2016 Summary Report

Former Willow Run Company Vehicle Operations Area
Ypsilanti, Michigan

Revitalizing Auto Communities Environmental Response Trust (RACER)

GHD | 1880 Assumption Street Windsor Ontario N8Y 1C4 Canada

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List of Acronyms

cis-1,2-DCE	cis-1,2-Dichloroethene
COCs	Constituents of Concern
CSM	Conceptual Site Model
CVO	Willow Run Company Vehicle Operations Area
CVOCs	Chlorinated Volatile Organic Compounds
DNAPL	Dense Nonaqueous Phase Liquids
FAV	Final Acute Value
GSI	Groundwater Surface Water Interface
GWVIA	Groundwater Volatilization to Indoor Air Inhalation Criteria
IM	Interim Measure
IRAs	Interim Response Actions
MDEQ	Michigan Department of Environmental Quality
MIP	Membrane Interface Probe
MNA	Monitored Natural Attenuation
NRDW	Non-residential Drinking Water Criteria
PAOCs	Potential Areas of Concern
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
PRB	Permeable Reactive Barrier
QAPP	Quality Assurance Project Plan
RACER	Revitalizing Auto Communities Environmental Trust
RCRA	Resource Conservation Recovery Act
RDW	Residential Drinking Water Criteria
Report	2016 Summary Report
RFI	RCRA Facility Investigation
RRD	Remediation and Redevelopment Division
Site	CVO Property, Ypsilanti, Michigan
SOW	Scope of Work
SSDS	Subslab Depressurization System
Step II Work Plan	Step II Investigation – RFI Work Plan Addendum No. 1
SVOCs	Semi-volatile Organic Compounds

TCE	Trichloroethlyene
TCL	Target Compound List
USEPA	United States Environmental Protection Agency
VC	Vinyl Chloride
VOCs	Volatile Organic Compounds
Work Plan	RCRA RFI Addendum No. 1
ppm	Parts Per Million
mg/L	Milligrams Per Litre

1. Introduction

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), GHD has prepared this 2016 Summary Report for the Willow Run Company Vehicle Operations (CVO) property located in Ypsilanti, Michigan (Site). Figure 1 presents the Site location.

The purpose of the 2016 investigations was to investigate the chlorinated volatile organic compounds (CVOCs) at the Site to aid in providing identification, evaluation and selection of effective remedial alternatives by defining or eliminating the potential for additional source areas, and further delineating the extent of on-Site impacts. Specifically, the 2016 investigations were completed for delineating groundwater impacts at the northern and southern property boundary and addressing the potential source areas identified during the membrane interface probe (MIP) investigation completed in late 2014. Furthermore, an annual groundwater monitoring event was completed to monitor constituent concentrations at the Site.

2. Recent Interim Actions

Many investigations have been completed at the Site over the years for source evaluation and to delineate impacts within groundwater and soils at various PAOCs. In addition, several Interim Response Actions (IRAs) have been completed at the Site. The following is an updated list of IRAs completed during 2013 through 2016.

- Remediation of VOCs and PCBs impacts (excavation, on-Site conditioning prior to disposal, and disposal) within PAOC 18 in 2013 and 2014, including recovered DNAPL
- Excavation and disposal of paint sludge and impacted soils beneath the northern portion of the Haulaway Building in 2013 and 2014
- Installation of the infiltration galleries beneath the Haulaway Building and PAOC 18 in 2014
- Installation of an active subslab depressurization system (SSDS) beneath a portion of the Haulaway Building in 2014. The SSDS has been in operation for over 3 years

3. Pathway Analysis

Generic Michigan Department of Environment Quality (MDEQ) Part 201 criteria are used as screening values in the tables and discussions presented in this letter. Exceedances highlighted do not necessarily reflect an unacceptable risk. Deed restrictions associated with groundwater 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 MDEQ 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

The MDEQ granted a *groundwater not in an aquifer determination* for the surficial (shallow) unit from which groundwater is sampled (letter to Dr. Ken Richards dated September 1, 2004) at the CVO property. Accordingly, drinking water criteria are not applicable; however, residential drinking water (RDW) criteria along with groundwater surface water interface (GSI) criteria are considered applicable for monitoring the property boundary concentrations for off-Site migration. Detections above GSI at interior wells (wells that are not at the property boundary and/or bank of the pond) do not reflect exceedances, as these pathways are not applicable at these locations. The results were flagged for assessment purposes only. In addition, groundwater volatilization to Indoor Air Inhalation criteria (GWVIA) is used as screening criteria to evaluate changing conditions and is not a relevant pathway since a SSDS is currently operating beneath the portion of the building where impacts exist. The existing deed restriction requires the property owner to assess vapor intrusion for any new buildings and restricts altering the SSDS beneath the existing building. Therefore, detections above this criterion at the remaining Site wells do not reflect a relevant pathway.

4. Scope of Work

The scope of work for the 2016 investigations are identified in the MDEQ approved RCRA RFI Addendum No. 1 (Work Plan) (GHD, March 2016) and Step II Investigation – RFI Addendum No. 1 (Step II Work Plan) (GHD, June 2016). As per the work plans, the scope of work consisted of the following tasks:

- Task 1: Site-Wide Data Gap Analysis
- Task 2: PAOC 18 Post Remediation Investigation
- Task 3: Storm Sewer Discharge Evaluation
- Task 4: Annual Site-Wide Groundwater Sampling
- Task 5: Treatability Study

The following sections describe the 2016 investigation activities to complete tasks identified above. The investigation areas and sampling locations are presented on Figures 2 and 3, respectively. Monitoring installation details are provided in Table 1. A summary of samples collected during the 2016 investigation is presented in Table 2.

4.1 Task 1: Site-Wide Data Gap Analysis

The Site-Wide data gap analysis was conducted to identify concentration trends at the northern portion of the Site, evaluate a potential source area identified during the MIP investigation, and further characterize groundwater impacts east of the utility corridor and along the southern property boundary via two transects (Transect #1 and Transect #2).

4.1.1 Northern Area Investigation

The northern area investigation was completed in February, June and October 2016 at the northern property boundary to define the extent of CVOCs. Specifically, to evaluate the movement of CVOCs from the top to the bottom of the bank and to assess the geological conditions at the groundwater

surface water interface (GSI) compliance points. The following summarizes the 2016 scope of work completed:

Soil Boring and Monitoring Well Installation

- February 2016 Monitoring Well Installation - Monitoring wells MW19-45, MW19-46, MW19-47, MW19-48, MW19-49, MW19-50 and MW19-52 were installed on the northern property boundary upper bank.
- June 2016 Monitoring Well and Soil Boring Installation - Monitoring wells and soil borings MW19-58, MW19-59, GS-3A, GS-4A, GS-17, GS-18, GS-19, GS-20, and GS-21 were installed on the northern property boundary lower bank.

Soil and Groundwater Sampling

- February 2016 Soil and Groundwater Sampling - Soil samples were collected during monitoring well installation at MW19-45, MW19-46 and MW19-47 for analysis of TCL VOCs, SVOCs, Metals and PCBs. Groundwater samples were collected from 18 monitoring wells for analysis of TCL VOCs. Select wells were also analyzed for metals, gases and general chemistry (as part of the treatability study).
- June 2016 Soil and Groundwater Sampling - Soil samples were collected during monitoring well and soil boring installation at GS-4A and MW19-59 for analysis of TCL VOCs, SVOCs, Metals and PCBs. Groundwater samples were collected from six monitoring wells for analysis of TCL VOCs.
- October 2016 Groundwater Sampling - Groundwater samples were collected from 20 monitoring wells for analysis of TCL VOCs.

4.1.2 Source Evaluation Based on MIP Impacts

The source evaluation investigation was completed in February and October 2016. The MIP investigation completed in 2014 suggested a potential additional source area between MW-3 and the southern property boundary. Furthermore, elevated concentrations of VC are observed between MW19-24 and MW19-03 located southeast of the utility corridor during regular groundwater monitoring events. The typical trend along the southern property boundary is that concentrations are high between MW19-24 and MW19-03 while concentrations east and west of these locations decrease substantially. The following summarizes the 2016 scope of work completed:

Soil Boring and Monitoring Well Installation

- February 2016 Monitoring Well Installation - Monitoring wells MW19-50, MW19-51, MW19-52, MW19-53, and MW19-54 were installed between MW-3 and the southern property boundary. Monitoring wells MW19-50 and MW19-52 were also installed to investigate the Northern Property Boundary.

Soil and Groundwater Sampling

- February 2016 Soil and Groundwater Sampling - Soil samples were collected during monitoring well and soil boring installation at SB19-115, MW19-50 and MW19-52 for analysis of TCL VOCs, SVOCs, Metals and PCBs. Groundwater samples were collected from monitoring wells

MW19-07, MW19-50, MW19-51, MW19-52, MW19-53, and MW-54 for analysis of TCL VOCs. MW19-07 and MW19-52 were also sampled for general chemistry, metals and gases (as part of the treatability study).

- October 2016 Groundwater Sampling - Groundwater samples were collected from six monitoring wells for analysis of TCL VOCs.

4.1.3 Southern Property Boundary

The southern property boundary investigation was completed in February and October/November 2016. Two transects (Transect #1 and Transect #2), shown on Figure 3, were completed using new and existing monitoring wells and soil boring descriptions to evaluate soil conditions and groundwater impacts east of the utility corridor and along the southern property boundary.

Transect #1

- Transect # 1 was completed in February 2016 east of utility corridor and included two soil borings (SB19-116 and SB19-117) and two monitoring wells (MW19-55 and MW19-56) to assess whether impacted groundwater extends northeast along the groundwater divide. In February and October 2016, groundwater samples were collected from monitoring wells MW-5, MW19-55, and MW19-56 for analysis of TCL VOCs

Transect #2

- Transect #2 was completed in February 2016 along the southeastern property boundary and included four soil borings (SB19-118 through SB-121) to confirm that no impacts extend to this portion of the Site. In February and November 2016, groundwater samples were collected from monitoring wells MW19-03, MW-14 and MW19-04 for analysis of TCL VOCs

4.2 Task 2: PAOC 18 Post Remediation Investigation

The PAOC 18 Post Remediation investigation was conducted in February, June and October/November 2016 east of the utility corridor along the northern portion of the property to assess the recent remedial activities. Monitoring wells were installed up gradient of PAOC 18 to determine the quality of groundwater before it enters PAOC 18 and GSI wells were installed at the bank of Tyler Pond for evaluating groundwater conditions. The following summarizes the 2016 scope of work completed:

Monitoring Well Installation

- February 2016 Monitoring Well Installation - Monitoring wells MW19-56 and MW19-57 were installed on east of the utility corridor in the northern portion of the Site.
- June 2016 Monitoring Well Installation - Monitoring wells GS-20 and GS-21 were installed at the bank of Tyler Pond

Groundwater Sampling

- February 2016 Groundwater Sampling - Groundwater samples were collected from MW19-56 and MW19-57 for analysis of TCL VOCs.

- October/November 2016 Groundwater Sampling - Groundwater samples were collected from MW19-56, MW19-57 GS-20 and GS-21 for analysis of TCL VOCs.

4.3 Task 3: Storm Sewer Discharge Sampling

It is suspected that groundwater is infiltrating the storm sewers and could be making it to the surface water from the storm sewer outfalls. The discharge from the three storm sewer outfalls (Outfalls 11, 13, and 14) were sampled during dry conditions in February 2016 to assess infiltration of impacted groundwater through the storm sewer network. Storm water samples were submitted for TCL VOCs analysis.

