-Trichlorobenzene	10.0	7.38		ug/L		74	42 - 133
1,2-Dichlorobenzene	10.0	9.97		ug/L		100	78 - 120
1,3-Dichlorobenzene	10.0	9.68		ug/L		97	78 - 120
1,4-Dichlorobenzene	10.0	9.66		ug/L		97	78 - 120
Trichlorofluoromethane	10.0	9.30		ug/L		93	51 - 164
Dibromochloromethane	10.0	8.08		ug/L		81	70 - 132
Methylcyclohexane	10.0	9.19		ug/L		92	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 121*
4-Bromofluorobenzene (Surr)	*97*		*59 - 120*
Toluene-d8 (Surr)	*109*		*70 - 123*
Dibromofluoromethane (Surr)	*107*		*75 - 128*

Lab Sample ID: MB 240-381637/6
Matrix: Water
Analysis Batch: 381637

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/16/19 11:35	1
Benzene	1.0	U	1.0	0.13	ug/L			05/16/19 11:35	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/16/19 11:35	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/16/19 11:35	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/16/19 11:35	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/16/19 11:35	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/16/19 11:35	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/16/19 11:35	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/16/19 11:35	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/16/19 11:35	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/16/19 11:35	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/16/19 11:35	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/16/19 11:35	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/16/19 11:35	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/16/19 11:35	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/16/19 11:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/16/19 11:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/16/19 11:35	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/16/19 11:35	1
2-Hexanone	10	U	10	0.54	ug/L			05/16/19 11:35	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/16/19 11:35	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/16/19 11:35	1
Styrene	1.0	U	1.0	0.10	ug/L			05/16/19 11:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/16/19 11:35	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/16/19 11:35	1
Toluene	1.0	U	1.0	0.14	ug/L			05/16/19 11:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-381637/6
Matrix: Water
Analysis Batch: 381637

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/16/19 11:35	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/16/19 11:35	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/16/19 11:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/16/19 11:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/16/19 11:35	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/16/19 11:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/16/19 11:35	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/16/19 11:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/16/19 11:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/16/19 11:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/16/19 11:35	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/16/19 11:35	1
Methyl acetate	10	U	10	1.7	ug/L			05/16/19 11:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/16/19 11:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/16/19 11:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/16/19 11:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/16/19 11:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/16/19 11:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/16/19 11:35	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/16/19 11:35	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/16/19 11:35	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/16/19 11:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 121*		*05/16/19 11:35*	*1*
4-Bromofluorobenzene (Surr)	*88*		*59 - 120*		*05/16/19 11:35*	*1*
Toluene-d8 (Surr)	*103*		*70 - 123*		*05/16/19 11:35*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 128*		*05/16/19 11:35*	*1*

Lab Sample ID: LCS 240-381637/4
Matrix: Water
Analysis Batch: 381637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	15.7		ug/L		78	21 - 162
Benzene	10.0	9.90		ug/L		99	80 - 123
Bromodichloromethane	10.0	8.52		ug/L		85	77 - 125
Bromoform	10.0	5.38		ug/L		54	49 - 141
Bromomethane	10.0	8.31		ug/L		83	41 - 175
2-Butanone (MEK)	20.0	12.9		ug/L		64	39 - 163
Carbon disulfide	10.0	7.62		ug/L		76	60 - 138
Carbon tetrachloride	10.0	9.88		ug/L		99	63 - 140
Chlorobenzene	10.0	9.85		ug/L		98	80 - 121
Chloroethane	10.0	7.79		ug/L		78	33 - 173
Chloroform	10.0	10.3		ug/L		103	79 - 127
Chloromethane	10.0	8.07		ug/L		81	54 - 143
1,1-Dichloroethane	10.0	10.1		ug/L		101	75 - 133
1,2-Dichloroethane	10.0	8.79		ug/L		88	71 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-381637/4
Matrix: Water
Analysis Batch: 381637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	8.47		ug/L		85	65 - 139
1,2-Dichloropropane	10.0	9.39		ug/L		94	78 - 133
cis-1,3-Dichloropropene	10.0	8.07		ug/L		81	64 - 132
trans-1,3-Dichloropropene	10.0	6.89		ug/L		69	55 - 128
Ethylbenzene	10.0	9.73		ug/L		97	80 - 120
2-Hexanone	20.0	10.8		ug/L		54	43 - 148
Methylene Chloride	10.0	9.46		ug/L		95	70 - 134
4-Methyl-2-pentanone (MIBK)	20.0	11.1		ug/L		56	49 - 143
Styrene	10.0	9.05		ug/L		90	79 - 120
1,1,2,2-Tetrachloroethane	10.0	7.36		ug/L		74	65 - 139
Tetrachloroethene	10.0	9.57		ug/L		96	74 - 130
Toluene	10.0	10.0		ug/L		100	78 - 129
Trichloroethene	10.0	9.29		ug/L		93	76 - 125
Vinyl chloride	10.0	8.93		ug/L		89	58 - 143
Xylenes, Total	20.0	19.8		ug/L		99	80 - 120
1,1,1-Trichloroethane	10.0	11.2		ug/L		112	69 - 134
1,1,2-Trichloroethane	10.0	8.76		ug/L		88	78 - 133
Cyclohexane	10.0	9.74		ug/L		97	58 - 145
1,2-Dibromo-3-Chloropropane	10.0	4.77		ug/L		48	46 - 132
1,2-Dibromoethane	10.0	7.72		ug/L		77	77 - 123
Dichlorodifluoromethane	10.0	9.57		ug/L		96	29 - 148
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	76 - 128
trans-1,2-Dichloroethene	10.0	10.9		ug/L		109	78 - 133
Isopropylbenzene	10.0	10.0		ug/L		100	74 - 120
Methyl acetate	20.0	12.7		ug/L		63	52 - 145
Methyl tert-butyl ether	10.0	7.80		ug/L		78	51 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.74		ug/L		87	50 - 156
1,2,4-Trichlorobenzene	10.0	8.60		ug/L		86	42 - 133
1,2-Dichlorobenzene	10.0	9.59		ug/L		96	78 - 120
1,3-Dichlorobenzene	10.0	9.50		ug/L		95	78 - 120
1,4-Dichlorobenzene	10.0	9.44		ug/L		94	78 - 120
Trichlorofluoromethane	10.0	9.30		ug/L		93	51 - 164
Dibromochloromethane	10.0	7.70		ug/L		77	70 - 132
Methylcyclohexane	10.0	9.97		ug/L		100	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 121*
4-Bromofluorobenzene (Surr)	*100*		*59 - 120*
Toluene-d8 (Surr)	*108*		*70 - 123*
Dibromofluoromethane (Surr)	*110*		*75 - 128*

Lab Sample ID: 240-112020-1 MS
Matrix: Water
Analysis Batch: 381637

Client Sample ID: GW-017303A-050219-DA-001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	67	U	133	98.1		ug/L		74	10 - 168
Benzene	6.7	U	66.7	61.3		ug/L		92	71 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-112020-1 MS
Matrix: Water
Analysis Batch: 381637

Client Sample ID: GW-017303A-050219-DA-001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	6.7	U	66.7	48.9		ug/L		73	64 - 125
Bromoform	6.7	U	66.7	31.6		ug/L		47	44 - 129
Bromomethane	6.7	U	66.7	52.1		ug/L		78	19 - 187
2-Butanone (MEK)	67	U	133	83.2		ug/L		62	37 - 156
Carbon disulfide	33	U	66.7	40.2		ug/L		60	43 - 144
Carbon tetrachloride	6.7	U	66.7	53.7		ug/L		81	41 - 143
Chlorobenzene	6.7	U	66.7	62.0		ug/L		93	70 - 123
Chloroethane	6.7	U	66.7	45.0		ug/L		67	11 - 189
Chloroform	6.7	U	66.7	66.2		ug/L		99	68 - 130
Chloromethane	6.7	U	66.7	54.3		ug/L		81	31 - 154
1,1-Dichloroethane	6.7	U	66.7	63.0		ug/L		94	63 - 136
1,2-Dichloroethane	6.7	U	66.7	56.9		ug/L		85	65 - 135
1,1-Dichloroethene	6.7	U	66.7	49.4		ug/L		74	53 - 140
1,2-Dichloropropane	6.7	U	66.7	57.4		ug/L		86	70 - 132
cis-1,3-Dichloropropene	6.7	U	66.7	43.4		ug/L		65	48 - 127
trans-1,3-Dichloropropene	6.7	U	66.7	38.6		ug/L		58	40 - 125
Ethylbenzene	6.7	U	66.7	58.3		ug/L		87	66 - 120
2-Hexanone	67	U	133	67.3		ug/L		50	42 - 150
Methylene Chloride	33	U	66.7	65.3		ug/L		98	61 - 130
4-Methyl-2-pentanone (MIBK)	67	U	133	66.1	J	ug/L		50	44 - 143
Styrene	6.7	U	66.7	56.6		ug/L		85	68 - 120
1,1,2,2-Tetrachloroethane	6.7	U	66.7	46.2		ug/L		69	60 - 137
Tetrachloroethene	6.7	U	66.7	54.3		ug/L		81	51 - 136
Toluene	6.7	U	66.7	60.7		ug/L		91	62 - 132
Trichloroethene	6.7	U	66.7	55.1		ug/L		83	55 - 131
Vinyl chloride	210	F1	66.7	239		ug/L		47	43 - 154
Xylenes, Total	13	U	133	119		ug/L		89	67 - 120
1,1,1-Trichloroethane	6.7	U	66.7	62.8		ug/L		94	51 - 138
1,1,2-Trichloroethane	6.7	U	66.7	55.8		ug/L		84	76 - 132
Cyclohexane	6.7	U	66.7	50.3		ug/L		75	42 - 135
1,2-Dibromo-3-Chloropropane	6.7	U	66.7	27.1		ug/L		41	38 - 124
1,2-Dibromoethane	6.7	U	66.7	48.0		ug/L		72	71 - 123
Dichlorodifluoromethane	6.7	U	66.7	58.7		ug/L		88	28 - 136
cis-1,2-Dichloroethene	140		66.7	196		ug/L		81	64 - 130
trans-1,2-Dichloroethene	6.0	J	66.7	73.4		ug/L		101	68 - 133
Isopropylbenzene	6.7	U	66.7	57.0		ug/L		86	59 - 120
Methyl acetate	67	U	133	77.1		ug/L		58	41 - 142
Methyl tert-butyl ether	1.6	J	66.7	48.1		ug/L		70	41 - 136
1,1,2-Trichloro-1,2,2-trifluoroethane	6.7	U	66.7	47.3		ug/L		71	31 - 156
1,2,4-Trichlorobenzene	6.7	U	66.7	48.0		ug/L		72	30 - 126
1,2-Dichlorobenzene	6.7	U	66.7	60.6		ug/L		91	64 - 120
1,3-Dichlorobenzene	6.7	U	66.7	58.1		ug/L		87	62 - 120
1,4-Dichlorobenzene	6.7	U	66.7	58.2		ug/L		87	63 - 120
Trichlorofluoromethane	6.7	U	66.7	53.8		ug/L		81	37 - 174
Dibromochloromethane	6.7	U	66.7	46.7		ug/L		70	60 - 129
Methylcyclohexane	6.7	U	66.7	49.3		ug/L		74	37 - 123

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-112020-1 MS
Matrix: Water
Analysis Batch: 381637

Client Sample ID: GW-017303A-050219-DA-001
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 121*
4-Bromofluorobenzene (Surr)	*101*		*59 - 120*
Toluene-d8 (Surr)	*107*		*70 - 123*
Dibromofluoromethane (Surr)	*111*		*75 - 128*

Lab Sample ID: 240-112020-1 MSD
Matrix: Water
Analysis Batch: 381637

Client Sample ID: GW-017303A-050219-DA-001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	67	U	133	97.9		ug/L		73	10 - 168	0	35
Benzene	6.7	U	66.7	63.3		ug/L		95	71 - 122	3	22
Bromodichloromethane	6.7	U	66.7	51.5		ug/L		77	64 - 125	5	27
Bromoform	6.7	U	66.7	32.6		ug/L		49	44 - 129	3	28
Bromomethane	6.7	U	66.7	53.1		ug/L		80	19 - 187	2	35
2-Butanone (MEK)	67	U	133	91.8		ug/L		69	37 - 156	10	35
Carbon disulfide	33	U	66.7	47.8		ug/L		72	43 - 144	17	33
Carbon tetrachloride	6.7	U	66.7	60.6		ug/L		91	41 - 143	12	30
Chlorobenzene	6.7	U	66.7	63.3		ug/L		95	70 - 123	2	23
Chloroethane	6.7	U	66.7	47.8		ug/L		72	11 - 189	6	35
Chloroform	6.7	U	66.7	67.3		ug/L		101	68 - 130	2	23
Chloromethane	6.7	U	66.7	50.7		ug/L		76	31 - 154	7	35
1,1-Dichloroethane	6.7	U	66.7	64.6		ug/L		97	63 - 136	3	23
1,2-Dichloroethane	6.7	U	66.7	56.9		ug/L		85	65 - 135	0	24
1,1-Dichloroethene	6.7	U	66.7	54.3		ug/L		81	53 - 140	9	35
1,2-Dichloropropane	6.7	U	66.7	58.8		ug/L		88	70 - 132	2	26
cis-1,3-Dichloropropene	6.7	U	66.7	46.4		ug/L		70	48 - 127	7	30
trans-1,3-Dichloropropene	6.7	U	66.7	42.0		ug/L		63	40 - 125	8	27
Ethylbenzene	6.7	U	66.7	62.2		ug/L		93	66 - 120	7	24
2-Hexanone	67	U	133	67.2		ug/L		50	42 - 150	0	35
Methylene Chloride	33	U	66.7	64.6		ug/L		97	61 - 130	1	29
4-Methyl-2-pentanone (MIBK)	67	U	133	71.4		ug/L		54	44 - 143	8	35
Styrene	6.7	U	66.7	58.3		ug/L		87	68 - 120	3	26
1,1,2,2-Tetrachloroethane	6.7	U	66.7	48.3		ug/L		72	60 - 137	5	31
Tetrachloroethene	6.7	U	66.7	59.8		ug/L		90	51 - 136	10	23
Toluene	6.7	U	66.7	64.3		ug/L		96	62 - 132	6	23
Trichloroethene	6.7	U	66.7	58.8		ug/L		88	55 - 131	6	23
Vinyl chloride	210	F1	66.7	227	F1	ug/L		30	43 - 154	5	29
Xylenes, Total	13	U	133	126		ug/L		94	67 - 120	6	25
1,1,1-Trichloroethane	6.7	U	66.7	69.9		ug/L		105	51 - 138	11	27
1,1,2-Trichloroethane	6.7	U	66.7	57.1		ug/L		86	76 - 132	2	25
Cyclohexane	6.7	U	66.7	61.0		ug/L		91	42 - 135	19	35
1,2-Dibromo-3-Chloropropane	6.7	U	66.7	26.2		ug/L		39	38 - 124	3	35
1,2-Dibromoethane	6.7	U	66.7	49.3		ug/L		74	71 - 123	3	27
Dichlorodifluoromethane	6.7	U	66.7	59.0		ug/L		88	28 - 136	0	35
cis-1,2-Dichloroethene	140		66.7	198		ug/L		84	64 - 130	1	21
trans-1,2-Dichloroethene	6.0	J	66.7	76.7		ug/L		106	68 - 133	4	24
Isopropylbenzene	6.7	U	66.7	62.8		ug/L		94	59 - 120	10	31

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-112020-1 MSD
Matrix: Water
Analysis Batch: 381637

Client Sample ID: GW-017303A-050219-DA-001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl acetate	67	U	133	79.5		ug/L		60	41 - 142	3	35
Methyl tert-butyl ether	1.6	J	66.7	49.0		ug/L		71	41 - 136	2	29
1,1,2-Trichloro-1,2,2-trifluoroethane	6.7	U	66.7	55.8		ug/L		84	31 - 156	16	35
1,2,4-Trichlorobenzene	6.7	U	66.7	49.5		ug/L		74	30 - 126	3	35
1,2-Dichlorobenzene	6.7	U	66.7	62.2		ug/L		93	64 - 120	3	30
1,3-Dichlorobenzene	6.7	U	66.7	61.7		ug/L		92	62 - 120	6	31
1,4-Dichlorobenzene	6.7	U	66.7	60.1		ug/L		90	63 - 120	3	28
Trichlorofluoromethane	6.7	U	66.7	57.7		ug/L		86	37 - 174	7	35
Dibromochloromethane	6.7	U	66.7	48.2		ug/L		72	60 - 129	3	26
Methylcyclohexane	6.7	U	66.7	62.1		ug/L		93	37 - 123	23	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 121*
4-Bromofluorobenzene (Surr)	*98*		*59 - 120*
Toluene-d8 (Surr)	*105*		*70 - 123*
Dibromofluoromethane (Surr)	*104*		*75 - 128*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112020-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-112020-1	GW-017303A-050219-DA-001	101	93	107	113
240-112020-1 MS	GW-017303A-050219-DA-001	93	101	107	111
240-112020-1 MSD	GW-017303A-050219-DA-001	90	98	105	104
240-112020-2	TB-017303A-050219-DA	108	106	115	117
LCS 240-381381/4	Lab Control Sample	95	97	109	107
LCS 240-381637/4	Lab Control Sample	93	100	108	110
MB 240-381381/6	Method Blank	113	83	104	118
MB 240-381637/6	Method Blank	97	88	103	108

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112020-1

Client Sample ID: GW-017303A-050219-DA-001

Lab Sample ID: 240-112020-1

Date Collected: 05/02/19 08:15
Matrix: Water
Date Received: 05/03/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		6.67	381637	05/16/19 12:19	LEE	TAL CAN

Client Sample ID: TB-017303A-050219-DA

Lab Sample ID: 240-112020-2

Date Collected: 05/02/19 00:00
Matrix: Water
Date Received: 05/03/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	381381	05/15/19 14:22	LEE	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 240-112020-1
Project/Site: 17303, RACER CVO

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19 *
Illinois	NELAP	5	200004	07-31-19 *
Kansas	NELAP	7	E-10336	04-30-20
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19 *
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19 *
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190 3.6/C3.4

Chain of Custody Record 312872

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: K. TREPKAU	Site Contact: B. TRIGGER	Date: 5/2/19	COC No: 17303-TOC.04-2019-01
Company Name: GHD SERVICES INC.	Tel/Fax: 248 915 8804	Lab Contact: B. HELLER	Carrier: FEDEX	___ of ___ COCs
Address: 39520 MACKENZIE RD	Analysis Turnaround Time			Sampler: D. ANTOLIP
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248 893 3408	TAT if different from Below ___			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: RACER - CTO	☐ 1 week			Job / SDG No.:
Site: YPSILANTI, MI	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	VOCs 8260B
GW-017303A-050219-DA 001	5/2/19	0915	G	W	3	N	Y	X
TB-017303A-050219-DA	—	—	—	W	1	N	N	X

Sample Specific Notes:

240-112020 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ___

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ___ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: ___ Corr'd: ___	Therm ID No.: ___

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	GHD	5/2/19 1200		TA	5-3-19 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

5/20/2019

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 112020
Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 5-3-19 Opened on 5-3-19

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 3.6 °C Corrected Cooler Temp. 3.4 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC984738**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-112217-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: James Abston

Denise D Heckler

Authorized for release by:
5/21/2019 4:05:04 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Job ID: 240-112217-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-112217-1

Comments
Sample KT-005 was received but not listed on the COC. Per GHD, do not analyze.
Sample collection times were received via email on May 9, 2019 for samples:

GW-017303A-050719-DA-002 Collected 5-7-2019 10:35
GW-017303A-050719-DA-001 Collected 5-7-2019 10:00

Receipt
The samples were received on 5/8/2019 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4º C.

GC/MS VOA
Method(s) 8260B: The pH of samples: PW-17303-050619-KT-001 (240-112217-1), PW-17303-050619-KT-002 (240-112217-2), PW-17303-050619-KT-003 (240-112217-3) and PW-17303-050619-KT-004 (240-112217-4) was greater than 2. The samples were analyzed within the normal 14 day holding time; however, experimental evidence suggests that some aromatic compounds in wastewater samples, notably, Benzene, Toluene, and Ethylbenzene are susceptible to biological degradation if samples are not preserved to a pH of 2.

Method(s) 8260B: There is no MS/MSD in batch 382079 due to poor spiking.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Assest ID
240-112217-1	PW-17303-050619-KT-001	Water	05/06/19 09:45	05/08/19 09:20	
240-112217-2	PW-17303-050619-KT-002	Water	05/06/19 09:50	05/08/19 09:20	
240-112217-3	PW-17303-050619-KT-003	Water	05/06/19 10:00	05/08/19 09:20	
240-112217-4	PW-17303-050619-KT-004	Water	05/06/19 13:30	05/08/19 09:20	
240-112217-5	PW-17303-050619-KT-006	Water	05/06/19 14:30	05/08/19 09:20	
240-112217-6	TRIP BLANK-001	Water	05/06/19 00:00	05/08/19 09:20	
240-112217-7	GW-017303A-050719-DA-001	Water	05/07/19 10:00	05/08/19 09:20	
240-112217-8	GW-017303A-050719-DA-002	Water	05/07/19 10:35	05/08/19 09:20	

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Client Sample ID: PW-17303-050619-KT-001 — Lab Sample ID: 240-112217-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	18		10	5.4	ug/L	1		8260B	Total/NA
Vinyl chloride	37		1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	7.2		1.0	0.16	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.39	J	1.0	0.19	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.11	J	1.0	0.070	ug/L	1		8260B	Total/NA

Client Sample ID: PW-17303-050619-KT-002 — Lab Sample ID: 240-112217-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.8	J	50	5.0	ug/L	50		8260B	Total/NA
Vinyl chloride	1800		50	10	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	1400		50	8.0	ug/L	50		8260B	Total/NA
trans-1,2-Dichloroethene	81		50	9.5	ug/L	50		8260B	Total/NA

Client Sample ID: PW-17303-050619-KT-003 — Lab Sample ID: 240-112217-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	36	J	100	10	ug/L	100		8260B	Total/NA
Vinyl chloride	2100		100	20	ug/L	100		8260B	Total/NA
cis-1,2-Dichloroethene	1800		100	16	ug/L	100		8260B	Total/NA
trans-1,2-Dichloroethene	130		100	19	ug/L	100		8260B	Total/NA

Client Sample ID: PW-17303-050619-KT-004 — Lab Sample ID: 240-112217-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15		10	5.4	ug/L	1		8260B	Total/NA
Trichloroethene	0.15	J	1.0	0.10	ug/L	1		8260B	Total/NA
Vinyl chloride	1.9		1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.16	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.24	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: PW-17303-050619-KT-006 — Lab Sample ID: 240-112217-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	32		10	5.4	ug/L	1		8260B	Total/NA
Vinyl chloride	1.6		1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.89	J	1.0	0.16	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.21	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK-001 — Lab Sample ID: 240-112217-6

No Detections.

Client Sample ID: GW-017303A-050719-DA-001 — Lab Sample ID: 240-112217-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	11	J	67	6.7	ug/L	66.67		8260B	Total/NA
Vinyl chloride	1700		67	13	ug/L	66.67		8260B	Total/NA
cis-1,2-Dichloroethene	1000		67	11	ug/L	66.67		8260B	Total/NA
trans-1,2-Dichloroethene	57	J	67	13	ug/L	66.67		8260B	Total/NA

Client Sample ID: GW-017303A-050719-DA-002 — Lab Sample ID: 240-112217-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.52	J	1.0	0.10	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-017303A-050719-DA-002 (Continued)

Lab Sample ID: 240-112217-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	13		1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.16	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.3		1.0	0.19	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: PW-17303-050619-KT-001
Date Collected: 05/06/19 09:45
Date Received: 05/08/19 09:20

Lab Sample ID: 240-112217-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**18**		10	5.4	ug/L			05/17/19 14:50	1
Benzene	1.0	U	1.0	0.13	ug/L			05/17/19 14:50	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/17/19 14:50	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/17/19 14:50	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/17/19 14:50	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/17/19 14:50	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/17/19 14:50	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/17/19 14:50	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/17/19 14:50	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/17/19 14:50	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/17/19 14:50	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/17/19 14:50	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/17/19 14:50	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/17/19 14:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/17/19 14:50	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/17/19 14:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/17/19 14:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/17/19 14:50	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/17/19 14:50	1
2-Hexanone	10	U	10	0.54	ug/L			05/17/19 14:50	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/17/19 14:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/17/19 14:50	1
Styrene	1.0	U	1.0	0.10	ug/L			05/17/19 14:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/17/19 14:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/17/19 14:50	1
Toluene	1.0	U	1.0	0.14	ug/L			05/17/19 14:50	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/17/19 14:50	1
Vinyl chloride	**37**		1.0	0.20	ug/L			05/17/19 14:50	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/17/19 14:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/17/19 14:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/17/19 14:50	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/17/19 14:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/17/19 14:50	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/17/19 14:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/17/19 14:50	1
cis-1,2-Dichloroethene	**7.2**		1.0	0.16	ug/L			05/17/19 14:50	1
trans-1,2-Dichloroethene	**0.39**	**J**	1.0	0.19	ug/L			05/17/19 14:50	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/17/19 14:50	1
Methyl acetate	10	U	10	1.7	ug/L			05/17/19 14:50	1
Methyl tert-butyl ether	**0.11**	**J**	1.0	0.070	ug/L			05/17/19 14:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/17/19 14:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/17/19 14:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 14:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 14:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/17/19 14:50	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/17/19 14:50	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/17/19 14:50	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/17/19 14:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 121		05/17/19 14:50	1
4-Bromofluorobenzene (Surr)	79		59 - 120		05/17/19 14:50	1
Toluene-d8 (Surr)	100		70 - 123		05/17/19 14:50	1
Dibromofluoromethane (Surr)	117		75 - 128		05/17/19 14:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: PW-17303-050619-KT-002
Date Collected: 05/06/19 09:50
Date Received: 05/08/19 09:20

Lab Sample ID: 240-112217-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	500	U	500	270	ug/L			05/17/19 15:12	50
Benzene	50	U	50	6.5	ug/L			05/17/19 15:12	50
Bromodichloromethane	50	U	50	8.5	ug/L			05/17/19 15:12	50
Bromoform	50	U	50	38	ug/L			05/17/19 15:12	50
Bromomethane	50	U	50	21	ug/L			05/17/19 15:12	50
2-Butanone (MEK)	500	U	500	58	ug/L			05/17/19 15:12	50
Carbon disulfide	250	U F2	250	14	ug/L			05/17/19 15:12	50
Carbon tetrachloride	50	U F2	50	13	ug/L			05/17/19 15:12	50
Chlorobenzene	50	U	50	7.0	ug/L			05/17/19 15:12	50
Chloroethane	50	U	50	42	ug/L			05/17/19 15:12	50
Chloroform	50	U	50	6.5	ug/L			05/17/19 15:12	50
Chloromethane	50	U	50	10	ug/L			05/17/19 15:12	50
1,1-Dichloroethane	50	U	50	8.5	ug/L			05/17/19 15:12	50
1,2-Dichloroethane	50	U	50	11	ug/L			05/17/19 15:12	50
1,1-Dichloroethene	50	U F2	50	9.5	ug/L			05/17/19 15:12	50
1,2-Dichloropropane	50	U	50	7.5	ug/L			05/17/19 15:12	50
cis-1,3-Dichloropropene	50	U	50	31	ug/L			05/17/19 15:12	50
trans-1,3-Dichloropropene	50	U	50	34	ug/L			05/17/19 15:12	50
Ethylbenzene	50	U	50	5.5	ug/L			05/17/19 15:12	50
2-Hexanone	500	U	500	27	ug/L			05/17/19 15:12	50
Methylene Chloride	250	U	250	130	ug/L			05/17/19 15:12	50
4-Methyl-2-pentanone (MIBK)	500	U	500	21	ug/L			05/17/19 15:12	50
Styrene	50	U	50	5.0	ug/L			05/17/19 15:12	50
1,1,2,2-Tetrachloroethane	50	U	50	6.5	ug/L			05/17/19 15:12	50
Tetrachloroethene	50	U F2	50	7.5	ug/L			05/17/19 15:12	50
Toluene	50	U	50	7.0	ug/L			05/17/19 15:12	50
Trichloroethene	**7.8**	**J**	50	5.0	ug/L			05/17/19 15:12	50
Vinyl chloride	**1800**		50	10	ug/L			05/17/19 15:12	50
Xylenes, Total	100	U	100	7.5	ug/L			05/17/19 15:12	50
1,1,1-Trichloroethane	50	U F2	50	12	ug/L			05/17/19 15:12	50
1,1,2-Trichloroethane	50	U	50	4.5	ug/L			05/17/19 15:12	50
Cyclohexane	50	U F2	50	12	ug/L			05/17/19 15:12	50
1,2-Dibromo-3-Chloropropane	50	U	50	46	ug/L			05/17/19 15:12	50
1,2-Dibromoethane	50	U	50	6.0	ug/L			05/17/19 15:12	50
Dichlorodifluoromethane	50	U	50	18	ug/L			05/17/19 15:12	50
cis-1,2-Dichloroethene	**1400**		50	8.0	ug/L			05/17/19 15:12	50
trans-1,2-Dichloroethene	**81**		50	9.5	ug/L			05/17/19 15:12	50
Isopropylbenzene	50	U	50	4.5	ug/L			05/17/19 15:12	50
Methyl acetate	500	U	500	86	ug/L			05/17/19 15:12	50
Methyl tert-butyl ether	50	U	50	3.5	ug/L			05/17/19 15:12	50
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U F2	50	21	ug/L			05/17/19 15:12	50
1,2,4-Trichlorobenzene	50	U	50	13	ug/L			05/17/19 15:12	50
1,2-Dichlorobenzene	50	U	50	7.5	ug/L			05/17/19 15:12	50
1,3-Dichlorobenzene	50	U	50	7.5	ug/L			05/17/19 15:12	50
1,4-Dichlorobenzene	50	U	50	8.0	ug/L			05/17/19 15:12	50
Trichlorofluoromethane	50	U	50	23	ug/L			05/17/19 15:12	50
Dibromochloromethane	50	U	50	20	ug/L			05/17/19 15:12	50
Methylcyclohexane	50	U F2	50	17	ug/L			05/17/19 15:12	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 121		05/17/19 15:12	50
4-Bromofluorobenzene (Surr)	81		59 - 120		05/17/19 15:12	50
Toluene-d8 (Surr)	102		70 - 123		05/17/19 15:12	50
Dibromofluoromethane (Surr)	119		75 - 128		05/17/19 15:12	50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: PW-17303-050619-KT-003
Date Collected: 05/06/19 10:00
Date Received: 05/08/19 09:20

Lab Sample ID: 240-112217-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1000	U	1000	540	ug/L			05/20/19 21:07	100
Benzene	100	U	100	13	ug/L			05/20/19 21:07	100
Bromodichloromethane	100	U	100	17	ug/L			05/20/19 21:07	100
Bromoform	100	U	100	76	ug/L			05/20/19 21:07	100
Bromomethane	100	U	100	42	ug/L			05/20/19 21:07	100
2-Butanone (MEK)	1000	U	1000	120	ug/L			05/20/19 21:07	100
Carbon disulfide	500	U	500	28	ug/L			05/20/19 21:07	100
Carbon tetrachloride	100	U	100	26	ug/L			05/20/19 21:07	100
Chlorobenzene	100	U	100	14	ug/L			05/20/19 21:07	100
Chloroethane	100	U	100	83	ug/L			05/20/19 21:07	100
Chloroform	100	U	100	13	ug/L			05/20/19 21:07	100
Chloromethane	100	U	100	20	ug/L			05/20/19 21:07	100
1,1-Dichloroethane	100	U	100	17	ug/L			05/20/19 21:07	100
1,2-Dichloroethane	100	U	100	21	ug/L			05/20/19 21:07	100
1,1-Dichloroethene	100	U	100	19	ug/L			05/20/19 21:07	100
1,2-Dichloropropane	100	U	100	15	ug/L			05/20/19 21:07	100
cis-1,3-Dichloropropene	100	U	100	61	ug/L			05/20/19 21:07	100
trans-1,3-Dichloropropene	100	U	100	67	ug/L			05/20/19 21:07	100
Ethylbenzene	100	U	100	11	ug/L			05/20/19 21:07	100
2-Hexanone	1000	U	1000	54	ug/L			05/20/19 21:07	100
Methylene Chloride	500	U	500	260	ug/L			05/20/19 21:07	100
4-Methyl-2-pentanone (MIBK)	1000	U	1000	42	ug/L			05/20/19 21:07	100
Styrene	100	U	100	10	ug/L			05/20/19 21:07	100
1,1,2,2-Tetrachloroethane	100	U	100	13	ug/L			05/20/19 21:07	100
Tetrachloroethene	100	U	100	15	ug/L			05/20/19 21:07	100
Toluene	100	U	100	14	ug/L			05/20/19 21:07	100
Trichloroethene	**36**	**J**	100	10	ug/L			05/20/19 21:07	100
Vinyl chloride	**2100**		100	20	ug/L			05/20/19 21:07	100
Xylenes, Total	200	U	200	15	ug/L			05/20/19 21:07	100
1,1,1-Trichloroethane	100	U	100	24	ug/L			05/20/19 21:07	100
1,1,2-Trichloroethane	100	U	100	9.0	ug/L			05/20/19 21:07	100
Cyclohexane	100	U	100	24	ug/L			05/20/19 21:07	100
1,2-Dibromo-3-Chloropropane	100	U	100	91	ug/L			05/20/19 21:07	100
1,2-Dibromoethane	100	U	100	12	ug/L			05/20/19 21:07	100
Dichlorodifluoromethane	100	U	100	35	ug/L			05/20/19 21:07	100
cis-1,2-Dichloroethene	**1800**		100	16	ug/L			05/20/19 21:07	100
trans-1,2-Dichloroethene	**130**		100	19	ug/L			05/20/19 21:07	100
Isopropylbenzene	100	U	100	9.0	ug/L			05/20/19 21:07	100
Methyl acetate	1000	U	1000	170	ug/L			05/20/19 21:07	100
Methyl tert-butyl ether	100	U	100	7.0	ug/L			05/20/19 21:07	100
1,1,2-Trichloro-1,2,2-trifluoroethane	100	U	100	41	ug/L			05/20/19 21:07	100
1,2,4-Trichlorobenzene	100	U	100	26	ug/L			05/20/19 21:07	100
1,2-Dichlorobenzene	100	U	100	15	ug/L			05/20/19 21:07	100
1,3-Dichlorobenzene	100	U	100	15	ug/L			05/20/19 21:07	100
1,4-Dichlorobenzene	100	U	100	16	ug/L			05/20/19 21:07	100
Trichlorofluoromethane	100	U	100	45	ug/L			05/20/19 21:07	100
Dibromochloromethane	100	U	100	39	ug/L			05/20/19 21:07	100
Methylcyclohexane	100	U	100	33	ug/L			05/20/19 21:07	100

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		70 - 121		05/20/19 21:07	100
4-Bromofluorobenzene (Surr)	86		59 - 120		05/20/19 21:07	100
Toluene-d8 (Surr)	103		70 - 123		05/20/19 21:07	100
Dibromofluoromethane (Surr)	127		75 - 128		05/20/19 21:07	100

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: PW-17303-050619-KT-004
Date Collected: 05/06/19 13:30
Date Received: 05/08/19 09:20

Lab Sample ID: 240-112217-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15**		10	5.4	ug/L			05/17/19 17:31	1
Benzene	1.0	U	1.0	0.13	ug/L			05/17/19 17:31	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/17/19 17:31	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/17/19 17:31	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/17/19 17:31	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/17/19 17:31	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/17/19 17:31	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/17/19 17:31	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/17/19 17:31	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/17/19 17:31	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/17/19 17:31	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/17/19 17:31	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/17/19 17:31	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/17/19 17:31	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/17/19 17:31	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/17/19 17:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/17/19 17:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/17/19 17:31	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/17/19 17:31	1
2-Hexanone	10	U	10	0.54	ug/L			05/17/19 17:31	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/17/19 17:31	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/17/19 17:31	1
Styrene	1.0	U	1.0	0.10	ug/L			05/17/19 17:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/17/19 17:31	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/17/19 17:31	1
Toluene	1.0	U	1.0	0.14	ug/L			05/17/19 17:31	1
Trichloroethene	**0.15**	**J**	1.0	0.10	ug/L			05/17/19 17:31	1
Vinyl chloride	**1.9**		1.0	0.20	ug/L			05/17/19 17:31	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/17/19 17:31	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/17/19 17:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/17/19 17:31	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/17/19 17:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/17/19 17:31	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/17/19 17:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/17/19 17:31	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.16	ug/L			05/17/19 17:31	1
trans-1,2-Dichloroethene	**0.24**	**J**	1.0	0.19	ug/L			05/17/19 17:31	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/17/19 17:31	1
Methyl acetate	10	U	10	1.7	ug/L			05/17/19 17:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/17/19 17:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/17/19 17:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/17/19 17:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 17:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 17:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/17/19 17:31	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/17/19 17:31	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/17/19 17:31	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/17/19 17:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 121		05/17/19 17:31	1
4-Bromofluorobenzene (Surr)	83		59 - 120		05/17/19 17:31	1
Toluene-d8 (Surr)	104		70 - 123		05/17/19 17:31	1
Dibromofluoromethane (Surr)	124		75 - 128		05/17/19 17:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: PW-17303-050619-KT-006
Date Collected: 05/06/19 14:30
Date Received: 05/08/19 09:20