4.4 Task 4: Annual Groundwater Monitoring Event

Regular groundwater sampling events have been performed to monitor constituent concentrations at the Site over the past several years. The groundwater monitoring program consists of groundwater sampling, as well as groundwater level monitoring to evaluate groundwater flow conditions.

An annual Site-wide groundwater investigation was conducted in October/November 2016 to evaluate current site-wide conditions. Groundwater levels were collected in October 2016 to evaluate groundwater flow conditions. Groundwater samples were collected and analyzed for the TCL VOCs as part of the routine sampling protocol. Well locations that have been part of the historical regular groundwater monitoring events were sampled as well as wells that were installed as part of the 2016 investigation activities.

4.5 Task 5: Treatability Study

A laboratory treatability study was conducted to determine the design parameters for a permeable reactive barrier (PRB) to intercept and treat the CVOCs present at the Site. Groundwater samples were collected from select wells to provide a characterization of baseline conditions for the treatability study. See Appendix E for a completed summary of the treatability study.

5. Results

The results of Tasks 1-5 as described in Section 4 are presented in Tables 3 and 4 and databox figures located in Appendix B. Groundwater iso-contours were also generated using data from the 2016 sampling events and historical data to interpolate and define the extent of CVOCs at the Site. Groundwater iso-contours generated for trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and VC are presented on Figures 4 through 6. For contouring purposes estimated concentrations (reported as J) were assumed to be equivalent to their reported value whereas non-detect concentrations were assumed to be present at 50 percent of the reporting limit. The laboratory analytical reports and data validation reports are presented in Appendix D. A further discussion of results are presented in Section 6.

6. Discussion of Results

This section discusses the results from the 2016 sampling events. The 2016 investigations included the installation of monitoring wells and soil borings; therefore, the Site geology and hydrogeology is updated in this Section in conjunction with an update on the CVOCs in soil and groundwater.

6.1 Geology and Hydrogeology

During the 2016 investigations, monitoring wells and soil borings were installed in areas throughout the Site, updating the already extensive understanding of the Site's geology and hydrogeology. In general, the investigations completed in 2016 did not alter the understanding of the geology and hydrogeology south of the northern property boundary. The geology and hydrogeology south of the northern property boundary is generally consistent with the detailed description described in the 2012 Site Summary Report (CRA, 2012). The geology and hydrogeology near the northern property boundary was updated in the sections below.

Detailed stratigraphy logs were completed for each borehole and monitoring well installed at the Site. The stratigraphy logs for the locations completed in 2016 are provided in Appendix A. A summary of monitoring well information, including the screened interval stratigraphy, is presented in Table 1. Figure 7 presents groundwater contours.

6.1.1 Northern Property Boundary Geology and Hydrogeology

Based on review of the monitoring wells and borings installed in the area of the northern property boundary, an update to the geology and hydrogeology is provided below.

Northern Property Boundary Geology

Geology in the area of the northern property boundary refers to the northernmost borings (south of the slope) and monitoring wells at the base of the slope prior to entering Tyler Pond (north of the slope). For the purposes of this section, two saturated units were encountered near the northern property boundary as described below:

- *(1) Shallow Saturated Unit –* This unit is mainly encountered south of the slope. The shallow saturated unit consists of fill, sand, silts and interbedded clay lenses from the surface to approximately 700 ft AMSL. This shallow sandy unit is permeable and is associated with the site-wide shallow saturated unit. South of the Northern Property Boundary, the shallow sandy unit is underlain by the regional clay unit that extends to at least 615 ft AMSL which was the deepest boring explored.
- *(2) Intermediate Saturated Unit –* This unit is mainly encountered north of the slope. The intermediate saturated unit consists of organic sandy silts, sands and interbedded clay lenses from 695ft AMSL to approximately 685 ft AMSL. This intermediate saturated unit appears to have limited comingling with the shallow saturated unit.

There is variability in the geology from east to west along the northern property boundary as described below:

- East of boring GS-3A (located north of the slope), a regional clay is encountered extending from the surface to terminal with the intermediate saturated unit encountered at 695 ft to 697 AMSL and 685 ft to 687 ft AMSL, respectively. The saturated units are not encountered consistently, but are likely associated with the intermediate saturated unit and/or utility corridors. There appears to be minimal commingling between the shallow and intermediate saturated units east of boring GS-3A.
- West of GS-3A (located north of the slope), a sandy unit consisting of fill, sand, silts and interbedded clay lenses is encountered from the surface to approximately 690 ft AMSL and is likely associated with the shallow and intermediate saturated units. It appears the two units are commingled throughout this area.

Northern Property Boundary Hydrogeology

One of the main goals of the 2016 investigations was to determine if the site wide shallow saturated unit (south of the slope) is in connection with intermediate saturated unit (north of the slope). Groundwater contour maps (Figure 7) and trend analyses (Appendix C) were reviewed to determine if a connection exists between the saturated units north and south of the slope. The trend analyses were completed with monitoring wells located south of the slope (MW19-45, MW19-46, MW19-47, MW19-48 and MW19-50) vs north of the slope (GS-17, GS-18, GS-3, GS-19 and GS-4). The wells were selected to correspond up-gradient and down-gradient of the slope. The following provides further discussion of the hydrogeology at the northern property boundary.

Water Levels:

Upon review of water levels there is a significant gradient drop north of the slope. In review of the trend analysis of water levels (Appendix C), the average groundwater elevation south of the slope was approximately 707 ft AMSL and north of the slope was approximately 700 ft. AMSL. An approximate gradient of the area from south to north is approximately 0.018 which is several orders of magnitude greater than areas south of the slope. This hydraulic gradient is not consistent with areas south of the slope and likely indicate monitoring wells screened across separate units.

Figure 7 presents the groundwater contour map from water levels collected during the annual groundwater sampling event in October/November 2016. The groundwater contour map is generally consistent with historic data and identifies a steep gradient near Tyler Pond and a groundwater divide. Based on the recent update to geology and hydrogeology in the northern portion of the site, the steep gradient near Tyler Pond is likely due to wells screened across different saturated units (shallow and intermediate).

Groundwater Chemistry:

Upon review of the groundwater chemistry trend analyses (Appendix C), there appears to be supporting lines of evidence that the shallow and intermediate saturated units have limited commingling. Data from east of GS-3A indicated groundwater chemistry north of the slope had consistently different readings of water levels, VC concentrations, conductivity, ORP, pH, and turbidity. These are lines of evidence that the monitoring wells north and south of the slope are

screened in different saturated units. West of boring GS-3A, the readings are more consistent, indicating some possible commingling between the shallow and intermediate saturated units. Overall, the groundwater chemistry trend analyses appear to indicate monitoring wells are screened across separate units (shallow and intermediate); specifically, east of boring GS-3A.

VC Concentrations:

Although this section is not intended to discuss results, the presence of VC south vs north of the slope provides information on the connectivity of the shallow and intermediate saturated units. Upon review of VC trend analysis of wells located north vs south of the slope near Tyler Pond, an order of magnitude drop in VC concentrations from the top of the slope compared to the bottom indicates there is likely some interconnection between the shallow and intermediate saturated units, but it appears limited. Specifically, where concentrations are greatest, the concentrations of VC drop several orders of magnitude from south to north over a relatively small distance.

Therefore, upon review of the geology and hydrogeology, the shallow saturated unit located south of the slope appears to have limited hydrologic connectivity to the intermediate saturated unit located north of the slope. In addition, it appears monitoring wells are typically screened in the upper saturated unit south of the slope and in the intermediate saturated unit north of the slope.

6.2 Soil Sampling Results

Based on soil iso-contour maps (Figures 4-6) and databoxes (Appendix B), elevated CVOCs, SVOCs, metals and PCBs in soil are generally consistent with historical data except the following:

Northern Property Boundary Investigation:

Soil results indicate elevated VC concentrations at MW19-52, MW19-59, SB19-115 and GS-4A. Soil from GS-4A indicates VC impacts at the slope of the bank and just south of Tyler Pond. However, the soil impacts north of the slope (GS-4A (71 ppb)) were significantly lower than nearby up-gradient boring (MW19-59 [280 ppb]) located south of the slope. In addition, VC was the only CVOC to be encountered in soil north of the slope. All other constituents encountered during the northern property boundary investigation were generally consistent with historical data.

Source Evaluation Based on MIP Impacts Investigation:

Soil results within the MW-3 and Southern Property Boundary area indicated elevated levels of CVOCs, particularly VC, confirming the hotspots identified during the MIP investigation. In general, the 2016 investigation results are consistent with the previous investigations at the Site.

6.3 Groundwater Sampling Results

Based on groundwater iso-contour maps (Figures 4-6) and databoxes (Appendix B), elevated CVOCs, SVOCs, metals and PCBs in groundwater are generally consistent with historical data except the in the following areas and investigations.

Northern Property Boundary Investigation:

The main constituent of concern north and south of the slope is VC in groundwater. In general, VC concentrations north of the slope were an order of magnitude lower in comparison to VC concentrations in monitoring wells south of the slope. This is likely a result of monitoring wells screened in different saturated units. As identified in Section 6.1.1, there is limited mixing between the upper and intermediate saturated units which is likely the cause for much lower concentrations north of the slope. Therefore, it is unlikely VC in monitoring wells north of the slope are source areas, but it is likely the VC is a result of limited mixing with the shallow and intermediate saturated units.

Source Evaluation Based on MIP Impacts:

The groundwater data showed that chlorinated compounds exceeded the Part 201 criteria at all locations within this area. The highest concentration of VC (57 parts per million [ppm]) in groundwater was detected at MW19-51, located west of the utility corridor. The MIP investigation and the 2016 investigation activities identify an apparent source location at or near MW19-51.

Southern Property Boundary Investigation:

Two transects (Transect #1 and Transect #2 as identified on Figure 3) were completed using new and existing monitoring wells and soil boring descriptions to evaluate soil conditions and groundwater impacts east of the utility corridor and along the southern property boundary.

Transect 1: The groundwater data collected from Transect #1 (as shown on Figure 3) had CVOCs exceeding Part 201 criteria. However, the concentrations east of the utility corridor are significantly less than those west of the utility corridor and groundwater concentrations generally decrease northeast of MW-5.

Transect 2: Low levels of CVOCs observed in groundwater within Transect #2 (as shown on Figure 3) completed near the southeastern property boundary confirmed that impacts do not extend to this portion of Site.

PAOC 18 Post Remediation Investigation:

Groundwater concentrations of CVOCs, particularly cis-1,2-DCE and VC exceeded the Part 201 criteria in monitoring wells MW19-56 and MW19-57, indicating that CVOCs are present in groundwater before it enters PAOC 18. In addition, groundwater concentrations of CVOCs, particularly cis-1,2-DCE, TCE and VC exceeded the Part 201 criteria in monitoring wells GS-20 and GS-21 (VC only), indicating that CVOCs extend laterally beyond the sheet pile wall.

Storm Sewer Discharge investigation:

Storm water samples collected from the Outfall #'s 11, 13, and 14 indicated low levels of select VOCs in the storm water samples indicating that some infiltration of impacted groundwater may be occurring through the storm sewer network.

Annual Groundwater Monitoring Event:

In general, groundwater concentrations for the Site wells are consistent with the historical data with the exception of MW19-11. Elevated levels of VC (80 ppm) were observed at MW19-11 during November 2016. The concentrations of VC at MW19-11 were detected at 8.8 ppm in February 2016 and were consistent with historical data. Elevated concentrations observed in November 2016 will be monitored during the 2017 Annual Groundwater Event to assess whether the apparent increase in VC concentration is confirmed.

Task 5: Treatability Study Results:

A permeable reactive barrier (PRB) is being considered to prevent migration of CVOCs. A laboratory treatability study was completed in order to determine the design parameters for a PRB to intercept and treat the CVO present at the Site. The results of the study demonstrate that PRB is an effective treatment for CVOC at the Site. A barrier containing 40 percent zero valent iron (ZVI) and 60 percent sand would be recommended. Based on the data from the study, an HRT of at least 90 hours would be required to achieve treatment of the CVOC. Details of the treatability study analysis and results, including the groundwater sample results for natural attenuation parameters are provided in Appendix E.

It should be noted that due to the drawdown activities of Tyler Pond, these remediation alternatives included the PRB will need to be reevaluated.

7. Extent of Vertical Impacts

The vertical extent of groundwater impacts was generally consistent with historical data south of the northern property boundary. The impacts encountered south of the slope is within the upper saturated unit which is well defined. The VC impacts encountered north of the slope (just south of Tyler Pond) appears to be within the intermediate saturated unit. The vertical extent of the intermediate unit is not fully defined. Therefore, additional investigation is necessary to further define the vertical extent of potential impacts in the intermediate saturated unit located north of the slope.

8. Extent of Horizontal Impacts

Soil

The horizontal extent of soil impacts were not delineated in soil borings near the northern property boundary. Specifically, GS-4A had VC in soil and was the most northerly boring installed in that area. Therefore, additional investigation will be necessary to delineate horizontal soil impacts north of the slope.

Groundwater

The horizontal extent of groundwater impacts is generally well defined and 2016 data was generally consistent with historical data south of the slope. The VC impacts encountered north of the slope

(just south of Tyler Pond) appears to be within the intermediate saturated unit. The horizontal extent of the intermediate unit is not fully defined. Therefore, additional investigation is necessary to further define the horizontal extent of potential impacts in the intermediate saturated unit located north of the slope.

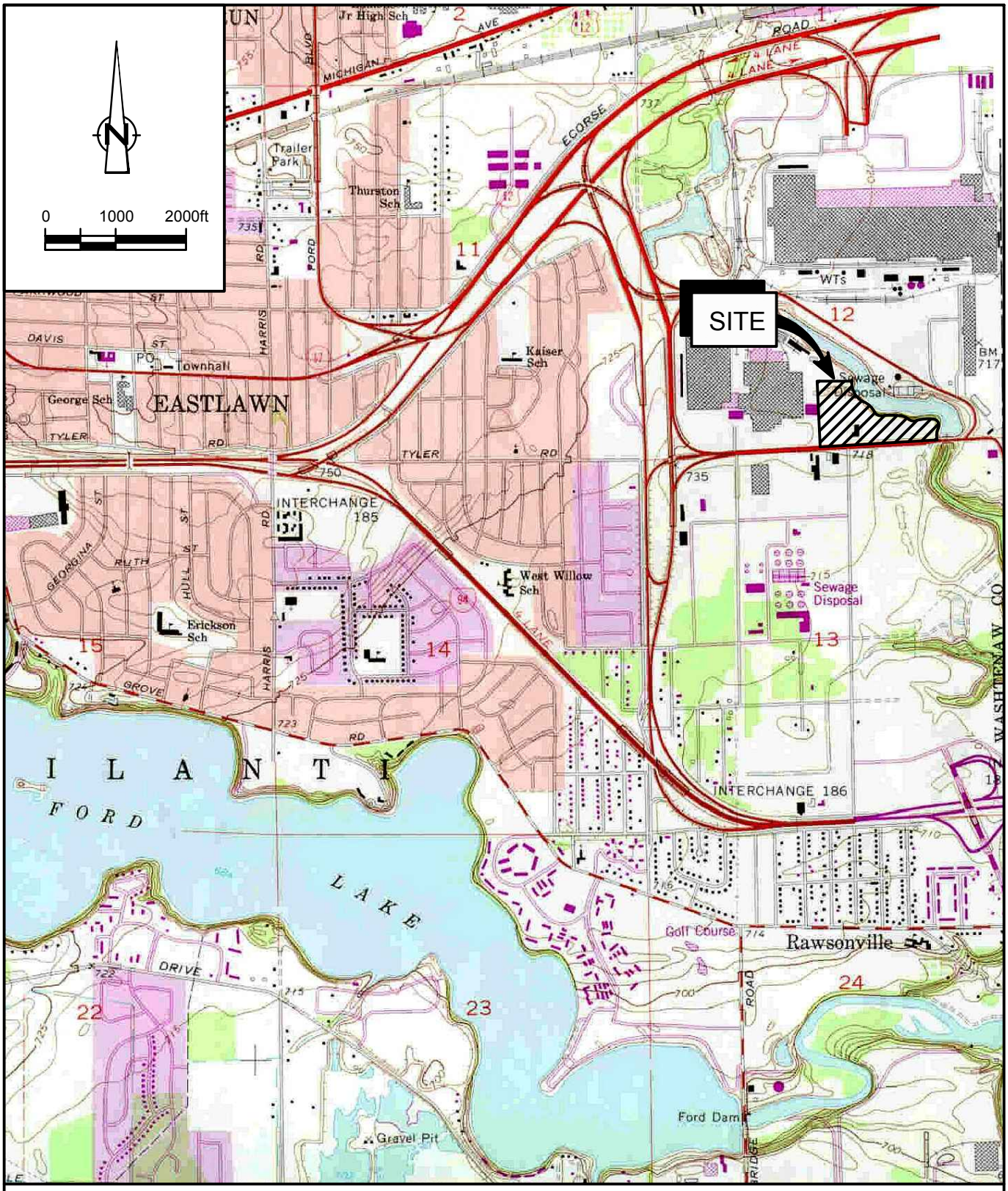
9. Conclusion and Future Monitoring

The investigation results show soil and groundwater concentrations exceeding Part 201 Criteria are present throughout the Site. In general, the 2016 investigation results are consistent with the previous investigations at the Site with the exception of area north of the slope. Based on the updated geology and hydrogeology of the northern portion of the site, an additional saturated unit with limited hydraulic connection to the shallow saturated unit is present in this area, but is not present throughout most of the Site. The limited data from the intermediate saturated unit indicated VC impacts in groundwater. Future investigations in the intermediate saturated unit will be necessary to define extent of impacts.

The hotspots identified during investigations and previous activities including test pitting and MIP investigation activities are due to the historic filling activities at the Site.

It is anticipated that in general, the next steps for the Site will include the following:

- Assessment of changes in hydrogeology based on Tyler Pond drawdown activities and applicability of GSI criteria for locations at the bank of pond/creek.
- Further evaluation, selection and implementation of the effective remedial alternatives for treating impacted groundwater.
- Ongoing groundwater monitoring.