Lab Sample ID: 240-112217-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**32**		10	5.4	ug/L			05/17/19 17:53	1
Benzene	1.0	U	1.0	0.13	ug/L			05/17/19 17:53	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/17/19 17:53	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/17/19 17:53	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/17/19 17:53	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/17/19 17:53	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/17/19 17:53	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/17/19 17:53	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/17/19 17:53	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/17/19 17:53	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/17/19 17:53	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/17/19 17:53	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/17/19 17:53	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/17/19 17:53	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/17/19 17:53	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/17/19 17:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/17/19 17:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/17/19 17:53	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/17/19 17:53	1
2-Hexanone	10	U	10	0.54	ug/L			05/17/19 17:53	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/17/19 17:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/17/19 17:53	1
Styrene	1.0	U	1.0	0.10	ug/L			05/17/19 17:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/17/19 17:53	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/17/19 17:53	1
Toluene	1.0	U	1.0	0.14	ug/L			05/17/19 17:53	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/17/19 17:53	1
Vinyl chloride	**1.6**		1.0	0.20	ug/L			05/17/19 17:53	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/17/19 17:53	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/17/19 17:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/17/19 17:53	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/17/19 17:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/17/19 17:53	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/17/19 17:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/17/19 17:53	1
cis-1,2-Dichloroethene	**0.89**	**J**	1.0	0.16	ug/L			05/17/19 17:53	1
trans-1,2-Dichloroethene	**0.21**	**J**	1.0	0.19	ug/L			05/17/19 17:53	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/17/19 17:53	1
Methyl acetate	10	U	10	1.7	ug/L			05/17/19 17:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/17/19 17:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/17/19 17:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/17/19 17:53	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 17:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 17:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/17/19 17:53	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/17/19 17:53	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/17/19 17:53	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/17/19 17:53	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 121		05/17/19 17:53	1
4-Bromofluorobenzene (Surr)	80		59 - 120		05/17/19 17:53	1
Toluene-d8 (Surr)	100		70 - 123		05/17/19 17:53	1
Dibromofluoromethane (Surr)	117		75 - 128		05/17/19 17:53	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TRIP BLANK-001
Date Collected: 05/06/19 00:00
Date Received: 05/08/19 09:20

Lab Sample ID: 240-112217-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/17/19 18:15	1
Benzene	1.0	U	1.0	0.13	ug/L			05/17/19 18:15	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/17/19 18:15	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/17/19 18:15	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/17/19 18:15	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/17/19 18:15	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/17/19 18:15	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/17/19 18:15	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/17/19 18:15	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/17/19 18:15	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/17/19 18:15	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/17/19 18:15	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/17/19 18:15	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/17/19 18:15	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/17/19 18:15	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/17/19 18:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/17/19 18:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/17/19 18:15	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/17/19 18:15	1
2-Hexanone	10	U	10	0.54	ug/L			05/17/19 18:15	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/17/19 18:15	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/17/19 18:15	1
Styrene	1.0	U	1.0	0.10	ug/L			05/17/19 18:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/17/19 18:15	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/17/19 18:15	1
Toluene	1.0	U	1.0	0.14	ug/L			05/17/19 18:15	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/17/19 18:15	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/17/19 18:15	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/17/19 18:15	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/17/19 18:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/17/19 18:15	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/17/19 18:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/17/19 18:15	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/17/19 18:15	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/17/19 18:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/17/19 18:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/17/19 18:15	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/17/19 18:15	1
Methyl acetate	10	U	10	1.7	ug/L			05/17/19 18:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/17/19 18:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/17/19 18:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/17/19 18:15	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 18:15	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 18:15	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/17/19 18:15	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/17/19 18:15	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/17/19 18:15	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/17/19 18:15	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 121		05/17/19 18:15	1
4-Bromofluorobenzene (Surr)	79		59 - 120		05/17/19 18:15	1
Toluene-d8 (Surr)	100		70 - 123		05/17/19 18:15	1
Dibromofluoromethane (Surr)	120		75 - 128		05/17/19 18:15	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-017303A-050719-DA-001
Date Collected: 05/07/19 10:00
Date Received: 05/08/19 09:20

Lab Sample ID: 240-112217-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U	670	360	ug/L			05/20/19 13:39	66.67
Benzene	67	U	67	8.7	ug/L			05/20/19 13:39	66.67
Bromodichloromethane	67	U	67	11	ug/L			05/20/19 13:39	66.67
Bromoform	67	U	67	51	ug/L			05/20/19 13:39	66.67
Bromomethane	67	U	67	28	ug/L			05/20/19 13:39	66.67
2-Butanone (MEK)	670	U	670	77	ug/L			05/20/19 13:39	66.67
Carbon disulfide	330	U	330	19	ug/L			05/20/19 13:39	66.67
Carbon tetrachloride	67	U	67	17	ug/L			05/20/19 13:39	66.67
Chlorobenzene	67	U	67	9.3	ug/L			05/20/19 13:39	66.67
Chloroethane	67	U	67	55	ug/L			05/20/19 13:39	66.67
Chloroform	67	U	67	8.7	ug/L			05/20/19 13:39	66.67
Chloromethane	67	U	67	13	ug/L			05/20/19 13:39	66.67
1,1-Dichloroethane	67	U	67	11	ug/L			05/20/19 13:39	66.67
1,2-Dichloroethane	67	U	67	14	ug/L			05/20/19 13:39	66.67
1,1-Dichloroethene	67	U	67	13	ug/L			05/20/19 13:39	66.67
1,2-Dichloropropane	67	U	67	10	ug/L			05/20/19 13:39	66.67
cis-1,3-Dichloropropene	67	U	67	41	ug/L			05/20/19 13:39	66.67
trans-1,3-Dichloropropene	67	U	67	45	ug/L			05/20/19 13:39	66.67
Ethylbenzene	67	U	67	7.3	ug/L			05/20/19 13:39	66.67
2-Hexanone	670	U	670	36	ug/L			05/20/19 13:39	66.67
Methylene Chloride	330	U	330	170	ug/L			05/20/19 13:39	66.67
4-Methyl-2-pentanone (MIBK)	670	U	670	28	ug/L			05/20/19 13:39	66.67
Styrene	67	U	67	6.7	ug/L			05/20/19 13:39	66.67
1,1,2,2-Tetrachloroethane	67	U	67	8.7	ug/L			05/20/19 13:39	66.67
Tetrachloroethene	67	U	67	10	ug/L			05/20/19 13:39	66.67
Toluene	67	U	67	9.3	ug/L			05/20/19 13:39	66.67
Trichloroethene	**11**	**J**	67	6.7	ug/L			05/20/19 13:39	66.67
Vinyl chloride	**1700**		67	13	ug/L			05/20/19 13:39	66.67
Xylenes, Total	130	U	130	10	ug/L			05/20/19 13:39	66.67
1,1,1-Trichloroethane	67	U	67	16	ug/L			05/20/19 13:39	66.67
1,1,2-Trichloroethane	67	U	67	6.0	ug/L			05/20/19 13:39	66.67
Cyclohexane	67	U	67	16	ug/L			05/20/19 13:39	66.67
1,2-Dibromo-3-Chloropropane	67	U	67	61	ug/L			05/20/19 13:39	66.67
1,2-Dibromoethane	67	U	67	8.0	ug/L			05/20/19 13:39	66.67
Dichlorodifluoromethane	67	U	67	23	ug/L			05/20/19 13:39	66.67
cis-1,2-Dichloroethene	**1000**		67	11	ug/L			05/20/19 13:39	66.67
trans-1,2-Dichloroethene	**57**	**J**	67	13	ug/L			05/20/19 13:39	66.67
Isopropylbenzene	67	U	67	6.0	ug/L			05/20/19 13:39	66.67
Methyl acetate	670	U	670	110	ug/L			05/20/19 13:39	66.67
Methyl tert-butyl ether	67	U	67	4.7	ug/L			05/20/19 13:39	66.67
1,1,2-Trichloro-1,2,2-trifluoroethane	67	U	67	27	ug/L			05/20/19 13:39	66.67
1,2,4-Trichlorobenzene	67	U	67	17	ug/L			05/20/19 13:39	66.67
1,2-Dichlorobenzene	67	U	67	10	ug/L			05/20/19 13:39	66.67
1,3-Dichlorobenzene	67	U	67	10	ug/L			05/20/19 13:39	66.67
1,4-Dichlorobenzene	67	U	67	11	ug/L			05/20/19 13:39	66.67
Trichlorofluoromethane	67	U	67	30	ug/L			05/20/19 13:39	66.67
Dibromochloromethane	67	U	67	26	ug/L			05/20/19 13:39	66.67
Methylcyclohexane	67	U	67	22	ug/L			05/20/19 13:39	66.67

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 121		05/20/19 13:39	66.67
4-Bromofluorobenzene (Surr)	83		59 - 120		05/20/19 13:39	66.67
Toluene-d8 (Surr)	102		70 - 123		05/20/19 13:39	66.67
Dibromofluoromethane (Surr)	124		75 - 128		05/20/19 13:39	66.67

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-017303A-050719-DA-002
Date Collected: 05/07/19 10:35
Date Received: 05/08/19 09:20

Lab Sample ID: 240-112217-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/17/19 18:59	1
Benzene	1.0	U	1.0	0.13	ug/L			05/17/19 18:59	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/17/19 18:59	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/17/19 18:59	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/17/19 18:59	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/17/19 18:59	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/17/19 18:59	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/17/19 18:59	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/17/19 18:59	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/17/19 18:59	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/17/19 18:59	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/17/19 18:59	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/17/19 18:59	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/17/19 18:59	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/17/19 18:59	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/17/19 18:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/17/19 18:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/17/19 18:59	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/17/19 18:59	1
2-Hexanone	10	U	10	0.54	ug/L			05/17/19 18:59	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/17/19 18:59	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/17/19 18:59	1
Styrene	1.0	U	1.0	0.10	ug/L			05/17/19 18:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/17/19 18:59	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/17/19 18:59	1
Toluene	1.0	U	1.0	0.14	ug/L			05/17/19 18:59	1
Trichloroethene	**0.52**	**J**	1.0	0.10	ug/L			05/17/19 18:59	1
Vinyl chloride	**13**		1.0	0.20	ug/L			05/17/19 18:59	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/17/19 18:59	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/17/19 18:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/17/19 18:59	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/17/19 18:59	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/17/19 18:59	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/17/19 18:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/17/19 18:59	1
cis-1,2-Dichloroethene	**14**		1.0	0.16	ug/L			05/17/19 18:59	1
trans-1,2-Dichloroethene	**1.3**		1.0	0.19	ug/L			05/17/19 18:59	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/17/19 18:59	1
Methyl acetate	10	U	10	1.7	ug/L			05/17/19 18:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/17/19 18:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/17/19 18:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/17/19 18:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 18:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 18:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/17/19 18:59	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/17/19 18:59	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/17/19 18:59	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/17/19 18:59	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 121		05/17/19 18:59	1
4-Bromofluorobenzene (Surr)	82		59 - 120		05/17/19 18:59	1
Toluene-d8 (Surr)	102		70 - 123		05/17/19 18:59	1
Dibromofluoromethane (Surr)	121		75 - 128		05/17/19 18:59	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

GC/MS VOA

Analysis Batch: 381844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-112217-1	PW-17303-050619-KT-001	Total/NA	Water	8260B	
240-112217-2	PW-17303-050619-KT-002	Total/NA	Water	8260B	
240-112217-4	PW-17303-050619-KT-004	Total/NA	Water	8260B	
240-112217-5	PW-17303-050619-KT-006	Total/NA	Water	8260B	
240-112217-6	TRIP BLANK-001	Total/NA	Water	8260B	
240-112217-8	GW-017303A-050719-DA-002	Total/NA	Water	8260B	
MB 240-381844/6	Method Blank	Total/NA	Water	8260B	
LCS 240-381844/4	Lab Control Sample	Total/NA	Water	8260B	
240-112217-2 MS	PW-17303-050619-KT-002	Total/NA	Water	8260B	
240-112217-2 MSD	PW-17303-050619-KT-002	Total/NA	Water	8260B	

Analysis Batch: 382079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-112217-3	PW-17303-050619-KT-003	Total/NA	Water	8260B	
240-112217-7	GW-017303A-050719-DA-001	Total/NA	Water	8260B	
MB 240-382079/6	Method Blank	Total/NA	Water	8260B	
LCS 240-382079/4	Lab Control Sample	Total/NA	Water	8260B	

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-381844/6
Matrix: Water
Analysis Batch: 381844

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/17/19 12:39	1
Benzene	1.0	U	1.0	0.13	ug/L			05/17/19 12:39	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/17/19 12:39	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/17/19 12:39	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/17/19 12:39	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/17/19 12:39	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/17/19 12:39	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/17/19 12:39	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/17/19 12:39	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/17/19 12:39	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/17/19 12:39	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/17/19 12:39	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/17/19 12:39	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/17/19 12:39	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/17/19 12:39	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/17/19 12:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/17/19 12:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/17/19 12:39	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/17/19 12:39	1
2-Hexanone	10	U	10	0.54	ug/L			05/17/19 12:39	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/17/19 12:39	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/17/19 12:39	1
Styrene	1.0	U	1.0	0.10	ug/L			05/17/19 12:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/17/19 12:39	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/17/19 12:39	1
Toluene	1.0	U	1.0	0.14	ug/L			05/17/19 12:39	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/17/19 12:39	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/17/19 12:39	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/17/19 12:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/17/19 12:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/17/19 12:39	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/17/19 12:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/17/19 12:39	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/17/19 12:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/17/19 12:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/17/19 12:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/17/19 12:39	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/17/19 12:39	1
Methyl acetate	10	U	10	1.7	ug/L			05/17/19 12:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/17/19 12:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/17/19 12:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/17/19 12:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 12:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/17/19 12:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/17/19 12:39	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/17/19 12:39	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/17/19 12:39	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/17/19 12:39	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-381844/6
Matrix: Water
Analysis Batch: 381844

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 121		05/17/19 12:39	1
4-Bromofluorobenzene (Surr)	85		59 - 120		05/17/19 12:39	1
Toluene-d8 (Surr)	105		70 - 123		05/17/19 12:39	1
Dibromofluoromethane (Surr)	113		75 - 128		05/17/19 12:39	1

Lab Sample ID: LCS 240-381844/4
Matrix: Water
Analysis Batch: 381844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.7		ug/L		84	21 - 162
Benzene	10.0	10.6		ug/L		106	80 - 123
Bromodichloromethane	10.0	8.67		ug/L		87	77 - 125
Bromoform	10.0	5.88		ug/L		59	49 - 141
Bromomethane	10.0	7.98		ug/L		80	41 - 175
2-Butanone (MEK)	20.0	14.4		ug/L		72	39 - 163
Carbon disulfide	10.0	7.76		ug/L		78	60 - 138
Carbon tetrachloride	10.0	10.2		ug/L		102	63 - 140
Chlorobenzene	10.0	10.7		ug/L		107	80 - 121
Chloroethane	10.0	7.99		ug/L		80	33 - 173
Chloroform	10.0	11.1		ug/L		111	79 - 127
Chloromethane	10.0	8.28		ug/L		83	54 - 143
1,1-Dichloroethane	10.0	10.7		ug/L		107	75 - 133
1,2-Dichloroethane	10.0	9.73		ug/L		97	71 - 135
1,1-Dichloroethene	10.0	8.92		ug/L		89	65 - 139
1,2-Dichloropropane	10.0	9.91		ug/L		99	78 - 133
cis-1,3-Dichloropropene	10.0	7.94		ug/L		79	64 - 132
trans-1,3-Dichloropropene	10.0	7.08		ug/L		71	55 - 128
Ethylbenzene	10.0	10.4		ug/L		104	80 - 120
2-Hexanone	20.0	12.9		ug/L		64	43 - 148
Methylene Chloride	10.0	10.2		ug/L		102	70 - 134
4-Methyl-2-pentanone (MIBK)	20.0	11.9		ug/L		59	49 - 143
Styrene	10.0	9.64		ug/L		96	79 - 120
1,1,2,2-Tetrachloroethane	10.0	8.21		ug/L		82	65 - 139
Tetrachloroethene	10.0	10.1		ug/L		101	74 - 130
Toluene	10.0	10.5		ug/L		105	78 - 129
Trichloroethene	10.0	9.57		ug/L		96	76 - 125
Vinyl chloride	10.0	8.83		ug/L		88	58 - 143
Xylenes, Total	20.0	20.4		ug/L		102	80 - 120
1,1,1-Trichloroethane	10.0	11.3		ug/L		113	69 - 134
1,1,2-Trichloroethane	10.0	9.77		ug/L		98	78 - 133
Cyclohexane	10.0	9.81		ug/L		98	58 - 145
1,2-Dibromo-3-Chloropropane	10.0	4.70		ug/L		47	46 - 132
1,2-Dibromoethane	10.0	8.50		ug/L		85	77 - 123
Dichlorodifluoromethane	10.0	9.53		ug/L		95	29 - 148
cis-1,2-Dichloroethene	10.0	11.0		ug/L		110	76 - 128
trans-1,2-Dichloroethene	10.0	11.3		ug/L		113	78 - 133
Isopropylbenzene	10.0	10.1		ug/L		101	74 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-381844/4
Matrix: Water
Analysis Batch: 381844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	20.0	14.4		ug/L		72	52 - 145
Methyl tert-butyl ether	10.0	7.77		ug/L		78	51 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.19		ug/L		92	50 - 156
1,2,4-Trichlorobenzene	10.0	7.58		ug/L		76	42 - 133
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	78 - 120
1,3-Dichlorobenzene	10.0	9.56		ug/L		96	78 - 120
1,4-Dichlorobenzene	10.0	9.63		ug/L		96	78 - 120
Trichlorofluoromethane	10.0	9.15		ug/L		91	51 - 164
Dibromochloromethane	10.0	8.31		ug/L		83	70 - 132
Methylcyclohexane	10.0	9.61		ug/L		96	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 121*
4-Bromofluorobenzene (Surr)	*102*		*59 - 120*
Toluene-d8 (Surr)	*109*		*70 - 123*
Dibromofluoromethane (Surr)	*109*		*75 - 128*

Lab Sample ID: 240-112217-2 MS
Matrix: Water
Analysis Batch: 381844

Client Sample ID: PW-17303-050619-KT-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	500	U	1000	829		ug/L		83	10 - 168
Benzene	50	U	500	468		ug/L		94	71 - 122
Bromodichloromethane	50	U	500	385		ug/L		77	64 - 125
Bromoform	50	U	500	238		ug/L		48	44 - 129
Bromomethane	50	U	500	401		ug/L		80	19 - 187
2-Butanone (MEK)	500	U	1000	765		ug/L		77	37 - 156
Carbon disulfide	250	U F2	500	263		ug/L		53	43 - 144
Carbon tetrachloride	50	U F2	500	328		ug/L		66	41 - 143
Chlorobenzene	50	U	500	487		ug/L		97	70 - 123
Chloroethane	50	U	500	370		ug/L		74	11 - 189
Chloroform	50	U	500	518		ug/L		104	68 - 130
Chloromethane	50	U	500	448		ug/L		90	31 - 154
1,1-Dichloroethane	50	U	500	478		ug/L		96	63 - 136
1,2-Dichloroethane	50	U	500	462		ug/L		92	65 - 135
1,1-Dichloroethene	50	U F2	500	303		ug/L		61	53 - 140
1,2-Dichloropropane	50	U	500	444		ug/L		89	70 - 132
cis-1,3-Dichloropropene	50	U	500	333		ug/L		67	48 - 127
trans-1,3-Dichloropropene	50	U	500	294		ug/L		59	40 - 125
Ethylbenzene	50	U	500	430		ug/L		86	66 - 120
2-Hexanone	500	U	1000	586		ug/L		59	42 - 150
Methylene Chloride	250	U	500	478		ug/L		96	61 - 130
4-Methyl-2-pentanone (MIBK)	500	U	1000	552		ug/L		55	44 - 143
Styrene	50	U	500	443		ug/L		89	68 - 120
1,1,2,2-Tetrachloroethane	50	U	500	377		ug/L		75	60 - 137
Tetrachloroethene	50	U F2	500	382		ug/L		76	51 - 136
Toluene	50	U	500	470		ug/L		94	62 - 132

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-112217-2 MS
Matrix: Water
Analysis Batch: 381844

Client Sample ID: PW-17303-050619-KT-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	7.8	J	500	392		ug/L		77	55 - 131
Vinyl chloride	1800		500	2080	E	ug/L		55	43 - 154
Xylenes, Total	100	U	1000	890		ug/L		89	67 - 120
1,1,1-Trichloroethane	50	U F2	500	417		ug/L		83	51 - 138
1,1,2-Trichloroethane	50	U	500	465		ug/L		93	76 - 132
Cyclohexane	50	U F2	500	264		ug/L		53	42 - 135
1,2-Dibromo-3-Chloropropane	50	U	500	194		ug/L		39	38 - 124
1,2-Dibromoethane	50	U	500	388		ug/L		78	71 - 123
Dichlorodifluoromethane	50	U	500	466		ug/L		93	28 - 136
cis-1,2-Dichloroethene	1400		500	1800		ug/L		84	64 - 130
trans-1,2-Dichloroethene	81		500	560		ug/L		96	68 - 133
Isopropylbenzene	50	U	500	400		ug/L		80	59 - 120
Methyl acetate	500	U	1000	672		ug/L		67	41 - 142
Methyl tert-butyl ether	50	U	500	347		ug/L		69	41 - 136
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U F2	500	259		ug/L		52	31 - 156
1,2,4-Trichlorobenzene	50	U	500	315		ug/L		63	30 - 126
1,2-Dichlorobenzene	50	U	500	457		ug/L		91	64 - 120
1,3-Dichlorobenzene	50	U	500	435		ug/L		87	62 - 120
1,4-Dichlorobenzene	50	U	500	442		ug/L		88	63 - 120
Trichlorofluoromethane	50	U	500	436		ug/L		87	37 - 174
Dibromochloromethane	50	U	500	365		ug/L		73	60 - 129
Methylcyclohexane	50	U F2	500	266		ug/L		53	37 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 121*
4-Bromofluorobenzene (Surr)	*104*		*59 - 120*
Toluene-d8 (Surr)	*111*		*70 - 123*
Dibromofluoromethane (Surr)	*113*		*75 - 128*

Lab Sample ID: 240-112217-2 MSD
Matrix: Water
Analysis Batch: 381844

Client Sample ID: PW-17303-050619-KT-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	500	U	1000	912		ug/L		91	10 - 168	10	35
Benzene	50	U	500	526		ug/L		105	71 - 122	12	22
Bromodichloromethane	50	U	500	425		ug/L		85	64 - 125	10	27
Bromoform	50	U	500	269		ug/L		54	44 - 129	12	28
Bromomethane	50	U	500	411		ug/L		82	19 - 187	2	35
2-Butanone (MEK)	500	U	1000	768		ug/L		77	37 - 156	0	35
Carbon disulfide	250	U F2	500	378	F2	ug/L		76	43 - 144	36	33
Carbon tetrachloride	50	U F2	500	499	F2	ug/L		100	41 - 143	41	30
Chlorobenzene	50	U	500	527		ug/L		105	70 - 123	8	23
Chloroethane	50	U	500	410		ug/L		82	11 - 189	10	35
Chloroform	50	U	500	559		ug/L		112	68 - 130	8	23
Chloromethane	50	U	500	469		ug/L		94	31 - 154	5	35
1,1-Dichloroethane	50	U	500	542		ug/L		108	63 - 136	13	23
1,2-Dichloroethane	50	U	500	495		ug/L		99	65 - 135	7	24

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-112217-2 MSD
Matrix: Water
Analysis Batch: 381844

Client Sample ID: PW-17303-050619-KT-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50	U F2	500	439	F2	ug/L		88	53 - 140	37	35
1,2-Dichloropropane	50	U	500	487		ug/L		97	70 - 132	9	26
cis-1,3-Dichloropropene	50	U	500	380		ug/L		76	48 - 127	13	30
trans-1,3-Dichloropropene	50	U	500	338		ug/L		68	40 - 125	14	27
Ethylbenzene	50	U	500	513		ug/L		103	66 - 120	18	24
2-Hexanone	500	U	1000	594		ug/L		59	42 - 150	1	35
Methylene Chloride	250	U	500	512		ug/L		102	61 - 130	7	29
4-Methyl-2-pentanone (MIBK)	500	U	1000	573		ug/L		57	44 - 143	4	35
Styrene	50	U	500	480		ug/L		96	68 - 120	8	26
1,1,2,2-Tetrachloroethane	50	U	500	407		ug/L		81	60 - 137	8	31
Tetrachloroethene	50	U F2	500	501	F2	ug/L		100	51 - 136	27	23
Toluene	50	U	500	540		ug/L		108	62 - 132	14	23
Trichloroethene	7.8	J	500	479		ug/L		94	55 - 131	20	23
Vinyl chloride	1800		500	2180	E	ug/L		76	43 - 154	5	29
Xylenes, Total	100	U	1000	1020		ug/L		102	67 - 120	14	25
1,1,1-Trichloroethane	50	U F2	500	558	F2	ug/L		112	51 - 138	29	27
1,1,2-Trichloroethane	50	U	500	495		ug/L		99	76 - 132	6	25
Cyclohexane	50	U F2	500	477	F2	ug/L		95	42 - 135	58	35
1,2-Dibromo-3-Chloropropane	50	U	500	220		ug/L		44	38 - 124	13	35
1,2-Dibromoethane	50	U	500	417		ug/L		83	71 - 123	7	27
Dichlorodifluoromethane	50	U	500	511		ug/L		102	28 - 136	9	35
cis-1,2-Dichloroethene	1400		500	1920		ug/L		107	64 - 130	6	21
trans-1,2-Dichloroethene	81		500	658		ug/L		115	68 - 133	16	24
Isopropylbenzene	50	U	500	501		ug/L		100	59 - 120	22	31
Methyl acetate	500	U	1000	704		ug/L		70	41 - 142	5	35
Methyl tert-butyl ether	50	U	500	382		ug/L		76	41 - 136	10	29
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U F2	500	447	F2	ug/L		89	31 - 156	53	35
1,2,4-Trichlorobenzene	50	U	500	354		ug/L		71	30 - 126	12	35
1,2-Dichlorobenzene	50	U	500	492		ug/L		98	64 - 120	7	30
1,3-Dichlorobenzene	50	U	500	479		ug/L		96	62 - 120	9	31
1,4-Dichlorobenzene	50	U	500	478		ug/L		96	63 - 120	8	28
Trichlorofluoromethane	50	U	500	485		ug/L		97	37 - 174	11	35
Dibromochloromethane	50	U	500	409		ug/L		82	60 - 129	12	26
Methylcyclohexane	50	U F2	500	470	F2	ug/L		94	37 - 123	55	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 121*
4-Bromofluorobenzene (Surr)	*104*		*59 - 120*
Toluene-d8 (Surr)	*116*		*70 - 123*
Dibromofluoromethane (Surr)	*115*		*75 - 128*

Lab Sample ID: MB 240-382079/6
Matrix: Water
Analysis Batch: 382079

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/20/19 11:50	1
Benzene	1.0	U	1.0	0.13	ug/L			05/20/19 11:50	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-382079/6
Matrix: Water
Analysis Batch: 382079

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/20/19 11:50	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/20/19 11:50	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/20/19 11:50	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/20/19 11:50	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/20/19 11:50	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/20/19 11:50	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/20/19 11:50	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/20/19 11:50	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/20/19 11:50	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/20/19 11:50	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/20/19 11:50	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/20/19 11:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/20/19 11:50	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/20/19 11:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/20/19 11:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/20/19 11:50	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/20/19 11:50	1
2-Hexanone	10	U	10	0.54	ug/L			05/20/19 11:50	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/20/19 11:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/20/19 11:50	1
Styrene	1.0	U	1.0	0.10	ug/L			05/20/19 11:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/20/19 11:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/20/19 11:50	1
Toluene	1.0	U	1.0	0.14	ug/L			05/20/19 11:50	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/20/19 11:50	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/20/19 11:50	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/20/19 11:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/20/19 11:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/20/19 11:50	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/20/19 11:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/20/19 11:50	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/20/19 11:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/20/19 11:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/20/19 11:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/20/19 11:50	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/20/19 11:50	1
Methyl acetate	10	U	10	1.7	ug/L			05/20/19 11:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/20/19 11:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/20/19 11:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/20/19 11:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/20/19 11:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/20/19 11:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/20/19 11:50	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/20/19 11:50	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/20/19 11:50	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/20/19 11:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-382079/6
Matrix: Water
Analysis Batch: 382079

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		70 - 121		05/20/19 11:50	1
4-Bromofluorobenzene (Surr)	87		59 - 120		05/20/19 11:50	1
Toluene-d8 (Surr)	106		70 - 123		05/20/19 11:50	1
Dibromofluoromethane (Surr)	126		75 - 128		05/20/19 11:50	1

Lab Sample ID: LCS 240-382079/4
Matrix: Water
Analysis Batch: 382079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.6		ug/L		83	21 - 162
Benzene	10.0	11.1		ug/L		111	80 - 123
Bromodichloromethane	10.0	9.29		ug/L		93	77 - 125
Bromoform	10.0	6.07		ug/L		61	49 - 141
Bromomethane	10.0	8.22		ug/L		82	41 - 175
2-Butanone (MEK)	20.0	14.2		ug/L		71	39 - 163
Carbon disulfide	10.0	9.14		ug/L		91	60 - 138
Carbon tetrachloride	10.0	11.2		ug/L		112	63 - 140
Chlorobenzene	10.0	11.0		ug/L		110	80 - 121
Chloroethane	10.0	7.86		ug/L		79	33 - 173
Chloroform	10.0	12.0		ug/L		120	79 - 127
Chloromethane	10.0	8.67		ug/L		87	54 - 143
1,1-Dichloroethane	10.0	11.7		ug/L		117	75 - 133
1,2-Dichloroethane	10.0	10.5		ug/L		105	71 - 135
1,1-Dichloroethene	10.0	9.64		ug/L		96	65 - 139
1,2-Dichloropropane	10.0	10.3		ug/L		103	78 - 133
cis-1,3-Dichloropropene	10.0	8.28		ug/L		83	64 - 132
trans-1,3-Dichloropropene	10.0	7.45		ug/L		75	55 - 128
Ethylbenzene	10.0	10.7		ug/L		107	80 - 120
2-Hexanone	20.0	12.9		ug/L		65	43 - 148
Methylene Chloride	10.0	11.1		ug/L		111	70 - 134
4-Methyl-2-pentanone (MIBK)	20.0	12.5		ug/L		63	49 - 143
Styrene	10.0	10.2		ug/L		102	79 - 120
1,1,2,2-Tetrachloroethane	10.0	8.49		ug/L		85	65 - 139
Tetrachloroethene	10.0	10.6		ug/L		106	74 - 130
Toluene	10.0	11.1		ug/L		111	78 - 129
Trichloroethene	10.0	9.93		ug/L		99	76 - 125
Vinyl chloride	10.0	9.22		ug/L		92	58 - 143
Xylenes, Total	20.0	21.2		ug/L		106	80 - 120
1,1,1-Trichloroethane	10.0	12.2		ug/L		122	69 - 134
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	78 - 133
Cyclohexane	10.0	10.6		ug/L		106	58 - 145
1,2-Dibromo-3-Chloropropane	10.0	4.90		ug/L		49	46 - 132
1,2-Dibromoethane	10.0	8.88		ug/L		89	77 - 123
Dichlorodifluoromethane	10.0	9.68		ug/L		97	29 - 148
cis-1,2-Dichloroethene	10.0	11.6		ug/L		116	76 - 128
trans-1,2-Dichloroethene	10.0	12.4		ug/L		124	78 - 133
Isopropylbenzene	10.0	10.3		ug/L		103	74 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-382079/4
Matrix: Water
Analysis Batch: 382079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	20.0	15.3		ug/L		76	52 - 145
Methyl tert-butyl ether	10.0	8.35		ug/L		84	51 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.2		ug/L		102	50 - 156
1,2,4-Trichlorobenzene	10.0	7.43		ug/L		74	42 - 133
1,2-Dichlorobenzene	10.0	9.92		ug/L		99	78 - 120
1,3-Dichlorobenzene	10.0	9.66		ug/L		97	78 - 120
1,4-Dichlorobenzene	10.0	9.81		ug/L		98	78 - 120
Trichlorofluoromethane	10.0	9.26		ug/L		93	51 - 164
Dibromochloromethane	10.0	8.93		ug/L		89	70 - 132
Methylcyclohexane	10.0	10.1		ug/L		101	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 121*
4-Bromofluorobenzene (Surr)	*106*		*59 - 120*
Toluene-d8 (Surr)	*108*		*70 - 123*
Dibromofluoromethane (Surr)	*112*		*75 - 128*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-112217-1	PW-17303-050619-KT-001	110	79	100	117
240-112217-2	PW-17303-050619-KT-002	110	81	102	119
240-112217-2 MS	PW-17303-050619-KT-002	100	104	111	113
240-112217-2 MSD	PW-17303-050619-KT-002	103	104	116	115
240-112217-3	PW-17303-050619-KT-003	120	86	103	127
240-112217-4	PW-17303-050619-KT-004	114	83	104	124
240-112217-5	PW-17303-050619-KT-006	110	80	100	117
240-112217-6	TRIP BLANK-001	112	79	100	120
240-112217-7	GW-017303A-050719-DA-001	119	83	102	124
240-112217-8	GW-017303A-050719-DA-002	114	82	102	121
LCS 240-381844/4	Lab Control Sample	97	102	109	109
LCS 240-382079/4	Lab Control Sample	99	106	108	112
MB 240-381844/6	Method Blank	107	85	105	113
MB 240-382079/6	Method Blank	120	87	106	126

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Client Sample ID: PW-17303-050619-KT-001
Lab Sample ID: 240-112217-1
Date Collected: 05/06/19 09:45
Matrix: Water
Date Received: 05/08/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	381844	05/17/19 14:50	LEE	TAL CAN

Client Sample ID: PW-17303-050619-KT-002
Lab Sample ID: 240-112217-2
Date Collected: 05/06/19 09:50
Matrix: Water
Date Received: 05/08/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	381844	05/17/19 15:12	LEE	TAL CAN

Client Sample ID: PW-17303-050619-KT-003
Lab Sample ID: 240-112217-3
Date Collected: 05/06/19 10:00
Matrix: Water
Date Received: 05/08/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	382079	05/20/19 21:07	LEE	TAL CAN

Client Sample ID: PW-17303-050619-KT-004
Lab Sample ID: 240-112217-4
Date Collected: 05/06/19 13:30
Matrix: Water
Date Received: 05/08/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	381844	05/17/19 17:31	LEE	TAL CAN

Client Sample ID: PW-17303-050619-KT-006
Lab Sample ID: 240-112217-5
Date Collected: 05/06/19 14:30
Matrix: Water
Date Received: 05/08/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	381844	05/17/19 17:53	LEE	TAL CAN

Client Sample ID: TRIP BLANK-001
Lab Sample ID: 240-112217-6
Date Collected: 05/06/19 00:00
Matrix: Water
Date Received: 05/08/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	381844	05/17/19 18:15	LEE	TAL CAN

Client Sample ID: GW-017303A-050719-DA-001
Lab Sample ID: 240-112217-7
Date Collected: 05/07/19 10:00
Matrix: Water
Date Received: 05/08/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		66.67	382079	05/20/19 13:39	LEE	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-112217-1

Client Sample ID: GW-017303A-050719-DA-002

Lab Sample ID: 240-112217-8

Date Collected: 05/07/19 10:35

Matrix: Water

Date Received: 05/08/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	381844	05/17/19 18:59	LEE	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 240-112217-1
Project/Site: 17303, RACER CVO

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19 *
Illinois	NELAP	5	200004	07-31-19 *
Kansas	NELAP	7	E-10336	04-30-20
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19 *
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19 *
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Canton
4101 Shuffel Street, N. N.

North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

3.6/3.4

Chain of Custody Record

160638

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: 201

Client Contact	Project Manager: K. Trestrail	Site Contact: J. Abston	Date: 5/7/19	COC No: 017303A-2019A-T02.04
Company Name: GHD Services, Inc.	Tel/Fax: 248.915.8801	Lab Contact: D. Heckler	Carrier: FedEx	1 of 1 COCs
Address: 26850 Haggerty Rd.	Analysis Turnaround Time			Sampler: D. ANTULIS
City/State/Zip: Farmington Hills, MI	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 248.893.2400	TAT if different from Below _____			Walk-in Client:
Fax: 248.893.2450	☒ 2 weeks			Lab Sampling:
Project Name: RACER - CVO	☐ 1 week			
Site: Ypsilanti, MI	☐ 2 days			Job / SDG No.:
PO# 017303A-2019A-T02.04	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs - 8260	Sample Specific Notes:
PW-17303-050619-KT-001	5-6-19	0945	G	PW	3	N	N	X	PW-01 (0.5)
PW-17303-050619-KT-002	↓	0950	↓	↓	3	N	N	X	PW-01 (1.5)
PW-17303-050619-KT-003		1000			3	N	N	X	PW-01 (2.5)
PW-17303-050619-KT-004		1330			3	N	N	X	PW-02 (0.5)
PW-17303-050619-KT-006	↓	1430	↓	↓	3	N	N	X	PW-03 (0.5)
TRIP BLANK-001					1	N	N	X	Trip
GW-017303A-050719-DA-001	5/7/19		G	GW	3	N	N	X	
↓ ↓ ↓ ↓ -002	↓		↓	↓	3	N	N	X	

240-112217 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	GHD	5/7/19 1200	[signature]	TAL	5/8/19 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

5/21/2019

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 112217**
Canton Facility

Client GHD Site Name

Cooler Received on 5/8/15 Opened on 5/8/15

Cooler unpacked by:

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # 1A Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam (Plastic Bag) None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 3.6 °C Corrected Cooler Temp. 3.4 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC984738**
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. (Yes) No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 902601 (Yes) No
16. Was a LL Hg or Me Hg trip blank present? ____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: RC

Received 1x40mL HCL VOA, Labeled PW-17303-050619-KT-005 not on chain, will log at end.

18. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) -005 were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

VOA Sample Preservation - Date/Time VOAs Frozen: ____

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-111738-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: James Abston

Denise D Heckler

Authorized for release by:
5/10/2019 8:14:22 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 240-111738-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-111738-1

Comments
No additional comments.