SOURCE: USGS QUADRANGLE MAP;
YPSILANTI EAST, MICHIGAN

figure 1

SITE LOCATION MAP
2016 SUMMARY REPORT
FORMER WILLOW RUN COMPANY VEHICLE OPERATIONS AREA
Ypsilanti, Michigan

YPSILANTI

017303-T05(033)GN-DE011 MAY 3, 2018

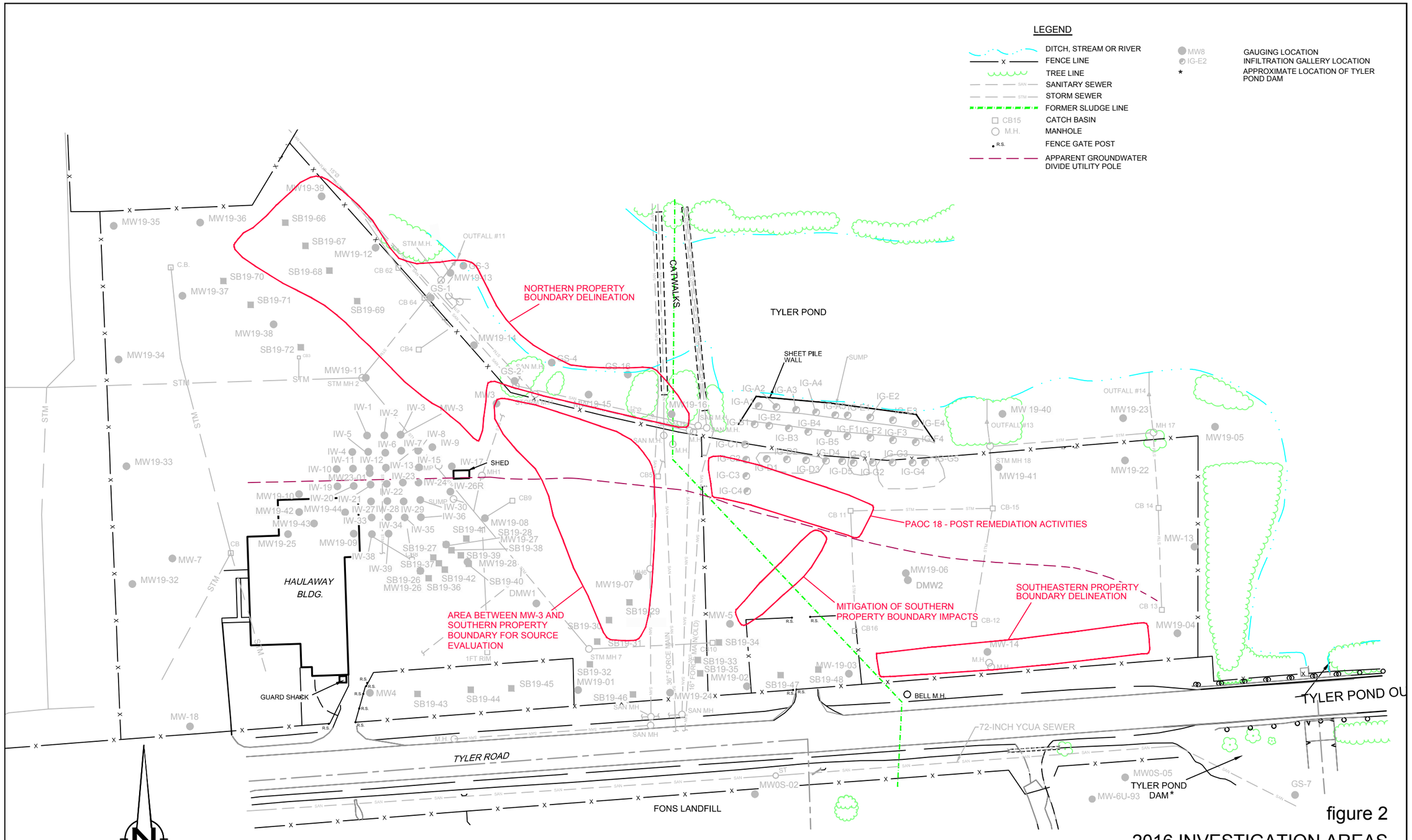


figure 2

2016 INVESTIGATION AREAS
2016 SUMMARY REPORT
FORMER WILLOW RUN COMPANY VEHICLE OPERATIONS AREA
Ypsilanti, Michigan

017303-T05(033)GN-DE015 MAY 3, 2018

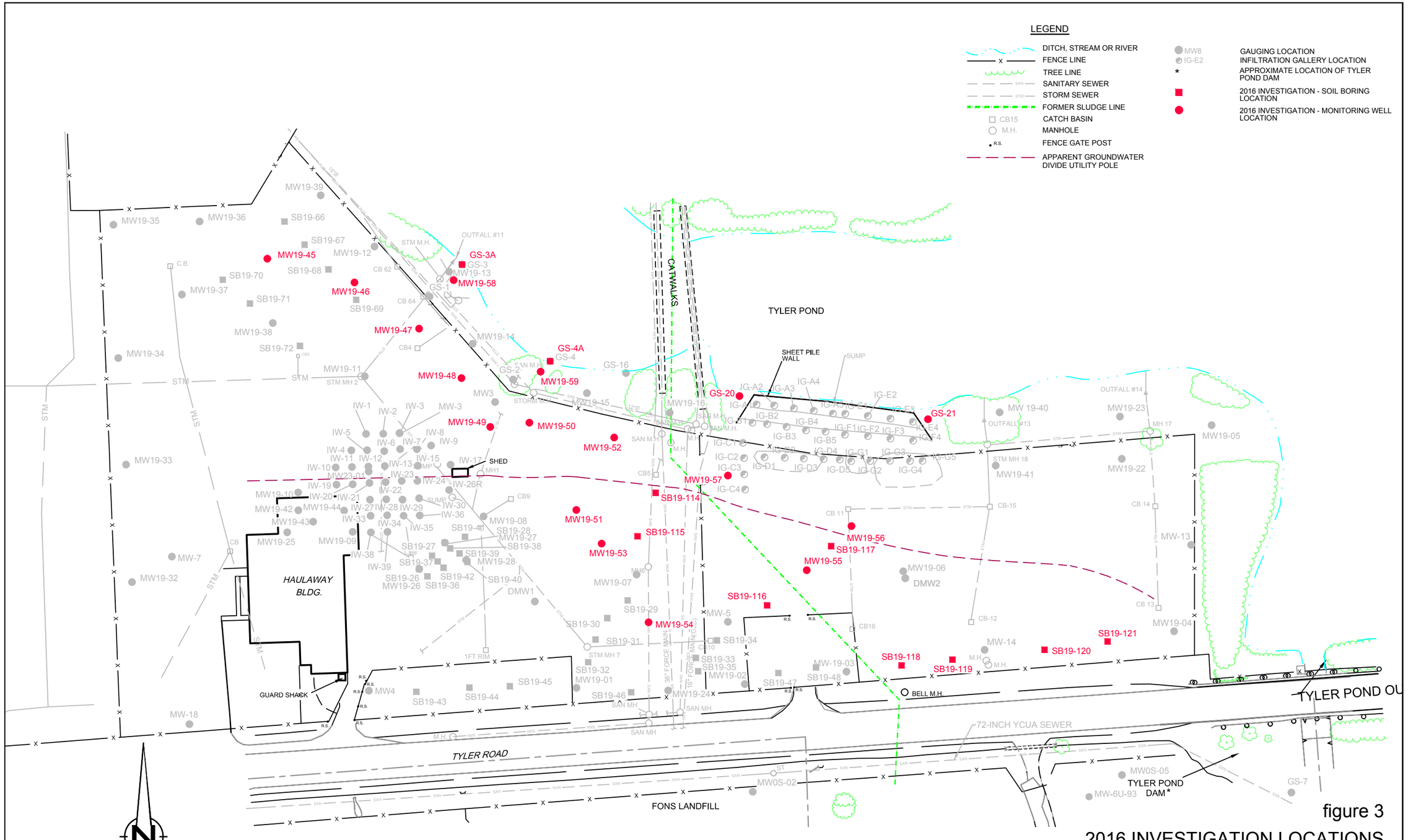


figure 3

2016 INVESTIGATION LOCATIONS
2016 SUMMARY REPORT
FORMER WILLOW RUN COMPANY VEHICLE OPERATIONS AREA
Ypsilanti, Michigan

017303-T05(033)GN-DE009 MAY 3, 2018

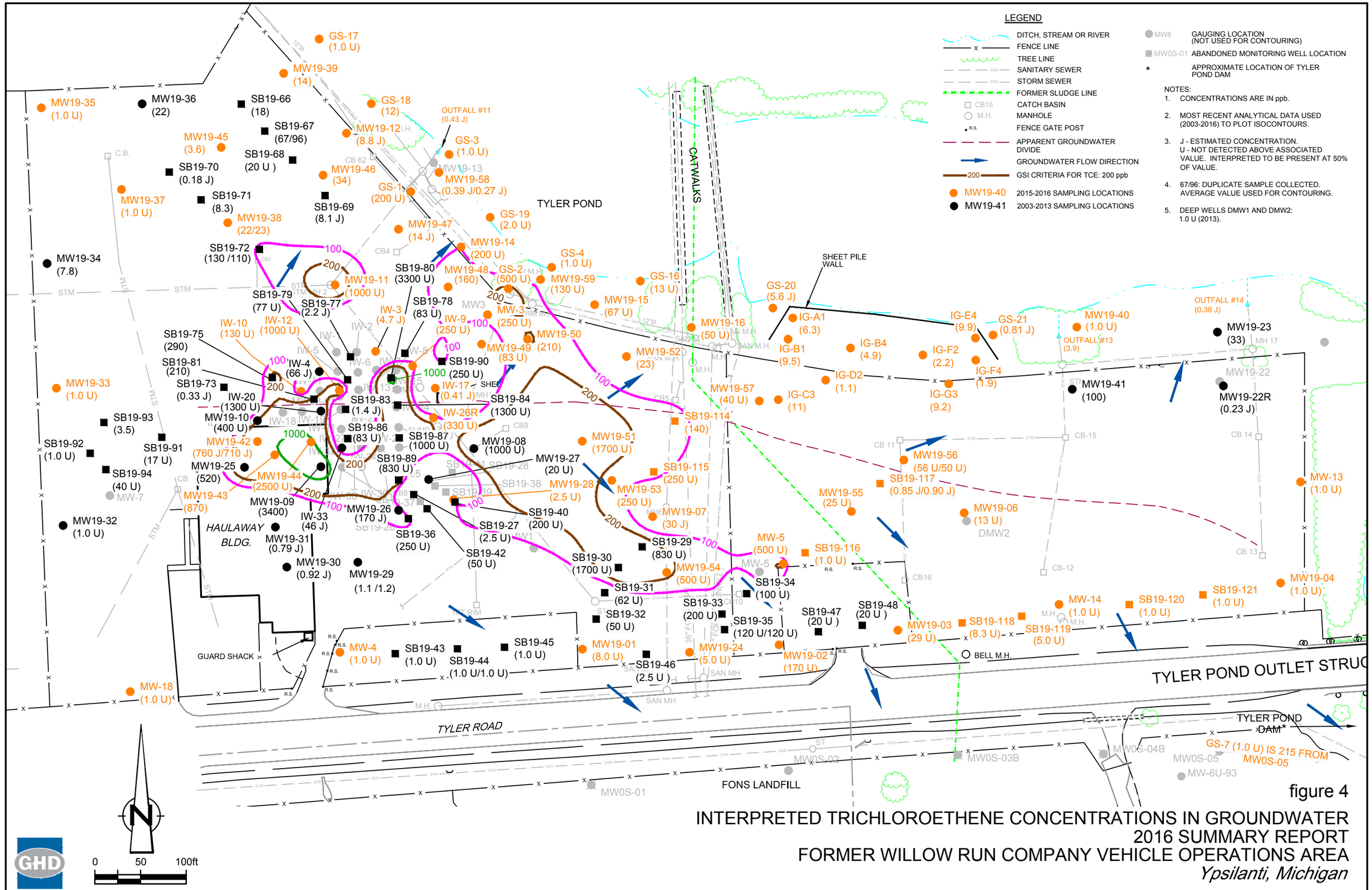


figure 4

INTERPRETED TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER
2016 SUMMARY REPORT
FORMER WILLOW RUN COMPANY VEHICLE OPERATIONS AREA
Ypsilanti, Michigan

017303-T05(033)GN-DE016 MAY 3, 2018

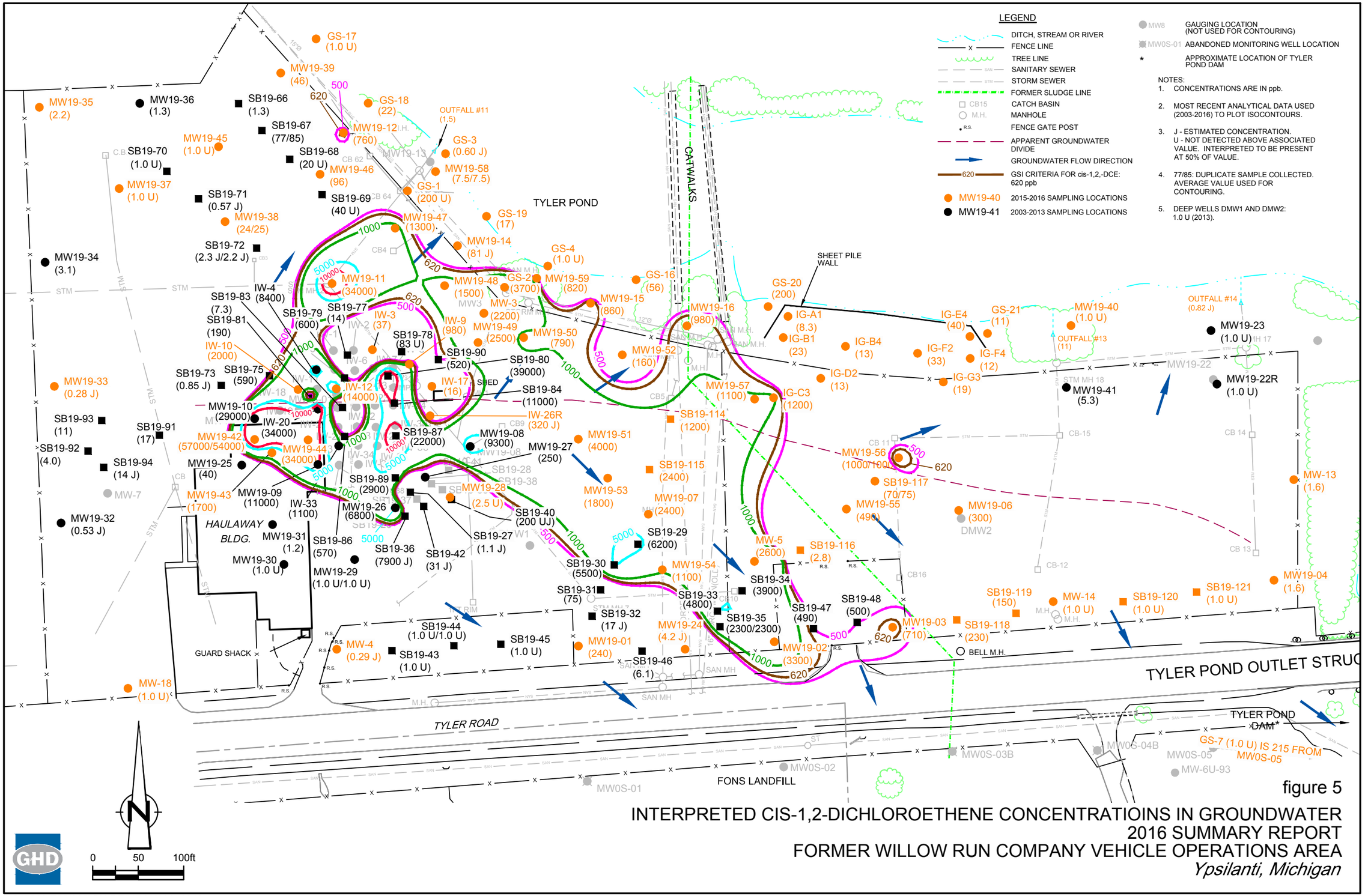


figure 5

INTERPRETED CIS-1,2-DICHLOROETHENE CONCENTRATIOINS IN GROUNDWATER
2016 SUMMARY REPORT
FORMER WILLOW RUN COMPANY VEHICLE OPERATIONS AREA
Ypsilanti, Michigan

017303-T05(033)GN-DE017 MAY 3, 2018

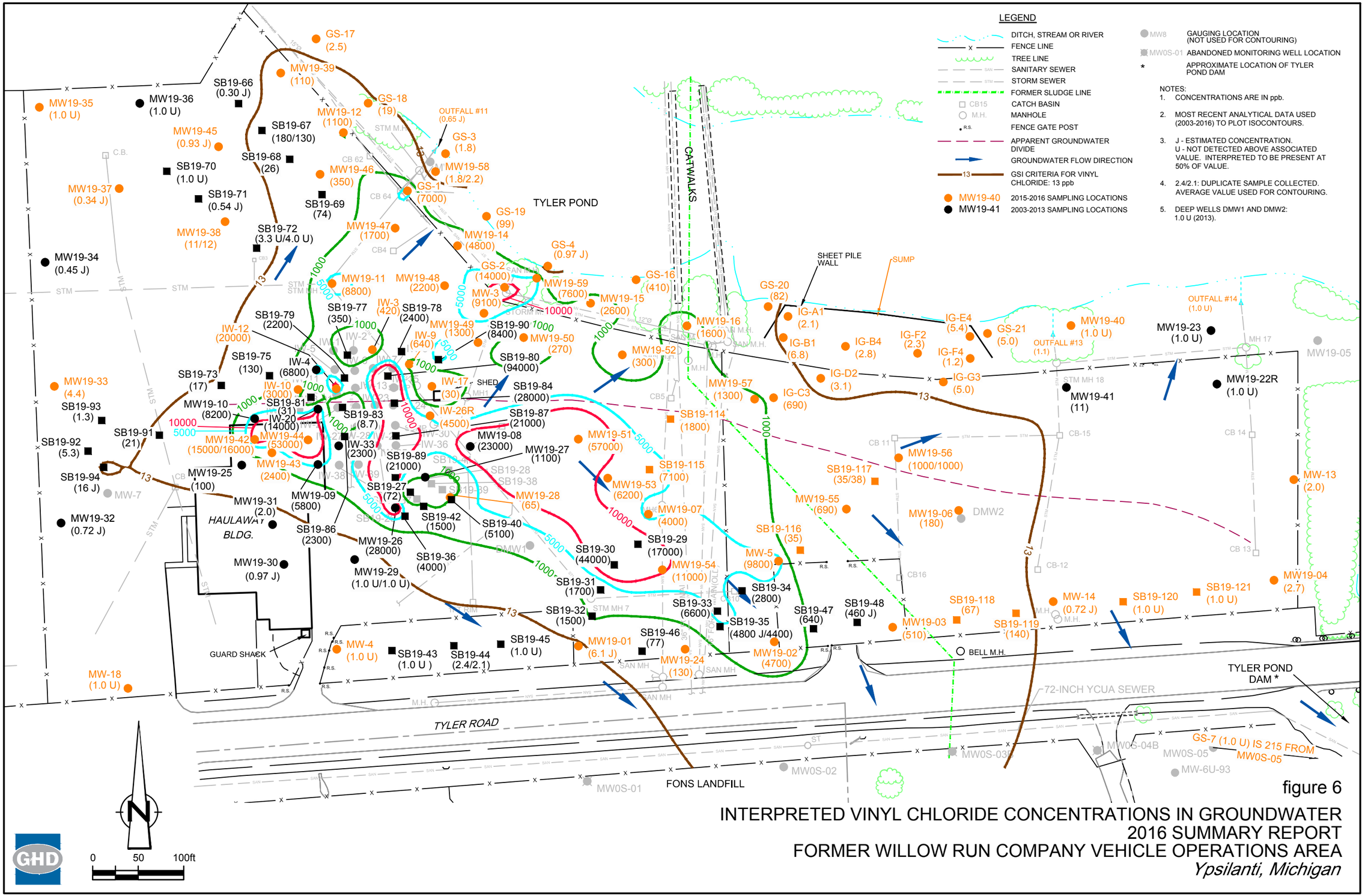
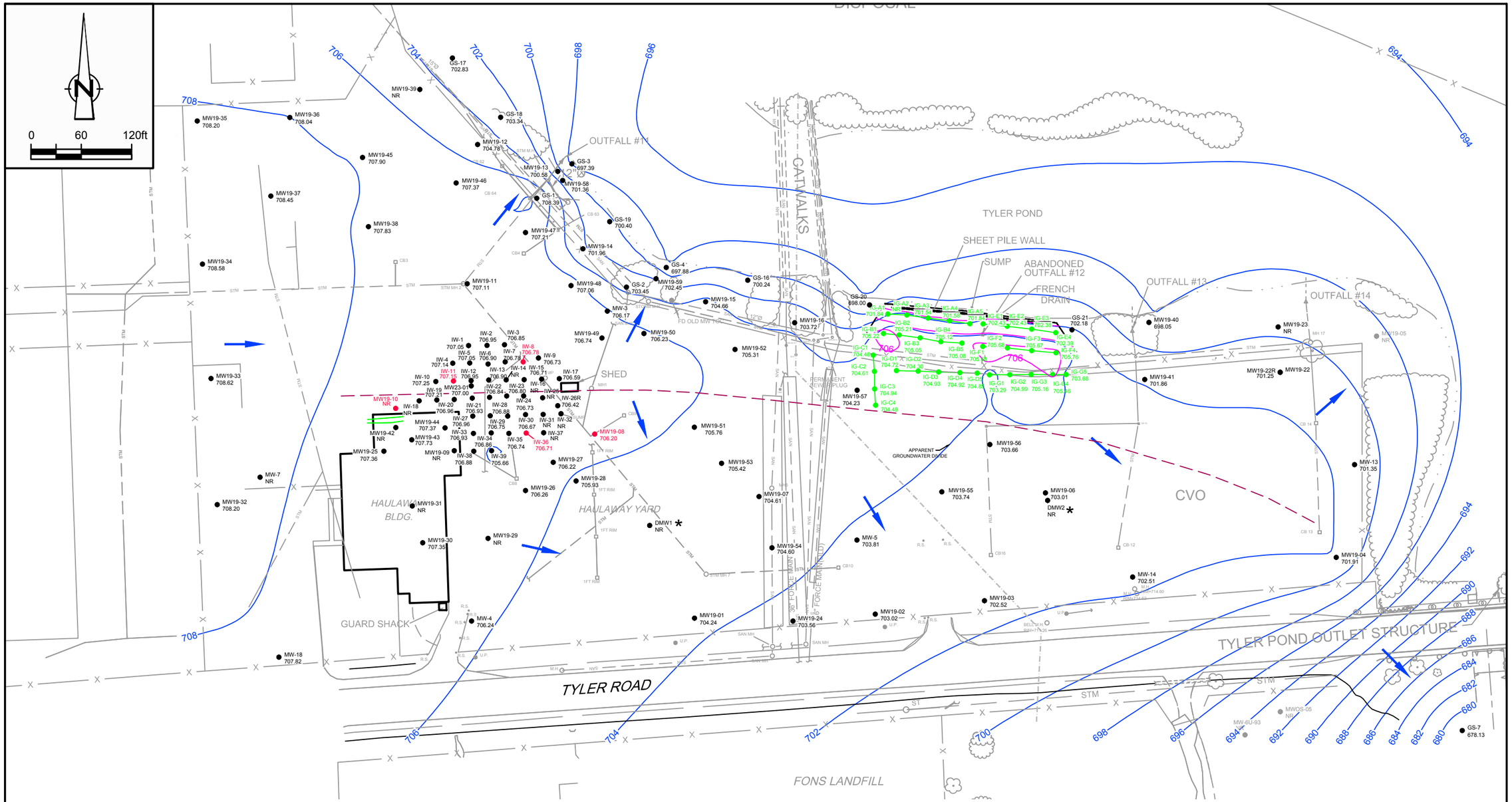


figure 6

INTERPRETED VINYL CHLORIDE CONCENTRATIONS IN GROUNDWATER
2016 SUMMARY REPORT
FORMER WILLOW RUN COMPANY VEHICLE OPERATIONS AREA
Ypsilanti, Michigan

017303-T05(033)GN-DE018 MAY 3, 2018



LEGEND

706	GROUNDWATER CONTOUR
	GROUNDWATER CONTOUR WITHIN SHEET PILE WALL
	DITCH, STREAM OR RIVER
	FENCE LINE
	TREE LINE
	FORMER SLUDGE LINE
	APPARENT GROUNDWATER DIVIDE
U.P.	UTILITY POLE
706.20	GROUNDWATER ELEVATION (AMSL)
*	ELEVATION NOT INCLUDED IN CONTOUR. WELL SCREENS DEEP AQUIFER
NR	NO LEVEL RECORDED. WELL WAS INACCESSIBLE
MW19-08	LNAPL OBSERVED IN WELL
	GROUNDWATER FLOW DIRECTION
	INFILTRATION GALLERY

figure 7

GROUNDWATER ELEVATION CONTOURS - OCTOBER 2016
2016 SUMMARY REPORT
FORMER WILLOW RUN COMPANY VEHICLE OPERATIONS AREA
Ypsilanti, Michigan

Monitoring Well Construction Summmary
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

Monitoring Well ID	Easting	Northing	Borehole or Well Completion Date	Total Borehole Depth (feet)	Well Material	Well Dia. (in)	Screen Length (ft)	Ground Surface Elevation (ft. AMSL)	Top of Casing (TOC) Elevation (ft. AMSL)	Screened Interval (ft bgs)	Screened Interval (ft. AMSL)	Final Const.
GS-17	13344023.22	268758.842	6/14/2016	23	PVC	1	10	707.12	709.98	7 - 17	700.12 - 690.12	ST
GS-18	13344080.51	268688.235	6/14/2016	18	PVC	1	10	704.80	707.96	6 - 16	698.80 - 688.8	ST
GS-19	13344210.45	268563.957	6/15/2016	15	PVC	1	5	700.90	709.93	8 - 13	692.90 - 687.9	ST
GS-20	13344519.82	268464.736	6/13/2016	10	PVC	1	5	701.12	704.43	2 - 7	699.12 - 694.12	ST
GS-21	13344760.72	268435.234	6/13/2016	10	PVC	1	5	704.01	707.86	1.8 - 6.8	702.21 - 697.21	ST
MW19-45	13343916.13	268640.347	2/8/2016	30	PVC	2	10	717.21	716.72	9 - 19	708.21 - 698.21	FM
MW19-46	13344027.68	268610.066	2/8/2016	25	PVC	2	10	716.19	715.93	6 - 16	710.19 - 700.19	FM
MW19-47	13344110.17	268550.976	2/8/2016	30	PVC	2	10	715.18	714.93	7 - 17	708.18 - 698.18	FM
MW19-48	13344164.39	268487.759	2/5/2016	25	PVC	2	10	715.34	715.02	6 - 16	709.34 - 699.34	FM
MW19-49	13344201.13	268425.367	2/5/2016	30	PVC	2	10	716.58	716.14	8 - 18	708.58 - 698.58	FM
MW19-50	13344251.27	268430.724	2/4/2016	25	PVC	2	10	716.23	715.69	6 - 16	710.23 - 700.23	FM
MW19-51	13344311.27	268319.143	2/4/2016	20	PVC	2	10	716.16	715.81	7 - 17	709.16 - 699.16	FM
MW19-52	13344359.68	268411.76	2/4/2016	25	PVC	2	10	715.72	715.25	5 - 15	710.72 - 700.72	FM
MW19-53	13344343.52	268276.284	2/3/2016	20	PVC	2	10	716.10	715.72	6.5 - 16.5	709.60 - 699.6	FM
MW19-54	13344403.58	268175.66	2/3/2016	20	PVC	2	10	715.87	715.51	6.5 - 16.5	709.37 - 699.37	FM
MW19-55	13344605.81	268242.283	2/2/2016	20	PVC	2	10	715.85	715.36	8 - 18	707.85 - 697.85	FM
MW19-56	13344663.09	268298.598	2/2/2016	20	PVC	2	10	714.13	713.74	6 - 16	708.13 - 698.13	FM
MW19-57	13344504.92	268363.197	2/2/2016	20	PVC	2	10	715.56	715.13	6 - 16	709.56 - 699.56	FM
MW19-58	13344154.48	268613.059	6/15/2016	25	PVC	2	10	711.20	714.38	8 - 18	703.20 - 693.2	ST
MW19-59	13344265.53	268495.984	6/15/2016	13	PVC	1	5	703.93	705.82	3.5 - 8.5	700.43 - 695.43	ST

Notes:
Ft. BGS - Feet below ground surface.
Ft. AMSL - Feet above mean sea level.
TOC - Top of casing.
FM - Flushmouunt.
ST - Stick up.
-- Data Not Available.
Datum: State Plane Coordinate System MI South NAD83/NAVD88 International feet.