Receipt
The samples were received on 4/30/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA
Method(s) 8260B: There was an MS/MSD analyzed in batch 240-380208 but could not be reported because the associated sample needed reanalyzed in a different batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-111738-1	017303A-042919-DA-001	Solid	04/29/19 10:30	04/30/19 10:00
240-111738-2	017303A-042919-DA-002	Solid	04/29/19 10:45	04/30/19 10:00
240-111738-3	017303A-042919-DA-003	Solid	04/29/19 11:15	04/30/19 10:00
240-111738-4	017303A-042919-DA-004	Solid	04/29/19 11:30	04/30/19 10:00
240-111738-5	017303A-042919-DA-005	Solid	04/29/19 13:20	04/30/19 10:00
240-111738-6	017303A-042919-DA-006	Solid	04/29/19 13:30	04/30/19 10:00
240-111738-7	017303A-042919-DA-007	Solid	04/29/19 13:45	04/30/19 10:00
240-111738-8	017303A-042919-DA-008	Solid	04/29/19 14:30	04/30/19 10:00
240-111738-9	017303A-042919-DA-009	Solid	04/29/19 14:15	04/30/19 10:00
240-111738-10	017303A-042919-DA-010	Solid	04/29/19 15:45	04/30/19 10:00
240-111738-11	017303A-042919-DA-011	Solid	04/29/19 16:00	04/30/19 10:00
240-111738-12	017303A-042919-DA-012	Solid	04/29/19 16:15	04/30/19 10:00
240-111738-13	017303A-042919-DA-013	Solid	04/29/19 16:30	04/30/19 10:00
240-111738-14	TB-017303A-042919	Water	04/29/19 00:00	04/30/19 10:00

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Client Sample ID: 017303A-042919-DA-001 — Lab Sample ID: 240-111738-1

No Detections.

Client Sample ID: 017303A-042919-DA-002 — Lab Sample ID: 240-111738-2

No Detections.

Client Sample ID: 017303A-042919-DA-003 — Lab Sample ID: 240-111738-3

No Detections.

Client Sample ID: 017303A-042919-DA-004 — Lab Sample ID: 240-111738-4

No Detections.

Client Sample ID: 017303A-042919-DA-005 — Lab Sample ID: 240-111738-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	600	J	1300	380	ug/Kg	4	☼	8260B MI	Total/NA
cis-1,2-Dichloroethene	13000		270	61	ug/Kg	4	☼	8260B MI	Total/NA
Ethylbenzene	120	J	270	81	ug/Kg	4	☼	8260B MI	Total/NA
trans-1,2-Dichloroethene	620		270	67	ug/Kg	4	☼	8260B MI	Total/NA
Trichloroethene	6100		270	74	ug/Kg	4	☼	8260B MI	Total/NA
Vinyl chloride	380		220	81	ug/Kg	4	☼	8260B MI	Total/NA
Xylenes, Total	590	J	810	180	ug/Kg	4	☼	8260B MI	Total/NA

Client Sample ID: 017303A-042919-DA-006 — Lab Sample ID: 240-111738-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	980		64	14	ug/Kg	1	☼	8260B MI	Total/NA
trans-1,2-Dichloroethene	16	J	64	16	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	49	J	64	18	ug/Kg	1	☼	8260B MI	Total/NA
Vinyl chloride	230		51	19	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: 017303A-042919-DA-007 — Lab Sample ID: 240-111738-7

No Detections.

Client Sample ID: 017303A-042919-DA-008 — Lab Sample ID: 240-111738-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	61		57	13	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	33	J	57	16	ug/Kg	1	☼	8260B MI	Total/NA
Methylcyclohexane	180	J	1400	89	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: 017303A-042919-DA-009 — Lab Sample ID: 240-111738-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	47	J	54	12	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	17	J	54	15	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: 017303A-042919-DA-010 — Lab Sample ID: 240-111738-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	770		53	12	ug/Kg	1	☼	8260B MI	Total/NA
trans-1,2-Dichloroethene	120		53	13	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	530		53	15	ug/Kg	1	☼	8260B MI	Total/NA
Vinyl chloride	41	J	42	16	ug/Kg	1	☼	8260B MI	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Client Sample ID: 017303A-042919-DA-011 — Lab Sample ID: 240-111738-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	120	J	1300	85	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: 017303A-042919-DA-012 — Lab Sample ID: 240-111738-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	140	J	1300	85	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: 017303A-042919-DA-013 — Lab Sample ID: 240-111738-13

No Detections.

Client Sample ID: TB-017303A-042919 — Lab Sample ID: 240-111738-14

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B MI	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
5035	Closed System Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-001
Date Collected: 04/29/19 10:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-1
Matrix: Solid
Percent Solids: 79.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	60	U	60	22	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,1,2,2-Tetrachloroethane	60	U	60	18	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	300	U	300	89	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,1,2-Trichloroethane	60	U	60	18	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,1-Dichloroethane	60	U	60	12	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,1-Dichloroethene	60	U	60	24	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,2,4-Trichlorobenzene	300	U	300	83	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,2-Dibromo-3-Chloropropane	300	U	300	120	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,2-Dichlorobenzene	120	U	120	37	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,2-Dichloroethane	60	U	60	22	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,2-Dichloropropane	60	U	60	16	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,3-Dichlorobenzene	120	U	120	34	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,4-Dichlorobenzene	120	U	120	27	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
2-Hexanone	3000	U	3000	500	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Acetone	890	U	890	340	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Benzene	60	U	60	13	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Bromoform	120	U	120	46	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Bromomethane	370	U	370	300	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Carbon disulfide	300	U	300	160	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Carbon tetrachloride	60	U	60	24	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Chlorobenzene	60	U	60	13	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Chloroethane	300	U	300	240	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Chloroform	60	U	60	16	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Chloromethane	300	U	300	120	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
cis-1,2-Dichloroethene	60	U	60	13	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
cis-1,3-Dichloropropene	60	U	60	31	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Cyclohexane	1400	U	1400	270	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Bromodichloromethane	120	U	120	28	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Dichlorodifluoromethane	120	U	120	54	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Ethylbenzene	60	U	60	18	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
1,2-Dibromoethane	300	U	300	57	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Isopropylbenzene	300	U	300	54	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Methyl acetate	1400	U	1400	1200	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
2-Butanone (MEK)	890	U	890	210	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
4-Methyl-2-pentanone (MIBK)	3000	U	3000	510	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Methyl tert-butyl ether	300	U	300	74	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Methylene Chloride	740	U	740	260	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Styrene	60	U	60	21	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Tetrachloroethene	60	U	60	27	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Toluene	120	U	120	36	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
trans-1,2-Dichloroethene	60	U	60	15	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
trans-1,3-Dichloropropene	60	U	60	33	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Trichloroethene	60	U	60	16	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Trichlorofluoromethane	120	U	120	60	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Vinyl chloride	48	U	48	18	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Xylenes, Total	180	U	180	40	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Methylcyclohexane	1400	U	1400	92	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1
Dibromochloromethane	60	U	60	54	ug/Kg	☼	05/01/19 13:51	05/02/19 16:17	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		53 - 155	05/01/19 13:51	05/02/19 16:17	1
4-Bromofluorobenzene (Surr)	86		48 - 151	05/01/19 13:51	05/02/19 16:17	1
Toluene-d8 (Surr)	92		49 - 147	05/01/19 13:51	05/02/19 16:17	1
Dibromofluoromethane (Surr)	78		49 - 138	05/01/19 13:51	05/02/19 16:17	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-002
Date Collected: 04/29/19 10:45
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-2
Matrix: Solid
Percent Solids: 77.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	65	U	65	24	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,1,2,2-Tetrachloroethane	65	U	65	19	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	320	U	320	97	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,1,2-Trichloroethane	65	U	65	19	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,1-Dichloroethane	65	U	65	13	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,1-Dichloroethene	65	U	65	26	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,2,4-Trichlorobenzene	320	U	320	91	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,2-Dibromo-3-Chloropropane	320	U	320	130	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,2-Dichlorobenzene	130	U	130	40	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,2-Dichloroethane	65	U	65	24	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,2-Dichloropropane	65	U	65	18	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,3-Dichlorobenzene	130	U	130	37	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,4-Dichlorobenzene	130	U	130	29	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
2-Hexanone	3200	U	3200	540	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Acetone	970	U	970	370	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Benzene	65	U	65	15	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Bromoform	130	U	130	50	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Bromomethane	400	U	400	330	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Carbon disulfide	320	U	320	180	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Carbon tetrachloride	65	U	65	26	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Chlorobenzene	65	U	65	15	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Chloroethane	320	U	320	270	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Chloroform	65	U	65	18	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Chloromethane	320	U	320	140	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
cis-1,2-Dichloroethene	65	U	65	15	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
cis-1,3-Dichloropropene	65	U	65	34	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Cyclohexane	1600	U	1600	290	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Bromodichloromethane	130	U	130	31	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Dichlorodifluoromethane	130	U	130	58	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Ethylbenzene	65	U	65	19	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
1,2-Dibromoethane	320	U	320	62	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Isopropylbenzene	320	U	320	58	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Methyl acetate	1600	U	1600	1300	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
2-Butanone (MEK)	970	U	970	230	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
4-Methyl-2-pentanone (MIBK)	3200	U	3200	550	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Methyl tert-butyl ether	320	U	320	81	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Methylene Chloride	810	U	810	290	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Styrene	65	U	65	23	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Tetrachloroethene	65	U	65	29	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Toluene	130	U	130	39	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
trans-1,2-Dichloroethene	65	U	65	16	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
trans-1,3-Dichloropropene	65	U	65	36	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Trichloroethene	65	U	65	18	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Trichlorofluoromethane	130	U	130	65	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Vinyl chloride	52	U	52	19	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Xylenes, Total	190	U	190	44	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Methylcyclohexane	1600	U	1600	100	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1
Dibromochloromethane	65	U	65	58	ug/Kg	☼	05/01/19 13:51	05/02/19 16:41	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		53 - 155	05/01/19 13:51	05/02/19 16:41	1
4-Bromofluorobenzene (Surr)	81		48 - 151	05/01/19 13:51	05/02/19 16:41	1
Toluene-d8 (Surr)	87		49 - 147	05/01/19 13:51	05/02/19 16:41	1
Dibromofluoromethane (Surr)	73		49 - 138	05/01/19 13:51	05/02/19 16:41	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-003
Date Collected: 04/29/19 11:15
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-3
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	56	U	56	21	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,1,2,2-Tetrachloroethane	56	U	56	17	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	84	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,1,2-Trichloroethane	56	U	56	17	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,1-Dichloroethane	56	U	56	11	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,1-Dichloroethene	56	U	56	22	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,2,4-Trichlorobenzene	280	U	280	78	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,2-Dichloroethane	56	U	56	21	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,2-Dichloropropane	56	U	56	15	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
2-Hexanone	2800	U	2800	470	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Acetone	840	U	840	320	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Benzene	56	U	56	13	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Bromoform	110	U	110	43	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Bromomethane	350	U	350	290	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Carbon disulfide	280	U	280	150	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Carbon tetrachloride	56	U	56	22	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Chlorobenzene	56	U	56	13	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Chloroform	56	U	56	15	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
cis-1,2-Dichloroethene	56	U	56	13	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
cis-1,3-Dichloropropene	56	U	56	29	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Bromodichloromethane	110	U	110	27	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Dichlorodifluoromethane	110	U	110	50	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Ethylbenzene	56	U	56	17	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
1,2-Dibromoethane	280	U	280	53	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Isopropylbenzene	280	U	280	50	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
2-Butanone (MEK)	840	U	840	200	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	480	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Methyl tert-butyl ether	280	U	280	70	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Methylene Chloride	700	U	700	250	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Styrene	56	U	56	20	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Tetrachloroethene	56	U	56	25	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Toluene	110	U	110	34	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
trans-1,2-Dichloroethene	56	U	56	14	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
trans-1,3-Dichloropropene	56	U	56	31	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Trichloroethene	56	U	56	15	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Trichlorofluoromethane	110	U	110	56	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Vinyl chloride	45	U	45	17	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Xylenes, Total	170	U	170	38	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Methylcyclohexane	1300	U	1300	87	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1
Dibromochloromethane	56	U	56	50	ug/Kg	☼	05/01/19 13:51	05/02/19 17:06	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		53 - 155	05/01/19 13:51	05/02/19 17:06	1
4-Bromofluorobenzene (Surr)	76		48 - 151	05/01/19 13:51	05/02/19 17:06	1
Toluene-d8 (Surr)	83		49 - 147	05/01/19 13:51	05/02/19 17:06	1
Dibromofluoromethane (Surr)	69		49 - 138	05/01/19 13:51	05/02/19 17:06	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-004
Date Collected: 04/29/19 11:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-4
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	56	U	56	21	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,1,2,2-Tetrachloroethane	56	U	56	17	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	84	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,1,2-Trichloroethane	56	U	56	17	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,1-Dichloroethane	56	U	56	11	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,1-Dichloroethene	56	U	56	23	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,2,4-Trichlorobenzene	280	U	280	79	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,2-Dichloroethane	56	U	56	21	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,2-Dichloropropane	56	U	56	15	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
2-Hexanone	2800	U	2800	470	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Acetone	840	U	840	320	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Benzene	56	U	56	13	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Bromoform	110	U	110	44	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Bromomethane	350	U	350	290	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Carbon disulfide	280	U	280	150	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Carbon tetrachloride	56	U	56	23	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Chlorobenzene	56	U	56	13	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Chloroform	56	U	56	15	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
cis-1,2-Dichloroethene	56	U	56	13	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
cis-1,3-Dichloropropene	56	U	56	30	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Cyclohexane	1400	U	1400	250	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Bromodichloromethane	110	U	110	27	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Dichlorodifluoromethane	110	U	110	51	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Ethylbenzene	56	U	56	17	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
1,2-Dibromoethane	280	U	280	53	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Isopropylbenzene	280	U	280	51	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Methyl acetate	1400	U	1400	1100	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
2-Butanone (MEK)	840	U	840	200	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	480	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Methyl tert-butyl ether	280	U	280	70	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Methylene Chloride	700	U	700	250	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Styrene	56	U	56	20	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Tetrachloroethene	56	U	56	25	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Toluene	110	U	110	34	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
trans-1,2-Dichloroethene	56	U	56	14	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
trans-1,3-Dichloropropene	56	U	56	31	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Trichloroethene	56	U	56	15	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Trichlorofluoromethane	110	U	110	56	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Vinyl chloride	45	U	45	17	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Xylenes, Total	170	U	170	38	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Methylcyclohexane	1400	U	1400	87	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1
Dibromochloromethane	56	U	56	51	ug/Kg	☼	05/01/19 13:51	05/02/19 17:31	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		53 - 155	05/01/19 13:51	05/02/19 17:31	1
4-Bromofluorobenzene (Surr)	79		48 - 151	05/01/19 13:51	05/02/19 17:31	1
Toluene-d8 (Surr)	85		49 - 147	05/01/19 13:51	05/02/19 17:31	1
Dibromofluoromethane (Surr)	70		49 - 138	05/01/19 13:51	05/02/19 17:31	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-005
Date Collected: 04/29/19 13:20
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-5
Matrix: Solid
Percent Solids: 74.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	270	U	270	100	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,1,2,2-Tetrachloroethane	270	U	270	81	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,1,2-Trichloro-1,2,2-trifluoroethane	1300	U	1300	400	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,1,2-Trichloroethane	270	U	270	81	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,1-Dichloroethane	270	U	270	54	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,1-Dichloroethene	270	U	270	110	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,2,4-Trichlorobenzene	**600**	**J**	1300	380	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,2-Dibromo-3-Chloropropane	1300	U	1300	540	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,2-Dichlorobenzene	540	U	540	170	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,2-Dichloroethane	270	U	270	100	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,2-Dichloropropane	270	U	270	74	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,3-Dichlorobenzene	540	U	540	160	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,4-Dichlorobenzene	540	U	540	120	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
2-Hexanone	13000	U	13000	2200	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Acetone	4000	U	4000	1500	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Benzene	270	U	270	61	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Bromoform	540	U	540	210	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Bromomethane	1700	U	1700	1400	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Carbon disulfide	1300	U	1300	740	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Carbon tetrachloride	270	U	270	110	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Chlorobenzene	270	U	270	61	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Chloroethane	1300	U	1300	1100	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Chloroform	270	U	270	74	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Chloromethane	1300	U	1300	570	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
cis-1,2-Dichloroethene	**13000**		270	61	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
cis-1,3-Dichloropropene	270	U	270	140	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Cyclohexane	6500	U	6500	1200	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Bromodichloromethane	540	U	540	130	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Dichlorodifluoromethane	540	U	540	240	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Ethylbenzene	**120**	**J**	270	81	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
1,2-Dibromoethane	1300	U	1300	260	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Isopropylbenzene	1300	U	1300	240	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Methyl acetate	6500	U	6500	5300	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
2-Butanone (MEK)	4000	U	4000	950	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
4-Methyl-2-pentanone (MIBK)	13000	U	13000	2300	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Methyl tert-butyl ether	1300	U	1300	340	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Methylene Chloride	3400	U	3400	1200	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Styrene	270	U	270	94	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Tetrachloroethene	270	U	270	120	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Toluene	540	U	540	160	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
trans-1,2-Dichloroethene	**620**		270	67	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
trans-1,3-Dichloropropene	270	U	270	150	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Trichloroethene	**6100**		270	74	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Trichlorofluoromethane	540	U	540	270	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Vinyl chloride	**380**		220	81	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Xylenes, Total	**590**	**J**	810	180	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Methylcyclohexane	6500	U	6500	420	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4
Dibromochloromethane	270	U	270	240	ug/Kg	☼	05/01/19 13:51	05/03/19 15:02	4

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		53 - 155	05/01/19 13:51	05/03/19 15:02	4
4-Bromofluorobenzene (Surr)	80		48 - 151	05/01/19 13:51	05/03/19 15:02	4
Toluene-d8 (Surr)	83		49 - 147	05/01/19 13:51	05/03/19 15:02	4
Dibromofluoromethane (Surr)	80		49 - 138	05/01/19 13:51	05/03/19 15:02	4

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-006
Date Collected: 04/29/19 13:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-6
Matrix: Solid
Percent Solids: 77.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	64	U	64	24	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,1,2,2-Tetrachloroethane	64	U	64	19	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	320	U	320	96	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,1,2-Trichloroethane	64	U	64	19	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,1-Dichloroethane	64	U	64	13	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,1-Dichloroethene	64	U	64	25	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,2,4-Trichlorobenzene	320	U	320	89	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,2-Dibromo-3-Chloropropane	320	U	320	130	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,2-Dichlorobenzene	130	U	130	40	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,2-Dichloroethane	64	U	64	24	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,2-Dichloropropane	64	U	64	18	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,3-Dichlorobenzene	130	U	130	37	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,4-Dichlorobenzene	130	U	130	29	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
2-Hexanone	3200	U	3200	530	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Acetone	960	U	960	360	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Benzene	64	U	64	14	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Bromoform	130	U	130	49	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Bromomethane	400	U	400	320	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Carbon disulfide	320	U	320	180	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Carbon tetrachloride	64	U	64	25	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Chlorobenzene	64	U	64	14	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Chloroethane	320	U	320	260	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Chloroform	64	U	64	18	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Chloromethane	320	U	320	130	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
cis-1,2-Dichloroethene	**980**		64	14	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
cis-1,3-Dichloropropene	64	U	64	33	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Cyclohexane	1500	U	1500	290	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Bromodichloromethane	130	U	130	30	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Dichlorodifluoromethane	130	U	130	57	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Ethylbenzene	64	U	64	19	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
1,2-Dibromoethane	320	U	320	61	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Isopropylbenzene	320	U	320	57	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Methyl acetate	1500	U	1500	1300	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
2-Butanone (MEK)	960	U	960	220	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
4-Methyl-2-pentanone (MIBK)	3200	U	3200	540	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Methyl tert-butyl ether	320	U	320	80	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Methylene Chloride	800	U	800	280	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Styrene	64	U	64	22	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Tetrachloroethene	64	U	64	29	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Toluene	130	U	130	38	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
trans-1,2-Dichloroethene	**16**	**J**	64	16	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
trans-1,3-Dichloropropene	64	U	64	35	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Trichloroethene	**49**	**J**	64	18	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Trichlorofluoromethane	130	U	130	64	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Vinyl chloride	**230**		51	19	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Xylenes, Total	190	U	190	43	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Methylcyclohexane	1500	U	1500	99	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1
Dibromochloromethane	64	U	64	57	ug/Kg	☼	05/01/19 13:51	05/03/19 15:27	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		53 - 155	05/01/19 13:51	05/03/19 15:27	1
4-Bromofluorobenzene (Surr)	86		48 - 151	05/01/19 13:51	05/03/19 15:27	1
Toluene-d8 (Surr)	95		49 - 147	05/01/19 13:51	05/03/19 15:27	1
Dibromofluoromethane (Surr)	83		49 - 138	05/01/19 13:51	05/03/19 15:27	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-007
Date Collected: 04/29/19 13:45
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-7
Matrix: Solid
Percent Solids: 83.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	21	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,1,2,2-Tetrachloroethane	55	U	55	17	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	83	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,1,2-Trichloroethane	55	U	55	17	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,2,4-Trichlorobenzene	280	U	280	78	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,2-Dichloroethane	55	U	55	21	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
2-Hexanone	2800	U	2800	460	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Acetone	830	U	830	320	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Benzene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Bromoform	110	U	110	43	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Bromomethane	350	U	350	280	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Carbon disulfide	280	U	280	150	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Chloroform	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
cis-1,2-Dichloroethene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Dichlorodifluoromethane	110	U	110	50	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Ethylbenzene	55	U	55	17	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
1,2-Dibromoethane	280	U	280	53	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Isopropylbenzene	280	U	280	50	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
2-Butanone (MEK)	830	U	830	200	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	470	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Methyl tert-butyl ether	280	U	280	69	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Methylene Chloride	690	U	690	250	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Styrene	55	U	55	19	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Toluene	110	U	110	33	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
trans-1,2-Dichloroethene	55	U	55	14	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
trans-1,3-Dichloropropene	55	U	55	30	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Trichloroethene	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Vinyl chloride	44	U	44	17	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Xylenes, Total	170	U	170	37	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Methylcyclohexane	1300	U	1300	86	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1
Dibromochloromethane	55	U	55	50	ug/Kg	☼	05/01/19 13:51	05/02/19 18:45	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		53 - 155	05/01/19 13:51	05/02/19 18:45	1
4-Bromofluorobenzene (Surr)	77		48 - 151	05/01/19 13:51	05/02/19 18:45	1
Toluene-d8 (Surr)	81		49 - 147	05/01/19 13:51	05/02/19 18:45	1
Dibromofluoromethane (Surr)	69		49 - 138	05/01/19 13:51	05/02/19 18:45	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-008
Date Collected: 04/29/19 14:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-8
Matrix: Solid
Percent Solids: 82.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	57	U	57	21	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,1,2,2-Tetrachloroethane	57	U	57	17	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	290	U	290	86	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,1,2-Trichloroethane	57	U	57	17	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,1-Dichloroethane	57	U	57	11	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,1-Dichloroethene	57	U	57	23	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,2,4-Trichlorobenzene	290	U	290	80	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,2-Dibromo-3-Chloropropane	290	U	290	110	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,2-Dichlorobenzene	110	U	110	36	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,2-Dichloroethane	57	U	57	21	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,2-Dichloropropane	57	U	57	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,3-Dichlorobenzene	110	U	110	33	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,4-Dichlorobenzene	110	U	110	26	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
2-Hexanone	2900	U	2900	480	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Acetone	860	U	860	330	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Benzene	57	U	57	13	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Bromoform	110	U	110	44	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Bromomethane	360	U	360	290	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Carbon disulfide	290	U	290	160	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Carbon tetrachloride	57	U	57	23	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Chlorobenzene	57	U	57	13	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Chloroethane	290	U	290	230	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Chloroform	57	U	57	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Chloromethane	290	U	290	120	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
cis-1,2-Dichloroethene	**61**		57	13	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
cis-1,3-Dichloropropene	57	U	57	30	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Cyclohexane	1400	U	1400	260	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Bromodichloromethane	110	U	110	27	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Dichlorodifluoromethane	110	U	110	51	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Ethylbenzene	57	U	57	17	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
1,2-Dibromoethane	290	U	290	54	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Isopropylbenzene	290	U	290	51	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Methyl acetate	1400	U	1400	1100	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
2-Butanone (MEK)	860	U	860	200	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
4-Methyl-2-pentanone (MIBK)	2900	U	2900	490	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Methyl tert-butyl ether	290	U	290	71	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Methylene Chloride	710	U	710	250	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Styrene	57	U	57	20	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Tetrachloroethene	57	U	57	26	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Toluene	110	U	110	34	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
trans-1,2-Dichloroethene	57	U	57	14	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
trans-1,3-Dichloropropene	57	U	57	31	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Trichloroethene	**33**	**J**	57	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Trichlorofluoromethane	110	U	110	57	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Vinyl chloride	46	U	46	17	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Xylenes, Total	170	U	170	39	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Methylcyclohexane	**180**	**J**	1400	89	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1
Dibromochloromethane	57	U	57	51	ug/Kg	☼	05/01/19 13:51	05/02/19 19:10	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		53 - 155	05/01/19 13:51	05/02/19 19:10	1
4-Bromofluorobenzene (Surr)	83		48 - 151	05/01/19 13:51	05/02/19 19:10	1
Toluene-d8 (Surr)	91		49 - 147	05/01/19 13:51	05/02/19 19:10	1
Dibromofluoromethane (Surr)	74		49 - 138	05/01/19 13:51	05/02/19 19:10	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-009
Date Collected: 04/29/19 14:15
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-9
Matrix: Solid
Percent Solids: 82.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	54	U	54	20	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,1,2,2-Tetrachloroethane	54	U	54	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	81	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,1,2-Trichloroethane	54	U	54	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,1-Dichloroethane	54	U	54	11	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,1-Dichloroethene	54	U	54	22	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,2,4-Trichlorobenzene	270	U	270	75	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,2-Dichlorobenzene	110	U	110	34	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,2-Dichloroethane	54	U	54	20	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,2-Dichloropropane	54	U	54	15	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,3-Dichlorobenzene	110	U	110	31	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,4-Dichlorobenzene	110	U	110	24	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
2-Hexanone	2700	U	2700	450	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Acetone	810	U	810	310	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Benzene	54	U	54	12	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Bromoform	110	U	110	42	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Bromomethane	340	U	340	270	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Carbon tetrachloride	54	U	54	22	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Chlorobenzene	54	U	54	12	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Chloroethane	270	U	270	220	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Chloroform	54	U	54	15	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Chloromethane	270	U	270	110	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
cis-1,2-Dichloroethene	**47**	**J**	54	12	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
cis-1,3-Dichloropropene	54	U	54	28	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Cyclohexane	1300	U	1300	240	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Dichlorodifluoromethane	110	U	110	48	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Ethylbenzene	54	U	54	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
1,2-Dibromoethane	270	U	270	51	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Isopropylbenzene	270	U	270	48	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
2-Butanone (MEK)	810	U	810	190	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	460	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Methyl tert-butyl ether	270	U	270	67	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Methylene Chloride	670	U	670	240	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Styrene	54	U	54	19	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Tetrachloroethene	54	U	54	24	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Toluene	110	U	110	32	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
trans-1,2-Dichloroethene	54	U	54	13	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
trans-1,3-Dichloropropene	54	U	54	30	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Trichloroethene	**17**	**J**	54	15	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Trichlorofluoromethane	110	U	110	54	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Vinyl chloride	43	U	43	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Xylenes, Total	160	U	160	36	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Methylcyclohexane	1300	U	1300	83	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1
Dibromochloromethane	54	U	54	48	ug/Kg	☼	05/01/19 13:51	05/02/19 19:34	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		53 - 155	05/01/19 13:51	05/02/19 19:34	1
4-Bromofluorobenzene (Surr)	79		48 - 151	05/01/19 13:51	05/02/19 19:34	1
Toluene-d8 (Surr)	84		49 - 147	05/01/19 13:51	05/02/19 19:34	1
Dibromofluoromethane (Surr)	71		49 - 138	05/01/19 13:51	05/02/19 19:34	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-010
Date Collected: 04/29/19 15:45
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-10
Matrix: Solid
Percent Solids: 86.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	53	U	53	20	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,1,2,2-Tetrachloroethane	53	U	53	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	79	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,1,2-Trichloroethane	53	U	53	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,1-Dichloroethane	53	U	53	11	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,1-Dichloroethene	53	U	53	21	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,2,4-Trichlorobenzene	260	U	260	74	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,2-Dibromo-3-Chloropropane	260	U	260	110	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,2-Dichlorobenzene	110	U	110	33	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,2-Dichloroethane	53	U	53	20	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,2-Dichloropropane	53	U	53	15	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,3-Dichlorobenzene	110	U	110	30	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,4-Dichlorobenzene	110	U	110	24	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
2-Hexanone	2600	U	2600	440	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Acetone	790	U	790	300	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Benzene	53	U	53	12	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Bromoform	110	U	110	41	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Bromomethane	330	U	330	270	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Carbon disulfide	260	U	260	150	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Carbon tetrachloride	53	U	53	21	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Chlorobenzene	53	U	53	12	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Chloroethane	260	U	260	220	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Chloroform	53	U	53	15	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Chloromethane	260	U	260	110	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
cis-1,2-Dichloroethene	**770**		53	12	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
cis-1,3-Dichloropropene	53	U	53	28	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Cyclohexane	1300	U	1300	240	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Dichlorodifluoromethane	110	U	110	48	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Ethylbenzene	53	U	53	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
1,2-Dibromoethane	260	U	260	50	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Isopropylbenzene	260	U	260	48	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Methyl acetate	1300	U	1300	1000	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
2-Butanone (MEK)	790	U	790	190	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	450	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Methyl tert-butyl ether	260	U	260	66	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Methylene Chloride	660	U	660	240	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Styrene	53	U	53	19	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Tetrachloroethene	53	U	53	24	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Toluene	110	U	110	32	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
trans-1,2-Dichloroethene	**120**		53	13	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
trans-1,3-Dichloropropene	53	U	53	29	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Trichloroethene	**530**		53	15	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Trichlorofluoromethane	110	U	110	53	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Vinyl chloride	**41**	**J**	42	16	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Xylenes, Total	160	U	160	36	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Methylcyclohexane	1300	U	1300	82	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1
Dibromochloromethane	53	U	53	48	ug/Kg	☼	05/01/19 13:51	05/02/19 19:59	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		53 - 155	05/01/19 13:51	05/02/19 19:59	1
4-Bromofluorobenzene (Surr)	88		48 - 151	05/01/19 13:51	05/02/19 19:59	1
Toluene-d8 (Surr)	94		49 - 147	05/01/19 13:51	05/02/19 19:59	1
Dibromofluoromethane (Surr)	77		49 - 138	05/01/19 13:51	05/02/19 19:59	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-011
Date Collected: 04/29/19 16:00
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-11
Matrix: Solid
Percent Solids: 84.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	21	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,1,2,2-Tetrachloroethane	55	U	55	16	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	82	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,1,2-Trichloroethane	55	U	55	16	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,2,4-Trichlorobenzene	270	U	270	77	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,2-Dichlorobenzene	110	U	110	34	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,2-Dichloroethane	55	U	55	21	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
2-Hexanone	2700	U	2700	460	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Acetone	820	U	820	310	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Benzene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Bromoform	110	U	110	42	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Bromomethane	340	U	340	280	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Chloroethane	270	U	270	220	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Chloroform	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Chloromethane	270	U	270	120	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
cis-1,2-Dichloroethene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Dichlorodifluoromethane	110	U	110	49	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Ethylbenzene	55	U	55	16	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
1,2-Dibromoethane	270	U	270	52	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Isopropylbenzene	270	U	270	49	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
2-Butanone (MEK)	820	U	820	190	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	470	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Methyl tert-butyl ether	270	U	270	69	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Methylene Chloride	690	U	690	240	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Styrene	55	U	55	19	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Toluene	110	U	110	33	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
trans-1,2-Dichloroethene	55	U	55	14	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
trans-1,3-Dichloropropene	55	U	55	30	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Trichloroethene	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Vinyl chloride	44	U	44	16	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Methylcyclohexane	**120**	**J**	1300	85	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1
Dibromochloromethane	55	U	55	49	ug/Kg	☼	05/01/19 13:51	05/02/19 20:24	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		53 - 155	05/01/19 13:51	05/02/19 20:24	1
4-Bromofluorobenzene (Surr)	82		48 - 151	05/01/19 13:51	05/02/19 20:24	1
Toluene-d8 (Surr)	91		49 - 147	05/01/19 13:51	05/02/19 20:24	1
Dibromofluoromethane (Surr)	76		49 - 138	05/01/19 13:51	05/02/19 20:24	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-012
Date Collected: 04/29/19 16:15
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-12
Matrix: Solid
Percent Solids: 84.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	20	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,1,2,2-Tetrachloroethane	55	U	55	16	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	82	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,1,2-Trichloroethane	55	U	55	16	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,2,4-Trichlorobenzene	270	U	270	77	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,2-Dichlorobenzene	110	U	110	34	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,2-Dichloroethane	55	U	55	20	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,3-Dichlorobenzene	110	U	110	31	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
2-Hexanone	2700	U	2700	450	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Acetone	820	U	820	310	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Benzene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Bromoform	110	U	110	42	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Bromomethane	340	U	340	280	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Chloroethane	270	U	270	220	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Chloroform	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Chloromethane	270	U	270	110	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
cis-1,2-Dichloroethene	55	U	55	12	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Dichlorodifluoromethane	110	U	110	49	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Ethylbenzene	55	U	55	16	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
1,2-Dibromoethane	270	U	270	52	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Isopropylbenzene	270	U	270	49	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
2-Butanone (MEK)	820	U	820	190	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	460	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Methyl tert-butyl ether	270	U	270	68	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Methylene Chloride	680	U	680	240	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Styrene	55	U	55	19	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Toluene	110	U	110	33	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
trans-1,2-Dichloroethene	55	U	55	14	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
trans-1,3-Dichloropropene	55	U	55	30	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Trichloroethene	55	U	55	15	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Vinyl chloride	44	U	44	16	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Methylcyclohexane	**140**	**J**	1300	85	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1
Dibromochloromethane	55	U	55	49	ug/Kg	☼	05/01/19 13:51	05/02/19 20:48	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		53 - 155	05/01/19 13:51	05/02/19 20:48	1
4-Bromofluorobenzene (Surr)	85		48 - 151	05/01/19 13:51	05/02/19 20:48	1
Toluene-d8 (Surr)	92		49 - 147	05/01/19 13:51	05/02/19 20:48	1
Dibromofluoromethane (Surr)	75		49 - 138	05/01/19 13:51	05/02/19 20:48	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: 017303A-042919-DA-013
Date Collected: 04/29/19 16:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-13
Matrix: Solid
Percent Solids: 82.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	57	U	57	21	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,1,2,2-Tetrachloroethane	57	U	57	17	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	85	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,1,2-Trichloroethane	57	U	57	17	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,1-Dichloroethane	57	U	57	11	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,1-Dichloroethene	57	U	57	23	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,2,4-Trichlorobenzene	280	U	280	79	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,2-Dichloroethane	57	U	57	21	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,2-Dichloropropane	57	U	57	16	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,3-Dichlorobenzene	110	U	110	33	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
2-Hexanone	2800	U	2800	470	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Acetone	850	U	850	320	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Benzene	57	U	57	13	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Bromoform	110	U	110	44	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Bromomethane	350	U	350	290	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Carbon disulfide	280	U	280	160	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Carbon tetrachloride	57	U	57	23	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Chlorobenzene	57	U	57	13	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Chloroform	57	U	57	16	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
cis-1,2-Dichloroethene	57	U	57	13	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
cis-1,3-Dichloropropene	57	U	57	30	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Cyclohexane	1400	U	1400	260	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Bromodichloromethane	110	U	110	27	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Dichlorodifluoromethane	110	U	110	51	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Ethylbenzene	57	U	57	17	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
1,2-Dibromoethane	280	U	280	54	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Isopropylbenzene	280	U	280	51	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Methyl acetate	1400	U	1400	1100	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
2-Butanone (MEK)	850	U	850	200	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	480	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Methyl tert-butyl ether	280	U	280	71	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Methylene Chloride	710	U	710	250	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Styrene	57	U	57	20	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Tetrachloroethene	57	U	57	25	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Toluene	110	U	110	34	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
trans-1,2-Dichloroethene	57	U	57	14	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
trans-1,3-Dichloropropene	57	U	57	31	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Trichloroethene	57	U	57	16	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Trichlorofluoromethane	110	U	110	57	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Vinyl chloride	45	U	45	17	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Xylenes, Total	170	U	170	38	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Methylcyclohexane	1400	U	1400	88	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1
Dibromochloromethane	57	U	57	51	ug/Kg	☼	05/01/19 13:51	05/02/19 21:13	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		53 - 155	05/01/19 13:51	05/02/19 21:13	1
4-Bromofluorobenzene (Surr)	84		48 - 151	05/01/19 13:51	05/02/19 21:13	1
Toluene-d8 (Surr)	90		49 - 147	05/01/19 13:51	05/02/19 21:13	1
Dibromofluoromethane (Surr)	74		49 - 138	05/01/19 13:51	05/02/19 21:13	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-017303A-042919
Date Collected: 04/29/19 00:00
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/08/19 17:21	1
Benzene	1.0	U	1.0	0.13	ug/L			05/08/19 17:21	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/08/19 17:21	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/08/19 17:21	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/08/19 17:21	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/08/19 17:21	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/08/19 17:21	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/08/19 17:21	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/08/19 17:21	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/08/19 17:21	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/08/19 17:21	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/08/19 17:21	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/08/19 17:21	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/08/19 17:21	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/08/19 17:21	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/08/19 17:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/08/19 17:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/08/19 17:21	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/08/19 17:21	1
2-Hexanone	10	U	10	0.54	ug/L			05/08/19 17:21	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/08/19 17:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/08/19 17:21	1
Styrene	1.0	U	1.0	0.10	ug/L			05/08/19 17:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/08/19 17:21	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/08/19 17:21	1
Toluene	1.0	U	1.0	0.14	ug/L			05/08/19 17:21	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/08/19 17:21	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/08/19 17:21	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/08/19 17:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/08/19 17:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/08/19 17:21	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/08/19 17:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/08/19 17:21	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/08/19 17:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/08/19 17:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/08/19 17:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/08/19 17:21	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/08/19 17:21	1
Methyl acetate	10	U	10	1.7	ug/L			05/08/19 17:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/08/19 17:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/08/19 17:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/08/19 17:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/08/19 17:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/08/19 17:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/08/19 17:21	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/08/19 17:21	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/08/19 17:21	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/08/19 17:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 121		05/08/19 17:21	1
4-Bromofluorobenzene (Surr)	76		59 - 120		05/08/19 17:21	1
Toluene-d8 (Surr)	92		70 - 123		05/08/19 17:21	1
Dibromofluoromethane (Surr)	114		75 - 128		05/08/19 17:21	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-001
Date Collected: 04/29/19 10:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-1
Matrix: Solid
Percent Solids: 79.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**79.2**		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	**20.8**		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-002
Date Collected: 04/29/19 10:45
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-2
Matrix: Solid
Percent Solids: 77.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77.0		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	23.0		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-003
Date Collected: 04/29/19 11:15
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-3
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.2		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	16.8		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-004
Date Collected: 04/29/19 11:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-4
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.2		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	16.8		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-005
Date Collected: 04/29/19 13:20
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-5
Matrix: Solid
Percent Solids: 74.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74.6		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	25.4		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-006
Date Collected: 04/29/19 13:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-6
Matrix: Solid
Percent Solids: 77.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77.3		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	22.7		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-007
Date Collected: 04/29/19 13:45
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-7
Matrix: Solid
Percent Solids: 83.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.7		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	16.3		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-008
Date Collected: 04/29/19 14:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-8
Matrix: Solid
Percent Solids: 82.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.5		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	17.5		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-009
Date Collected: 04/29/19 14:15
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-9
Matrix: Solid
Percent Solids: 82.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.6		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	17.4		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-010
Date Collected: 04/29/19 15:45
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-10
Matrix: Solid
Percent Solids: 86.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.1		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	13.9		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-011
Date Collected: 04/29/19 16:00
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-11
Matrix: Solid
Percent Solids: 84.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.3		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	15.7		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-012
Date Collected: 04/29/19 16:15
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-12
Matrix: Solid
Percent Solids: 84.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.5		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	15.5		0.1	0.1	%			05/02/19 14:25	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