Table 2

Sample Analysis Summary
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

Area	Sample ID	Location Description	Collection Date (mm/dd/yy)	Sample Depth	QAQC	Analysis
February 2016 Groundwater Sampling Event						
Northern Wells	GW-17303-021716-CB-024	GS-1	02/17/2016			TCL VOCs, Field Parameters
Northern Wells	GW-17303-021816-CB-028	GS-2	02/18/2016			TCL VOCs, General Chemistry, Metals, Gas, Field Parameters
Northern Wells	GW-17303-021116-CB-021	MW-3	02/11/2016			TCL VOCs, Field Parameters
Northern Wells	GW-17303-021716-CB-023	MW19-12	02/17/2016			TCL VOCs, Field Parameters
Northern Wells	GW-17303-021816-CB-029	MW19-14	02/18/2016			TCL VOCs, Field Parameters
Northern Wells	GW-17303-021816-CB-027	MW19-15	02/18/2016			TCL VOCs, Field Parameters
Northern Wells	GW-17303-021816-CB-026	MW19-16	02/18/2016			TCL VOCs, General Chemistry, Metals, Gas, Field Parameters
Northern Wells	GW-17303-021916-CB-032	MW19-24	02/19/2016			TCL VOCs, General Chemistry, Metals, Gas, Field Parameters
Northern Wells	GW-17303-021716-CB-025	MW19-37	02/17/2016			TCL VOCs, Field Parameters
Northern Wells	GW-17303-021916-CB-030	MW19-38	02/19/2016			TCL VOCs, General Chemistry, Metals, Gas, Field Parameters
Northern Wells	GW-17303-021916-CB-031	MW19-38	02/19/2016		Dup	TCL VOCs, General Chemistry, Metals, Gas, Field Parameters
Northern Wells	GW-17303-021716-CB-022	MW19-39	02/17/2016			TCL VOCs, Field Parameters
Northern Wells	GW-17303-022516-CB-045	MW19-45	02/25/2016			TCL VOCs, General Chemistry, Metals, Gas
Northern Wells	GW-17303-022616-CB-050	MW19-46	02/26/2016			TCL VOCs
Northern Wells	GW-17303-022516-CB-046	MW19-47	02/25/2016			TCL VOCs, General Chemistry, Metals, Gas
Northern Wells	GW-17303-022516-CB-047	MW19-48	02/25/2016			TCL VOCs, General Chemistry, Metals, Gas
Northern Wells	GW-17303-022616-CB-051	MW19-49	02/26/2016			TCL VOCs
Northern Wells	GW-17303-022616-CB-052	MW19-50	02/26/2016			TCL VOCs
Northern Wells	GW-17303-022516-CB-048	MW19-52	02/25/2016			TCL VOCs, General Chemistry, Metals, Gas
Southern Property Boundary	GW-17303-021116-CB-018	MW-5	02/11/2016			TCL VOCs, Field Parameters
Southern Property Boundary	GW-17303-021116-CB-016	MW-14	02/11/2016			TCL VOCs, Field Parameters
Southern Property Boundary	GW-17303-021116-CB-020	MW19-01	02/11/2016			TCL VOCs, Field Parameters
Southern Property Boundary	GW-17303-021116-CB-019	MW19-02	02/11/2016			TCL VOCs, Field Parameters
Southern Property Boundary	GW-17303-021116-CB-017	MW19-03	02/11/2016			TCL VOCs, Field Parameters
Southern Property Boundary	GW-17303-021116-CB-015	MW19-04	02/11/2016			TCL VOCs, Field Parameters
Eastern Portion of the Site	GW-17303-022416-CB-041	MW19-55	02/24/2016			TCL VOCs
Eastern Portion of the Site	GW-17303-022416-CB-042	MW19-56	02/24/2016			TCL VOCs
Eastern Portion of the Site	GW-17303-022416-CB-043	MW19-56	02/24/2016		Dup	TCL VOCs
Eastern Portion of the Site	GW-17303-022416-CB-044	MW19-57	02/24/2016			TCL VOCs
Near the Haulaway Building	GW-17303-022316-CB-036	IW-3	02/23/2016			TCL VOCs
Near the Haulaway Building	GW-17303-022316-CB-037	IW-9	02/23/2016			TCL VOCs
Near the Haulaway Building	GW-17303-022316-CB-038	IW-17	02/23/2016			TCL VOCs
Near the Haulaway Building	GW-17303-022316-CB-039	IW-26R	02/23/2016			TCL VOCs
Near the Haulaway Building	GW-17303-022316-CB-035	MW19-11	02/23/2016			TCL VOCs
West of the Utility Corridor	GW-17303-021916-CB-033	MW19-07	02/19/2016			TCL VOCs, General Chemistry, Metals, Gas, Field Parameters
West of the Utility Corridor	GW-17303-022916-CB-054	MW19-51	02/29/2016			TCL VOCs
West of the Utility Corridor	GW-17303-022916-CB-055	MW19-53	02/29/2016			TCL VOCs
West of the Utility Corridor	GW-17303-022916-CB-056	MW19-54	02/29/2016			TCL VOCs

Table 2

Sample Analysis Summary
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

Area	Sample ID	Location Description	Collection Date (mm/dd/yy)	Sample Depth	QAQC	Analysis
February 2016 Soil Sampling Event						
Northern Wells	SO-17303-020816-CB-011	MW19-45	02/08/2016	2-4 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
Northern Wells	SO-17303-020816-CB-012	MW19-45	02/08/2016	2-4 ft BGS	Dup	TCL VOCs, SVOCs, Metals, PCBs
Northern Wells	SO-17303-020816-CB-010	MW19-46	02/08/2016	7.5-9.5 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
Northern Wells	SO-17303-020816-CB-009	MW19-47	02/08/2016	7.5-9.5 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
West of the Utility Corridor	SO-17303-020416-CB-004	MW19-50	02/04/2016	3-5 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
West of the Utility Corridor	SO-17303-020416-CB-005	MW19-50	02/04/2016	3-5 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
West of the Utility Corridor	SO-17303-020416-CB-006	MW19-50	02/04/2016	10-12 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
West of the Utility Corridor	SO-17303-020416-CB-007	MW19-50	02/04/2016	1-3 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
West of the Utility Corridor	SO-17303-020416-CB-003	MW19-52	02/04/2016	4-6 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
	SO-17303-020316-CB-002	SB19-115	02/03/2016	13-15 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
June 2016 Groundwater Sampling Event						
Northern Wells	GW-17303-062216-JY-009	GS-3	06/22/2016			TCL VOCs
Northern Wells	GW-17303-062216-JY-011	GS-4	06/22/2016			TCL VOCs
Northern Wells	GW-17303-062116-JY-004	GS-17	06/21/2016			TCL VOCs
Northern Wells	GW-17303-062116-JY-006	GS-18	06/21/2016			TCL VOCs
Northern Wells	GW-17303-062216-JY-010	GS-19	06/22/2016			TCL VOCs
Northern Wells	GW-17303-062216-JY-007	MW19-58	06/22/2016			TCL VOCs
Northern Wells	GW-17303-062216-JY-008	MW19-58	06/22/2016		Dup	TCL VOCs
Northern Wells	GW-17303-062216-JY-012	MW19-59	06/22/2016			TCL VOCs
PAOC 18	GW-17303-062216-JY-013	GS-20	06/22/2016			TCL VOCs
PAOC 18	GW-17303-062216-JY-014	GS-21	06/22/2016			TCL VOCs
Northern Wells	SO-17303-061516-DR-002	GS-4A	06/15/2016	2-4 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
Northern Wells	SO-17303-061516-DR-001	MW19-59	06/15/2016	2-4 ft BGS		TCL VOCs, SVOCs, Metals, PCBs
Sitewide October and November 2016 Groundwater Sampling Event						
Northern Wells	GW-17303-103116-DS-049	GS-1	10/31/2016			TCL VOCs
Northern Wells	GW-17303-102616-JY-009	GS-2	10/26/2016			TCL VOCs
Northern Wells	GW-17303-103116-DS-051	GS-3	10/31/2016			TCL VOCs
Northern Wells	GW-17303-110216-DS-056	GS-4	11/2/2016			TCL VOCs
Northern Wells	GW-17303-110216-DS-054	GS-16	11/2/2016			TCL VOCs
Northern Wells	GW-17303-103116-DS-047	GS-17	10/31/2016			TCL VOCs
Northern Wells	GW-17303-103116-DS-048	GS-18	10/31/2016			TCL VOCs
Northern Wells	GW-17303-103116-DS-052	GS-19	10/31/2016			TCL VOCs
Northern Wells	GW-17303-102616-JY-008	MW19-12	10/26/2016			TCL VOCs
Northern Wells	GW-17303-103116-DS-053	MW19-14	10/31/2016			TCL VOCs