General Chemistry

Client Sample ID: 017303A-042919-DA-013
Date Collected: 04/29/19 16:30
Date Received: 04/30/19 10:00

Lab Sample ID: 240-111738-13
Matrix: Solid
Percent Solids: 82.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.7		0.1	0.1	%			05/02/19 14:25	1
Percent Moisture	17.3		0.1	0.1	%			05/02/19 14:25	1

GC/MS VOA

Prep Batch: 379169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111738-1	017303A-042919-DA-001	Total/NA	Solid	5035	
240-111738-2	017303A-042919-DA-002	Total/NA	Solid	5035	
240-111738-3	017303A-042919-DA-003	Total/NA	Solid	5035	
240-111738-4	017303A-042919-DA-004	Total/NA	Solid	5035	
240-111738-5	017303A-042919-DA-005	Total/NA	Solid	5035	
240-111738-6	017303A-042919-DA-006	Total/NA	Solid	5035	
240-111738-7	017303A-042919-DA-007	Total/NA	Solid	5035	
240-111738-8	017303A-042919-DA-008	Total/NA	Solid	5035	
240-111738-9	017303A-042919-DA-009	Total/NA	Solid	5035	
240-111738-10	017303A-042919-DA-010	Total/NA	Solid	5035	
240-111738-11	017303A-042919-DA-011	Total/NA	Solid	5035	
240-111738-12	017303A-042919-DA-012	Total/NA	Solid	5035	
240-111738-13	017303A-042919-DA-013	Total/NA	Solid	5035	
MB 240-379169/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-379169/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 240-379169/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 379313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111738-1	017303A-042919-DA-001	Total/NA	Solid	8260B MI	379169
240-111738-2	017303A-042919-DA-002	Total/NA	Solid	8260B MI	379169
240-111738-3	017303A-042919-DA-003	Total/NA	Solid	8260B MI	379169
240-111738-4	017303A-042919-DA-004	Total/NA	Solid	8260B MI	379169
240-111738-7	017303A-042919-DA-007	Total/NA	Solid	8260B MI	379169
240-111738-8	017303A-042919-DA-008	Total/NA	Solid	8260B MI	379169
240-111738-9	017303A-042919-DA-009	Total/NA	Solid	8260B MI	379169
240-111738-10	017303A-042919-DA-010	Total/NA	Solid	8260B MI	379169
240-111738-11	017303A-042919-DA-011	Total/NA	Solid	8260B MI	379169
240-111738-12	017303A-042919-DA-012	Total/NA	Solid	8260B MI	379169
240-111738-13	017303A-042919-DA-013	Total/NA	Solid	8260B MI	379169
MB 240-379169/1-A	Method Blank	Total/NA	Solid	8260B MI	379169
LCS 240-379169/2-A	Lab Control Sample	Total/NA	Solid	8260B MI	379169
LCSD 240-379169/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B MI	379169

Analysis Batch: 379519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111738-5	017303A-042919-DA-005	Total/NA	Solid	8260B MI	379169
240-111738-6	017303A-042919-DA-006	Total/NA	Solid	8260B MI	379169

Analysis Batch: 380208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111738-14	TB-017303A-042919	Total/NA	Water	8260B	
MB 240-380208/6	Method Blank	Total/NA	Water	8260B	
LCS 240-380208/4	Lab Control Sample	Total/NA	Water	8260B	

General Chemistry

Analysis Batch: 379399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111738-1	017303A-042919-DA-001	Total/NA	Solid	Moisture	
240-111738-2	017303A-042919-DA-002	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 379399 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111738-3	017303A-042919-DA-003	Total/NA	Solid	Moisture	
240-111738-4	017303A-042919-DA-004	Total/NA	Solid	Moisture	
240-111738-5	017303A-042919-DA-005	Total/NA	Solid	Moisture	
240-111738-6	017303A-042919-DA-006	Total/NA	Solid	Moisture	
240-111738-7	017303A-042919-DA-007	Total/NA	Solid	Moisture	
240-111738-8	017303A-042919-DA-008	Total/NA	Solid	Moisture	
240-111738-9	017303A-042919-DA-009	Total/NA	Solid	Moisture	
240-111738-10	017303A-042919-DA-010	Total/NA	Solid	Moisture	
240-111738-11	017303A-042919-DA-011	Total/NA	Solid	Moisture	
240-111738-12	017303A-042919-DA-012	Total/NA	Solid	Moisture	
240-111738-13	017303A-042919-DA-013	Total/NA	Solid	Moisture	
240-111738-2 DU	017303A-042919-DA-002	Total/NA	Solid	Moisture	
240-111738-12 DU	017303A-042919-DA-012	Total/NA	Solid	Moisture	

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-380208/6
Matrix: Water
Analysis Batch: 380208

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/08/19 14:22	1
Benzene	1.0	U	1.0	0.13	ug/L			05/08/19 14:22	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/08/19 14:22	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/08/19 14:22	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/08/19 14:22	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/08/19 14:22	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/08/19 14:22	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/08/19 14:22	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/08/19 14:22	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/08/19 14:22	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/08/19 14:22	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/08/19 14:22	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/08/19 14:22	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/08/19 14:22	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/08/19 14:22	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/08/19 14:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/08/19 14:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/08/19 14:22	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/08/19 14:22	1
2-Hexanone	10	U	10	0.54	ug/L			05/08/19 14:22	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/08/19 14:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/08/19 14:22	1
Styrene	1.0	U	1.0	0.10	ug/L			05/08/19 14:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/08/19 14:22	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/08/19 14:22	1
Toluene	1.0	U	1.0	0.14	ug/L			05/08/19 14:22	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/08/19 14:22	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/08/19 14:22	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/08/19 14:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/08/19 14:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/08/19 14:22	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/08/19 14:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/08/19 14:22	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/08/19 14:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/08/19 14:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/08/19 14:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/08/19 14:22	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/08/19 14:22	1
Methyl acetate	10	U	10	1.7	ug/L			05/08/19 14:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/08/19 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/08/19 14:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/08/19 14:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/08/19 14:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/08/19 14:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/08/19 14:22	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/08/19 14:22	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/08/19 14:22	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/08/19 14:22	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-380208/6
Matrix: Water
Analysis Batch: 380208

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 121		05/08/19 14:22	1
4-Bromofluorobenzene (Surr)	78		59 - 120		05/08/19 14:22	1
Toluene-d8 (Surr)	93		70 - 123		05/08/19 14:22	1
Dibromofluoromethane (Surr)	109		75 - 128		05/08/19 14:22	1

Lab Sample ID: LCS 240-380208/4
Matrix: Water
Analysis Batch: 380208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	14.7		ug/L		73	21 - 162
Benzene	10.0	10.4		ug/L		104	80 - 123
Bromodichloromethane	10.0	8.76		ug/L		88	77 - 125
Bromoform	10.0	8.29		ug/L		83	49 - 141
Bromomethane	10.0	9.38		ug/L		94	41 - 175
2-Butanone (MEK)	20.0	17.4		ug/L		87	39 - 163
Carbon disulfide	10.0	9.92		ug/L		99	60 - 138
Carbon tetrachloride	10.0	9.82		ug/L		98	63 - 140
Chlorobenzene	10.0	10.3		ug/L		103	80 - 121
Chloroethane	10.0	8.78		ug/L		88	33 - 173
Chloroform	10.0	9.74		ug/L		97	79 - 127
Chloromethane	10.0	12.5		ug/L		125	54 - 143
1,1-Dichloroethane	10.0	9.81		ug/L		98	75 - 133
1,2-Dichloroethane	10.0	8.63		ug/L		86	71 - 135
1,1-Dichloroethene	10.0	10.3		ug/L		103	65 - 139
1,2-Dichloropropane	10.0	10.4		ug/L		104	78 - 133
cis-1,3-Dichloropropene	10.0	8.87		ug/L		89	64 - 132
trans-1,3-Dichloropropene	10.0	8.37		ug/L		84	55 - 128
Ethylbenzene	10.0	10.2		ug/L		102	80 - 120
2-Hexanone	20.0	17.1		ug/L		85	43 - 148
Methylene Chloride	10.0	11.4		ug/L		114	70 - 134
4-Methyl-2-pentanone (MIBK)	20.0	16.9		ug/L		84	49 - 143
Styrene	10.0	9.93		ug/L		99	79 - 120
1,1,2,2-Tetrachloroethane	10.0	9.74		ug/L		97	65 - 139
Tetrachloroethene	10.0	10.7		ug/L		107	74 - 130
Toluene	10.0	10.6		ug/L		106	78 - 129
Trichloroethene	10.0	9.75		ug/L		97	76 - 125
Vinyl chloride	10.0	11.4		ug/L		114	58 - 143
Xylenes, Total	20.0	20.9		ug/L		105	80 - 120
1,1,1-Trichloroethane	10.0	9.97		ug/L		100	69 - 134
1,1,2-Trichloroethane	10.0	11.0		ug/L		110	78 - 133
Cyclohexane	10.0	10.3		ug/L		103	58 - 145
1,2-Dibromo-3-Chloropropane	10.0	7.33		ug/L		73	46 - 132
1,2-Dibromoethane	10.0	10.1		ug/L		101	77 - 123
Dichlorodifluoromethane	10.0	11.2		ug/L		112	29 - 148
cis-1,2-Dichloroethene	10.0	9.94		ug/L		99	76 - 128
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	78 - 133
Isopropylbenzene	10.0	10.0		ug/L		100	74 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-380208/4
Matrix: Water
Analysis Batch: 380208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	20.0	19.4		ug/L		97	52 - 145
Methyl tert-butyl ether	10.0	6.83		ug/L		68	51 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.5		ug/L		105	50 - 156
1,2,4-Trichlorobenzene	10.0	8.29		ug/L		83	42 - 133
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	78 - 120
1,3-Dichlorobenzene	10.0	9.96		ug/L		100	78 - 120
1,4-Dichlorobenzene	10.0	9.94		ug/L		99	78 - 120
Trichlorofluoromethane	10.0	10.5		ug/L		105	51 - 164
Dibromochloromethane	10.0	9.15		ug/L		91	70 - 132
Methylcyclohexane	10.0	9.48		ug/L		95	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 121*
4-Bromofluorobenzene (Surr)	*103*		*59 - 120*
Toluene-d8 (Surr)	*103*		*70 - 123*
Dibromofluoromethane (Surr)	*98*		*75 - 128*

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-379169/1-A
Matrix: Solid
Analysis Batch: 379313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 379169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	40	U	40	15	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,1,2,2-Tetrachloroethane	40	U	40	12	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	60	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,1,2-Trichloroethane	40	U	40	12	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,1-Dichloroethane	40	U	40	8.0	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,1-Dichloroethene	40	U	40	16	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,2,4-Trichlorobenzene	200	U	200	56	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,2-Dibromo-3-Chloropropane	200	U	200	80	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,2-Dichlorobenzene	80	U	80	25	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,2-Dichloroethane	40	U	40	15	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,2-Dichloropropane	40	U	40	11	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,3-Dichlorobenzene	80	U	80	23	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,4-Dichlorobenzene	80	U	80	18	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
2-Hexanone	2000	U	2000	330	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Acetone	600	U	600	230	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Benzene	40	U	40	9.0	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Bromoform	80	U	80	31	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Bromomethane	250	U	250	200	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Carbon disulfide	200	U	200	110	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Carbon tetrachloride	40	U	40	16	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Chlorobenzene	40	U	40	9.0	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Chloroethane	200	U	200	160	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Chloroform	40	U	40	11	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Chloromethane	200	U	200	84	ug/Kg		05/01/19 13:51	05/02/19 13:24	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-379169/1-A
Matrix: Solid
Analysis Batch: 379313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 379169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	40	U	40	9.0	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
cis-1,3-Dichloropropene	40	U	40	21	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Cyclohexane	960	U	960	180	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Bromodichloromethane	80	U	80	19	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Dichlorodifluoromethane	80	U	80	36	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Ethylbenzene	40	U	40	12	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
1,2-Dibromoethane	200	U	200	38	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Isopropylbenzene	200	U	200	36	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Methyl acetate	960	U	960	790	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
2-Butanone (MEK)	600	U	600	140	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	340	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Methyl tert-butyl ether	200	U	200	50	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Methylene Chloride	500	U	500	180	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Styrene	40	U	40	14	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Tetrachloroethene	40	U	40	18	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Toluene	80	U	80	24	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
trans-1,2-Dichloroethene	40	U	40	10	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
trans-1,3-Dichloropropene	40	U	40	22	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Trichloroethene	40	U	40	11	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Trichlorofluoromethane	80	U	80	40	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Vinyl chloride	32	U	32	12	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Xylenes, Total	120	U	120	27	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Methylcyclohexane	960	U	960	62	ug/Kg		05/01/19 13:51	05/02/19 13:24	1
Dibromochloromethane	40	U	40	36	ug/Kg		05/01/19 13:51	05/02/19 13:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*53 - 155*	*05/01/19 13:51*	*05/02/19 13:24*	*1*
4-Bromofluorobenzene (Surr)	*73*		*48 - 151*	*05/01/19 13:51*	*05/02/19 13:24*	*1*
Toluene-d8 (Surr)	*79*		*49 - 147*	*05/01/19 13:51*	*05/02/19 13:24*	*1*
Dibromofluoromethane (Surr)	*70*		*49 - 138*	*05/01/19 13:51*	*05/02/19 13:24*	*1*

Lab Sample ID: LCS 240-379169/2-A
Matrix: Solid
Analysis Batch: 379313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 379169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1000	808		ug/Kg		81	64 - 135
1,1,2,2-Tetrachloroethane	1000	804		ug/Kg		80	68 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	849		ug/Kg		85	56 - 138
1,1,2-Trichloroethane	1000	881		ug/Kg		88	78 - 120
1,1-Dichloroethane	1000	851		ug/Kg		85	72 - 122
1,1-Dichloroethene	1000	832		ug/Kg		83	57 - 139
1,2,4-Trichlorobenzene	1000	684		ug/Kg		68	54 - 120
1,2-Dibromo-3-Chloropropane	1000	518		ug/Kg		52	38 - 135
1,2-Dichlorobenzene	1000	816		ug/Kg		82	73 - 120
1,2-Dichloroethane	1000	833		ug/Kg		83	64 - 126
1,2-Dichloropropane	1000	878		ug/Kg		88	78 - 122
1,3-Dichlorobenzene	1000	848		ug/Kg		85	70 - 120

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-379169/2-A
Matrix: Solid
Analysis Batch: 379313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 379169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	1000	837		ug/Kg		84	71 - 120
2-Hexanone	2000	1480	J	ug/Kg		74	52 - 145
Acetone	2000	1390		ug/Kg		70	43 - 159
Benzene	1000	840		ug/Kg		84	74 - 123
Bromoform	1000	558		ug/Kg		56	46 - 137
Bromomethane	1000	250	U	ug/Kg		14	10 - 152
Carbon disulfide	1000	708		ug/Kg		71	29 - 153
Carbon tetrachloride	1000	766		ug/Kg		77	56 - 139
Chlorobenzene	1000	868		ug/Kg		87	80 - 120
Chloroethane	1000	221		ug/Kg		22	15 - 155
Chloroform	1000	815		ug/Kg		82	72 - 124
Chloromethane	1000	687		ug/Kg		69	45 - 128
cis-1,2-Dichloroethene	1000	806		ug/Kg		81	74 - 123
cis-1,3-Dichloropropene	1000	813		ug/Kg		81	63 - 137
Cyclohexane	1000	950	J	ug/Kg		95	64 - 130
Bromodichloromethane	1000	734		ug/Kg		73	63 - 132
Dichlorodifluoromethane	1000	626		ug/Kg		63	26 - 138
Ethylbenzene	1000	900		ug/Kg		90	76 - 120
1,2-Dibromoethane	1000	809		ug/Kg		81	76 - 120
Isopropylbenzene	1000	895		ug/Kg		90	77 - 124
Methyl acetate	2000	1520		ug/Kg		76	52 - 136
2-Butanone (MEK)	2000	1500		ug/Kg		75	45 - 148
4-Methyl-2-pentanone (MIBK)	2000	1450	J	ug/Kg		72	53 - 139
Methyl tert-butyl ether	1000	875		ug/Kg		87	66 - 127
Methylene Chloride	1000	797		ug/Kg		80	62 - 137
Styrene	1000	839		ug/Kg		84	76 - 121
Tetrachloroethene	1000	873		ug/Kg		87	76 - 120
Toluene	1000	899		ug/Kg		90	76 - 120
trans-1,2-Dichloroethene	1000	852		ug/Kg		85	71 - 133
trans-1,3-Dichloropropene	1000	790		ug/Kg		79	55 - 121
Trichloroethene	1000	822		ug/Kg		82	73 - 126
Trichlorofluoromethane	1000	761		ug/Kg		76	47 - 146
Vinyl chloride	1000	758		ug/Kg		76	52 - 130
Xylenes, Total	2000	1770		ug/Kg		88	79 - 120
Methylcyclohexane	1000	882	J	ug/Kg		88	68 - 127
Dibromochloromethane	1000	740		ug/Kg		74	58 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*53 - 155*
4-Bromofluorobenzene (Surr)	*78*		*48 - 151*
Toluene-d8 (Surr)	*84*		*49 - 147*
Dibromofluoromethane (Surr)	*74*		*49 - 138*

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 240-379169/3-A
Matrix: Solid
Analysis Batch: 379313

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 379169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	823		ug/Kg		82	64 - 135	2	40
1,1,2,2-Tetrachloroethane	1000	834		ug/Kg		83	68 - 128	4	40
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	868		ug/Kg		87	56 - 138	2	40
1,1,2-Trichloroethane	1000	873		ug/Kg		87	78 - 120	1	40
1,1-Dichloroethane	1000	858		ug/Kg		86	72 - 122	1	40
1,1-Dichloroethene	1000	846		ug/Kg		85	57 - 139	2	40
1,2,4-Trichlorobenzene	1000	703		ug/Kg		70	54 - 120	3	40
1,2-Dibromo-3-Chloropropane	1000	523		ug/Kg		52	38 - 135	1	40
1,2-Dichlorobenzene	1000	832		ug/Kg		83	73 - 120	2	40
1,2-Dichloroethane	1000	834		ug/Kg		83	64 - 126	0	40
1,2-Dichloropropane	1000	888		ug/Kg		89	78 - 122	1	40
1,3-Dichlorobenzene	1000	860		ug/Kg		86	70 - 120	1	40
1,4-Dichlorobenzene	1000	848		ug/Kg		85	71 - 120	1	40
2-Hexanone	2000	1560	J	ug/Kg		78	52 - 145	5	40
Acetone	2000	1470		ug/Kg		74	43 - 159	6	40
Benzene	1000	858		ug/Kg		86	74 - 123	2	40
Bromoform	1000	563		ug/Kg		56	46 - 137	1	40
Bromomethane	1000	250	U	ug/Kg		19	10 - 152	27	40
Carbon disulfide	1000	711		ug/Kg		71	29 - 153	0	40
Carbon tetrachloride	1000	763		ug/Kg		76	56 - 139	0	40
Chlorobenzene	1000	874		ug/Kg		87	80 - 120	1	40
Chloroethane	1000	235		ug/Kg		23	15 - 155	6	40
Chloroform	1000	836		ug/Kg		84	72 - 124	2	40
Chloromethane	1000	681		ug/Kg		68	45 - 128	1	40
cis-1,2-Dichloroethene	1000	837		ug/Kg		84	74 - 123	4	40
cis-1,3-Dichloropropene	1000	832		ug/Kg		83	63 - 137	2	40
Cyclohexane	1000	942	J	ug/Kg		94	64 - 130	1	40
Bromodichloromethane	1000	743		ug/Kg		74	63 - 132	1	40
Dichlorodifluoromethane	1000	631		ug/Kg		63	26 - 138	1	40
Ethylbenzene	1000	900		ug/Kg		90	76 - 120	0	40
1,2-Dibromoethane	1000	811		ug/Kg		81	76 - 120	0	40
Isopropylbenzene	1000	897		ug/Kg		90	77 - 124	0	40
Methyl acetate	2000	1590		ug/Kg		80	52 - 136	5	40
2-Butanone (MEK)	2000	1560		ug/Kg		78	45 - 148	4	40
4-Methyl-2-pentanone (MIBK)	2000	1520	J	ug/Kg		76	53 - 139	5	40
Methyl tert-butyl ether	1000	939		ug/Kg		94	66 - 127	7	40
Methylene Chloride	1000	799		ug/Kg		80	62 - 137	0	40
Styrene	1000	837		ug/Kg		84	76 - 121	0	40
Tetrachloroethene	1000	894		ug/Kg		89	76 - 120	2	40
Toluene	1000	903		ug/Kg		90	76 - 120	0	40
trans-1,2-Dichloroethene	1000	866		ug/Kg		87	71 - 133	2	40
trans-1,3-Dichloropropene	1000	800		ug/Kg		80	55 - 121	1	40
Trichloroethene	1000	819		ug/Kg		82	73 - 126	0	40
Trichlorofluoromethane	1000	764		ug/Kg		76	47 - 146	0	40
Vinyl chloride	1000	764		ug/Kg		76	52 - 130	1	40
Xylenes, Total	2000	1770		ug/Kg		88	79 - 120	0	40
Methylcyclohexane	1000	895	J	ug/Kg		89	68 - 127	1	40
Dibromochloromethane	1000	743		ug/Kg		74	58 - 131	0	40

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*76*		*53 - 155*
4-Bromofluorobenzene (Surr)	*79*		*48 - 151*
Toluene-d8 (Surr)	*85*		*49 - 147*
Dibromofluoromethane (Surr)	*76*		*49 - 138*

Method: Moisture - Percent Moisture

Lab Sample ID: 240-111738-2 DU
Matrix: Solid
Analysis Batch: 379399

Client Sample ID: 017303A-042919-DA-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	77.0			79.0		%				2	20
Percent Moisture	23.0			21.0		%				9	20

Lab Sample ID: 240-111738-12 DU
Matrix: Solid
Analysis Batch: 379399

Client Sample ID: 017303A-042919-DA-012
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	84.5			83.9		%				0.6	20
Percent Moisture	15.5			16.1		%				3	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-111738-14	TB-017303A-042919	102	76	92	114
LCS 240-380208/4	Lab Control Sample	83	103	103	98
MB 240-380208/6	Method Blank	101	78	93	109

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(53-155)	(48-151)	(49-147)	(49-138)
240-111738-1	017303A-042919-DA-001	91	86	92	78
240-111738-2	017303A-042919-DA-002	84	81	87	73
240-111738-3	017303A-042919-DA-003	82	76	83	69
240-111738-4	017303A-042919-DA-004	82	79	85	70
240-111738-5	017303A-042919-DA-005	81	80	83	80
240-111738-6	017303A-042919-DA-006	93	86	95	83
240-111738-7	017303A-042919-DA-007	82	77	81	69
240-111738-8	017303A-042919-DA-008	87	83	91	74
240-111738-9	017303A-042919-DA-009	83	79	84	71
240-111738-10	017303A-042919-DA-010	91	88	94	77
240-111738-11	017303A-042919-DA-011	90	82	91	76
240-111738-12	017303A-042919-DA-012	88	85	92	75
240-111738-13	017303A-042919-DA-013	88	84	90	74
LCS 240-379169/2-A	Lab Control Sample	75	78	84	74
LCSD 240-379169/3-A	Lab Control Sample Dup	76	79	85	76
MB 240-379169/1-A	Method Blank	75	73	79	70

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Client Sample ID: 017303A-042919-DA-001 — **Lab Sample ID: 240-111738-1**
Date Collected: 04/29/19 10:30 — **Matrix: Solid**
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-001 — **Lab Sample ID: 240-111738-1**
Date Collected: 04/29/19 10:30 — **Matrix: Solid**
Date Received: 04/30/19 10:00 — **Percent Solids: 79.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 16:17	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-002 — **Lab Sample ID: 240-111738-2**
Date Collected: 04/29/19 10:45 — **Matrix: Solid**
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-002 — **Lab Sample ID: 240-111738-2**
Date Collected: 04/29/19 10:45 — **Matrix: Solid**
Date Received: 04/30/19 10:00 — **Percent Solids: 77.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 16:41	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-003 — **Lab Sample ID: 240-111738-3**
Date Collected: 04/29/19 11:15 — **Matrix: Solid**
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-003 — **Lab Sample ID: 240-111738-3**
Date Collected: 04/29/19 11:15 — **Matrix: Solid**
Date Received: 04/30/19 10:00 — **Percent Solids: 83.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 17:06	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-004 — **Lab Sample ID: 240-111738-4**
Date Collected: 04/29/19 11:30 — **Matrix: Solid**
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Client Sample ID: 017303A-042919-DA-004
Lab Sample ID: 240-111738-4
Date Collected: 04/29/19 11:30
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 17:31	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-005
Lab Sample ID: 240-111738-5
Date Collected: 04/29/19 13:20
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-005
Lab Sample ID: 240-111738-5
Date Collected: 04/29/19 13:20
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 74.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		4	379519	05/03/19 15:02	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-006
Lab Sample ID: 240-111738-6
Date Collected: 04/29/19 13:30
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-006
Lab Sample ID: 240-111738-6
Date Collected: 04/29/19 13:30
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 77.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379519	05/03/19 15:27	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-007
Lab Sample ID: 240-111738-7
Date Collected: 04/29/19 13:45
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Client Sample ID: 017303A-042919-DA-007
Lab Sample ID: 240-111738-7
Date Collected: 04/29/19 13:45
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 18:45	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-008
Lab Sample ID: 240-111738-8
Date Collected: 04/29/19 14:30
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-008
Lab Sample ID: 240-111738-8
Date Collected: 04/29/19 14:30
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 19:10	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-009
Lab Sample ID: 240-111738-9
Date Collected: 04/29/19 14:15
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-009
Lab Sample ID: 240-111738-9
Date Collected: 04/29/19 14:15
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 19:34	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-010
Lab Sample ID: 240-111738-10
Date Collected: 04/29/19 15:45
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Client Sample ID: 017303A-042919-DA-010
Lab Sample ID: 240-111738-10
Date Collected: 04/29/19 15:45
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 19:59	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-011
Lab Sample ID: 240-111738-11
Date Collected: 04/29/19 16:00
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-011
Lab Sample ID: 240-111738-11
Date Collected: 04/29/19 16:00
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 20:24	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-012
Lab Sample ID: 240-111738-12
Date Collected: 04/29/19 16:15
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Client Sample ID: 017303A-042919-DA-012
Lab Sample ID: 240-111738-12
Date Collected: 04/29/19 16:15
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 20:48	HMB	TAL CAN

Client Sample ID: 017303A-042919-DA-013
Lab Sample ID: 240-111738-13
Date Collected: 04/29/19 16:30
Matrix: Solid
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379399	05/02/19 14:25	MMM	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Client Sample ID: 017303A-042919-DA-013

Lab Sample ID: 240-111738-13

Date Collected: 04/29/19 16:30
Matrix: Solid
Date Received: 04/30/19 10:00
Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379169	05/01/19 13:51	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379313	05/02/19 21:13	HMB	TAL CAN

Client Sample ID: TB-017303A-042919

Lab Sample ID: 240-111738-14

Date Collected: 04/29/19 00:00
Matrix: Water
Date Received: 04/30/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	380208	05/08/19 17:21	LRW	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111738-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	04-30-19 *
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Michigan

10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

MICHIGAN 190

Chain of Custody Record

238880

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: K. Trestrail	Site Contact: G. Trigger	Date: 4/29/19	COC No: 17303-T02-04-2019-01
Company Name: GHD Services, Inc.	Tel/Fax: 248.915.8801	Lab Contact: D. Heckler	Carrier: FEDEX	1 of 1 COCs
Address: 26850 Haggerty Road	Analysis Turnaround Time			Sampler: D. ANTULIS
City/State/Zip: Farmington Hills, MI	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248. 893. 2400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: RACER - CVO	☐ 1 week			Job / SDG No.:
Site: Ypsilanti, MI	☐ 2 days			
PO# 017303A-2019A-T02.04	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOCs - 8260B - FULL	Sample Specific Notes:
017303A-042919-DA-001	4-29-19	1030	G	S	2	N	N	X	
-002		1045			2			X	
-003		1115			1			X	
-004		1130						X	
-005		1320						X	
-006		1330						X	
-007		1945						X	
-008		1430						X	
-009		1445							
-010		1545							
-011		1610							
-012		1615							

240-111738 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company: GHD	Date/Time: 4/29/19 1700	Received by:	Company: ETA	Date/Time: 4-30-19 1000
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

5/10/2019

MICHIGAN
190

4.6/4W4

Chain of Custody Record

312875

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

SAW

Client Contact	Project Manager: K. TRESTRAIL	Site Contact: G. TRIGGER	Date: 4/29/19	COC No: 17303-TO2-04-7019-01
Company Name: GHD SERVICES INC.	Tel/Fax: 248 ~~373~~ 795-8801	Lab Contact: D. HELKIER	Carrier: FED EX	1 of 1 COCs
Address: 26850 HAGGERTY RD	Analysis Turnaround Time			Sampler: D. ANTULIS
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248 893 3400	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVD	☐ 1 week			Job / SDG No.:
Site: YPSILANTI, MI	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	VOCs 8260B-Full	Sample Specific Notes:
017303A-042919-D4-013	4-29-19	1630	G	S	2	N	N	X	
TB-017303A-042919	—	—	—	W	1			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	GHD	4/29/19 1700		ETA	4-30-19 1000
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

5/10/2019

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 111738
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: Ryan Cribley

Cooler Received on 4-30-19 Opened on 4-30-19

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) (Foam) (Plastic Bag) None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 4.6 °C Corrected Cooler Temp. 4.4 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes (No) NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC984738**
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No (NA)
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B828801VB (Yes) No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: RC

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-111853-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Authorized for release by:
5/10/2019 8:19:33 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Job ID: 240-111853-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-111853-1

Comments
No additional comments.

Receipt
The samples were received on 5/1/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
Method(s) 8260B MI: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-379340 and analytical batch 240-379640.

Method(s) 8260B MI: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-379340 and analytical batch 240-379778.

Method(s) 8260B MI: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-380022 and analytical batch 240-380281.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-111853-1	SO-017303A-043019-DA-014	Solid	04/30/19 09:05	05/01/19 10:00
240-111853-2	SO-017303A-043019-DA-015	Solid	04/30/19 09:15	05/01/19 10:00
240-111853-3	SO-017303A-043019-DA-016	Solid	04/30/19 09:20	05/01/19 10:00
240-111853-4	SO-017303A-043019-DA-017	Solid	04/30/19 10:00	05/01/19 10:00
240-111853-5	SO-017303A-043019-DA-018	Solid	04/30/19 10:30	05/01/19 10:00
240-111853-6	SO-017303A-043019-DA-019	Solid	04/30/19 10:50	05/01/19 10:00
240-111853-7	SO-017303A-043019-DA-020	Solid	04/30/19 11:00	05/01/19 10:00
240-111853-8	SO-017303A-043019-DA-021	Solid	04/30/19 11:20	05/01/19 10:00
240-111853-9	SO-017303A-043019-DA-022	Solid	04/30/19 11:45	05/01/19 10:00
240-111853-10	SO-017303A-043019-DA-023	Solid	04/30/19 13:35	05/01/19 10:00
240-111853-11	SO-017303A-043019-DA-024	Solid	04/30/19 13:40	05/01/19 10:00
240-111853-12	SO-017303A-043019-DA-025	Solid	04/30/19 13:50	05/01/19 10:00
240-111853-13	SO-017303A-043019-DA-026	Solid	04/30/19 13:55	05/01/19 10:00
240-111853-14	SO-017303A-043019-DA-027	Solid	04/30/19 14:00	05/01/19 10:00
240-111853-15	SO-017303A-043019-DA-028	Solid	04/30/19 14:10	05/01/19 10:00
240-111853-16	SO-017303A-043019-DA-029	Solid	04/30/19 14:15	05/01/19 10:00
240-111853-17	SO-017303A-043019-DA-030	Solid	04/30/19 14:41	05/01/19 10:00
240-111853-18	SO-017303A-043019-DA-031	Solid	04/30/19 14:45	05/01/19 10:00
240-111853-19	SO-017303A-043019-DA-032	Solid	04/30/19 14:50	05/01/19 10:00
240-111853-20	SO-017303A-043019-DA-033	Solid	04/30/19 14:55	05/01/19 10:00
240-111853-21	SO-017303A-043019-DA-034	Solid	04/30/19 15:10	05/01/19 10:00
240-111853-22	SO-017303A-043019-DA-035	Solid	04/30/19 15:20	05/01/19 10:00
240-111853-23	SO-017303A-043019-DA-036	Solid	04/30/19 15:30	05/01/19 10:00
240-111853-24	TB-017303A-043019	Water	04/30/19 00:00	05/01/19 10:00

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Client Sample ID: SO-017303A-043019-DA-014 — Lab Sample ID: 240-111853-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	180	J	280	78	ug/Kg	1	☼	8260B MI	Total/NA
1,3-Dichlorobenzene	38	J	110	32	ug/Kg	1	☼	8260B MI	Total/NA
1,4-Dichlorobenzene	96	J	110	25	ug/Kg	1	☼	8260B MI	Total/NA
cis-1,2-Dichloroethene	2600		55	12	ug/Kg	1	☼	8260B MI	Total/NA
Ethylbenzene	53	J	55	17	ug/Kg	1	☼	8260B MI	Total/NA
trans-1,2-Dichloroethene	220		55	14	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	390		55	15	ug/Kg	1	☼	8260B MI	Total/NA
Vinyl chloride	80		44	17	ug/Kg	1	☼	8260B MI	Total/NA
Xylenes, Total	280		170	37	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-015 — Lab Sample ID: 240-111853-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	17000		280	62	ug/Kg	5	☼	8260B MI	Total/NA
trans-1,2-Dichloroethene	330		280	69	ug/Kg	5	☼	8260B MI	Total/NA
Vinyl chloride	23000		220	83	ug/Kg	5	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-016 — Lab Sample ID: 240-111853-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	11	J	50	11	ug/Kg	1	☼	8260B MI	Total/NA
Methylcyclohexane	170	J	1200	78	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-017 — Lab Sample ID: 240-111853-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	130		60	14	ug/Kg	1	☼	8260B MI	Total/NA
Vinyl chloride	120		48	18	ug/Kg	1	☼	8260B MI	Total/NA
Methylcyclohexane	180	J	1500	94	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-018 — Lab Sample ID: 240-111853-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	200		59	13	ug/Kg	1	☼	8260B MI	Total/NA
Vinyl chloride	160		47	18	ug/Kg	1	☼	8260B MI	Total/NA
Methylcyclohexane	130	J	1400	91	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-019 — Lab Sample ID: 240-111853-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3400		50	11	ug/Kg	1	☼	8260B MI	Total/NA
Ethylbenzene	16	J	50	15	ug/Kg	1	☼	8260B MI	Total/NA
Toluene	34	J	100	30	ug/Kg	1	☼	8260B MI	Total/NA
trans-1,2-Dichloroethene	430		50	13	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	1400		50	14	ug/Kg	1	☼	8260B MI	Total/NA
Vinyl chloride	37	J	40	15	ug/Kg	1	☼	8260B MI	Total/NA
Xylenes, Total	67	J	150	34	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-020 — Lab Sample ID: 240-111853-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	9200		1200	260	ug/Kg	20	☼	8260B MI	Total/NA
Trichloroethene	51000		1200	320	ug/Kg	20	☼	8260B MI	Total/NA
Vinyl chloride	350	J	920	350	ug/Kg	20	☼	8260B MI	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample ID: SO-017303A-043019-DA-020 (Continued) — Lab Sample ID: 240-111853-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	1300	J	3500	780	ug/Kg	20	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-021 — Lab Sample ID: 240-111853-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	22	J	63	14	ug/Kg	1	☼	8260B MI	Total/NA
Toluene	42	J	130	38	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	82		63	17	ug/Kg	1	☼	8260B MI	Total/NA
Xylenes, Total	81	J	190	42	ug/Kg	1	☼	8260B MI	Total/NA
Methylcyclohexane	160	J	1500	97	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-022 — Lab Sample ID: 240-111853-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	13	J	53	12	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	41	J	53	15	ug/Kg	1	☼	8260B MI	Total/NA
Xylenes, Total	44	J	160	36	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-023 — Lab Sample ID: 240-111853-10

No Detections.