Table 2

Sample Analysis Summary
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

Area	Sample ID	Location Description	Collection Date (mm/dd/yy)	Sample Depth	QAQC	Analysis
Sitewide October and November 2016 Groundwater Sampling Event (Cont'd)						
Northern Wells	GW-17303-103116-DS-046	MW19-16	10/31/2016			TCL VOCs
Northern Wells	GW-17303-102516-JY-005	MW19-35	10/25/2016			TCL VOCs
Northern Wells	GW-17303-102516-JY-007	MW19-38	10/25/2016			TCL VOCs
Northern Wells	GW-17303-102516-JY-006	MW19-45	10/25/2016			TCL VOCs
Northern Wells	GW-17303-102716-JY-013	MW19-46	10/27/2016			TCL VOCs
Northern Wells	GW-17303-102716-JY-014	MW19-47	10/27/2016			TCL VOCs
Northern Wells	GW-17303-102716-JY-016	MW19-48	10/27/2016			TCL VOCs
Northern Wells	GW-17303-102716-JY-017	MW19-48	10/27/2016		Dup	TCL VOCs
Northern Wells	GW-17303-102716-JY-018	MW19-49	10/27/2016			TCL VOCs
Northern Wells	GW-17303-103116-DS-050	MW19-58	10/31/2016			TCL VOCs
Northern Wells	GW-17303-110216-DS-055	MW19-59	11/2/2016			TCL VOCs
PAOC 18	GW-17303-103116-DS-044	IG-A1	10/31/2016			TCL VOCs
PAOC 18	GW-17303-103116-DS-043	IG-B1	10/31/2016			TCL VOCs
PAOC 18	GW-17303-103116-DS-042	IG-B4	10/31/2016			TCL VOCs
PAOC 18	GW-17303-102816-JY-022	IG-C3	10/28/2016			TCL VOCs
PAOC 18	GW-17303-102816-JY-023	IG-C3	10/28/2016		Dup	TCL VOCs
PAOC 18	GW-17303-102816-JY-025	IG-D2	10/28/2016			TCL VOCs
PAOC 18	GW-17303-103116-DS-038	IG-E4	10/31/2016			TCL VOCs
PAOC 18	GW-17303-102816-JY-024	IG-G3	10/28/2016			TCL VOCs
PAOC 18	GW-17303-103116-DS-040	IG-F4	10/31/2016			TCL VOCs
PAOC 18	GW-17303-103116-DS-045	GS-20	10/31/2016			TCL VOCs
PAOC 18	GW-17303-103116-DS-036	GS-21	10/31/2016			TCL VOCs
West of the Utility Corridor	GW-17303-102616-JY-011	MW19-07	10/26/2016			TCL VOCs
West of the Utility Corridor	GW-17303-102716-JY-019	MW19-50	10/27/2016			TCL VOCs
West of the Utility Corridor	GW-17303-102616-JY-012	MW19-51	10/26/2016			TCL VOCs
West of the Utility Corridor	GW-17303-102716-JY-020	MW19-52	10/27/2016			TCL VOCs
West of the Utility Corridor	GW-17303-102816-JY-026	MW19-53	10/28/2016			TCL VOCs
West of the Utility Corridor	GW-17303-102616-JY-010	MW19-54	10/26/2016			TCL VOCs
Southern Property Boundary	GW-17303-103116-DS-033	MW-4	10/31/2016			TCL VOCs
Southern Property Boundary	GW-17303-102816-JY-027	MW-5	10/28/2016			TCL VOCs
Southern Property Boundary	GW-17303-110216-DS-057	MW-14	11/2/2016			TCL VOCs
Southern Property Boundary	GW-17303-110216-DS-058	MW-14	11/2/2016		Dup	TCL VOCs
Southern Property Boundary	GW-17303-102816-JY-031	MW19-01	10/28/2016			TCL VOCs
Southern Property Boundary	GW-17303-102816-JY-028	MW19-02	10/28/2016			TCL VOCs
Southern Property Boundary	GW-17303-110216-DS-059	MW19-03	11/2/2016			TCL VOCs
Southern Property Boundary	GW-17303-102816-JY-029	MW19-24	10/28/2016			TCL VOCs

Table 2

Sample Analysis Summary
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

Area	Sample ID	Location Description	Collection Date (mm/dd/yy)	Sample Depth	QAQC	Analysis
Sitewide October and November 2016 Groundwater Sampling Event (Cont'd)						
Western Portion of the Site	GW-17303-102516-JY-001	MW-18	10/25/2016			TCL VOCs
Western Portion of the Site	GW-17303-102516-JY-002	MW19-33	10/25/2016			TCL VOCs
Western Portion of the Site	GW-17303-102516-JY-003	MW19-33	10/25/2016		Dup	TCL VOCs
Western Portion of the Site	GW-17303-102516-JY-004	MW19-34	10/25/2016			TCL VOCs
Eastern Portion of the Site	GW-17303-102816-JY-030	MW-13	10/28/2016			TCL VOCs
Eastern Portion of the Site	GW-17303-110216-DS-060	MW19-06	11/2/2016			TCL VOCs
Eastern Portion of the Site	GW-17303-103116-DS-034	MW19-40	10/31/2016			TCL VOCs
Eastern Portion of the Site	GW-17303-110316-DS-062	MW19-55	11/3/2016			TCL VOCs
Eastern Portion of the Site	GW-17303-110316-DS-061	MW19-56	11/3/2016			TCL VOCs
Eastern Portion of the Site	GW-17303-102816-JY-021	MW19-57	10/28/2016			TCL VOCs
Inside the Haulaway Building	GW-17303-103116-DS-039	MW19-43	10/31/2016			TCL VOCs
Near the Haulaway Building	GW-17303-110416-DS-067	IW-2	11/4/2016			TCL VOCs
Near the Haulaway Building	GW-17303-110316-DS-066	IW-6	11/3/2016			TCL VOCs
Near the Haulaway Building	GW-17303-110316-DS-065	IW-9	11/3/2016			TCL VOCs
Near the Haulaway Building	GW-17303-110416-DS-068	IW-10	11/4/2016			TCL VOCs
Near the Haulaway Building	GW-17303-103116-DS-041	IW-20	10/31/2016			TCL VOCs
Near the Haulaway Building	GW-17303-110316-DS-063	IW-30	11/3/2016			TCL VOCs
Near the Haulaway Building	GW-17303-103116-DS-035	IW-33	10/31/2016			TCL VOCs
Near the Haulaway Building	GW-17303-103116-DS-037	IW-34	10/31/2016			TCL VOCs
Near the Haulaway Building	GW-17303-110316-DS-064	IW-26R	11/3/2016			TCL VOCs
Near the Haulaway Building	GW-17303-102716-JY-015	MW19-11	10/27/2016			TCL VOCs
Off-Site	GW-17303-102816-JY-032	GS-7	10/28/2016			TCL VOCs

Table 3

Soil Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

Sample Location: / Sample Date: / Sample Depth: / Sample Type: / Parameters	Units	Statewide Default Background Levels a	Nonresidential Drinking Water Protection Criteria b	Groundwater Surface Water Interface Protection Criteria c	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria d	Nonresidential Direct Contact Criteria i	GS-4A 06/15/2016 2-4 ft BGS	MW19-45 02/08/2016 2-4 ft BGS	MW19-45 02/08/2016 2-4 ft BGS Duplicate	MW19-46 02/08/2016 7.5-9.5 ft BGS	MW19-47 02/08/2016 7.5-9.5 ft BGS	MW19-50 02/04/2016 3-5 ft BGS	MW19-50 02/04/2016 3-5 ft BGS Duplicate	MW19-50 02/04/2016 10-12 ft BGS	MW19-50 02/04/2016 1-3 ft BGS	MW19-52 02/04/2016 4-6 ft BGS	MW19-59 06/15/2016 2-4 ft BGS	SB19-115 02/03/2016 13-15 ft BGS
VOCs																		
1,1,1-Trichloroethane	ug/kg	NA	4,000	1,800	460,000	1,000,000,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
1,1,2,2-Tetrachloroethane	ug/kg	NA	700	1,600	23,000	240,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
1,1,2-Trichloroethane	ug/kg	NA	100	6,600	24,000	840,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
1,1-Dichloroethane	ug/kg	NA	50,000	15,000	430,000	87,000,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
1,1-Dichloroethene	ug/kg	NA	140	2,600	330	660,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
1,2,4-Trichlorobenzene	ug/kg	NA	4,200	5,900	18,000,000	5,800,000	260 U	220 U	220 U	42 J	410 J	230 U	230 U	230 U	240 U	200 U	130 J	2400 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	NA	10	NA	1,200	20,000	260 U	220 U	220 U	210 U	440 U	230 U	230 U	230 U	240 U	200 U	260 U	2400 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg	NA	20	110	3,600	430	260 U	220 U	220 U	210 U	440 U	230 U	230 U	230 U	240 U	200 U	260 U	2400 U
1,2-Dichlorobenzene	ug/kg	NA	14,000	280	20,000,000	63,000,000	110 U	90 U	88 U	83 U	180 U	91 U	90 U	91 U	98 U	82 U	110 U	960 U
1,2-Dichloroethane	ug/kg	NA	100	7,200	11,000	420,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
1,2-Dichloropropane	ug/kg	NA	100	4,600	7,400	660,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
1,3-Dichlorobenzene	ug/kg	NA	480	680	48,000	660,000	110 U	90 U	88 U	83 U	180 U	91 U	90 U	91 U	98 U	82 U	110 U	960 U
1,4-Dichlorobenzene	ug/kg	NA	1,700	360	100,000	1,900,000	110 U	90 U	88 U	83 U	180 U	91 U	90 U	91 U	98 U	82 U	110 U	960 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	NA	760,000	44,000	99,000,000	700,000,000	790 U	670 U	660 U	620 U	1300 U	680 U	680 U	690 U	730 U	610 U	790 U	7200 U
2-Hexanone	ug/kg	NA	58,000	NA	1,800,000	100,000,000	2600 U	2200 U	2200 U	2100 U	4400 U	2300 U	2300 U	2300 U	2400 U	2000 U	2600 U	24000 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg	NA	100,000	NA	69,000,000	180,000,000	2600 U	2200 U	2200 U	2100 U	4400 U	2300 U	2300 U	2300 U	2400 U	2000 U	2600 U	24000 U
Acetone	ug/kg	NA	42,000	34,000	540,000,000	73,000,000	790 U	670 U	660 U	620 U	1300 U	680 U	680 U	690 U	730 U	610 U	790 U	7200 U
Benzene	ug/kg	NA	100	4,000	8,400	840,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	290[b]	480 U
Bromodichloromethane	ug/kg	NA	1,600	NA	6,400	490,000	110 U	90 U	88 U	83 U	180 U	91 U	90 U	91 U	98 U	82 U	110 U	960 U
Bromoform	ug/kg	NA	1,600	NA	770,000	3,800,000	110 U	90 U	88 U	83 U	180 U	91 U	90 U	91 U	98 U	82 U	110 U	960 U
Bromomethane (Methyl bromide)	ug/kg	NA	580	700	1,600	1,000,000	260 U	220 U	220 U	210 U	440 U	230 U	230 U	230 U	240 U	200 U	260 U	2400 U
Carbon disulfide	ug/kg	NA	46,000	NA	140,000	43,000,000	260 U	220 U	220 U	210 U	440 U	230 U	230 U	230 U	240 U	200 U	260 U	2400 U
Carbon tetrachloride	ug/kg	NA	100	900	990	440,000	53 U	45 U	44 U	42 U	88 U	45 U	44 J	46 U	49 U	41 U	53 U	480 U
Chlorobenzene	ug/kg	NA	2,000	500	220,000	14,000,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
Chloroethane	ug/kg	NA	34,000	22,000	5,300,000	12,000,000	260 U	220 U	220 U	210 U	440 U	230 U	230 U	230 U	240 U	200 U	260 U	2400 U
Chloroform (Trichloromethane)	ug/kg	NA	1,600	7,000	38,000	5,500,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
Chloromethane (Methyl chloride)	ug/kg	NA	22,000	NA	10,000	7,400,000	260 U	220 U	220 U	210 U	440 U	230 U	230 U	230 U	240 U	200 U	260 U	2400 U
cis-1,2-Dichloroethene	ug/kg	NA	1,400	12,000	41,000	8,000,000	53 U	45 U	44 U	42 U	150	45 U	45 U	89	49 U	79	53 U	9600[b]
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NA	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
Cyclohexane	ug/kg	NA	NA	NA	NA	NA	1300 U	1100 U	1100 U	1000 U	2100 U	1100 U	1100 U	1100 U	1200 U	980 U	1300 U	12000 U
Dibromochloromethane	ug/kg	NA	1,600	NA	21,000	500,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
Dichlorodifluoromethane (CFC-12)	ug/kg	NA	270,000	NA	1,700,000	170,000,000	110 U	90 U	88 U	83 U	180 U	91 U	90 U	91 U	98 U	82 U	110 U	960 U
Ethylbenzene	ug/kg	NA	1,500	360	460,000	71,000,000	53 U	45 U	44 U	74	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
Isopropyl benzene	ug/kg	NA	260,000	3,200	730,000	80,000,000	260 U	220 U	220 U	32 J	440 U	16 J	230 U	230 U	240 U	150 J	27 J	2400 U
Methyl acetate	ug/kg	NA	NA	NA	NA	NA	130 J	1100 U	1100 U	1000 U	2100 U	210 J	280 J	1100 U	240 J	140 J	150 J	12000 U
Methyl cyclohexane	ug/kg	NA	NA	NA	NA	NA	110 J	1100 U	1100 U	1000 U	2100 U	1100 U	1100 U	1100 U	1200 U	79 J	160 J	12000 U
Methyl tert butyl ether (MTBE)	ug/kg	NA	800	140,000	18,000,000	7,100,000	260 U	220 U	220 U	210 U	440 U	230 U	230 U	230 U	240 U	200 U	260 U	2400 U
Methylene chloride	ug/kg	NA	100	30,000	240,000	5,800,000	260 U	220 U	220 U	210 U	440 U	230 U	150 J[b]	230 U	240 U	200 U	260 U	2400 U
Styrene	ug/kg	NA	2,700	2,100	1,300,000	1,900,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
Tetrachloroethene	ug/kg	NA	100	1,200	21,000	930,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	60	53 U	480 U
Toluene	ug/kg	NA	16,000	5,400	610,000	160,000,000	110 U	90 U	88 U	34 J	180 U	12 J	30 J	91 U	98 U	34 J	110 U	960 U
trans-1,2-Dichloroethene	ug/kg	NA	2,000	30,000	43,000	12,000,000	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	450 J
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NA	53 U	45 U	44 U	42 U	88 U	45 U	45 U	46 U	49 U	41 U	53 U	480 U
Trichloroethene	ug/kg	NA	100	4,000	1,900	660,000	53 U	110[b]	94	42 U	4900[bcd]	45 U	45 U	340[b]	49 U	41 U	53 U	780[b]
Trichlorofluoromethane (CFC-11)	ug/kg	NA	150,000	NA	5,100,000	260,000,000	110 U	90 U	88 U	83 U	180 U	91 U	90 U	91 U	98 U	82 U	110 U	960 U
Trifluorotrichloroethane (CFC-113)	ug/kg	NA	9,000,000	1,700	9,300,000	1,000,000,000	260 U	220 U	220 U	210 U	440 U	230 U	230 U	230 U	240 U	200 U	260 U	2400 U
Vinyl chloride	ug/kg	NA	40	260	2,800	34,000	71[b]	36 U	35 U	33 U	70 U	36 U	36 U	37 U	39 U	45[b]	280[bc]	17000[bcd]
Xylenes (total)	ug/kg	NA	5,600	820	12,000,000	1,000,000,000	160 U	130 U	130 U	280	150 J	120 J	120 J	140 U	150 U	420	63 J	1400 U