Client Sample ID: SO-017303A-043019-DA-024 — Lab Sample ID: 240-111853-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	25	J	50	11	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-025 — Lab Sample ID: 240-111853-12

No Detections.

Client Sample ID: SO-017303A-043019-DA-026 — Lab Sample ID: 240-111853-13

No Detections.

Client Sample ID: SO-017303A-043019-DA-027 — Lab Sample ID: 240-111853-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	120	J	1300	85	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-028 — Lab Sample ID: 240-111853-15

No Detections.

Client Sample ID: SO-017303A-043019-DA-029 — Lab Sample ID: 240-111853-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	110	J	1300	81	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-030 — Lab Sample ID: 240-111853-17

No Detections.

Client Sample ID: SO-017303A-043019-DA-031 — Lab Sample ID: 240-111853-18

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Client Sample ID: SO-017303A-043019-DA-032 — Lab Sample ID: 240-111853-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	54	J	56	13	ug/Kg	1	☼	8260B MI	Total/NA
Vinyl chloride	370		45	17	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-033 — Lab Sample ID: 240-111853-20

No Detections.

Client Sample ID: SO-017303A-043019-DA-034 — Lab Sample ID: 240-111853-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	190	J	1300	85	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-035 — Lab Sample ID: 240-111853-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	71	J	160	36	ug/Kg	1	☼	8260B MI	Total/NA
Methylcyclohexane	200	J	1300	83	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-043019-DA-036 — Lab Sample ID: 240-111853-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	170	J	1300	86	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: TB-017303A-043019 — Lab Sample ID: 240-111853-24

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B MI	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
5035	Closed System Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-014
Date Collected: 04/30/19 09:05
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-1
Matrix: Solid
Percent Solids: 80.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	21	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,1,2,2-Tetrachloroethane	55	U	55	17	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	83	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,1,2-Trichloroethane	55	U	55	17	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,2,4-Trichlorobenzene	**180**	**J**	280	78	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,2-Dichloroethane	55	U	55	21	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,3-Dichlorobenzene	**38**	**J**	110	32	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,4-Dichlorobenzene	**96**	**J**	110	25	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
2-Hexanone	2800	U	2800	460	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Acetone	830	U	830	320	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Benzene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Bromoform	110	U	110	43	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Bromomethane	350	U	350	280	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Carbon disulfide	280	U	280	150	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Chloroform	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
cis-1,2-Dichloroethene	**2600**		55	12	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Dichlorodifluoromethane	110	U	110	50	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Ethylbenzene	**53**	**J**	55	17	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
1,2-Dibromoethane	280	U	280	53	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Isopropylbenzene	280	U	280	50	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
2-Butanone (MEK)	830	U	830	200	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	470	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Methyl tert-butyl ether	280	U	280	69	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Methylene Chloride	690	U	690	250	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Styrene	55	U	55	19	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Toluene	110	U	110	33	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
trans-1,2-Dichloroethene	**220**		55	14	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
trans-1,3-Dichloropropene	55	U	55	30	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Trichloroethene	**390**		55	15	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Vinyl chloride	**80**		44	17	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Xylenes, Total	**280**		170	37	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Methylcyclohexane	1300	U	1300	86	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1
Dibromochloromethane	55	U	55	50	ug/Kg	☼	05/02/19 10:46	05/04/19 18:16	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		53 - 155	05/02/19 10:46	05/04/19 18:16	1
4-Bromofluorobenzene (Surr)	87		48 - 151	05/02/19 10:46	05/04/19 18:16	1
Toluene-d8 (Surr)	91		49 - 147	05/02/19 10:46	05/04/19 18:16	1
Dibromofluoromethane (Surr)	81		49 - 138	05/02/19 10:46	05/04/19 18:16	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-015
Date Collected: 04/30/19 09:15
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-2
Matrix: Solid
Percent Solids: 84.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	280	U	280	100	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,1,2,2-Tetrachloroethane	280	U	280	83	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1400	U	1400	410	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,1,2-Trichloroethane	280	U	280	83	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,1-Dichloroethane	280	U	280	55	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,1-Dichloroethene	280	U	280	110	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,2,4-Trichlorobenzene	1400	U	1400	390	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,2-Dibromo-3-Chloropropane	1400	U	1400	550	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,2-Dichlorobenzene	550	U	550	170	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,2-Dichloroethane	280	U	280	100	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,2-Dichloropropane	280	U	280	76	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,3-Dichlorobenzene	550	U	550	160	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,4-Dichlorobenzene	550	U	550	120	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
2-Hexanone	14000	U	14000	2300	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Acetone	4100	U	4100	1600	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Benzene	280	U	280	62	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Bromoform	550	U	550	210	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Bromomethane	1700	U	1700	1400	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Carbon disulfide	1400	U	1400	760	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Carbon tetrachloride	280	U	280	110	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Chlorobenzene	280	U	280	62	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Chloroethane	1400	U	1400	1100	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Chloroform	280	U	280	76	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Chloromethane	1400	U	1400	580	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
cis-1,2-Dichloroethene	**17000**		280	62	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
cis-1,3-Dichloropropene	280	U	280	140	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Cyclohexane	6600	U	6600	1200	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Bromodichloromethane	550	U	550	130	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Dichlorodifluoromethane	550	U	550	250	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Ethylbenzene	280	U	280	83	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
1,2-Dibromoethane	1400	U	1400	260	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Isopropylbenzene	1400	U	1400	250	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Methyl acetate	6600	U	6600	5400	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
2-Butanone (MEK)	4100	U	4100	970	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
4-Methyl-2-pentanone (MIBK)	14000	U	14000	2300	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Methyl tert-butyl ether	1400	U	1400	340	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Methylene Chloride	3400	U	3400	1200	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Styrene	280	U	280	96	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Tetrachloroethene	280	U	280	120	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Toluene	550	U	550	170	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
trans-1,2-Dichloroethene	**330**		280	69	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
trans-1,3-Dichloropropene	280	U	280	150	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Trichloroethene	280	U	280	76	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Trichlorofluoromethane	550	U	550	280	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Vinyl chloride	**23000**		220	83	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Xylenes, Total	830	U	830	190	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Methylcyclohexane	6600	U	6600	430	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5
Dibromochloromethane	280	U	280	250	ug/Kg	☼	05/02/19 10:46	05/06/19 13:48	5

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		53 - 155	05/02/19 10:46	05/06/19 13:48	5
4-Bromofluorobenzene (Surr)	75		48 - 151	05/02/19 10:46	05/06/19 13:48	5
Toluene-d8 (Surr)	81		49 - 147	05/02/19 10:46	05/06/19 13:48	5
Dibromofluoromethane (Surr)	84		49 - 138	05/02/19 10:46	05/06/19 13:48	5

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-016
Date Collected: 04/30/19 09:20
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-3
Matrix: Solid
Percent Solids: 84.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,1,2,2-Tetrachloroethane	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	75	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,1,2-Trichloroethane	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,1-Dichloroethane	50	U	50	10	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,1-Dichloroethene	50	U	50	20	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,2,4-Trichlorobenzene	250	U	250	70	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,2-Dibromo-3-Chloropropane	250	U	250	100	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,2-Dichlorobenzene	100	U	100	31	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,2-Dichloroethane	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,2-Dichloropropane	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,3-Dichlorobenzene	100	U	100	29	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
2-Hexanone	2500	U	2500	420	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Acetone	750	U	750	290	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Benzene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Bromoform	100	U	100	39	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Bromomethane	310	U	310	260	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Carbon disulfide	250	U	250	140	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Carbon tetrachloride	50	U	50	20	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Chlorobenzene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Chloroethane	250	U	250	210	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Chloroform	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Chloromethane	250	U	250	110	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
cis-1,2-Dichloroethene	**11**	**J**	50	11	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
cis-1,3-Dichloropropene	50	U	50	26	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Dichlorodifluoromethane	100	U	100	45	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Ethylbenzene	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
1,2-Dibromoethane	250	U	250	48	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Isopropylbenzene	250	U	250	45	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Methyl acetate	1200	U	1200	990	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
2-Butanone (MEK)	750	U	750	180	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	430	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Methyl tert-butyl ether	250	U	250	63	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Methylene Chloride	630	U	630	220	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Styrene	50	U	50	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Tetrachloroethene	50	U	50	23	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Toluene	100	U	100	30	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
trans-1,2-Dichloroethene	50	U	50	13	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
trans-1,3-Dichloropropene	50	U	50	28	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Trichloroethene	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Trichlorofluoromethane	100	U	100	50	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Vinyl chloride	40	U	40	15	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Methylcyclohexane	**170**	**J**	1200	78	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1
Dibromochloromethane	50	U	50	45	ug/Kg	☼	05/02/19 10:46	05/04/19 19:05	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		53 - 155	05/02/19 10:46	05/04/19 19:05	1
4-Bromofluorobenzene (Surr)	78		48 - 151	05/02/19 10:46	05/04/19 19:05	1
Toluene-d8 (Surr)	85		49 - 147	05/02/19 10:46	05/04/19 19:05	1
Dibromofluoromethane (Surr)	72		49 - 138	05/02/19 10:46	05/04/19 19:05	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-017
Date Collected: 04/30/19 10:00
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-4
Matrix: Solid
Percent Solids: 79.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	60	U	60	23	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,1,2,2-Tetrachloroethane	60	U	60	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	300	U	300	91	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,1,2-Trichloroethane	60	U	60	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,1-Dichloroethane	60	U	60	12	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,1-Dichloroethene	60	U	60	24	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,2,4-Trichlorobenzene	300	U	300	85	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,2-Dibromo-3-Chloropropane	300	U	300	120	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,2-Dichlorobenzene	120	U	120	38	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,2-Dichloroethane	60	U	60	23	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,2-Dichloropropane	60	U	60	17	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,3-Dichlorobenzene	120	U	120	35	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,4-Dichlorobenzene	120	U	120	27	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
2-Hexanone	3000	U	3000	500	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Acetone	910	U	910	350	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Benzene	60	U	60	14	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Bromoform	120	U	120	47	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Bromomethane	380	U	380	310	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Carbon disulfide	300	U	300	170	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Carbon tetrachloride	60	U	60	24	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Chlorobenzene	60	U	60	14	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Chloroethane	300	U	300	250	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Chloroform	60	U	60	17	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Chloromethane	300	U	300	130	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
cis-1,2-Dichloroethene	**130**		60	14	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
cis-1,3-Dichloropropene	60	U	60	32	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Cyclohexane	1500	U	1500	270	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Bromodichloromethane	120	U	120	29	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Dichlorodifluoromethane	120	U	120	54	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Ethylbenzene	60	U	60	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
1,2-Dibromoethane	300	U	300	57	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Isopropylbenzene	300	U	300	54	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Methyl acetate	1500	U	1500	1200	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
2-Butanone (MEK)	910	U	910	210	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
4-Methyl-2-pentanone (MIBK)	3000	U	3000	510	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Methyl tert-butyl ether	300	U	300	76	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Methylene Chloride	760	U	760	270	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Styrene	60	U	60	21	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Tetrachloroethene	60	U	60	27	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Toluene	120	U	120	36	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
trans-1,2-Dichloroethene	60	U	60	15	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
trans-1,3-Dichloropropene	60	U	60	33	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Trichloroethene	60	U	60	17	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Trichlorofluoromethane	120	U	120	60	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Vinyl chloride	**120**		48	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Xylenes, Total	180	U	180	41	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Methylcyclohexane	**180**	**J**	1500	94	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1
Dibromochloromethane	60	U	60	54	ug/Kg	☼	05/02/19 10:46	05/04/19 19:30	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		53 - 155	05/02/19 10:46	05/04/19 19:30	1
4-Bromofluorobenzene (Surr)	81		48 - 151	05/02/19 10:46	05/04/19 19:30	1
Toluene-d8 (Surr)	86		49 - 147	05/02/19 10:46	05/04/19 19:30	1
Dibromofluoromethane (Surr)	74		49 - 138	05/02/19 10:46	05/04/19 19:30	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-018
Date Collected: 04/30/19 10:30
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-5
Matrix: Solid
Percent Solids: 78.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	59	U	59	22	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,1,2,2-Tetrachloroethane	59	U	59	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	290	U	290	88	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,1,2-Trichloroethane	59	U	59	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,1-Dichloroethane	59	U	59	12	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,1-Dichloroethene	59	U	59	24	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,2,4-Trichlorobenzene	290	U	290	82	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,2-Dibromo-3-Chloropropane	290	U	290	120	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,2-Dichlorobenzene	120	U	120	37	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,2-Dichloroethane	59	U	59	22	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,2-Dichloropropane	59	U	59	16	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,3-Dichlorobenzene	120	U	120	34	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,4-Dichlorobenzene	120	U	120	26	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
2-Hexanone	2900	U	2900	490	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Acetone	880	U	880	340	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Benzene	59	U	59	13	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Bromoform	120	U	120	46	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Bromomethane	370	U	370	300	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Carbon disulfide	290	U	290	160	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Carbon tetrachloride	59	U	59	24	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Chlorobenzene	59	U	59	13	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Chloroethane	290	U	290	240	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Chloroform	59	U	59	16	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Chloromethane	290	U	290	120	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
cis-1,2-Dichloroethene	**200**		59	13	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
cis-1,3-Dichloropropene	59	U	59	31	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Cyclohexane	1400	U	1400	270	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Bromodichloromethane	120	U	120	28	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Dichlorodifluoromethane	120	U	120	53	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Ethylbenzene	59	U	59	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
1,2-Dibromoethane	290	U	290	56	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Isopropylbenzene	290	U	290	53	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Methyl acetate	1400	U	1400	1200	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
2-Butanone (MEK)	880	U	880	210	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
4-Methyl-2-pentanone (MIBK)	2900	U	2900	500	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Methyl tert-butyl ether	290	U	290	73	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Methylene Chloride	730	U	730	260	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Styrene	59	U	59	21	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Tetrachloroethene	59	U	59	26	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Toluene	120	U	120	35	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
trans-1,2-Dichloroethene	59	U	59	15	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
trans-1,3-Dichloropropene	59	U	59	32	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Trichloroethene	59	U	59	16	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Trichlorofluoromethane	120	U	120	59	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Vinyl chloride	**160**		47	18	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Xylenes, Total	180	U	180	40	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Methylcyclohexane	**130**	**J**	1400	91	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1
Dibromochloromethane	59	U	59	53	ug/Kg	☼	05/02/19 10:46	05/04/19 19:54	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		53 - 155	05/02/19 10:46	05/04/19 19:54	1
4-Bromofluorobenzene (Surr)	87		48 - 151	05/02/19 10:46	05/04/19 19:54	1
Toluene-d8 (Surr)	93		49 - 147	05/02/19 10:46	05/04/19 19:54	1
Dibromofluoromethane (Surr)	74		49 - 138	05/02/19 10:46	05/04/19 19:54	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-019
Date Collected: 04/30/19 10:50
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-6
Matrix: Solid
Percent Solids: 88.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,1,2,2-Tetrachloroethane	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	75	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,1,2-Trichloroethane	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,1-Dichloroethane	50	U	50	10	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,1-Dichloroethene	50	U	50	20	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,2,4-Trichlorobenzene	250	U	250	70	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,2-Dibromo-3-Chloropropane	250	U	250	100	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,2-Dichlorobenzene	100	U	100	31	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,2-Dichloroethane	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,2-Dichloropropane	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,3-Dichlorobenzene	100	U	100	29	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
2-Hexanone	2500	U	2500	420	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Acetone	750	U	750	290	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Benzene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Bromoform	100	U	100	39	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Bromomethane	310	U	310	260	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Carbon disulfide	250	U	250	140	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Carbon tetrachloride	50	U	50	20	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Chlorobenzene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Chloroethane	250	U	250	210	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Chloroform	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Chloromethane	250	U	250	110	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
cis-1,2-Dichloroethene	**3400**		50	11	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
cis-1,3-Dichloropropene	50	U	50	26	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Dichlorodifluoromethane	100	U	100	45	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Ethylbenzene	**16**	**J**	50	15	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
1,2-Dibromoethane	250	U	250	48	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Isopropylbenzene	250	U	250	45	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Methyl acetate	1200	U	1200	990	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
2-Butanone (MEK)	750	U	750	180	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	430	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Methyl tert-butyl ether	250	U	250	63	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Methylene Chloride	630	U	630	220	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Styrene	50	U	50	18	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Tetrachloroethene	50	U	50	23	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Toluene	**34**	**J**	100	30	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
trans-1,2-Dichloroethene	**430**		50	13	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
trans-1,3-Dichloropropene	50	U	50	28	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Trichloroethene	**1400**		50	14	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Trichlorofluoromethane	100	U	100	50	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Vinyl chloride	**37**	**J**	40	15	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Xylenes, Total	**67**	**J**	150	34	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Methylcyclohexane	1200	U	1200	78	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1
Dibromochloromethane	50	U	50	45	ug/Kg	☼	05/02/19 10:46	05/04/19 20:19	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		53 - 155	05/02/19 10:46	05/04/19 20:19	1
4-Bromofluorobenzene (Surr)	84		48 - 151	05/02/19 10:46	05/04/19 20:19	1
Toluene-d8 (Surr)	87		49 - 147	05/02/19 10:46	05/04/19 20:19	1
Dibromofluoromethane (Surr)	74		49 - 138	05/02/19 10:46	05/04/19 20:19	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-020
Date Collected: 04/30/19 11:00
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-7
Matrix: Solid
Percent Solids: 81.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1200	U	1200	430	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,1,2,2-Tetrachloroethane	1200	U	1200	350	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,1,2-Trichloro-1,2,2-trifluoroethane	5800	U	5800	1700	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,1,2-Trichloroethane	1200	U	1200	350	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,1-Dichloroethane	1200	U	1200	230	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,1-Dichloroethene	1200	U	1200	460	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,2,4-Trichlorobenzene	5800	U	5800	1600	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,2-Dibromo-3-Chloropropane	5800	U	5800	2300	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,2-Dichlorobenzene	2300	U	2300	720	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,2-Dichloroethane	1200	U	1200	430	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,2-Dichloropropane	1200	U	1200	320	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,3-Dichlorobenzene	2300	U	2300	660	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,4-Dichlorobenzene	2300	U	2300	520	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
2-Hexanone	58000	U	58000	9600	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Acetone	17000	U	17000	6600	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Benzene	1200	U	1200	260	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Bromoform	2300	U	2300	890	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Bromomethane	7200	U	7200	5900	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Carbon disulfide	5800	U	5800	3200	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Carbon tetrachloride	1200	U	1200	460	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Chlorobenzene	1200	U	1200	260	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Chloroethane	5800	U	5800	4700	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Chloroform	1200	U	1200	320	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Chloromethane	5800	U	5800	2400	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
cis-1,2-Dichloroethene	**9200**		1200	260	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
cis-1,3-Dichloropropene	1200	U	1200	610	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Cyclohexane	28000	U	28000	5200	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Bromodichloromethane	2300	U	2300	550	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Dichlorodifluoromethane	2300	U	2300	1000	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Ethylbenzene	1200	U	1200	350	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
1,2-Dibromoethane	5800	U	5800	1100	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Isopropylbenzene	5800	U	5800	1000	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Methyl acetate	28000	U	28000	23000	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
2-Butanone (MEK)	17000	U	17000	4100	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
4-Methyl-2-pentanone (MIBK)	58000	U	58000	9800	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Methyl tert-butyl ether	5800	U	5800	1400	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Methylene Chloride	14000	U	14000	5100	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Styrene	1200	U	1200	400	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Tetrachloroethene	1200	U	1200	520	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Toluene	2300	U	2300	690	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
trans-1,2-Dichloroethene	1200	U	1200	290	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
trans-1,3-Dichloropropene	1200	U	1200	640	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Trichloroethene	**51000**		1200	320	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Trichlorofluoromethane	2300	U	2300	1200	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Vinyl chloride	**350**	**J**	920	350	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Xylenes, Total	**1300**	**J**	3500	780	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Methylcyclohexane	28000	U	28000	1800	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20
Dibromochloromethane	1200	U	1200	1000	ug/Kg	☼	05/02/19 10:46	05/06/19 14:13	20

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		53 - 155	05/02/19 10:46	05/06/19 14:13	20
4-Bromofluorobenzene (Surr)	82		48 - 151	05/02/19 10:46	05/06/19 14:13	20
Toluene-d8 (Surr)	87		49 - 147	05/02/19 10:46	05/06/19 14:13	20
Dibromofluoromethane (Surr)	83		49 - 138	05/02/19 10:46	05/06/19 14:13	20

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-021
Date Collected: 04/30/19 11:20
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-8
Matrix: Solid
Percent Solids: 77.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	63	U	63	23	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,1,2,2-Tetrachloroethane	63	U	63	19	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	310	U	310	94	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,1,2-Trichloroethane	63	U	63	19	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,1-Dichloroethane	63	U	63	13	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,1-Dichloroethene	63	U	63	25	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,2,4-Trichlorobenzene	310	U	310	88	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,2-Dibromo-3-Chloropropane	310	U	310	130	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,2-Dichlorobenzene	130	U	130	39	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,2-Dichloroethane	63	U	63	23	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,2-Dichloropropane	63	U	63	17	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,3-Dichlorobenzene	130	U	130	36	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,4-Dichlorobenzene	130	U	130	28	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
2-Hexanone	3100	U	3100	520	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Acetone	940	U	940	360	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Benzene	63	U	63	14	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Bromoform	130	U	130	49	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Bromomethane	390	U	390	320	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Carbon disulfide	310	U	310	170	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Carbon tetrachloride	63	U	63	25	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Chlorobenzene	63	U	63	14	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Chloroethane	310	U	310	260	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Chloroform	63	U	63	17	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Chloromethane	310	U	310	130	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
cis-1,2-Dichloroethene	**22**	**J**	63	14	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
cis-1,3-Dichloropropene	63	U	63	33	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Cyclohexane	1500	U	1500	280	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Bromodichloromethane	130	U	130	30	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Dichlorodifluoromethane	130	U	130	56	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Ethylbenzene	63	U	63	19	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
1,2-Dibromoethane	310	U	310	59	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Isopropylbenzene	310	U	310	56	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Methyl acetate	1500	U	1500	1200	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
2-Butanone (MEK)	940	U	940	220	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
4-Methyl-2-pentanone (MIBK)	3100	U	3100	530	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Methyl tert-butyl ether	310	U	310	78	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Methylene Chloride	780	U	780	280	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Styrene	63	U	63	22	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Tetrachloroethene	63	U	63	28	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Toluene	**42**	**J**	130	38	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
trans-1,2-Dichloroethene	63	U	63	16	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
trans-1,3-Dichloropropene	63	U	63	34	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Trichloroethene	**82**		63	17	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Trichlorofluoromethane	130	U	130	63	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Vinyl chloride	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Xylenes, Total	**81**	**J**	190	42	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Methylcyclohexane	**160**	**J**	1500	97	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1
Dibromochloromethane	63	U	63	56	ug/Kg	☼	05/02/19 10:46	05/06/19 14:37	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		53 - 155	05/02/19 10:46	05/06/19 14:37	1
4-Bromofluorobenzene (Surr)	84		48 - 151	05/02/19 10:46	05/06/19 14:37	1
Toluene-d8 (Surr)	90		49 - 147	05/02/19 10:46	05/06/19 14:37	1
Dibromofluoromethane (Surr)	80		49 - 138	05/02/19 10:46	05/06/19 14:37	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-022
Date Collected: 04/30/19 11:45
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-9
Matrix: Solid
Percent Solids: 86.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	53	U	53	20	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,1,2,2-Tetrachloroethane	53	U	53	16	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	79	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,1,2-Trichloroethane	53	U	53	16	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,1-Dichloroethane	53	U	53	11	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,1-Dichloroethene	53	U	53	21	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,2,4-Trichlorobenzene	260	U	260	74	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,2-Dibromo-3-Chloropropane	260	U	260	110	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,2-Dichlorobenzene	110	U	110	33	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,2-Dichloroethane	53	U	53	20	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,2-Dichloropropane	53	U	53	15	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,3-Dichlorobenzene	110	U	110	30	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,4-Dichlorobenzene	110	U	110	24	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
2-Hexanone	2600	U	2600	440	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Acetone	790	U	790	300	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Benzene	53	U	53	12	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Bromoform	110	U	110	41	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Bromomethane	330	U	330	270	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Carbon disulfide	260	U	260	150	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Carbon tetrachloride	53	U	53	21	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Chlorobenzene	53	U	53	12	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Chloroethane	260	U	260	220	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Chloroform	53	U	53	15	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Chloromethane	260	U	260	110	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
cis-1,2-Dichloroethene	**13**	**J**	53	12	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
cis-1,3-Dichloropropene	53	U	53	28	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Cyclohexane	1300	U	1300	240	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Dichlorodifluoromethane	110	U	110	48	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Ethylbenzene	53	U	53	16	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
1,2-Dibromoethane	260	U	260	50	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Isopropylbenzene	260	U	260	48	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Methyl acetate	1300	U	1300	1000	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
2-Butanone (MEK)	790	U	790	190	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	450	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Methyl tert-butyl ether	260	U	260	66	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Methylene Chloride	660	U	660	230	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Styrene	53	U	53	18	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Tetrachloroethene	53	U	53	24	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Toluene	110	U	110	32	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
trans-1,2-Dichloroethene	53	U	53	13	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
trans-1,3-Dichloropropene	53	U	53	29	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Trichloroethene	**41**	**J**	53	15	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Trichlorofluoromethane	110	U	110	53	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Vinyl chloride	42	U	42	16	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Xylenes, Total	**44**	**J**	160	36	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Methylcyclohexane	1300	U	1300	82	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1
Dibromochloromethane	53	U	53	48	ug/Kg	☼	05/02/19 10:46	05/04/19 21:34	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		53 - 155	05/02/19 10:46	05/04/19 21:34	1
4-Bromofluorobenzene (Surr)	78		48 - 151	05/02/19 10:46	05/04/19 21:34	1
Toluene-d8 (Surr)	82		49 - 147	05/02/19 10:46	05/04/19 21:34	1
Dibromofluoromethane (Surr)	69		49 - 138	05/02/19 10:46	05/04/19 21:34	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-023
Date Collected: 04/30/19 13:35
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-10
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	21	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,1,2,2-Tetrachloroethane	55	U	55	17	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	83	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,1,2-Trichloroethane	55	U	55	17	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,2,4-Trichlorobenzene	280	U	280	78	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,2-Dichloroethane	55	U	55	21	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
2-Hexanone	2800	U	2800	460	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Acetone	830	U	830	320	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Benzene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Bromoform	110	U	110	43	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Bromomethane	350	U	350	280	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Carbon disulfide	280	U	280	150	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Chloroform	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
cis-1,2-Dichloroethene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Dichlorodifluoromethane	110	U	110	50	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Ethylbenzene	55	U	55	17	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
1,2-Dibromoethane	280	U	280	53	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Isopropylbenzene	280	U	280	50	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
2-Butanone (MEK)	830	U	830	200	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	470	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Methyl tert-butyl ether	280	U	280	69	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Methylene Chloride	690	U	690	250	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Styrene	55	U	55	19	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Toluene	110	U	110	33	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
trans-1,2-Dichloroethene	55	U	55	14	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
trans-1,3-Dichloropropene	55	U	55	31	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Trichloroethene	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Vinyl chloride	44	U	44	17	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Xylenes, Total	170	U	170	37	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Methylcyclohexane	1300	U	1300	86	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1
Dibromochloromethane	55	U	55	50	ug/Kg	☼	05/02/19 10:46	05/04/19 21:59	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		53 - 155	05/02/19 10:46	05/04/19 21:59	1
4-Bromofluorobenzene (Surr)	80		48 - 151	05/02/19 10:46	05/04/19 21:59	1
Toluene-d8 (Surr)	84		49 - 147	05/02/19 10:46	05/04/19 21:59	1
Dibromofluoromethane (Surr)	71		49 - 138	05/02/19 10:46	05/04/19 21:59	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-024
Date Collected: 04/30/19 13:40
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-11
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,1,2,2-Tetrachloroethane	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	75	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,1,2-Trichloroethane	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,1-Dichloroethane	50	U	50	10	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,1-Dichloroethene	50	U	50	20	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,2,4-Trichlorobenzene	250	U	250	70	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,2-Dibromo-3-Chloropropane	250	U	250	100	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,2-Dichlorobenzene	100	U	100	31	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,2-Dichloroethane	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,2-Dichloropropane	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,3-Dichlorobenzene	100	U	100	29	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
2-Hexanone	2500	U	2500	420	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Acetone	750	U	750	290	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Benzene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Bromoform	100	U	100	39	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Bromomethane	310	U	310	260	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Carbon disulfide	250	U	250	140	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Carbon tetrachloride	50	U	50	20	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Chlorobenzene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Chloroethane	250	U	250	210	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Chloroform	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Chloromethane	250	U	250	110	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
cis-1,2-Dichloroethene	**25**	**J**	50	11	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
cis-1,3-Dichloropropene	50	U	50	26	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Dichlorodifluoromethane	100	U	100	45	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Ethylbenzene	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
1,2-Dibromoethane	250	U	250	48	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Isopropylbenzene	250	U	250	45	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Methyl acetate	1200	U	1200	980	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
2-Butanone (MEK)	750	U	750	180	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	430	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Methyl tert-butyl ether	250	U	250	63	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Methylene Chloride	630	U	630	220	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Styrene	50	U	50	18	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Tetrachloroethene	50	U	50	23	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Toluene	100	U	100	30	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
trans-1,2-Dichloroethene	50	U	50	13	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
trans-1,3-Dichloropropene	50	U	50	28	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Trichloroethene	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Trichlorofluoromethane	100	U	100	50	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Vinyl chloride	40	U	40	15	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Methylcyclohexane	1200	U	1200	78	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1
Dibromochloromethane	50	U	50	45	ug/Kg	☼	05/02/19 10:46	05/06/19 15:02	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		53 - 155	05/02/19 10:46	05/06/19 15:02	1
4-Bromofluorobenzene (Surr)	84		48 - 151	05/02/19 10:46	05/06/19 15:02	1
Toluene-d8 (Surr)	88		49 - 147	05/02/19 10:46	05/06/19 15:02	1
Dibromofluoromethane (Surr)	77		49 - 138	05/02/19 10:46	05/06/19 15:02	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-025
Date Collected: 04/30/19 13:50
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-12
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	21	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,1,2,2-Tetrachloroethane	55	U	55	16	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	82	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,1,2-Trichloroethane	55	U	55	16	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,2,4-Trichlorobenzene	270	U	270	77	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,2-Dichlorobenzene	110	U	110	34	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,2-Dichloroethane	55	U	55	21	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
2-Hexanone	2700	U	2700	460	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Acetone	820	U	820	310	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Benzene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Bromoform	110	U	110	43	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Bromomethane	340	U	340	280	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Chloroethane	270	U	270	230	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Chloroform	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Chloromethane	270	U	270	120	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
cis-1,2-Dichloroethene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Dichlorodifluoromethane	110	U	110	49	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Ethylbenzene	55	U	55	16	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
1,2-Dibromoethane	270	U	270	52	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Isopropylbenzene	270	U	270	49	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
2-Butanone (MEK)	820	U	820	190	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	470	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Methyl tert-butyl ether	270	U	270	69	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Methylene Chloride	690	U	690	240	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Styrene	55	U	55	19	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Toluene	110	U	110	33	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
trans-1,2-Dichloroethene	55	U	55	14	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
trans-1,3-Dichloropropene	55	U	55	30	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Trichloroethene	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Vinyl chloride	44	U	44	16	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Methylcyclohexane	1300	U	1300	85	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1
Dibromochloromethane	55	U	55	49	ug/Kg	☼	05/02/19 10:46	05/06/19 15:27	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		53 - 155	05/02/19 10:46	05/06/19 15:27	1
4-Bromofluorobenzene (Surr)	73		48 - 151	05/02/19 10:46	05/06/19 15:27	1
Toluene-d8 (Surr)	81		49 - 147	05/02/19 10:46	05/06/19 15:27	1
Dibromofluoromethane (Surr)	70		49 - 138	05/02/19 10:46	05/06/19 15:27	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-026
Date Collected: 04/30/19 13:55
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-13
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	56	U	56	21	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,1,2,2-Tetrachloroethane	56	U	56	17	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	85	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,1,2-Trichloroethane	56	U	56	17	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,1-Dichloroethane	56	U	56	11	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,1-Dichloroethene	56	U	56	23	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,2,4-Trichlorobenzene	280	U	280	79	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,2-Dichloroethane	56	U	56	21	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,2-Dichloropropane	56	U	56	16	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
2-Hexanone	2800	U	2800	470	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Acetone	850	U	850	320	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Benzene	56	U	56	13	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Bromoform	110	U	110	44	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Bromomethane	350	U	350	290	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Carbon disulfide	280	U	280	160	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Carbon tetrachloride	56	U	56	23	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Chlorobenzene	56	U	56	13	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Chloroform	56	U	56	16	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
cis-1,2-Dichloroethene	56	U	56	13	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
cis-1,3-Dichloropropene	56	U	56	30	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Cyclohexane	1400	U	1400	260	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Bromodichloromethane	110	U	110	27	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Dichlorodifluoromethane	110	U	110	51	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Ethylbenzene	56	U	56	17	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
1,2-Dibromoethane	280	U	280	54	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Isopropylbenzene	280	U	280	51	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Methyl acetate	1400	U	1400	1100	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
2-Butanone (MEK)	850	U	850	200	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	480	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Methyl tert-butyl ether	280	U	280	70	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Methylene Chloride	700	U	700	250	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Styrene	56	U	56	20	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Tetrachloroethene	56	U	56	25	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Toluene	110	U	110	34	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
trans-1,2-Dichloroethene	56	U	56	14	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
trans-1,3-Dichloropropene	56	U	56	31	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Trichloroethene	56	U	56	16	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Trichlorofluoromethane	110	U	110	56	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Vinyl chloride	45	U	45	17	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Xylenes, Total	170	U	170	38	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Methylcyclohexane	1400	U	1400	87	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1
Dibromochloromethane	56	U	56	51	ug/Kg	☼	05/02/19 10:46	05/06/19 15:51	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		53 - 155	05/02/19 10:46	05/06/19 15:51	1
4-Bromofluorobenzene (Surr)	78		48 - 151	05/02/19 10:46	05/06/19 15:51	1
Toluene-d8 (Surr)	85		49 - 147	05/02/19 10:46	05/06/19 15:51	1
Dibromofluoromethane (Surr)	74		49 - 138	05/02/19 10:46	05/06/19 15:51	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-027
Date Collected: 04/30/19 14:00
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-14
Matrix: Solid
Percent Solids: 84.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	21	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,1,2,2-Tetrachloroethane	55	U	55	16	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	82	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,1,2-Trichloroethane	55	U	55	16	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,2,4-Trichlorobenzene	270	U	270	77	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,2-Dichlorobenzene	110	U	110	34	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,2-Dichloroethane	55	U	55	21	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,3-Dichlorobenzene	110	U	110	31	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
2-Hexanone	2700	U	2700	460	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Acetone	820	U	820	310	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Benzene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Bromoform	110	U	110	42	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Bromomethane	340	U	340	280	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Chloroethane	270	U	270	220	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Chloroform	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Chloromethane	270	U	270	110	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
cis-1,2-Dichloroethene	55	U	55	12	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Dichlorodifluoromethane	110	U	110	49	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Ethylbenzene	55	U	55	16	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
1,2-Dibromoethane	270	U	270	52	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Isopropylbenzene	270	U	270	49	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
2-Butanone (MEK)	820	U	820	190	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	470	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Methyl tert-butyl ether	270	U	270	68	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Methylene Chloride	680	U	680	240	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Styrene	55	U	55	19	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Toluene	110	U	110	33	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
trans-1,2-Dichloroethene	55	U	55	14	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
trans-1,3-Dichloropropene	55	U	55	30	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Trichloroethene	55	U	55	15	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Vinyl chloride	44	U	44	16	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Methylcyclohexane	**120**	**J**	1300	85	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1
Dibromochloromethane	55	U	55	49	ug/Kg	☼	05/02/19 10:46	05/06/19 16:16	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		53 - 155	05/02/19 10:46	05/06/19 16:16	1
4-Bromofluorobenzene (Surr)	79		48 - 151	05/02/19 10:46	05/06/19 16:16	1
Toluene-d8 (Surr)	85		49 - 147	05/02/19 10:46	05/06/19 16:16	1
Dibromofluoromethane (Surr)	73		49 - 138	05/02/19 10:46	05/06/19 16:16	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-028
Date Collected: 04/30/19 14:10
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-15
Matrix: Solid
Percent Solids: 85.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	54	U	54	20	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,1,2,2-Tetrachloroethane	54	U	54	16	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	81	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,1,2-Trichloroethane	54	U	54	16	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,1-Dichloroethane	54	U	54	11	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,1-Dichloroethene	54	U	54	22	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,2,4-Trichlorobenzene	270	U	270	76	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,2-Dichlorobenzene	110	U	110	34	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,2-Dichloroethane	54	U	54	20	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,2-Dichloropropane	54	U	54	15	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,3-Dichlorobenzene	110	U	110	31	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,4-Dichlorobenzene	110	U	110	24	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
2-Hexanone	2700	U	2700	450	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Acetone	810	U	810	310	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Benzene	54	U	54	12	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Bromoform	110	U	110	42	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Bromomethane	340	U	340	280	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Carbon tetrachloride	54	U	54	22	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Chlorobenzene	54	U	54	12	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Chloroethane	270	U	270	220	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Chloroform	54	U	54	15	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Chloromethane	270	U	270	110	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
cis-1,2-Dichloroethene	54	U	54	12	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
cis-1,3-Dichloropropene	54	U	54	28	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Dichlorodifluoromethane	110	U	110	49	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Ethylbenzene	54	U	54	16	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
1,2-Dibromoethane	270	U	270	51	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Isopropylbenzene	270	U	270	49	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
2-Butanone (MEK)	810	U	810	190	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	460	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Methyl tert-butyl ether	270	U	270	68	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Methylene Chloride	680	U	680	240	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Styrene	54	U	54	19	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Tetrachloroethene	54	U	54	24	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Toluene	110	U	110	32	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
trans-1,2-Dichloroethene	54	U	54	14	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
trans-1,3-Dichloropropene	54	U	54	30	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Trichloroethene	54	U	54	15	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Trichlorofluoromethane	110	U	110	54	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Vinyl chloride	43	U	43	16	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Methylcyclohexane	1300	U	1300	84	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1
Dibromochloromethane	54	U	54	49	ug/Kg	☼	05/02/19 10:46	05/06/19 16:41	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		53 - 155	05/02/19 10:46	05/06/19 16:41	1
4-Bromofluorobenzene (Surr)	77		48 - 151	05/02/19 10:46	05/06/19 16:41	1
Toluene-d8 (Surr)	83		49 - 147	05/02/19 10:46	05/06/19 16:41	1
Dibromofluoromethane (Surr)	72		49 - 138	05/02/19 10:46	05/06/19 16:41	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-029
Date Collected: 04/30/19 14:15
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-16
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	53	U	53	20	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,1,2,2-Tetrachloroethane	53	U	53	16	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	79	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,1,2-Trichloroethane	53	U	53	16	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,1-Dichloroethane	53	U	53	11	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,1-Dichloroethene	53	U	53	21	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,2,4-Trichlorobenzene	260	U	260	74	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,2-Dibromo-3-Chloropropane	260	U	260	110	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,2-Dichlorobenzene	110	U	110	33	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,2-Dichloroethane	53	U	53	20	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,2-Dichloropropane	53	U	53	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,3-Dichlorobenzene	110	U	110	30	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,4-Dichlorobenzene	110	U	110	24	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
2-Hexanone	2600	U	2600	440	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Acetone	790	U	790	300	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Benzene	53	U	53	12	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Bromoform	110	U	110	41	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Bromomethane	330	U	330	270	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Carbon disulfide	260	U	260	140	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Carbon tetrachloride	53	U	53	21	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Chlorobenzene	53	U	53	12	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Chloroethane	260	U	260	220	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Chloroform	53	U	53	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Chloromethane	260	U	260	110	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
cis-1,2-Dichloroethene	53	U	53	12	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
cis-1,3-Dichloropropene	53	U	53	28	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Cyclohexane	1300	U	1300	240	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Dichlorodifluoromethane	110	U	110	47	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Ethylbenzene	53	U	53	16	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
1,2-Dibromoethane	260	U	260	50	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Isopropylbenzene	260	U	260	47	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Methyl acetate	1300	U	1300	1000	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
2-Butanone (MEK)	790	U	790	190	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	450	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Methyl tert-butyl ether	260	U	260	66	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Methylene Chloride	660	U	660	230	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Styrene	53	U	53	18	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Tetrachloroethene	53	U	53	24	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Toluene	110	U	110	32	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
trans-1,2-Dichloroethene	53	U	53	13	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
trans-1,3-Dichloropropene	53	U	53	29	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Trichloroethene	53	U	53	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Trichlorofluoromethane	110	U	110	53	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Vinyl chloride	42	U	42	16	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Xylenes, Total	160	U	160	35	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Methylcyclohexane	**110**	**J**	1300	81	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1
Dibromochloromethane	53	U	53	47	ug/Kg	☼	05/02/19 10:46	05/06/19 17:05	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		53 - 155	05/02/19 10:46	05/06/19 17:05	1
4-Bromofluorobenzene (Surr)	77		48 - 151	05/02/19 10:46	05/06/19 17:05	1
Toluene-d8 (Surr)	84		49 - 147	05/02/19 10:46	05/06/19 17:05	1
Dibromofluoromethane (Surr)	70		49 - 138	05/02/19 10:46	05/06/19 17:05	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-030
Date Collected: 04/30/19 14:41
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-17
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	51	U	51	19	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,1,2,2-Tetrachloroethane	51	U	51	15	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	76	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,1,2-Trichloroethane	51	U	51	15	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,1-Dichloroethane	51	U	51	10	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,1-Dichloroethene	51	U	51	20	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,2,4-Trichlorobenzene	250	U	250	71	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,2-Dibromo-3-Chloropropane	250	U	250	100	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,2-Dichlorobenzene	100	U	100	32	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,2-Dichloroethane	51	U	51	19	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,2-Dichloropropane	51	U	51	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,3-Dichlorobenzene	100	U	100	29	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
2-Hexanone	2500	U	2500	420	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Acetone	760	U	760	290	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Benzene	51	U	51	11	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Bromoform	100	U	100	39	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Bromomethane	320	U	320	260	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Carbon disulfide	250	U	250	140	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Carbon tetrachloride	51	U	51	20	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Chlorobenzene	51	U	51	11	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Chloroethane	250	U	250	210	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Chloroform	51	U	51	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Chloromethane	250	U	250	110	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
cis-1,2-Dichloroethene	51	U	51	11	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
cis-1,3-Dichloropropene	51	U	51	27	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Dichlorodifluoromethane	100	U	100	46	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Ethylbenzene	51	U	51	15	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
1,2-Dibromoethane	250	U	250	48	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Isopropylbenzene	250	U	250	46	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Methyl acetate	1200	U	1200	1000	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
2-Butanone (MEK)	760	U	760	180	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	430	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Methyl tert-butyl ether	250	U	250	64	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Methylene Chloride	640	U	640	230	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Styrene	51	U	51	18	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Tetrachloroethene	51	U	51	23	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Toluene	100	U	100	31	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
trans-1,2-Dichloroethene	51	U	51	13	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
trans-1,3-Dichloropropene	51	U	51	28	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Trichloroethene	51	U	51	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Trichlorofluoromethane	100	U	100	51	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Vinyl chloride	41	U	41	15	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Methylcyclohexane	1200	U	1200	79	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1
Dibromochloromethane	51	U	51	46	ug/Kg	☼	05/02/19 10:46	05/06/19 17:30	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		53 - 155	05/02/19 10:46	05/06/19 17:30	1
4-Bromofluorobenzene (Surr)	86		48 - 151	05/02/19 10:46	05/06/19 17:30	1
Toluene-d8 (Surr)	89		49 - 147	05/02/19 10:46	05/06/19 17:30	1
Dibromofluoromethane (Surr)	75		49 - 138	05/02/19 10:46	05/06/19 17:30	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-031
Date Collected: 04/30/19 14:45
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-18
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,1,2,2-Tetrachloroethane	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	76	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,1,2-Trichloroethane	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,1-Dichloroethane	50	U	50	10	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,1-Dichloroethene	50	U	50	20	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,2,4-Trichlorobenzene	250	U	250	71	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,2-Dibromo-3-Chloropropane	250	U	250	100	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,2-Dichlorobenzene	100	U	100	32	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,2-Dichloroethane	50	U	50	19	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,2-Dichloropropane	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,3-Dichlorobenzene	100	U	100	29	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
2-Hexanone	2500	U	2500	420	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Acetone	760	U	760	290	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Benzene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Bromoform	100	U	100	39	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Bromomethane	320	U	320	260	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Carbon disulfide	250	U	250	140	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Carbon tetrachloride	50	U	50	20	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Chlorobenzene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Chloroethane	250	U	250	210	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Chloroform	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Chloromethane	250	U	250	110	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
cis-1,2-Dichloroethene	50	U	50	11	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
cis-1,3-Dichloropropene	50	U	50	27	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Dichlorodifluoromethane	100	U	100	45	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Ethylbenzene	50	U	50	15	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
1,2-Dibromoethane	250	U	250	48	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Isopropylbenzene	250	U	250	45	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Methyl acetate	1200	U	1200	990	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
2-Butanone (MEK)	760	U	760	180	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	430	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Methyl tert-butyl ether	250	U	250	63	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Methylene Chloride	630	U	630	220	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Styrene	50	U	50	18	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Tetrachloroethene	50	U	50	23	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Toluene	100	U	100	30	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
trans-1,2-Dichloroethene	50	U	50	13	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
trans-1,3-Dichloropropene	50	U	50	28	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Trichloroethene	50	U	50	14	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Trichlorofluoromethane	100	U	100	50	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Vinyl chloride	40	U	40	15	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Methylcyclohexane	1200	U	1200	78	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1
Dibromochloromethane	50	U	50	45	ug/Kg	☼	05/02/19 10:46	05/06/19 17:55	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		53 - 155	05/02/19 10:46	05/06/19 17:55	1
4-Bromofluorobenzene (Surr)	84		48 - 151	05/02/19 10:46	05/06/19 17:55	1
Toluene-d8 (Surr)	90		49 - 147	05/02/19 10:46	05/06/19 17:55	1
Dibromofluoromethane (Surr)	72		49 - 138	05/02/19 10:46	05/06/19 17:55	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-032
Date Collected: 04/30/19 14:50
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-19
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	56	U	56	21	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,1,2,2-Tetrachloroethane	56	U	56	17	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	84	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,1,2-Trichloroethane	56	U	56	17	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,1-Dichloroethane	56	U	56	11	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,1-Dichloroethene	56	U	56	22	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,2,4-Trichlorobenzene	280	U	280	79	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,2-Dichloroethane	56	U	56	21	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,2-Dichloropropane	56	U	56	15	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
2-Hexanone	2800	U	2800	470	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Acetone	840	U	840	320	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Benzene	56	U	56	13	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Bromoform	110	U	110	44	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Bromomethane	350	U	350	290	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Carbon disulfide	280	U	280	150	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Carbon tetrachloride	56	U	56	22	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Chlorobenzene	56	U	56	13	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Chloroform	56	U	56	15	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
cis-1,2-Dichloroethene	**54**	**J**	56	13	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
cis-1,3-Dichloropropene	56	U	56	30	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Bromodichloromethane	110	U	110	27	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Dichlorodifluoromethane	110	U	110	51	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Ethylbenzene	56	U	56	17	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
1,2-Dibromoethane	280	U	280	53	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Isopropylbenzene	280	U	280	51	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
2-Butanone (MEK)	840	U	840	200	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	480	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Methyl tert-butyl ether	280	U	280	70	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Methylene Chloride	700	U	700	250	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Styrene	56	U	56	20	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Tetrachloroethene	56	U	56	25	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Toluene	110	U	110	34	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
trans-1,2-Dichloroethene	56	U	56	14	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
trans-1,3-Dichloropropene	56	U	56	31	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Trichloroethene	56	U	56	15	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Trichlorofluoromethane	110	U	110	56	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Vinyl chloride	**370**		45	17	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Xylenes, Total	170	U	170	38	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Methylcyclohexane	1300	U	1300	87	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1
Dibromochloromethane	56	U	56	51	ug/Kg	☼	05/02/19 10:46	05/06/19 18:20	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		53 - 155	05/02/19 10:46	05/06/19 18:20	1
4-Bromofluorobenzene (Surr)	84		48 - 151	05/02/19 10:46	05/06/19 18:20	1
Toluene-d8 (Surr)	90		49 - 147	05/02/19 10:46	05/06/19 18:20	1
Dibromofluoromethane (Surr)	77		49 - 138	05/02/19 10:46	05/06/19 18:20	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-033
Date Collected: 04/30/19 14:55
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-20
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	52	U	52	19	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,1,2,2-Tetrachloroethane	52	U	52	16	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	78	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,1,2-Trichloroethane	52	U	52	16	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,1-Dichloroethane	52	U	52	10	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,1-Dichloroethene	52	U	52	21	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,2,4-Trichlorobenzene	260	U	260	72	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,2-Dibromo-3-Chloropropane	260	U	260	100	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,2-Dichlorobenzene	100	U	100	32	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,2-Dichloroethane	52	U	52	19	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,2-Dichloropropane	52	U	52	14	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,3-Dichlorobenzene	100	U	100	30	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
2-Hexanone	2600	U	2600	430	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Acetone	780	U	780	300	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Benzene	52	U	52	12	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Bromoform	100	U	100	40	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Bromomethane	320	U	320	260	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Carbon disulfide	260	U	260	140	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Carbon tetrachloride	52	U	52	21	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Chlorobenzene	52	U	52	12	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Chloroethane	260	U	260	210	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Chloroform	52	U	52	14	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Chloromethane	260	U	260	110	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
cis-1,2-Dichloroethene	52	U	52	12	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
cis-1,3-Dichloropropene	52	U	52	27	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Bromodichloromethane	100	U	100	25	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Dichlorodifluoromethane	100	U	100	47	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Ethylbenzene	52	U	52	16	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
1,2-Dibromoethane	260	U	260	49	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Isopropylbenzene	260	U	260	47	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Methyl acetate	1200	U	1200	1000	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
2-Butanone (MEK)	780	U	780	180	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	440	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Methyl tert-butyl ether	260	U	260	65	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Methylene Chloride	650	U	650	230	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Styrene	52	U	52	18	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Tetrachloroethene	52	U	52	23	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Toluene	100	U	100	31	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
trans-1,2-Dichloroethene	52	U	52	13	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
trans-1,3-Dichloropropene	52	U	52	28	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Trichloroethene	52	U	52	14	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Trichlorofluoromethane	100	U	100	52	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Vinyl chloride	41	U	41	16	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Xylenes, Total	160	U	160	35	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Methylcyclohexane	1200	U	1200	80	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1
Dibromochloromethane	52	U	52	47	ug/Kg	☼	05/02/19 10:46	05/06/19 18:44	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		53 - 155	05/02/19 10:46	05/06/19 18:44	1
4-Bromofluorobenzene (Surr)	86		48 - 151	05/02/19 10:46	05/06/19 18:44	1
Toluene-d8 (Surr)	91		49 - 147	05/02/19 10:46	05/06/19 18:44	1
Dibromofluoromethane (Surr)	77		49 - 138	05/02/19 10:46	05/06/19 18:44	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-034
Date Collected: 04/30/19 15:10
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-21
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	21	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,1,2,2-Tetrachloroethane	55	U	55	16	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	82	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,1,2-Trichloroethane	55	U	55	16	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,2,4-Trichlorobenzene	270	U	270	77	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,2-Dichlorobenzene	110	U	110	34	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,2-Dichloroethane	55	U	55	21	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
2-Hexanone	2700	U	2700	460	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Acetone	820	U	820	310	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Benzene	55	U	55	12	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Bromoform	110	U	110	43	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Bromomethane	340	U	340	280	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Chloroethane	270	U	270	230	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Chloroform	55	U	55	15	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Chloromethane	270	U	270	120	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
cis-1,2-Dichloroethene	55	U	55	12	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Dichlorodifluoromethane	110	U	110	49	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Ethylbenzene	55	U	55	16	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
1,2-Dibromoethane	270	U	270	52	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Isopropylbenzene	270	U	270	49	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
2-Butanone (MEK)	820	U	820	190	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	470	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Methyl tert-butyl ether	270	U	270	69	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Methylene Chloride	690	U	690	240	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Styrene	55	U	55	19	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Toluene	110	U	110	33	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
trans-1,2-Dichloroethene	55	U	55	14	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
trans-1,3-Dichloropropene	55	U	55	30	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Trichloroethene	55	U	55	15	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Vinyl chloride	44	U	44	16	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Xylenes, Total	160	U	160	37	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Methylcyclohexane	**190**	**J**	1300	85	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1
Dibromochloromethane	55	U	55	49	ug/Kg	☼	05/07/19 11:38	05/08/19 19:20	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		53 - 155	05/07/19 11:38	05/08/19 19:20	1
4-Bromofluorobenzene (Surr)	83		48 - 151	05/07/19 11:38	05/08/19 19:20	1
Toluene-d8 (Surr)	92		49 - 147	05/07/19 11:38	05/08/19 19:20	1
Dibromofluoromethane (Surr)	86		49 - 138	05/07/19 11:38	05/08/19 19:20	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-035
Date Collected: 04/30/19 15:20
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-22
Matrix: Solid
Percent Solids: 85.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	54	U	54	20	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,1,2,2-Tetrachloroethane	54	U	54	16	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	81	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,1,2-Trichloroethane	54	U	54	16	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,1-Dichloroethane	54	U	54	11	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,1-Dichloroethene	54	U	54	22	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,2,4-Trichlorobenzene	270	U	270	75	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,2-Dichlorobenzene	110	U	110	34	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,2-Dichloroethane	54	U	54	20	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,2-Dichloropropane	54	U	54	15	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,3-Dichlorobenzene	110	U	110	31	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,4-Dichlorobenzene	110	U	110	24	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
2-Hexanone	2700	U	2700	450	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Acetone	810	U	810	310	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Benzene	54	U	54	12	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Bromoform	110	U	110	42	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Bromomethane	340	U	340	270	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Carbon tetrachloride	54	U	54	22	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Chlorobenzene	54	U	54	12	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Chloroethane	270	U	270	220	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Chloroform	54	U	54	15	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Chloromethane	270	U	270	110	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
cis-1,2-Dichloroethene	54	U	54	12	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
cis-1,3-Dichloropropene	54	U	54	28	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Cyclohexane	1300	U	1300	240	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Dichlorodifluoromethane	110	U	110	48	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Ethylbenzene	54	U	54	16	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
1,2-Dibromoethane	270	U	270	51	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Isopropylbenzene	270	U	270	48	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
2-Butanone (MEK)	810	U	810	190	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	460	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Methyl tert-butyl ether	270	U	270	67	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Methylene Chloride	670	U	670	240	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Styrene	54	U	54	19	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Tetrachloroethene	54	U	54	24	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Toluene	110	U	110	32	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
trans-1,2-Dichloroethene	54	U	54	13	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
trans-1,3-Dichloropropene	54	U	54	30	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Trichloroethene	54	U	54	15	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Trichlorofluoromethane	110	U	110	54	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Vinyl chloride	43	U	43	16	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Xylenes, Total	**71**	**J**	160	36	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Methylcyclohexane	**200**	**J**	1300	83	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1
Dibromochloromethane	54	U	54	48	ug/Kg	☼	05/07/19 11:38	05/08/19 19:42	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		53 - 155	05/07/19 11:38	05/08/19 19:42	1
4-Bromofluorobenzene (Surr)	79		48 - 151	05/07/19 11:38	05/08/19 19:42	1
Toluene-d8 (Surr)	87		49 - 147	05/07/19 11:38	05/08/19 19:42	1
Dibromofluoromethane (Surr)	83		49 - 138	05/07/19 11:38	05/08/19 19:42	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-043019-DA-036
Date Collected: 04/30/19 15:30
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-23
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	55	U	55	21	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,1,2,2-Tetrachloroethane	55	U	55	17	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	280	U	280	83	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,1,2-Trichloroethane	55	U	55	17	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,1-Dichloroethane	55	U	55	11	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,1-Dichloroethene	55	U	55	22	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,2,4-Trichlorobenzene	280	U	280	78	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,2-Dibromo-3-Chloropropane	280	U	280	110	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,2-Dichlorobenzene	110	U	110	35	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,2-Dichloroethane	55	U	55	21	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,2-Dichloropropane	55	U	55	15	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,3-Dichlorobenzene	110	U	110	32	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,4-Dichlorobenzene	110	U	110	25	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
2-Hexanone	2800	U	2800	460	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Acetone	830	U	830	320	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Benzene	55	U	55	12	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Bromoform	110	U	110	43	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Bromomethane	350	U	350	280	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Carbon disulfide	280	U	280	150	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Carbon tetrachloride	55	U	55	22	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Chlorobenzene	55	U	55	12	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Chloroethane	280	U	280	230	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Chloroform	55	U	55	15	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Chloromethane	280	U	280	120	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
cis-1,2-Dichloroethene	55	U	55	12	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
cis-1,3-Dichloropropene	55	U	55	29	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Cyclohexane	1300	U	1300	250	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Bromodichloromethane	110	U	110	26	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Dichlorodifluoromethane	110	U	110	50	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Ethylbenzene	55	U	55	17	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
1,2-Dibromoethane	280	U	280	53	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Isopropylbenzene	280	U	280	50	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
2-Butanone (MEK)	830	U	830	200	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
4-Methyl-2-pentanone (MIBK)	2800	U	2800	470	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Methyl tert-butyl ether	280	U	280	69	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Methylene Chloride	690	U	690	250	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Styrene	55	U	55	19	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Tetrachloroethene	55	U	55	25	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Toluene	110	U	110	33	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
trans-1,2-Dichloroethene	55	U	55	14	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
trans-1,3-Dichloropropene	55	U	55	30	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Trichloroethene	55	U	55	15	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Trichlorofluoromethane	110	U	110	55	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Vinyl chloride	44	U	44	17	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Xylenes, Total	170	U	170	37	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Methylcyclohexane	**170**	**J**	1300	86	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1
Dibromochloromethane	55	U	55	50	ug/Kg	☼	05/07/19 11:38	05/08/19 20:04	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		53 - 155	05/07/19 11:38	05/08/19 20:04	1
4-Bromofluorobenzene (Surr)	78		48 - 151	05/07/19 11:38	05/08/19 20:04	1
Toluene-d8 (Surr)	88		49 - 147	05/07/19 11:38	05/08/19 20:04	1
Dibromofluoromethane (Surr)	79		49 - 138	05/07/19 11:38	05/08/19 20:04	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-017303A-043019
Date Collected: 04/30/19 00:00
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-24
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/09/19 09:51	1
Benzene	1.0	U	1.0	0.13	ug/L			05/09/19 09:51	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/09/19 09:51	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/09/19 09:51	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/09/19 09:51	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/09/19 09:51	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/09/19 09:51	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/09/19 09:51	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/09/19 09:51	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/09/19 09:51	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/09/19 09:51	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/09/19 09:51	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/09/19 09:51	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/09/19 09:51	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/09/19 09:51	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/09/19 09:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/09/19 09:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/09/19 09:51	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/09/19 09:51	1
2-Hexanone	10	U	10	0.54	ug/L			05/09/19 09:51	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/09/19 09:51	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/09/19 09:51	1
Styrene	1.0	U	1.0	0.10	ug/L			05/09/19 09:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/09/19 09:51	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/09/19 09:51	1
Toluene	1.0	U	1.0	0.14	ug/L			05/09/19 09:51	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/09/19 09:51	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/09/19 09:51	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/09/19 09:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/09/19 09:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/09/19 09:51	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/09/19 09:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/09/19 09:51	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/09/19 09:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/09/19 09:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/09/19 09:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/09/19 09:51	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/09/19 09:51	1
Methyl acetate	10	U	10	1.7	ug/L			05/09/19 09:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/09/19 09:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/09/19 09:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/09/19 09:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/09/19 09:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/09/19 09:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/09/19 09:51	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/09/19 09:51	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/09/19 09:51	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/09/19 09:51	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 121		05/09/19 09:51	1
4-Bromofluorobenzene (Surr)	96		59 - 120		05/09/19 09:51	1
Toluene-d8 (Surr)	94		70 - 123		05/09/19 09:51	1
Dibromofluoromethane (Surr)	107		75 - 128		05/09/19 09:51	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-014
Date Collected: 04/30/19 09:05
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-1
Matrix: Solid
Percent Solids: 80.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80.2		0.1	0.1	%			05/06/19 16:29	1
Percent Moisture	19.8		0.1	0.1	%			05/06/19 16:29	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-015
Date Collected: 04/30/19 09:15
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-2
Matrix: Solid
Percent Solids: 84.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.2		0.1	0.1	%			05/06/19 16:29	1
Percent Moisture	15.8		0.1	0.1	%			05/06/19 16:29	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-016
Date Collected: 04/30/19 09:20
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-3
Matrix: Solid
Percent Solids: 84.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.9		0.1	0.1	%			05/06/19 16:29	1
Percent Moisture	15.1		0.1	0.1	%			05/06/19 16:29	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-017
Date Collected: 04/30/19 10:00
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-4
Matrix: Solid
Percent Solids: 79.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79.5		0.1	0.1	%			05/06/19 16:29	1
Percent Moisture	20.5		0.1	0.1	%			05/06/19 16:29	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-018
Date Collected: 04/30/19 10:30
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-5
Matrix: Solid
Percent Solids: 78.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78.0		0.1	0.1	%			05/06/19 16:29	1
Percent Moisture	22.0		0.1	0.1	%			05/06/19 16:29	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-019
Date Collected: 04/30/19 10:50
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-6
Matrix: Solid
Percent Solids: 88.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.6		0.1	0.1	%			05/06/19 16:29	1
Percent Moisture	11.4		0.1	0.1	%			05/06/19 16:29	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-020
Date Collected: 04/30/19 11:00
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-7
Matrix: Solid
Percent Solids: 81.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81.7		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	18.3		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-021
Date Collected: 04/30/19 11:20
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-8
Matrix: Solid
Percent Solids: 77.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77.8		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	22.2		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-022
Date Collected: 04/30/19 11:45
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-9
Matrix: Solid
Percent Solids: 86.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.1		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	13.9		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-023
Date Collected: 04/30/19 13:35
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-10
Matrix: Solid
Percent Solids: 83.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.8		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	16.2		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-024
Date Collected: 04/30/19 13:40
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-11
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.8		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	11.2		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-025
Date Collected: 04/30/19 13:50
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-12
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.4		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	15.6		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-026
Date Collected: 04/30/19 13:55
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-13
Matrix: Solid
Percent Solids: 83.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.2		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	16.8		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-027
Date Collected: 04/30/19 14:00
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-14
Matrix: Solid
Percent Solids: 84.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.6		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	15.4		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-028
Date Collected: 04/30/19 14:10
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-15
Matrix: Solid
Percent Solids: 85.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.0		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	15.0		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-029
Date Collected: 04/30/19 14:15
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-16
Matrix: Solid
Percent Solids: 86.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.6		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	13.4		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-030
Date Collected: 04/30/19 14:41
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-17
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.1		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	11.9		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-031
Date Collected: 04/30/19 14:45
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-18
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.3		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	11.7		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-032
Date Collected: 04/30/19 14:50
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-19
Matrix: Solid
Percent Solids: 83.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.3		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	16.7		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-033
Date Collected: 04/30/19 14:55
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-20
Matrix: Solid
Percent Solids: 87.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.2		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	12.8		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-034
Date Collected: 04/30/19 15:10
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-21
Matrix: Solid
Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.4		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	15.6		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-035
Date Collected: 04/30/19 15:20
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-22
Matrix: Solid
Percent Solids: 85.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.2		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	14.8		0.1	0.1	%			05/06/19 17:03	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

General Chemistry

Client Sample ID: SO-017303A-043019-DA-036
Date Collected: 04/30/19 15:30
Date Received: 05/01/19 10:00

Lab Sample ID: 240-111853-23
Matrix: Solid
Percent Solids: 84.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.0		0.1	0.1	%			05/06/19 17:03	1
Percent Moisture	16.0		0.1	0.1	%			05/06/19 17:03	1

GC/MS VOA

Prep Batch: 379340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111853-1	SO-017303A-043019-DA-014	Total/NA	Solid	5035	
240-111853-2	SO-017303A-043019-DA-015	Total/NA	Solid	5035	
240-111853-3	SO-017303A-043019-DA-016	Total/NA	Solid	5035	
240-111853-4	SO-017303A-043019-DA-017	Total/NA	Solid	5035	
240-111853-5	SO-017303A-043019-DA-018	Total/NA	Solid	5035	
240-111853-6	SO-017303A-043019-DA-019	Total/NA	Solid	5035	
240-111853-7	SO-017303A-043019-DA-020	Total/NA	Solid	5035	
240-111853-8	SO-017303A-043019-DA-021	Total/NA	Solid	5035	
240-111853-9	SO-017303A-043019-DA-022	Total/NA	Solid	5035	
240-111853-10	SO-017303A-043019-DA-023	Total/NA	Solid	5035	
240-111853-11	SO-017303A-043019-DA-024	Total/NA	Solid	5035	
240-111853-12	SO-017303A-043019-DA-025	Total/NA	Solid	5035	
240-111853-13	SO-017303A-043019-DA-026	Total/NA	Solid	5035	
240-111853-14	SO-017303A-043019-DA-027	Total/NA	Solid	5035	
240-111853-15	SO-017303A-043019-DA-028	Total/NA	Solid	5035	
240-111853-16	SO-017303A-043019-DA-029	Total/NA	Solid	5035	
240-111853-17	SO-017303A-043019-DA-030	Total/NA	Solid	5035	
240-111853-18	SO-017303A-043019-DA-031	Total/NA	Solid	5035	
240-111853-19	SO-017303A-043019-DA-032	Total/NA	Solid	5035	
240-111853-20	SO-017303A-043019-DA-033	Total/NA	Solid	5035	
MB 240-379340/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-379340/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 379640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111853-1	SO-017303A-043019-DA-014	Total/NA	Solid	8260B MI	379340
240-111853-3	SO-017303A-043019-DA-016	Total/NA	Solid	8260B MI	379340
240-111853-4	SO-017303A-043019-DA-017	Total/NA	Solid	8260B MI	379340
240-111853-5	SO-017303A-043019-DA-018	Total/NA	Solid	8260B MI	379340
240-111853-6	SO-017303A-043019-DA-019	Total/NA	Solid	8260B MI	379340
240-111853-9	SO-017303A-043019-DA-022	Total/NA	Solid	8260B MI	379340
240-111853-10	SO-017303A-043019-DA-023	Total/NA	Solid	8260B MI	379340
MB 240-379340/1-A	Method Blank	Total/NA	Solid	8260B MI	379340
LCS 240-379340/2-A	Lab Control Sample	Total/NA	Solid	8260B MI	379340

Analysis Batch: 379778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111853-2	SO-017303A-043019-DA-015	Total/NA	Solid	8260B MI	379340
240-111853-7	SO-017303A-043019-DA-020	Total/NA	Solid	8260B MI	379340
240-111853-8	SO-017303A-043019-DA-021	Total/NA	Solid	8260B MI	379340
240-111853-11	SO-017303A-043019-DA-024	Total/NA	Solid	8260B MI	379340
240-111853-12	SO-017303A-043019-DA-025	Total/NA	Solid	8260B MI	379340
240-111853-13	SO-017303A-043019-DA-026	Total/NA	Solid	8260B MI	379340
240-111853-14	SO-017303A-043019-DA-027	Total/NA	Solid	8260B MI	379340
240-111853-15	SO-017303A-043019-DA-028	Total/NA	Solid	8260B MI	379340
240-111853-16	SO-017303A-043019-DA-029	Total/NA	Solid	8260B MI	379340
240-111853-17	SO-017303A-043019-DA-030	Total/NA	Solid	8260B MI	379340
240-111853-18	SO-017303A-043019-DA-031	Total/NA	Solid	8260B MI	379340
240-111853-19	SO-017303A-043019-DA-032	Total/NA	Solid	8260B MI	379340
240-111853-20	SO-017303A-043019-DA-033	Total/NA	Solid	8260B MI	379340

GC/MS VOA

Prep Batch: 380022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111853-21	SO-017303A-043019-DA-034	Total/NA	Solid	5035	
240-111853-22	SO-017303A-043019-DA-035	Total/NA	Solid	5035	
240-111853-23	SO-017303A-043019-DA-036	Total/NA	Solid	5035	
MB 240-380022/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-380022/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 380281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111853-21	SO-017303A-043019-DA-034	Total/NA	Solid	8260B MI	380022
240-111853-22	SO-017303A-043019-DA-035	Total/NA	Solid	8260B MI	380022
240-111853-23	SO-017303A-043019-DA-036	Total/NA	Solid	8260B MI	380022
MB 240-380022/1-A	Method Blank	Total/NA	Solid	8260B MI	380022
LCS 240-380022/2-A	Lab Control Sample	Total/NA	Solid	8260B MI	380022

Analysis Batch: 380293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111853-24	TB-017303A-043019	Total/NA	Water	8260B	
MB 240-380293/6	Method Blank	Total/NA	Water	8260B	
LCS 240-380293/4	Lab Control Sample	Total/NA	Water	8260B	

General Chemistry

Analysis Batch: 379858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111853-1	SO-017303A-043019-DA-014	Total/NA	Solid	Moisture	
240-111853-2	SO-017303A-043019-DA-015	Total/NA	Solid	Moisture	
240-111853-3	SO-017303A-043019-DA-016	Total/NA	Solid	Moisture	
240-111853-4	SO-017303A-043019-DA-017	Total/NA	Solid	Moisture	
240-111853-5	SO-017303A-043019-DA-018	Total/NA	Solid	Moisture	
240-111853-6	SO-017303A-043019-DA-019	Total/NA	Solid	Moisture	
240-111853-7	SO-017303A-043019-DA-020	Total/NA	Solid	Moisture	
240-111853-8	SO-017303A-043019-DA-021	Total/NA	Solid	Moisture	
240-111853-9	SO-017303A-043019-DA-022	Total/NA	Solid	Moisture	
240-111853-10	SO-017303A-043019-DA-023	Total/NA	Solid	Moisture	
240-111853-11	SO-017303A-043019-DA-024	Total/NA	Solid	Moisture	
240-111853-12	SO-017303A-043019-DA-025	Total/NA	Solid	Moisture	
240-111853-13	SO-017303A-043019-DA-026	Total/NA	Solid	Moisture	
240-111853-14	SO-017303A-043019-DA-027	Total/NA	Solid	Moisture	
240-111853-15	SO-017303A-043019-DA-028	Total/NA	Solid	Moisture	
240-111853-16	SO-017303A-043019-DA-029	Total/NA	Solid	Moisture	
240-111853-17	SO-017303A-043019-DA-030	Total/NA	Solid	Moisture	
240-111853-18	SO-017303A-043019-DA-031	Total/NA	Solid	Moisture	
240-111853-19	SO-017303A-043019-DA-032	Total/NA	Solid	Moisture	
240-111853-20	SO-017303A-043019-DA-033	Total/NA	Solid	Moisture	
240-111853-21	SO-017303A-043019-DA-034	Total/NA	Solid	Moisture	
240-111853-22	SO-017303A-043019-DA-035	Total/NA	Solid	Moisture	
240-111853-23	SO-017303A-043019-DA-036	Total/NA	Solid	Moisture	
240-111853-1 DU	SO-017303A-043019-DA-014	Total/NA	Solid	Moisture	
240-111853-10 DU	SO-017303A-043019-DA-023	Total/NA	Solid	Moisture	
240-111853-19 DU	SO-017303A-043019-DA-032	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-380293/6
Matrix: Water
Analysis Batch: 380293

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/09/19 02:01	1
Benzene	1.0	U	1.0	0.13	ug/L			05/09/19 02:01	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/09/19 02:01	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/09/19 02:01	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/09/19 02:01	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/09/19 02:01	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/09/19 02:01	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/09/19 02:01	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/09/19 02:01	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/09/19 02:01	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/09/19 02:01	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/09/19 02:01	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/09/19 02:01	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/09/19 02:01	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/09/19 02:01	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/09/19 02:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/09/19 02:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/09/19 02:01	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/09/19 02:01	1
2-Hexanone	10	U	10	0.54	ug/L			05/09/19 02:01	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/09/19 02:01	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/09/19 02:01	1
Styrene	1.0	U	1.0	0.10	ug/L			05/09/19 02:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/09/19 02:01	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/09/19 02:01	1
Toluene	1.0	U	1.0	0.14	ug/L			05/09/19 02:01	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/09/19 02:01	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/09/19 02:01	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/09/19 02:01	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/09/19 02:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/09/19 02:01	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/09/19 02:01	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/09/19 02:01	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/09/19 02:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/09/19 02:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/09/19 02:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/09/19 02:01	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/09/19 02:01	1
Methyl acetate	10	U	10	1.7	ug/L			05/09/19 02:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/09/19 02:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/09/19 02:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/09/19 02:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/09/19 02:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/09/19 02:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/09/19 02:01	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/09/19 02:01	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/09/19 02:01	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/09/19 02:01	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-380293/6
Matrix: Water
Analysis Batch: 380293

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 121		05/09/19 02:01	1
4-Bromofluorobenzene (Surr)	100		59 - 120		05/09/19 02:01	1
Toluene-d8 (Surr)	96		70 - 123		05/09/19 02:01	1
Dibromofluoromethane (Surr)	100		75 - 128		05/09/19 02:01	1

Lab Sample ID: LCS 240-380293/4
Matrix: Water
Analysis Batch: 380293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	17.8		ug/L		89	21 - 162
Benzene	10.0	8.73		ug/L		87	80 - 123
Bromodichloromethane	10.0	8.82		ug/L		88	77 - 125
Bromoform	10.0	9.04		ug/L		90	49 - 141
Bromomethane	10.0	10.6		ug/L		106	41 - 175
2-Butanone (MEK)	20.0	18.8		ug/L		94	39 - 163
Carbon disulfide	10.0	8.29		ug/L		83	60 - 138
Carbon tetrachloride	10.0	8.49		ug/L		85	63 - 140
Chlorobenzene	10.0	9.10		ug/L		91	80 - 121
Chloroethane	10.0	9.53		ug/L		95	33 - 173
Chloroform	10.0	9.05		ug/L		90	79 - 127
Chloromethane	10.0	11.8		ug/L		118	54 - 143
1,1-Dichloroethane	10.0	8.56		ug/L		86	75 - 133
1,2-Dichloroethane	10.0	9.16		ug/L		92	71 - 135
1,1-Dichloroethene	10.0	9.21		ug/L		92	65 - 139
1,2-Dichloropropane	10.0	8.90		ug/L		89	78 - 133
cis-1,3-Dichloropropene	10.0	8.29		ug/L		83	64 - 132
trans-1,3-Dichloropropene	10.0	8.03		ug/L		80	55 - 128
Ethylbenzene	10.0	8.52		ug/L		85	80 - 120
2-Hexanone	20.0	17.1		ug/L		86	43 - 148
Methylene Chloride	10.0	7.90		ug/L		79	70 - 134
4-Methyl-2-pentanone (MIBK)	20.0	17.8		ug/L		89	49 - 143
Styrene	10.0	8.72		ug/L		87	79 - 120
1,1,2,2-Tetrachloroethane	10.0	8.64		ug/L		86	65 - 139
Tetrachloroethene	10.0	9.38		ug/L		94	74 - 130
Toluene	10.0	8.44		ug/L		84	78 - 129
Trichloroethene	10.0	9.63		ug/L		96	76 - 125
Vinyl chloride	10.0	10.3		ug/L		103	58 - 143
Xylenes, Total	20.0	16.3		ug/L		81	80 - 120
1,1,1-Trichloroethane	10.0	9.31		ug/L		93	69 - 134
1,1,2-Trichloroethane	10.0	9.49		ug/L		95	78 - 133
Cyclohexane	10.0	9.74		ug/L		97	58 - 145
1,2-Dibromo-3-Chloropropane	10.0	8.37		ug/L		84	46 - 132
1,2-Dibromoethane	10.0	8.82		ug/L		88	77 - 123
Dichlorodifluoromethane	10.0	10.6		ug/L		106	29 - 148
cis-1,2-Dichloroethene	10.0	9.23		ug/L		92	76 - 128
trans-1,2-Dichloroethene	10.0	8.92		ug/L		89	78 - 133
Isopropylbenzene	10.0	8.68		ug/L		87	74 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-380293/4
Matrix: Water
Analysis Batch: 380293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	20.0	18.6		ug/L		93	52 - 145
Methyl tert-butyl ether	10.0	8.30		ug/L		83	51 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.8		ug/L		108	50 - 156
1,2,4-Trichlorobenzene	10.0	6.89		ug/L		69	42 - 133
1,2-Dichlorobenzene	10.0	9.16		ug/L		92	78 - 120
1,3-Dichlorobenzene	10.0	9.08		ug/L		91	78 - 120
1,4-Dichlorobenzene	10.0	8.72		ug/L		87	78 - 120
Trichlorofluoromethane	10.0	11.1		ug/L		111	51 - 164
Dibromochloromethane	10.0	8.90		ug/L		89	70 - 132
Methylcyclohexane	10.0	7.85		ug/L		79	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 121*
4-Bromofluorobenzene (Surr)	*99*		*59 - 120*
Toluene-d8 (Surr)	*96*		*70 - 123*
Dibromofluoromethane (Surr)	*99*		*75 - 128*

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-379340/1-A
Matrix: Solid
Analysis Batch: 379640

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 379340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	40	U	40	15	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,1,2,2-Tetrachloroethane	40	U	40	12	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	60	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,1,2-Trichloroethane	40	U	40	12	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,1-Dichloroethane	40	U	40	8.0	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,1-Dichloroethene	40	U	40	16	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,2,4-Trichlorobenzene	200	U	200	56	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,2-Dibromo-3-Chloropropane	200	U	200	80	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,2-Dichlorobenzene	80	U	80	25	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,2-Dichloroethane	40	U	40	15	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,2-Dichloropropane	40	U	40	11	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,3-Dichlorobenzene	80	U	80	23	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,4-Dichlorobenzene	80	U	80	18	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
2-Hexanone	2000	U	2000	330	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Acetone	600	U	600	230	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Benzene	40	U	40	9.0	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Bromoform	80	U	80	31	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Bromomethane	250	U	250	200	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Carbon disulfide	200	U	200	110	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Carbon tetrachloride	40	U	40	16	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Chlorobenzene	40	U	40	9.0	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Chloroethane	200	U	200	160	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Chloroform	40	U	40	11	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Chloromethane	200	U	200	84	ug/Kg		05/02/19 10:46	05/04/19 17:26	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-379340/1-A
Matrix: Solid
Analysis Batch: 379640

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 379340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	40	U	40	9.0	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
cis-1,3-Dichloropropene	40	U	40	21	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Cyclohexane	960	U	960	180	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Bromodichloromethane	80	U	80	19	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Dichlorodifluoromethane	80	U	80	36	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Ethylbenzene	40	U	40	12	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
1,2-Dibromoethane	200	U	200	38	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Isopropylbenzene	200	U	200	36	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Methyl acetate	960	U	960	790	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
2-Butanone (MEK)	600	U	600	140	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	340	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Methyl tert-butyl ether	200	U	200	50	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Methylene Chloride	500	U	500	180	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Styrene	40	U	40	14	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Tetrachloroethene	40	U	40	18	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Toluene	80	U	80	24	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
trans-1,2-Dichloroethene	40	U	40	10	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
trans-1,3-Dichloropropene	40	U	40	22	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Trichloroethene	40	U	40	11	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Trichlorofluoromethane	80	U	80	40	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Vinyl chloride	32	U	32	12	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Xylenes, Total	120	U	120	27	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Methylcyclohexane	960	U	960	62	ug/Kg		05/02/19 10:46	05/04/19 17:26	1
Dibromochloromethane	40	U	40	36	ug/Kg		05/02/19 10:46	05/04/19 17:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*53 - 155*	*05/02/19 10:46*	*05/04/19 17:26*	*1*
4-Bromofluorobenzene (Surr)	*86*		*48 - 151*	*05/02/19 10:46*	*05/04/19 17:26*	*1*
Toluene-d8 (Surr)	*91*		*49 - 147*	*05/02/19 10:46*	*05/04/19 17:26*	*1*
Dibromofluoromethane (Surr)	*79*		*49 - 138*	*05/02/19 10:46*	*05/04/19 17:26*	*1*

Lab Sample ID: LCS 240-379340/2-A
Matrix: Solid
Analysis Batch: 379640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 379340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1000	849		ug/Kg		85	64 - 135
1,1,2,2-Tetrachloroethane	1000	915		ug/Kg		91	68 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	854		ug/Kg		85	56 - 138
1,1,2-Trichloroethane	1000	959		ug/Kg		96	78 - 120
1,1-Dichloroethane	1000	886		ug/Kg		89	72 - 122
1,1-Dichloroethene	1000	882		ug/Kg		88	57 - 139
1,2,4-Trichlorobenzene	1000	755		ug/Kg		76	54 - 120
1,2-Dibromo-3-Chloropropane	1000	602		ug/Kg		60	38 - 135
1,2-Dichlorobenzene	1000	872		ug/Kg		87	73 - 120
1,2-Dichloroethane	1000	870		ug/Kg		87	64 - 126
1,2-Dichloropropane	1000	908		ug/Kg		91	78 - 122
1,3-Dichlorobenzene	1000	915		ug/Kg		91	70 - 120

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-379340/2-A
Matrix: Solid
Analysis Batch: 379640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 379340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	1000	892		ug/Kg		89	71 - 120
2-Hexanone	2000	1700	J	ug/Kg		85	52 - 145
Acetone	2000	1640		ug/Kg		82	43 - 159
Benzene	1000	880		ug/Kg		88	74 - 123
Bromoform	1000	616		ug/Kg		62	46 - 137
Bromomethane	1000	218	J	ug/Kg		22	10 - 152
Carbon disulfide	1000	718		ug/Kg		72	29 - 153
Carbon tetrachloride	1000	793		ug/Kg		79	56 - 139
Chlorobenzene	1000	929		ug/Kg		93	80 - 120
Chloroethane	1000	168	J	ug/Kg		17	15 - 155
Chloroform	1000	869		ug/Kg		87	72 - 124
Chloromethane	1000	680		ug/Kg		68	45 - 128
cis-1,2-Dichloroethene	1000	873		ug/Kg		87	74 - 123
cis-1,3-Dichloropropene	1000	893		ug/Kg		89	63 - 137
Cyclohexane	1000	904	J	ug/Kg		90	64 - 130
Bromodichloromethane	1000	787		ug/Kg		79	63 - 132
Dichlorodifluoromethane	1000	586		ug/Kg		59	26 - 138
Ethylbenzene	1000	937		ug/Kg		94	76 - 120
1,2-Dibromoethane	1000	892		ug/Kg		89	76 - 120
Isopropylbenzene	1000	943		ug/Kg		94	77 - 124
Methyl acetate	2000	1700		ug/Kg		85	52 - 136
2-Butanone (MEK)	2000	1720		ug/Kg		86	45 - 148
4-Methyl-2-pentanone (MIBK)	2000	1690	J	ug/Kg		84	53 - 139
Methyl tert-butyl ether	1000	1020		ug/Kg		102	66 - 127
Methylene Chloride	1000	844		ug/Kg		84	62 - 137
Styrene	1000	902		ug/Kg		90	76 - 121
Tetrachloroethene	1000	924		ug/Kg		92	76 - 120
Toluene	1000	966		ug/Kg		97	76 - 120
trans-1,2-Dichloroethene	1000	896		ug/Kg		90	71 - 133
trans-1,3-Dichloropropene	1000	883		ug/Kg		88	55 - 121
Trichloroethene	1000	861		ug/Kg		86	73 - 126
Trichlorofluoromethane	1000	739		ug/Kg		74	47 - 146
Vinyl chloride	1000	761		ug/Kg		76	52 - 130
Xylenes, Total	2000	1890		ug/Kg		95	79 - 120
Methylcyclohexane	1000	859	J	ug/Kg		86	68 - 127
Dibromochloromethane	1000	813		ug/Kg		81	58 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*53 - 155*
4-Bromofluorobenzene (Surr)	*85*		*48 - 151*
Toluene-d8 (Surr)	*88*		*49 - 147*
Dibromofluoromethane (Surr)	*78*		*49 - 138*

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-380022/1-A
Matrix: Solid
Analysis Batch: 380281

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	40	U	40	15	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,1,2,2-Tetrachloroethane	40	U	40	12	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	60	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,1,2-Trichloroethane	40	U	40	12	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,1-Dichloroethane	40	U	40	8.0	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,1-Dichloroethene	40	U	40	16	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,2,4-Trichlorobenzene	200	U	200	56	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,2-Dibromo-3-Chloropropane	200	U	200	80	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,2-Dichlorobenzene	80	U	80	25	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,2-Dichloroethane	40	U	40	15	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,2-Dichloropropane	40	U	40	11	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,3-Dichlorobenzene	80	U	80	23	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,4-Dichlorobenzene	80	U	80	18	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
2-Hexanone	2000	U	2000	330	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Acetone	600	U	600	230	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Benzene	40	U	40	9.0	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Bromoform	80	U	80	31	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Bromomethane	250	U	250	200	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Carbon disulfide	200	U	200	110	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Carbon tetrachloride	40	U	40	16	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Chlorobenzene	40	U	40	9.0	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Chloroethane	200	U	200	160	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Chloroform	40	U	40	11	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Chloromethane	200	U	200	84	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
cis-1,2-Dichloroethene	40	U	40	9.0	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
cis-1,3-Dichloropropene	40	U	40	21	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Cyclohexane	960	U	960	180	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Bromodichloromethane	80	U	80	19	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Dichlorodifluoromethane	80	U	80	36	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Ethylbenzene	40	U	40	12	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
1,2-Dibromoethane	200	U	200	38	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Isopropylbenzene	200	U	200	36	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Methyl acetate	960	U	960	790	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
2-Butanone (MEK)	600	U	600	140	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	340	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Methyl tert-butyl ether	200	U	200	50	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Methylene Chloride	500	U	500	180	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Styrene	40	U	40	14	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Tetrachloroethene	40	U	40	18	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Toluene	80	U	80	24	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
trans-1,2-Dichloroethene	40	U	40	10	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
trans-1,3-Dichloropropene	40	U	40	22	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Trichloroethene	40	U	40	11	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Trichlorofluoromethane	80	U	80	40	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Vinyl chloride	32	U	32	12	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Xylenes, Total	120	U	120	27	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Methylcyclohexane	960	U	960	62	ug/Kg		05/07/19 11:38	05/08/19 18:35	1
Dibromochloromethane	40	U	40	36	ug/Kg		05/07/19 11:38	05/08/19 18:35	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-380022/1-A
Matrix: Solid
Analysis Batch: 380281

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380022

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*83*		*53 - 155*	*05/07/19 11:38*	*05/08/19 18:35*	*1*
4-Bromofluorobenzene (Surr)	*86*		*48 - 151*	*05/07/19 11:38*	*05/08/19 18:35*	*1*
Toluene-d8 (Surr)	*90*		*49 - 147*	*05/07/19 11:38*	*05/08/19 18:35*	*1*
Dibromofluoromethane (Surr)	*78*		*49 - 138*	*05/07/19 11:38*	*05/08/19 18:35*	*1*

Lab Sample ID: LCS 240-380022/2-A
Matrix: Solid
Analysis Batch: 380281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 380022

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1000	908		ug/Kg		91	64 - 135
1,1,2,2-Tetrachloroethane	1000	973		ug/Kg		97	68 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	866		ug/Kg		87	56 - 138
1,1,2-Trichloroethane	1000	974		ug/Kg		97	78 - 120
1,1-Dichloroethane	1000	950		ug/Kg		95	72 - 122
1,1-Dichloroethene	1000	842		ug/Kg		84	57 - 139
1,2,4-Trichlorobenzene	1000	820		ug/Kg		82	54 - 120
1,2-Dibromo-3-Chloropropane	1000	742		ug/Kg		74	38 - 135
1,2-Dichlorobenzene	1000	893		ug/Kg		89	73 - 120
1,2-Dichloroethane	1000	889		ug/Kg		89	64 - 126
1,2-Dichloropropane	1000	1020		ug/Kg		102	78 - 122
1,3-Dichlorobenzene	1000	912		ug/Kg		91	70 - 120
1,4-Dichlorobenzene	1000	887		ug/Kg		89	71 - 120
2-Hexanone	2000	1800	J	ug/Kg		90	52 - 145
Acetone	2000	1330		ug/Kg		67	43 - 159
Benzene	1000	961		ug/Kg		96	74 - 123
Bromoform	1000	790		ug/Kg		79	46 - 137
Bromomethane	1000	717		ug/Kg		72	10 - 152
Carbon disulfide	1000	841		ug/Kg		84	29 - 153
Carbon tetrachloride	1000	840		ug/Kg		84	56 - 139
Chlorobenzene	1000	939		ug/Kg		94	80 - 120
Chloroethane	1000	674		ug/Kg		67	15 - 155
Chloroform	1000	919		ug/Kg		92	72 - 124
Chloromethane	1000	888		ug/Kg		89	45 - 128
cis-1,2-Dichloroethene	1000	901		ug/Kg		90	74 - 123
cis-1,3-Dichloropropene	1000	989		ug/Kg		99	63 - 137
Cyclohexane	1000	910	J	ug/Kg		91	64 - 130
Bromodichloromethane	1000	877		ug/Kg		88	63 - 132
Dichlorodifluoromethane	1000	667		ug/Kg		67	26 - 138
Ethylbenzene	1000	946		ug/Kg		95	76 - 120
1,2-Dibromoethane	1000	920		ug/Kg		92	76 - 120
Isopropylbenzene	1000	953		ug/Kg		95	77 - 124
Methyl acetate	2000	1740		ug/Kg		87	52 - 136
2-Butanone (MEK)	2000	1700		ug/Kg		85	45 - 148
4-Methyl-2-pentanone (MIBK)	2000	1760	J	ug/Kg		88	53 - 139
Methyl tert-butyl ether	1000	854		ug/Kg		85	66 - 127
Methylene Chloride	1000	879		ug/Kg		88	62 - 137
Styrene	1000	894		ug/Kg		89	76 - 121

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-380022/2-A
Matrix: Solid
Analysis Batch: 380281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 380022

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	1000	936		ug/Kg		94	76 - 120
Toluene	1000	982		ug/Kg		98	76 - 120
trans-1,2-Dichloroethene	1000	963		ug/Kg		96	71 - 133
trans-1,3-Dichloropropene	1000	936		ug/Kg		94	55 - 121
Trichloroethene	1000	916		ug/Kg		92	73 - 126
Trichlorofluoromethane	1000	807		ug/Kg		81	47 - 146
Vinyl chloride	1000	949		ug/Kg		95	52 - 130
Xylenes, Total	2000	1910		ug/Kg		96	79 - 120
Methylcyclohexane	1000	880	J	ug/Kg		88	68 - 127
Dibromochloromethane	1000	866		ug/Kg		87	58 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*53 - 155*
4-Bromofluorobenzene (Surr)	*84*		*48 - 151*
Toluene-d8 (Surr)	*89*		*49 - 147*
Dibromofluoromethane (Surr)	*83*		*49 - 138*

Method: Moisture - Percent Moisture

Lab Sample ID: 240-111853-1 DU
Matrix: Solid
Analysis Batch: 379858

Client Sample ID: SO-017303A-043019-DA-014
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	80.2		80.3		%		0.1	20
Percent Moisture	19.8		19.7		%		0.5	20

Lab Sample ID: 240-111853-10 DU
Matrix: Solid
Analysis Batch: 379858

Client Sample ID: SO-017303A-043019-DA-023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	83.8		81.5		%		3	20
Percent Moisture	16.2		18.5		%		13	20

Lab Sample ID: 240-111853-19 DU
Matrix: Solid
Analysis Batch: 379858

Client Sample ID: SO-017303A-043019-DA-032
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	83.3		85.0		%		2	20
Percent Moisture	16.7		15.0		%		10	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-111853-24	TB-017303A-043019	94	96	94	107
LCS 240-380293/4	Lab Control Sample	90	99	96	99
MB 240-380293/6	Method Blank	89	100	96	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(53-155)	(48-151)	(49-147)	(49-138)
240-111853-1	SO-017303A-043019-DA-014	87	87	91	81
240-111853-2	SO-017303A-043019-DA-015	82	75	81	84
240-111853-3	SO-017303A-043019-DA-016	85	78	85	72
240-111853-4	SO-017303A-043019-DA-017	87	81	86	74
240-111853-5	SO-017303A-043019-DA-018	89	87	93	74
240-111853-6	SO-017303A-043019-DA-019	83	84	87	74
240-111853-7	SO-017303A-043019-DA-020	85	82	87	83
240-111853-8	SO-017303A-043019-DA-021	87	84	90	80
240-111853-9	SO-017303A-043019-DA-022	82	78	82	69
240-111853-10	SO-017303A-043019-DA-023	85	80	84	71
240-111853-11	SO-017303A-043019-DA-024	85	84	88	77
240-111853-12	SO-017303A-043019-DA-025	82	73	81	70
240-111853-13	SO-017303A-043019-DA-026	86	78	85	74
240-111853-14	SO-017303A-043019-DA-027	85	79	85	73
240-111853-15	SO-017303A-043019-DA-028	83	77	83	72
240-111853-16	SO-017303A-043019-DA-029	80	77	84	70
240-111853-17	SO-017303A-043019-DA-030	86	86	89	75
240-111853-18	SO-017303A-043019-DA-031	88	84	90	72
240-111853-19	SO-017303A-043019-DA-032	89	84	90	77
240-111853-20	SO-017303A-043019-DA-033	91	86	91	77
240-111853-21	SO-017303A-043019-DA-034	88	83	92	86
240-111853-22	SO-017303A-043019-DA-035	85	79	87	83
240-111853-23	SO-017303A-043019-DA-036	81	78	88	79
LCS 240-379340/2-A	Lab Control Sample	81	85	88	78
LCS 240-380022/2-A	Lab Control Sample	83	84	89	83
MB 240-379340/1-A	Method Blank	87	86	91	79
MB 240-380022/1-A	Method Blank	83	86	90	78

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Client Sample ID: SO-017303A-043019-DA-014
Lab Sample ID: 240-111853-1
Date Collected: 04/30/19 09:05
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 16:29	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-014
Lab Sample ID: 240-111853-1
Date Collected: 04/30/19 09:05
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379640	05/04/19 18:16	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-015
Lab Sample ID: 240-111853-2
Date Collected: 04/30/19 09:15
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 16:29	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-015
Lab Sample ID: 240-111853-2
Date Collected: 04/30/19 09:15
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		5	379778	05/06/19 13:48	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-016
Lab Sample ID: 240-111853-3
Date Collected: 04/30/19 09:20
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 16:29	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-016
Lab Sample ID: 240-111853-3
Date Collected: 04/30/19 09:20
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379640	05/04/19 19:05	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-017
Lab Sample ID: 240-111853-4
Date Collected: 04/30/19 10:00
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 16:29	BLW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Client Sample ID: SO-017303A-043019-DA-017
Lab Sample ID: 240-111853-4
Date Collected: 04/30/19 10:00
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379640	05/04/19 19:30	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-018
Lab Sample ID: 240-111853-5
Date Collected: 04/30/19 10:30
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 16:29	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-018
Lab Sample ID: 240-111853-5
Date Collected: 04/30/19 10:30
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379640	05/04/19 19:54	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-019
Lab Sample ID: 240-111853-6
Date Collected: 04/30/19 10:50
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 16:29	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-019
Lab Sample ID: 240-111853-6
Date Collected: 04/30/19 10:50
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379640	05/04/19 20:19	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-020
Lab Sample ID: 240-111853-7
Date Collected: 04/30/19 11:00
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Client Sample ID: SO-017303A-043019-DA-020
Lab Sample ID: 240-111853-7
Date Collected: 04/30/19 11:00
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		20	379778	05/06/19 14:13	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-021
Lab Sample ID: 240-111853-8
Date Collected: 04/30/19 11:20
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-021
Lab Sample ID: 240-111853-8
Date Collected: 04/30/19 11:20
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 14:37	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-022
Lab Sample ID: 240-111853-9
Date Collected: 04/30/19 11:45
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-022
Lab Sample ID: 240-111853-9
Date Collected: 04/30/19 11:45
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379640	05/04/19 21:34	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-023
Lab Sample ID: 240-111853-10
Date Collected: 04/30/19 13:35
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-023
Lab Sample ID: 240-111853-10
Date Collected: 04/30/19 13:35
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379640	05/04/19 21:59	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-024
Lab Sample ID: 240-111853-11
Date Collected: 04/30/19 13:40
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-024
Lab Sample ID: 240-111853-11
Date Collected: 04/30/19 13:40
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 15:02	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-025
Lab Sample ID: 240-111853-12
Date Collected: 04/30/19 13:50
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-025
Lab Sample ID: 240-111853-12
Date Collected: 04/30/19 13:50
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 15:27	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-026
Lab Sample ID: 240-111853-13
Date Collected: 04/30/19 13:55
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-026
Lab Sample ID: 240-111853-13
Date Collected: 04/30/19 13:55
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 15:51	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-027
Lab Sample ID: 240-111853-14
Date Collected: 04/30/19 14:00
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-027
Lab Sample ID: 240-111853-14
Date Collected: 04/30/19 14:00
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 16:16	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-028
Lab Sample ID: 240-111853-15
Date Collected: 04/30/19 14:10
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-028
Lab Sample ID: 240-111853-15
Date Collected: 04/30/19 14:10
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 16:41	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-029
Lab Sample ID: 240-111853-16
Date Collected: 04/30/19 14:15
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-029
Lab Sample ID: 240-111853-16
Date Collected: 04/30/19 14:15
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 17:05	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-030
Lab Sample ID: 240-111853-17
Date Collected: 04/30/19 14:41
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-030
Lab Sample ID: 240-111853-17
Date Collected: 04/30/19 14:41
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 17:30	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-031
Lab Sample ID: 240-111853-18
Date Collected: 04/30/19 14:45
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-031
Lab Sample ID: 240-111853-18
Date Collected: 04/30/19 14:45
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 17:55	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-032
Lab Sample ID: 240-111853-19
Date Collected: 04/30/19 14:50
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Client Sample ID: SO-017303A-043019-DA-032
Lab Sample ID: 240-111853-19
Date Collected: 04/30/19 14:50
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 18:20	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-033
Lab Sample ID: 240-111853-20
Date Collected: 04/30/19 14:55
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-033
Lab Sample ID: 240-111853-20
Date Collected: 04/30/19 14:55
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			379340	05/02/19 10:46	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	379778	05/06/19 18:44	HMB	TAL CAN

Client Sample ID: SO-017303A-043019-DA-034
Lab Sample ID: 240-111853-21
Date Collected: 04/30/19 15:10
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-034
Lab Sample ID: 240-111853-21
Date Collected: 04/30/19 15:10
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380022	05/07/19 11:38	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380281	05/08/19 19:20	TJL1	TAL CAN

Client Sample ID: SO-017303A-043019-DA-035
Lab Sample ID: 240-111853-22
Date Collected: 04/30/19 15:20
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111853-1

Client Sample ID: SO-017303A-043019-DA-035

Lab Sample ID: 240-111853-22
Date Collected: 04/30/19 15:20
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380022	05/07/19 11:38	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380281	05/08/19 19:42	TJL1	TAL CAN

Client Sample ID: SO-017303A-043019-DA-036

Lab Sample ID: 240-111853-23
Date Collected: 04/30/19 15:30
Matrix: Solid
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379858	05/06/19 17:03	BLW	TAL CAN

Client Sample ID: SO-017303A-043019-DA-036

Lab Sample ID: 240-111853-23
Date Collected: 04/30/19 15:30
Matrix: Solid
Date Received: 05/01/19 10:00
Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380022	05/07/19 11:38	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380281	05/08/19 20:04	TJL1	TAL CAN

Client Sample ID: TB-017303A-043019

Lab Sample ID: 240-111853-24
Date Collected: 04/30/19 00:00
Matrix: Water
Date Received: 05/01/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	380293	05/09/19 09:51	LRW	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 240-111853-1
Project/Site: 17303, RACER CVO

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	04-30-19 *
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN
190

3.9/C3.2

Chain of Custody Record

312871

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: K. TRESTRAIL	Site Contact: G. TRIGGER	Date: 4/30/19	COC No: 4303 - 102.04 - 209 - 01
Company Name: GHD SERVICES INC	Tel/Fax: 248 915 8801	Lab Contact: D. FERGUSON	Carrier: FEDEX	1 of 2 COCs
Address: 26050 HAGGERTY RD	Analysis Turnaround Time			Sampler: D. ANTUNES
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248 893 3400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: RACER - CVD	☐ 1 week			
Site: YPSILANTI, MI	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260B Low	Sample Specific Notes:
SD-01733A-04/30/19-DA-014	4/30	0905	G	S	2			X	
-015		0915						X	
-016		0920						X	
-017		1000						X	
-018		1030						X	
-019		1050						X	
-020		1100						X	
-021		1120						X	
-022		1145						X	
-023		1335						X	
-024		1340						X	
-025		1350						X	

240-111853 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:

Relinquished by:	Company: GHD	Date/Time: 4/30/19 1700	Received by:	Company: FTC	Date/Time: 5-1-19 1000
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

5/10/2019

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

Chain of Custody Record

238878

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210 (0713)

Client Contact	Project Manager: K. TRESTRAIL	Site Contact: G. TRIGGER	Date: 4/30/19	COC No: 730-70204-2019.01
Company Name: GHD SERVICES INC	Tel/Fax: 248 415 8801	Lab Contact: D. HEXTER	Carrier: FED EX	2 of 2 COCs
Address: 26850 HAGGERTY RD	Analysis Turnaround Time			Sampler: D. ANTUVIS
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 2488953400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: RACER C50	☐ 1 week			
Site: YPSILANTI, MI	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260B Full	Sample Specific Notes:
SO-017303A-043019-DA -026	4/30/19	1385	G	S	2			X	
-027		~~1400~~ 1400						X	
-028		1410						X	
-029		1415						X	
-030		1441						X	
-031		1445						X	
-032		1450						X	
-033		1455						X	
-034		1510						X	
-035		1520						X	
-036		1530						X	
TB-017303A-043019		—	—	W	1			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company: GHD	Date/Time: 4/30/19 1701	Received by:	Company: TAC	Date/Time: 5-1-19 1000
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 111853
Canton Facility

Client GHD Services Inc Site Name _____ Cooler unpacked by: MM

Cooler Received on 5-1-19 Opened on 5-1-19

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 1A Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 3.4 °C Corrected Cooler Temp. 3.2 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes (No)
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No (NA)
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC984738**
13. Were VOAs on the COC? Yes (No)
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No (NA)
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B628807VB (Yes) No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: RC

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-111906-1
Client Project/Site: 17303, RACER CVO

For:
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Attn: Ms. Ruth Mickle

Denise D Heckler

Authorized for release by:
5/15/2019 12:39:46 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Job ID: 240-111906-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-111906-1

Comments
No additional comments.

Receipt
The samples were received on 5/2/2019 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA
Method(s) 8260B: Method blank: (MB 240-380735/6) had a high surrogate recovery. The associated trip blank is reported.

Method(s) 8260B: Surrogate recovery for the following sample was outside the upper control limit: TB-017303A-050119 (240-111906-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B MI: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-380765 and analytical batch 240-380809.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-111906-1	SO-017303A-050119-DA-037	Solid	05/01/19 11:05	05/02/19 09:40
240-111906-2	SO-017303A-050119-DA-038	Solid	05/01/19 11:10	05/02/19 09:40
240-111906-3	SO-017303A-050119-DA-039	Solid	05/01/19 11:20	05/02/19 09:40
240-111906-4	SO-017303A-050119-DA-040	Solid	05/01/19 11:25	05/02/19 09:40
240-111906-5	SO-017303A-050119-DA-041	Solid	05/01/19 11:30	05/02/19 09:40
240-111906-6	SO-017303A-050119-DA-042	Solid	05/01/19 11:35	05/02/19 09:40
240-111906-7	SO-017303A-050119-DA-043	Solid	05/01/19 11:45	05/02/19 09:40
240-111906-8	TB-017303A-050119	Water	05/01/19 00:00	05/02/19 09:40

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Client Sample ID: SO-017303A-050119-DA-037 — Lab Sample ID: 240-111906-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	17	J	51	14	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-050119-DA-038 — Lab Sample ID: 240-111906-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	15	J	50	14	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-050119-DA-039 — Lab Sample ID: 240-111906-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	73		53	12	ug/Kg	1	☼	8260B MI	Total/NA
Trichloroethene	24	J	53	15	ug/Kg	1	☼	8260B MI	Total/NA
Vinyl chloride	36	J	42	16	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-050119-DA-040 — Lab Sample ID: 240-111906-4

No Detections.

Client Sample ID: SO-017303A-050119-DA-041 — Lab Sample ID: 240-111906-5

No Detections.

Client Sample ID: SO-017303A-050119-DA-042 — Lab Sample ID: 240-111906-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	170	J	1200	80	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: SO-017303A-050119-DA-043 — Lab Sample ID: 240-111906-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	65	J	160	36	ug/Kg	1	☼	8260B MI	Total/NA
Methylcyclohexane	210	J	1300	83	ug/Kg	1	☼	8260B MI	Total/NA

Client Sample ID: TB-017303A-050119 — Lab Sample ID: 240-111906-8

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B MI	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
5035	Closed System Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-050119-DA-037
Date Collected: 05/01/19 11:05
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	51	U	51	19	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,1,2,2-Tetrachloroethane	51	U	51	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	76	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,1,2-Trichloroethane	51	U	51	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,1-Dichloroethane	51	U	51	10	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,1-Dichloroethene	51	U	51	20	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,2,4-Trichlorobenzene	250	U	250	71	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,2-Dibromo-3-Chloropropane	250	U	250	100	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,2-Dichlorobenzene	100	U	100	32	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,2-Dichloroethane	51	U	51	19	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,2-Dichloropropane	51	U	51	14	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,3-Dichlorobenzene	100	U	100	29	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
2-Hexanone	2500	U	2500	420	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Acetone	760	U	760	290	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Benzene	51	U	51	11	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Bromoform	100	U	100	39	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Bromomethane	320	U	320	260	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Carbon disulfide	250	U	250	140	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Carbon tetrachloride	51	U	51	20	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Chlorobenzene	51	U	51	11	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Chloroethane	250	U	250	210	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Chloroform	51	U	51	14	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Chloromethane	250	U	250	110	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
cis-1,2-Dichloroethene	51	U	51	11	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
cis-1,3-Dichloropropene	51	U	51	27	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Dichlorodifluoromethane	100	U	100	46	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Ethylbenzene	51	U	51	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
1,2-Dibromoethane	250	U	250	48	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Isopropylbenzene	250	U	250	46	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Methyl acetate	1200	U	1200	1000	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
2-Butanone (MEK)	760	U	760	180	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	430	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Methyl tert-butyl ether	250	U	250	64	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Methylene Chloride	640	U	640	230	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Styrene	51	U	51	18	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Tetrachloroethene	51	U	51	23	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Toluene	100	U	100	31	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
trans-1,2-Dichloroethene	51	U	51	13	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
trans-1,3-Dichloropropene	51	U	51	28	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Trichloroethene	**17**	**J**	51	14	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Trichlorofluoromethane	100	U	100	51	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Vinyl chloride	41	U	41	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Methylcyclohexane	1200	U	1200	79	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1
Dibromochloromethane	51	U	51	46	ug/Kg	☼	05/10/19 22:16	05/12/19 14:13	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		53 - 155	05/10/19 22:16	05/12/19 14:13	1
4-Bromofluorobenzene (Surr)	82		48 - 151	05/10/19 22:16	05/12/19 14:13	1
Toluene-d8 (Surr)	89		49 - 147	05/10/19 22:16	05/12/19 14:13	1
Dibromofluoromethane (Surr)	79		49 - 138	05/10/19 22:16	05/12/19 14:13	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-050119-DA-038
Date Collected: 05/01/19 11:10
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-2
Matrix: Solid
Percent Solids: 88.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	50	U	50	19	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,1,2,2-Tetrachloroethane	50	U	50	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	75	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,1,2-Trichloroethane	50	U	50	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,1-Dichloroethane	50	U	50	10	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,1-Dichloroethene	50	U	50	20	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,2,4-Trichlorobenzene	250	U	250	70	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,2-Dibromo-3-Chloropropane	250	U	250	100	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,2-Dichlorobenzene	100	U	100	31	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,2-Dichloroethane	50	U	50	19	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,2-Dichloropropane	50	U	50	14	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,3-Dichlorobenzene	100	U	100	29	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
2-Hexanone	2500	U	2500	420	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Acetone	750	U	750	290	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Benzene	50	U	50	11	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Bromoform	100	U	100	39	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Bromomethane	310	U	310	260	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Carbon disulfide	250	U	250	140	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Carbon tetrachloride	50	U	50	20	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Chlorobenzene	50	U	50	11	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Chloroethane	250	U	250	210	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Chloroform	50	U	50	14	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Chloromethane	250	U	250	110	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
cis-1,2-Dichloroethene	50	U	50	11	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
cis-1,3-Dichloropropene	50	U	50	26	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Dichlorodifluoromethane	100	U	100	45	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Ethylbenzene	50	U	50	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
1,2-Dibromoethane	250	U	250	48	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Isopropylbenzene	250	U	250	45	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Methyl acetate	1200	U	1200	990	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
2-Butanone (MEK)	750	U	750	180	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	430	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Methyl tert-butyl ether	250	U	250	63	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Methylene Chloride	630	U	630	220	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Styrene	50	U	50	18	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Tetrachloroethene	50	U	50	23	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Toluene	100	U	100	30	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
trans-1,2-Dichloroethene	50	U	50	13	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
trans-1,3-Dichloropropene	50	U	50	28	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Trichloroethene	**15**	**J**	50	14	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Trichlorofluoromethane	100	U	100	50	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Vinyl chloride	40	U	40	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Methylcyclohexane	1200	U	1200	78	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1
Dibromochloromethane	50	U	50	45	ug/Kg	☼	05/10/19 22:16	05/12/19 14:35	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		53 - 155	05/10/19 22:16	05/12/19 14:35	1
4-Bromofluorobenzene (Surr)	89		48 - 151	05/10/19 22:16	05/12/19 14:35	1
Toluene-d8 (Surr)	95		49 - 147	05/10/19 22:16	05/12/19 14:35	1
Dibromofluoromethane (Surr)	84		49 - 138	05/10/19 22:16	05/12/19 14:35	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-050119-DA-039
Date Collected: 05/01/19 11:20
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-3
Matrix: Solid
Percent Solids: 86.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	53	U	53	20	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,1,2,2-Tetrachloroethane	53	U	53	16	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	79	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,1,2-Trichloroethane	53	U	53	16	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,1-Dichloroethane	53	U	53	11	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,1-Dichloroethene	53	U	53	21	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,2,4-Trichlorobenzene	260	U	260	74	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,2-Dibromo-3-Chloropropane	260	U	260	110	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,2-Dichlorobenzene	110	U	110	33	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,2-Dichloroethane	53	U	53	20	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,2-Dichloropropane	53	U	53	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,3-Dichlorobenzene	110	U	110	30	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,4-Dichlorobenzene	110	U	110	24	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
2-Hexanone	2600	U	2600	440	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Acetone	790	U	790	300	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Benzene	53	U	53	12	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Bromoform	110	U	110	41	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Bromomethane	330	U	330	270	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Carbon disulfide	260	U	260	150	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Carbon tetrachloride	53	U	53	21	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Chlorobenzene	53	U	53	12	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Chloroethane	260	U	260	220	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Chloroform	53	U	53	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Chloromethane	260	U	260	110	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
cis-1,2-Dichloroethene	**73**		53	12	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
cis-1,3-Dichloropropene	53	U	53	28	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Cyclohexane	1300	U	1300	240	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Dichlorodifluoromethane	110	U	110	47	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Ethylbenzene	53	U	53	16	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
1,2-Dibromoethane	260	U	260	50	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Isopropylbenzene	260	U	260	47	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Methyl acetate	1300	U	1300	1000	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
2-Butanone (MEK)	790	U	790	190	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	450	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Methyl tert-butyl ether	260	U	260	66	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Methylene Chloride	660	U	660	230	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Styrene	53	U	53	18	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Tetrachloroethene	53	U	53	24	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Toluene	110	U	110	32	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
trans-1,2-Dichloroethene	53	U	53	13	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
trans-1,3-Dichloropropene	53	U	53	29	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Trichloroethene	**24**	**J**	53	15	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Trichlorofluoromethane	110	U	110	53	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Vinyl chloride	**36**	**J**	42	16	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Xylenes, Total	160	U	160	36	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Methylcyclohexane	1300	U	1300	82	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1
Dibromochloromethane	53	U	53	47	ug/Kg	☼	05/10/19 22:16	05/12/19 14:57	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		53 - 155	05/10/19 22:16	05/12/19 14:57	1
4-Bromofluorobenzene (Surr)	86		48 - 151	05/10/19 22:16	05/12/19 14:57	1
Toluene-d8 (Surr)	89		49 - 147	05/10/19 22:16	05/12/19 14:57	1
Dibromofluoromethane (Surr)	84		49 - 138	05/10/19 22:16	05/12/19 14:57	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-050119-DA-040
Date Collected: 05/01/19 11:25
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-4
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	51	U	51	19	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,1,2,2-Tetrachloroethane	51	U	51	15	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	76	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,1,2-Trichloroethane	51	U	51	15	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,1-Dichloroethane	51	U	51	10	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,1-Dichloroethene	51	U	51	20	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,2,4-Trichlorobenzene	250	U	250	71	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,2-Dibromo-3-Chloropropane	250	U	250	100	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,2-Dichlorobenzene	100	U	100	32	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,2-Dichloroethane	51	U	51	19	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,2-Dichloropropane	51	U	51	14	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,3-Dichlorobenzene	100	U	100	29	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
2-Hexanone	2500	U	2500	420	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Acetone	760	U	760	290	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Benzene	51	U	51	11	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Bromoform	100	U	100	39	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Bromomethane	320	U	320	260	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Carbon disulfide	250	U	250	140	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Carbon tetrachloride	51	U	51	20	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Chlorobenzene	51	U	51	11	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Chloroethane	250	U	250	210	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Chloroform	51	U	51	14	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Chloromethane	250	U	250	110	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
cis-1,2-Dichloroethene	51	U	51	11	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
cis-1,3-Dichloropropene	51	U	51	27	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Dichlorodifluoromethane	100	U	100	46	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Ethylbenzene	51	U	51	15	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
1,2-Dibromoethane	250	U	250	48	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Isopropylbenzene	250	U	250	46	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Methyl acetate	1200	U	1200	1000	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
2-Butanone (MEK)	760	U	760	180	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	430	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Methyl tert-butyl ether	250	U	250	64	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Methylene Chloride	640	U	640	230	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Styrene	51	U	51	18	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Tetrachloroethene	51	U	51	23	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Toluene	100	U	100	31	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
trans-1,2-Dichloroethene	51	U	51	13	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
trans-1,3-Dichloropropene	51	U	51	28	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Trichloroethene	51	U	51	14	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Trichlorofluoromethane	100	U	100	51	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Vinyl chloride	41	U	41	15	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Xylenes, Total	150	U	150	34	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Methylcyclohexane	1200	U	1200	79	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1
Dibromochloromethane	51	U	51	46	ug/Kg	☼	05/10/19 22:16	05/12/19 15:20	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		53 - 155	05/10/19 22:16	05/12/19 15:20	1
4-Bromofluorobenzene (Surr)	86		48 - 151	05/10/19 22:16	05/12/19 15:20	1
Toluene-d8 (Surr)	92		49 - 147	05/10/19 22:16	05/12/19 15:20	1
Dibromofluoromethane (Surr)	81		49 - 138	05/10/19 22:16	05/12/19 15:20	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-050119-DA-041
Date Collected: 05/01/19 11:30
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-5
Matrix: Solid
Percent Solids: 92.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	47	U	47	18	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,1,2,2-Tetrachloroethane	47	U	47	14	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	71	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,1,2-Trichloroethane	47	U	47	14	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,1-Dichloroethane	47	U	47	9.4	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,1-Dichloroethene	47	U	47	19	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,2,4-Trichlorobenzene	240	U	240	66	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,2-Dibromo-3-Chloropropane	240	U	240	94	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,2-Dichlorobenzene	94	U	94	29	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,2-Dichloroethane	47	U	47	18	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,2-Dichloropropane	47	U	47	13	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,3-Dichlorobenzene	94	U	94	27	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,4-Dichlorobenzene	94	U	94	21	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
2-Hexanone	2400	U	2400	390	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Acetone	710	U	710	270	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Benzene	47	U	47	11	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Bromoform	94	U	94	36	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Bromomethane	290	U	290	240	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Carbon disulfide	240	U	240	130	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Carbon tetrachloride	47	U	47	19	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Chlorobenzene	47	U	47	11	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Chloroethane	240	U	240	190	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Chloroform	47	U	47	13	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Chloromethane	240	U	240	99	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
cis-1,2-Dichloroethene	47	U	47	11	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
cis-1,3-Dichloropropene	47	U	47	25	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Cyclohexane	1100	U	1100	210	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Bromodichloromethane	94	U	94	22	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Dichlorodifluoromethane	94	U	94	42	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Ethylbenzene	47	U	47	14	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
1,2-Dibromoethane	240	U	240	45	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Isopropylbenzene	240	U	240	42	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Methyl acetate	1100	U	1100	920	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
2-Butanone (MEK)	710	U	710	170	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	400	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Methyl tert-butyl ether	240	U	240	59	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Methylene Chloride	590	U	590	210	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Styrene	47	U	47	16	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Tetrachloroethene	47	U	47	21	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Toluene	94	U	94	28	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
trans-1,2-Dichloroethene	47	U	47	12	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
trans-1,3-Dichloropropene	47	U	47	26	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Trichloroethene	47	U	47	13	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Trichlorofluoromethane	94	U	94	47	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Vinyl chloride	38	U	38	14	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Xylenes, Total	140	U	140	32	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Methylcyclohexane	1100	U	1100	73	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1
Dibromochloromethane	47	U	47	42	ug/Kg	☼	05/10/19 22:16	05/12/19 15:42	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		53 - 155	05/10/19 22:16	05/12/19 15:42	1
4-Bromofluorobenzene (Surr)	85		48 - 151	05/10/19 22:16	05/12/19 15:42	1
Toluene-d8 (Surr)	89		49 - 147	05/10/19 22:16	05/12/19 15:42	1
Dibromofluoromethane (Surr)	80		49 - 138	05/10/19 22:16	05/12/19 15:42	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-050119-DA-042
Date Collected: 05/01/19 11:35
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-6
Matrix: Solid
Percent Solids: 87.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	52	U	52	19	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,1,2,2-Tetrachloroethane	52	U	52	15	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	77	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,1,2-Trichloroethane	52	U	52	15	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,1-Dichloroethane	52	U	52	10	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,1-Dichloroethene	52	U	52	21	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,2,4-Trichlorobenzene	260	U	260	72	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,2-Dibromo-3-Chloropropane	260	U	260	100	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,2-Dichlorobenzene	100	U	100	32	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,2-Dichloroethane	52	U	52	19	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,2-Dichloropropane	52	U	52	14	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,3-Dichlorobenzene	100	U	100	30	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,4-Dichlorobenzene	100	U	100	23	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
2-Hexanone	2600	U	2600	430	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Acetone	770	U	770	300	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Benzene	52	U	52	12	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Bromoform	100	U	100	40	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Bromomethane	320	U	320	260	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Carbon disulfide	260	U	260	140	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Carbon tetrachloride	52	U	52	21	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Chlorobenzene	52	U	52	12	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Chloroethane	260	U	260	210	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Chloroform	52	U	52	14	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Chloromethane	260	U	260	110	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
cis-1,2-Dichloroethene	52	U	52	12	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
cis-1,3-Dichloropropene	52	U	52	27	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Cyclohexane	1200	U	1200	230	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Bromodichloromethane	100	U	100	24	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Dichlorodifluoromethane	100	U	100	46	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Ethylbenzene	52	U	52	15	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
1,2-Dibromoethane	260	U	260	49	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Isopropylbenzene	260	U	260	46	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Methyl acetate	1200	U	1200	1000	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
2-Butanone (MEK)	770	U	770	180	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	440	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Methyl tert-butyl ether	260	U	260	64	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Methylene Chloride	640	U	640	230	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Styrene	52	U	52	18	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Tetrachloroethene	52	U	52	23	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Toluene	100	U	100	31	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
trans-1,2-Dichloroethene	52	U	52	13	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
trans-1,3-Dichloropropene	52	U	52	28	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Trichloroethene	52	U	52	14	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Trichlorofluoromethane	100	U	100	52	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Vinyl chloride	41	U	41	15	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Xylenes, Total	150	U	150	35	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Methylcyclohexane	**170**	**J**	1200	80	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1
Dibromochloromethane	52	U	52	46	ug/Kg	☼	05/10/19 22:16	05/12/19 16:04	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		53 - 155	05/10/19 22:16	05/12/19 16:04	1
4-Bromofluorobenzene (Surr)	80		48 - 151	05/10/19 22:16	05/12/19 16:04	1
Toluene-d8 (Surr)	85		49 - 147	05/10/19 22:16	05/12/19 16:04	1
Dibromofluoromethane (Surr)	81		49 - 138	05/10/19 22:16	05/12/19 16:04	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Client Sample ID: SO-017303A-050119-DA-043
Date Collected: 05/01/19 11:45
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-7
Matrix: Solid
Percent Solids: 85.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	54	U	54	20	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,1,2,2-Tetrachloroethane	54	U	54	16	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	270	U	270	80	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,1,2-Trichloroethane	54	U	54	16	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,1-Dichloroethane	54	U	54	11	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,1-Dichloroethene	54	U	54	21	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,2,4-Trichlorobenzene	270	U	270	75	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,2-Dibromo-3-Chloropropane	270	U	270	110	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,2-Dichlorobenzene	110	U	110	33	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,2-Dichloroethane	54	U	54	20	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,2-Dichloropropane	54	U	54	15	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,3-Dichlorobenzene	110	U	110	31	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,4-Dichlorobenzene	110	U	110	24	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
2-Hexanone	2700	U	2700	450	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Acetone	800	U	800	310	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Benzene	54	U	54	12	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Bromoform	110	U	110	41	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Bromomethane	330	U	330	270	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Carbon disulfide	270	U	270	150	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Carbon tetrachloride	54	U	54	21	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Chlorobenzene	54	U	54	12	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Chloroethane	270	U	270	220	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Chloroform	54	U	54	15	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Chloromethane	270	U	270	110	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
cis-1,2-Dichloroethene	54	U	54	12	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
cis-1,3-Dichloropropene	54	U	54	28	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Cyclohexane	1300	U	1300	240	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Bromodichloromethane	110	U	110	25	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Dichlorodifluoromethane	110	U	110	48	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Ethylbenzene	54	U	54	16	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
1,2-Dibromoethane	270	U	270	51	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Isopropylbenzene	270	U	270	48	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Methyl acetate	1300	U	1300	1100	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
2-Butanone (MEK)	800	U	800	190	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
4-Methyl-2-pentanone (MIBK)	2700	U	2700	460	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Methyl tert-butyl ether	270	U	270	67	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Methylene Chloride	670	U	670	240	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Styrene	54	U	54	19	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Tetrachloroethene	54	U	54	24	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Toluene	110	U	110	32	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
trans-1,2-Dichloroethene	54	U	54	13	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
trans-1,3-Dichloropropene	54	U	54	29	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Trichloroethene	54	U	54	15	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Trichlorofluoromethane	110	U	110	54	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Vinyl chloride	43	U	43	16	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Xylenes, Total	**65**	**J**	160	36	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Methylcyclohexane	**210**	**J**	1300	83	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1
Dibromochloromethane	54	U	54	48	ug/Kg	☼	05/10/19 22:16	05/12/19 16:26	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		53 - 155	05/10/19 22:16	05/12/19 16:26	1
4-Bromofluorobenzene (Surr)	78		48 - 151	05/10/19 22:16	05/12/19 16:26	1
Toluene-d8 (Surr)	81		49 - 147	05/10/19 22:16	05/12/19 16:26	1
Dibromofluoromethane (Surr)	75		49 - 138	05/10/19 22:16	05/12/19 16:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-017303A-050119
Date Collected: 05/01/19 00:00
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/11/19 06:36	1
Benzene	1.0	U	1.0	0.13	ug/L			05/11/19 06:36	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/11/19 06:36	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/11/19 06:36	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/11/19 06:36	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/11/19 06:36	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/11/19 06:36	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/11/19 06:36	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/11/19 06:36	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/11/19 06:36	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/11/19 06:36	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/11/19 06:36	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/11/19 06:36	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/11/19 06:36	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/11/19 06:36	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/11/19 06:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/11/19 06:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/11/19 06:36	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/11/19 06:36	1
2-Hexanone	10	U	10	0.54	ug/L			05/11/19 06:36	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/11/19 06:36	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/11/19 06:36	1
Styrene	1.0	U	1.0	0.10	ug/L			05/11/19 06:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/11/19 06:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/11/19 06:36	1
Toluene	1.0	U	1.0	0.14	ug/L			05/11/19 06:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/11/19 06:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/11/19 06:36	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/11/19 06:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/11/19 06:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/11/19 06:36	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/11/19 06:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/11/19 06:36	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/11/19 06:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/11/19 06:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/11/19 06:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/11/19 06:36	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/11/19 06:36	1
Methyl acetate	10	U	10	1.7	ug/L			05/11/19 06:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/11/19 06:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/11/19 06:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/11/19 06:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/11/19 06:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/11/19 06:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/11/19 06:36	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/11/19 06:36	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/11/19 06:36	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/11/19 06:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	129	X	70 - 121		05/11/19 06:36	1
4-Bromofluorobenzene (Surr)	88		59 - 120		05/11/19 06:36	1
Toluene-d8 (Surr)	96		70 - 123		05/11/19 06:36	1
Dibromofluoromethane (Surr)	118		75 - 128		05/11/19 06:36	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

General Chemistry

Client Sample ID: SO-017303A-050119-DA-037
Date Collected: 05/01/19 11:05
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.9		0.1	0.1	%			05/03/19 12:24	1
Percent Moisture	12.1		0.1	0.1	%			05/03/19 12:24	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

General Chemistry

Client Sample ID: SO-017303A-050119-DA-038
Date Collected: 05/01/19 11:10
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-2
Matrix: Solid
Percent Solids: 88.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.6		0.1	0.1	%			05/03/19 12:24	1
Percent Moisture	11.4		0.1	0.1	%			05/03/19 12:24	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

General Chemistry

Client Sample ID: SO-017303A-050119-DA-039
Date Collected: 05/01/19 11:20
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-3
Matrix: Solid
Percent Solids: 86.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.1		0.1	0.1	%			05/03/19 12:24	1
Percent Moisture	13.9		0.1	0.1	%			05/03/19 12:24	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

General Chemistry

Client Sample ID: SO-017303A-050119-DA-040
Date Collected: 05/01/19 11:25
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-4
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.1		0.1	0.1	%			05/03/19 12:24	1
Percent Moisture	11.9		0.1	0.1	%			05/03/19 12:24	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

General Chemistry

Client Sample ID: SO-017303A-050119-DA-041
Date Collected: 05/01/19 11:30
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-5
Matrix: Solid
Percent Solids: 92.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.0		0.1	0.1	%			05/03/19 12:24	1
Percent Moisture	8.0		0.1	0.1	%			05/03/19 12:24	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

General Chemistry

Client Sample ID: SO-017303A-050119-DA-042
Date Collected: 05/01/19 11:35
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-6
Matrix: Solid
Percent Solids: 87.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.4		0.1	0.1	%			05/03/19 12:24	1
Percent Moisture	12.6		0.1	0.1	%			05/03/19 12:24	1

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

General Chemistry

Client Sample ID: SO-017303A-050119-DA-043
Date Collected: 05/01/19 11:45
Date Received: 05/02/19 09:40

Lab Sample ID: 240-111906-7
Matrix: Solid
Percent Solids: 85.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.6		0.1	0.1	%			05/03/19 12:42	1
Percent Moisture	14.4		0.1	0.1	%			05/03/19 12:42	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

GC/MS VOA

Analysis Batch: 380735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111906-8	TB-017303A-050119	Total/NA	Water	8260B	
MB 240-380735/6	Method Blank	Total/NA	Water	8260B	
LCS 240-380735/4	Lab Control Sample	Total/NA	Water	8260B	

Prep Batch: 380765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111906-1	SO-017303A-050119-DA-037	Total/NA	Solid	5035	
240-111906-2	SO-017303A-050119-DA-038	Total/NA	Solid	5035	
240-111906-3	SO-017303A-050119-DA-039	Total/NA	Solid	5035	
240-111906-4	SO-017303A-050119-DA-040	Total/NA	Solid	5035	
240-111906-5	SO-017303A-050119-DA-041	Total/NA	Solid	5035	
240-111906-6	SO-017303A-050119-DA-042	Total/NA	Solid	5035	
240-111906-7	SO-017303A-050119-DA-043	Total/NA	Solid	5035	
MB 240-380765/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-380765/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 380809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111906-1	SO-017303A-050119-DA-037	Total/NA	Solid	8260B MI	380765
240-111906-2	SO-017303A-050119-DA-038	Total/NA	Solid	8260B MI	380765
240-111906-3	SO-017303A-050119-DA-039	Total/NA	Solid	8260B MI	380765
240-111906-4	SO-017303A-050119-DA-040	Total/NA	Solid	8260B MI	380765
240-111906-5	SO-017303A-050119-DA-041	Total/NA	Solid	8260B MI	380765
240-111906-6	SO-017303A-050119-DA-042	Total/NA	Solid	8260B MI	380765
240-111906-7	SO-017303A-050119-DA-043	Total/NA	Solid	8260B MI	380765
MB 240-380765/1-A	Method Blank	Total/NA	Solid	8260B MI	380765
LCS 240-380765/2-A	Lab Control Sample	Total/NA	Solid	8260B MI	380765

General Chemistry

Analysis Batch: 379556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111906-1	SO-017303A-050119-DA-037	Total/NA	Solid	Moisture	
240-111906-2	SO-017303A-050119-DA-038	Total/NA	Solid	Moisture	
240-111906-3	SO-017303A-050119-DA-039	Total/NA	Solid	Moisture	
240-111906-4	SO-017303A-050119-DA-040	Total/NA	Solid	Moisture	
240-111906-5	SO-017303A-050119-DA-041	Total/NA	Solid	Moisture	
240-111906-6	SO-017303A-050119-DA-042	Total/NA	Solid	Moisture	
240-111906-7	SO-017303A-050119-DA-043	Total/NA	Solid	Moisture	

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-380735/6
Matrix: Water
Analysis Batch: 380735

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			05/10/19 23:14	1
Benzene	1.0	U	1.0	0.13	ug/L			05/10/19 23:14	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/10/19 23:14	1
Bromoform	1.0	U	1.0	0.76	ug/L			05/10/19 23:14	1
Bromomethane	1.0	U	1.0	0.42	ug/L			05/10/19 23:14	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			05/10/19 23:14	1
Carbon disulfide	5.0	U	5.0	0.28	ug/L			05/10/19 23:14	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			05/10/19 23:14	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/10/19 23:14	1
Chloroethane	1.0	U	1.0	0.83	ug/L			05/10/19 23:14	1
Chloroform	1.0	U	1.0	0.13	ug/L			05/10/19 23:14	1
Chloromethane	1.0	U	1.0	0.20	ug/L			05/10/19 23:14	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			05/10/19 23:14	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/10/19 23:14	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/10/19 23:14	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			05/10/19 23:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			05/10/19 23:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			05/10/19 23:14	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			05/10/19 23:14	1
2-Hexanone	10	U	10	0.54	ug/L			05/10/19 23:14	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			05/10/19 23:14	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			05/10/19 23:14	1
Styrene	1.0	U	1.0	0.10	ug/L			05/10/19 23:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			05/10/19 23:14	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/10/19 23:14	1
Toluene	1.0	U	1.0	0.14	ug/L			05/10/19 23:14	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/10/19 23:14	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/10/19 23:14	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			05/10/19 23:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			05/10/19 23:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			05/10/19 23:14	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			05/10/19 23:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.91	ug/L			05/10/19 23:14	1
1,2-Dibromoethane	1.0	U	1.0	0.12	ug/L			05/10/19 23:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			05/10/19 23:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/10/19 23:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/10/19 23:14	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			05/10/19 23:14	1
Methyl acetate	10	U	10	1.7	ug/L			05/10/19 23:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			05/10/19 23:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			05/10/19 23:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			05/10/19 23:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/10/19 23:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			05/10/19 23:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			05/10/19 23:14	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			05/10/19 23:14	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			05/10/19 23:14	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			05/10/19 23:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-380735/6
Matrix: Water
Analysis Batch: 380735

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125	X	70 - 121		05/10/19 23:14	1
4-Bromofluorobenzene (Surr)	94		59 - 120		05/10/19 23:14	1
Toluene-d8 (Surr)	99		70 - 123		05/10/19 23:14	1
Dibromofluoromethane (Surr)	119		75 - 128		05/10/19 23:14	1

Lab Sample ID: LCS 240-380735/4
Matrix: Water
Analysis Batch: 380735

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	27.5		ug/L		137	21 - 162
Benzene	10.0	10.7		ug/L		107	80 - 123
Bromodichloromethane	10.0	11.4		ug/L		114	77 - 125
Bromoform	10.0	10.5		ug/L		105	49 - 141
Bromomethane	10.0	10.8		ug/L		108	41 - 175
2-Butanone (MEK)	20.0	25.5		ug/L		127	39 - 163
Carbon disulfide	10.0	11.0		ug/L		110	60 - 138
Carbon tetrachloride	10.0	11.0		ug/L		110	63 - 140
Chlorobenzene	10.0	9.94		ug/L		99	80 - 121
Chloroethane	10.0	11.8		ug/L		118	33 - 173
Chloroform	10.0	12.0		ug/L		120	79 - 127
Chloromethane	10.0	11.0		ug/L		110	54 - 143
1,1-Dichloroethane	10.0	11.3		ug/L		113	75 - 133
1,2-Dichloroethane	10.0	12.1		ug/L		121	71 - 135
1,1-Dichloroethene	10.0	11.2		ug/L		112	65 - 139
1,2-Dichloropropane	10.0	11.7		ug/L		117	78 - 133
cis-1,3-Dichloropropene	10.0	11.3		ug/L		113	64 - 132
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	55 - 128
Ethylbenzene	10.0	9.79		ug/L		98	80 - 120
2-Hexanone	20.0	24.6		ug/L		123	43 - 148
Methylene Chloride	10.0	11.0		ug/L		110	70 - 134
4-Methyl-2-pentanone (MIBK)	20.0	25.5		ug/L		128	49 - 143
Styrene	10.0	10.3		ug/L		103	79 - 120
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	65 - 139
Tetrachloroethene	10.0	9.92		ug/L		99	74 - 130
Toluene	10.0	10.5		ug/L		105	78 - 129
Trichloroethene	10.0	9.82		ug/L		98	76 - 125
Vinyl chloride	10.0	11.1		ug/L		111	58 - 143
Xylenes, Total	20.0	21.4		ug/L		107	80 - 120
1,1,1-Trichloroethane	10.0	11.3		ug/L		113	69 - 134
1,1,2-Trichloroethane	10.0	11.0		ug/L		110	78 - 133
Cyclohexane	10.0	11.5		ug/L		115	58 - 145
1,2-Dibromo-3-Chloropropane	10.0	11.4		ug/L		114	46 - 132
1,2-Dibromoethane	10.0	10.5		ug/L		105	77 - 123
Dichlorodifluoromethane	10.0	8.96		ug/L		90	29 - 148
cis-1,2-Dichloroethene	10.0	11.2		ug/L		112	76 - 128
trans-1,2-Dichloroethene	10.0	11.1		ug/L		111	78 - 133
Isopropylbenzene	10.0	10.7		ug/L		107	74 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-380735/4
Matrix: Water
Analysis Batch: 380735

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	20.0	24.2		ug/L		121	52 - 145
Methyl tert-butyl ether	10.0	11.1		ug/L		111	51 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.1		ug/L		111	50 - 156
1,2,4-Trichlorobenzene	10.0	8.97		ug/L		90	42 - 133
1,2-Dichlorobenzene	10.0	10.7		ug/L		107	78 - 120
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	78 - 120
1,4-Dichlorobenzene	10.0	10.2		ug/L		102	78 - 120
Trichlorofluoromethane	10.0	11.2		ug/L		112	51 - 164
Dibromochloromethane	10.0	10.9		ug/L		109	70 - 132
Methylcyclohexane	10.0	10.2		ug/L		102	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 121*
4-Bromofluorobenzene (Surr)	*103*		*59 - 120*
Toluene-d8 (Surr)	*96*		*70 - 123*
Dibromofluoromethane (Surr)	*104*		*75 - 128*

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-380765/1-A
Matrix: Solid
Analysis Batch: 380809

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	40	U	40	15	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,1,2,2-Tetrachloroethane	40	U	40	12	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	60	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,1,2-Trichloroethane	40	U	40	12	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,1-Dichloroethane	40	U	40	8.0	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,1-Dichloroethene	40	U	40	16	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,2,4-Trichlorobenzene	200	U	200	56	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,2-Dibromo-3-Chloropropane	200	U	200	80	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,2-Dichlorobenzene	80	U	80	25	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,2-Dichloroethane	40	U	40	15	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,2-Dichloropropane	40	U	40	11	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,3-Dichlorobenzene	80	U	80	23	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,4-Dichlorobenzene	80	U	80	18	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
2-Hexanone	2000	U	2000	330	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Acetone	600	U	600	230	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Benzene	40	U	40	9.0	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Bromoform	80	U	80	31	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Bromomethane	250	U	250	200	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Carbon disulfide	200	U	200	110	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Carbon tetrachloride	40	U	40	16	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Chlorobenzene	40	U	40	9.0	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Chloroethane	200	U	200	160	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Chloroform	40	U	40	11	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Chloromethane	200	U	200	84	ug/Kg		05/10/19 22:16	05/12/19 13:29	1

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-380765/1-A
Matrix: Solid
Analysis Batch: 380809

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	40	U	40	9.0	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
cis-1,3-Dichloropropene	40	U	40	21	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Cyclohexane	960	U	960	180	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Bromodichloromethane	80	U	80	19	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Dichlorodifluoromethane	80	U	80	36	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Ethylbenzene	40	U	40	12	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
1,2-Dibromoethane	200	U	200	38	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Isopropylbenzene	200	U	200	36	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Methyl acetate	960	U	960	790	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
2-Butanone (MEK)	600	U	600	140	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	340	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Methyl tert-butyl ether	200	U	200	50	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Methylene Chloride	500	U	500	180	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Styrene	40	U	40	14	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Tetrachloroethene	40	U	40	18	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Toluene	80	U	80	24	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
trans-1,2-Dichloroethene	40	U	40	10	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
trans-1,3-Dichloropropene	40	U	40	22	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Trichloroethene	40	U	40	11	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Trichlorofluoromethane	80	U	80	40	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Vinyl chloride	32	U	32	12	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Xylenes, Total	120	U	120	27	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Methylcyclohexane	960	U	960	62	ug/Kg		05/10/19 22:16	05/12/19 13:29	1
Dibromochloromethane	40	U	40	36	ug/Kg		05/10/19 22:16	05/12/19 13:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*53 - 155*	*05/10/19 22:16*	*05/12/19 13:29*	*1*
4-Bromofluorobenzene (Surr)	*87*		*48 - 151*	*05/10/19 22:16*	*05/12/19 13:29*	*1*
Toluene-d8 (Surr)	*87*		*49 - 147*	*05/10/19 22:16*	*05/12/19 13:29*	*1*
Dibromofluoromethane (Surr)	*79*		*49 - 138*	*05/10/19 22:16*	*05/12/19 13:29*	*1*

Lab Sample ID: LCS 240-380765/2-A
Matrix: Solid
Analysis Batch: 380809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 380765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1000	899		ug/Kg		90	64 - 135
1,1,2,2-Tetrachloroethane	1000	963		ug/Kg		96	68 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	811		ug/Kg		81	56 - 138
1,1,2-Trichloroethane	1000	1000		ug/Kg		100	78 - 120
1,1-Dichloroethane	1000	925		ug/Kg		92	72 - 122
1,1-Dichloroethene	1000	766		ug/Kg		77	57 - 139
1,2,4-Trichlorobenzene	1000	853		ug/Kg		85	54 - 120
1,2-Dibromo-3-Chloropropane	1000	804		ug/Kg		80	38 - 135
1,2-Dichlorobenzene	1000	918		ug/Kg		92	73 - 120
1,2-Dichloroethane	1000	883		ug/Kg		88	64 - 126
1,2-Dichloropropane	1000	980		ug/Kg		98	78 - 122
1,3-Dichlorobenzene	1000	937		ug/Kg		94	70 - 120

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-380765/2-A
Matrix: Solid
Analysis Batch: 380809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 380765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	1000	927		ug/Kg		93	71 - 120
2-Hexanone	2000	1720	J	ug/Kg		86	52 - 145
Acetone	2000	1010		ug/Kg		50	43 - 159
Benzene	1000	964		ug/Kg		96	74 - 123
Bromoform	1000	839		ug/Kg		84	46 - 137
Bromomethane	1000	738		ug/Kg		74	10 - 152
Carbon disulfide	1000	765		ug/Kg		77	29 - 153
Carbon tetrachloride	1000	878		ug/Kg		88	56 - 139
Chlorobenzene	1000	942		ug/Kg		94	80 - 120
Chloroethane	1000	675		ug/Kg		67	15 - 155
Chloroform	1000	911		ug/Kg		91	72 - 124
Chloromethane	1000	789		ug/Kg		79	45 - 128
cis-1,2-Dichloroethene	1000	897		ug/Kg		90	74 - 123
cis-1,3-Dichloropropene	1000	953		ug/Kg		95	63 - 137
Cyclohexane	1000	943	J	ug/Kg		94	64 - 130
Bromodichloromethane	1000	848		ug/Kg		85	63 - 132
Dichlorodifluoromethane	1000	729		ug/Kg		73	26 - 138
Ethylbenzene	1000	971		ug/Kg		97	76 - 120
1,2-Dibromoethane	1000	966		ug/Kg		97	76 - 120
Isopropylbenzene	1000	977		ug/Kg		98	77 - 124
Methyl acetate	2000	1620		ug/Kg		81	52 - 136
2-Butanone (MEK)	2000	1570		ug/Kg		79	45 - 148
4-Methyl-2-pentanone (MIBK)	2000	1670	J	ug/Kg		84	53 - 139
Methyl tert-butyl ether	1000	845		ug/Kg		84	66 - 127
Methylene Chloride	1000	813		ug/Kg		81	62 - 137
Styrene	1000	916		ug/Kg		92	76 - 121
Tetrachloroethene	1000	972		ug/Kg		97	76 - 120
Toluene	1000	1010		ug/Kg		101	76 - 120
trans-1,2-Dichloroethene	1000	929		ug/Kg		93	71 - 133
trans-1,3-Dichloropropene	1000	971		ug/Kg		97	55 - 121
Trichloroethene	1000	929		ug/Kg		93	73 - 126
Trichlorofluoromethane	1000	768		ug/Kg		77	47 - 146
Vinyl chloride	1000	858		ug/Kg		86	52 - 130
Xylenes, Total	2000	1930		ug/Kg		97	79 - 120
Methylcyclohexane	1000	924	J	ug/Kg		92	68 - 127
Dibromochloromethane	1000	890		ug/Kg		89	58 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*53 - 155*
4-Bromofluorobenzene (Surr)	*84*		*48 - 151*
Toluene-d8 (Surr)	*90*		*49 - 147*
Dibromofluoromethane (Surr)	*83*		*49 - 138*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-111906-8	TB-017303A-050119	129 X	88	96	118
LCS 240-380735/4	Lab Control Sample	108	103	96	104
MB 240-380735/6	Method Blank	125 X	94	99	119

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(53-155)	(48-151)	(49-147)	(49-138)
240-111906-1	SO-017303A-050119-DA-037	81	82	89	79
240-111906-2	SO-017303A-050119-DA-038	86	89	95	84
240-111906-3	SO-017303A-050119-DA-039	85	86	89	84
240-111906-4	SO-017303A-050119-DA-040	84	86	92	81
240-111906-5	SO-017303A-050119-DA-041	83	85	89	80
240-111906-6	SO-017303A-050119-DA-042	82	80	85	81
240-111906-7	SO-017303A-050119-DA-043	78	78	81	75
LCS 240-380765/2-A	Lab Control Sample	82	84	90	83
MB 240-380765/1-A	Method Blank	77	87	87	79

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Client Sample ID: SO-017303A-050119-DA-037
Lab Sample ID: 240-111906-1
Date Collected: 05/01/19 11:05
Matrix: Solid
Date Received: 05/02/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379556	05/03/19 12:24	JWW	TAL CAN

Client Sample ID: SO-017303A-050119-DA-037
Lab Sample ID: 240-111906-1
Date Collected: 05/01/19 11:05
Matrix: Solid
Date Received: 05/02/19 09:40
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380765	05/10/19 22:16	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380809	05/12/19 14:13	TJL1	TAL CAN

Client Sample ID: SO-017303A-050119-DA-038
Lab Sample ID: 240-111906-2
Date Collected: 05/01/19 11:10
Matrix: Solid
Date Received: 05/02/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379556	05/03/19 12:24	JWW	TAL CAN

Client Sample ID: SO-017303A-050119-DA-038
Lab Sample ID: 240-111906-2
Date Collected: 05/01/19 11:10
Matrix: Solid
Date Received: 05/02/19 09:40
Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380765	05/10/19 22:16	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380809	05/12/19 14:35	TJL1	TAL CAN

Client Sample ID: SO-017303A-050119-DA-039
Lab Sample ID: 240-111906-3
Date Collected: 05/01/19 11:20
Matrix: Solid
Date Received: 05/02/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379556	05/03/19 12:24	JWW	TAL CAN

Client Sample ID: SO-017303A-050119-DA-039
Lab Sample ID: 240-111906-3
Date Collected: 05/01/19 11:20
Matrix: Solid
Date Received: 05/02/19 09:40
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380765	05/10/19 22:16	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380809	05/12/19 14:57	TJL1	TAL CAN

Client Sample ID: SO-017303A-050119-DA-040
Lab Sample ID: 240-111906-4
Date Collected: 05/01/19 11:25
Matrix: Solid
Date Received: 05/02/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379556	05/03/19 12:24	JWW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Client Sample ID: SO-017303A-050119-DA-040
Lab Sample ID: 240-111906-4
Date Collected: 05/01/19 11:25
Matrix: Solid
Date Received: 05/02/19 09:40
Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380765	05/10/19 22:16	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380809	05/12/19 15:20	TJL1	TAL CAN

Client Sample ID: SO-017303A-050119-DA-041
Lab Sample ID: 240-111906-5
Date Collected: 05/01/19 11:30
Matrix: Solid
Date Received: 05/02/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379556	05/03/19 12:24	JWW	TAL CAN

Client Sample ID: SO-017303A-050119-DA-041
Lab Sample ID: 240-111906-5
Date Collected: 05/01/19 11:30
Matrix: Solid
Date Received: 05/02/19 09:40
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380765	05/10/19 22:16	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380809	05/12/19 15:42	TJL1	TAL CAN

Client Sample ID: SO-017303A-050119-DA-042
Lab Sample ID: 240-111906-6
Date Collected: 05/01/19 11:35
Matrix: Solid
Date Received: 05/02/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379556	05/03/19 12:24	JWW	TAL CAN

Client Sample ID: SO-017303A-050119-DA-042
Lab Sample ID: 240-111906-6
Date Collected: 05/01/19 11:35
Matrix: Solid
Date Received: 05/02/19 09:40
Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380765	05/10/19 22:16	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380809	05/12/19 16:04	TJL1	TAL CAN

Client Sample ID: SO-017303A-050119-DA-043
Lab Sample ID: 240-111906-7
Date Collected: 05/01/19 11:45
Matrix: Solid
Date Received: 05/02/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	379556	05/03/19 12:42	JWW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Client Sample ID: SO-017303A-050119-DA-043

Lab Sample ID: 240-111906-7

Date Collected: 05/01/19 11:45
Matrix: Solid
Date Received: 05/02/19 09:40
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			380765	05/10/19 22:16	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	380809	05/12/19 16:26	TJL1	TAL CAN

Client Sample ID: TB-017303A-050119

Lab Sample ID: 240-111906-8

Date Collected: 05/01/19 00:00
Matrix: Water
Date Received: 05/02/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	380735	05/11/19 06:36	LEE	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 17303, RACER CVO

Job ID: 240-111906-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	04-30-19 *
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN
190

3.6/C3.4

Chain of Custody Record

312873

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: K. FIRESTRAIN	Site Contact: G. TRIGGER	Date: 5/1/19	COC No: 7363 TO2.04-20 T-01
Company Name: GHD SERVICES INC	Tel/Fax: 248 915 8801	Lab Contact: D. HECKLER	Carrier: FEDEX	1 of 1 COCs
Address: 26850 ATHERTY RD	Analysis Turnaround Time			Sampler: D. ANTULIS
City/State/Zip: FARMINGTON HILLS, MI 48331	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248 833 3400	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: RACER - CDD	☐ 1 week			
Site: YPSILANTI, MI	☐ 2 days			Job / SDG No.:
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260B Full	Sample Specific Notes:
SO-017303A-0501|9-SA-037	5/1/19	1105	G	S	2			X	
-038		1110						X	
-039		1120						X	
-040		1125						X	
-041		1130						X	
-042		1135						X	
-043		1145						X	
TB-017303A-0501|9	—	—	—	W	1			X	



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	GHD	5/1/19 1530		ETA	5-2-19 940
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

5/15/2019

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 111906
Canton Facility

Client GHD Services Site Name _____ Cooler unpacked by: Ryan Crabler

Cooler Received on 5-2-19 Opened on 5-2-19 940

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) (Foam) (Plastic Bag) None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 3.6 °C Corrected Cooler Temp. 3.4 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes (No) NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC984738**
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. (Yes) No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B828801VB (Yes) No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: AC

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) TB-017303A-050119 (1) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____


GHD