Table 3

Soil Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

Sample Location:		Statewide Default Background Levels	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Direct Contact Criteria	GS-4A	MW19-45	MW19-45	MW19-46	MW19-47	MW19-50	MW19-50	MW19-50	MW19-50	MW19-52	MW19-59	SB19-115
Sample Date:							06/15/2016	02/08/2016	02/08/2016	02/08/2016	02/08/2016	02/04/2016	02/04/2016	02/04/2016	02/04/2016	02/04/2016	06/15/2016	02/03/2016
Sample Depth:							2-4 ft BGS	2-4 ft BGS	2-4 ft BGS	7.5-9.5 ft BGS	7.5-9.5 ft BGS	3-5 ft BGS	3-5 ft BGS	10-12 ft BGS	1-3 ft BGS	4-6 ft BGS	2-4 ft BGS	13-15 ft BGS
Sample Type:									Duplicate				Duplicate					
Parameters	**Units**	**a**	**b**	**c**	**d**	**i**												
SVOCs		NA	NA	NA	NA	NA												
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/kg	NA	NA	NA	NA	NA	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2,4,5-Trichlorophenol	ug/kg	NA	110,000	NA	NA	73,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	R	1200 U	320 U
2,4,6-Trichlorophenol	ug/kg	NA	9,400	330	NA	3,300,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2,4-Dichlorophenol	ug/kg	NA	4,200	330	NA	3,900,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2,4-Dimethylphenol	ug/kg	NA	20,000	7,600	NA	36,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2,4-Dinitrophenol	ug/kg	NA	NA	NA	NA	NA	430 U	840 U	170 U	16000 U	860 U	170 U	170 U	180 U	37000 U	R	700 U	180 U
2,4-Dinitrotoluene	ug/kg	NA	640	NA	NA	220,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2,6-Dinitrotoluene	ug/kg	NA	NA	NA	NA	NA	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2-Chloronaphthalene	ug/kg	NA	1,800,000	NA	NA	180,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2-Chlorophenol	ug/kg	NA	2,600	360	800,000	4,500,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2-Methylnaphthalene	ug/kg	NA	170,000	4,200	4,900,000	26,000,000	82 J	31 J	20 J	24000 J[c]	27 J	110 J	84 J	16 J	5600 J[c]	1800 J	76 J	320 U
2-Methylphenol	ug/kg	NA	20,000	1,000	NA	36,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
2-Nitroaniline	ug/kg	NA	NA	NA	NA	NA	570 U	1100 U	220 U	22000 U	1100 U	230 U	230 U	240 U	49000 U	4400 U	930 U	240 U
2-Nitrophenol	ug/kg	NA	1,200	NA	NA	2,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
3&4-Methylphenol	ug/kg	NA	20,000	1,000	NA	36,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
3,3'-Dichlorobenzidine	ug/kg	NA	2,000	2,000	NA	30,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
3-Nitroaniline	ug/kg	NA	NA	NA	NA	NA	570 U	1100 U	220 U	22000 U	1100 U	230 U	230 U	240 U	49000 U	4400 U	930 U	240 U
4,6-Dinitro-2-methylphenol	ug/kg	NA	830	NA	NA	260,000	570 U	1100 U	220 U	22000 U	1100 U	230 U	230 U	240 U	49000 U	4400 U	930 U	240 U
4-Bromophenyl phenyl ether	ug/kg	NA	NA	NA	NA	NA	430 U	840 U	170 U	16000 U	860 U	170 U	170 U	180 U	37000 U	3300 U	700 U	180 U
4-Chloro-3-methylphenol	ug/kg	NA	16,000	280	NA	15,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	R	1200 U	320 U
4-Chloroaniline	ug/kg	NA	NA	NA	NA	NA	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	R	1200 U	320 U
4-Chlorophenyl phenyl ether	ug/kg	NA	NA	NA	NA	NA	570 U	1100 U	220 U	22000 U	1100 U	230 U	230 U	240 U	49000 U	4400 U	930 U	240 U
4-Nitroaniline	ug/kg	NA	NA	NA	NA	NA	570 U	1100 U	220 U	22000 U	1100 U	230 U	230 U	240 U	49000 U	4400 U	930 U	240 U
4-Nitrophenol	ug/kg	NA	NA	NA	NA	NA	940 U	1900 U	370 U	36000 U	1900 U	370 U	380 U	400 U	80000 U	R	1500 U	400 U
Acenaphthene	ug/kg	NA	880,000	8,700	350,000,000	130,000,000	750 U	220 J	100 J	25000 J[c]	1500 U	570	460	77 J	29000 J[c]	3500 J	1200 U	320 U
Acenaphthylene	ug/kg	NA	17,000	NA	3,000,000	5,200,000	750 U	1500 U	5.9 J	4700 J	1500 U	18 J	11 J	4.5 J	1100 J	220 J	1200 U	320 U
Acetophenone	ug/kg	NA	88,000	NA	210,000,000	150,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Anthracene	ug/kg	NA	41,000	NA	1,000,000,000	730,000,000	750 U	350 J	200 J	28000 J	45 J	660	310	150 J	52000 J[b]	3200 J	30 J	320 U
Atrazine	ug/kg	NA	60	150	NA	330,000	110 U	220 U	44 U	4400 U	230 U	45 U	46 U	49 U	9800 U	880 U	190 U	48 U
Benzaldehyde	ug/kg	NA	NA	NA	NA	NA	750 U	1500 U	290 U	29000 U	1500 U	300 U	120 J	320 U	64000 U	5800 U	1200 U	320 U
Benzo(a)anthracene	ug/kg	NA	NA	NA	NA	80,000	24 J	1100 J	700	42000	530 J	1000	490	240 J	84000[i]	5800	48 J	320 U
Benzo(a)pyrene	ug/kg	NA	NA	NA	NA	8,000	27 J	1000 J	660	29000[i]	770 J	840	420	210 J	71000[i]	5500 J	62 J	320 U
Benzo(b)fluoranthene	ug/kg	NA	NA	NA	NA	80,000	42 J	1500	960	38000	1100 J	1100	540	280 J	97000[i]	7500	91 J	320 U
Benzo(g,h,i)perylene	ug/kg	NA	NA	NA	NA	7,000,000	31 J	770 J	570	11000 J	790 J	380	260 J	100 J	32000 J	3300 J	1200 U	320 U
Benzo(k)fluoranthene	ug/kg	NA	NA	NA	NA	800,000	750 U	590 J	400	16000 J	400 J	500	270 J	110 J	35000 J	2600 J	32 J	320 U
Biphenyl (1,1-Biphenyl)	ug/kg	NA	NA	NA	NA	NA	750 U	1500 U	8.2 J	4300 J	1500 U	77 J	77 J	320 U	2400 J	420 J	1200 U	320 U
bis(2-Chloroethoxy)methane	ug/kg	NA	NA	NA	NA	NA	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
bis(2-Chloroethyl)ether	ug/kg	NA	170	100	44,000	58,000	230 U	450 U	89 U	8700 U	460 U	90 U	91 U	97 U	20000 U	1800 U	370 U	96 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg	NA	NA	NA	NA	12,000,000	750 U	1500 U	290 U	29000 U	1500 U	45 J	63 J	28 J	64000 U	5800 U	1200 U	320 U
Butyl benzylphthalate (BBP)	ug/kg	NA	5,600,000	120,000	NA	120,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Caprolactam	ug/kg	NA	340,000	NA	NA	310,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Carbazole	ug/kg	NA	39,000	1,100	NA	2,400,000	750 U	250 J	100 J	4700 J[c]	1500 U	580	310	98 J	34000 J[c]	3200 J[c]	1200 U	320 U
Chrysene	ug/kg	NA	NA	NA	NA	8,000,000	34 J	1300 J	840	37000	730 J	1100	550	270 J	87000	6200	80 J	320 U
Dibenz(a,h)anthracene	ug/kg	NA	NA	NA	NA	8,000	750 U	200 J	130 J	2900 J	170 J	120 J	72 J	29 J	10000 J[i]	740 J	1200 U	320 U
Dibenzofuran	ug/kg	NA	NA	1,700	3,600,000	NA	750 U	91 J	50 J	13000 J[c]	1500 U	400	270 J	59 J	21000 J[c]	2700 J[c]	1200 U	320 U
Diethyl phthalate	ug/kg	NA	320,000	2,200	NA	550,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Dimethyl phthalate	ug/kg	NA	4,200,000	NA	NA	1,000,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Di-n-butylphthalate (DBP)	ug/kg	NA	2,700,000	11,000	NA	87,000,000	750 U	310 J	72 J	29000 U	430 J	200 J	210 J	320 U	64000 U	5800 U	1200 U	320 U
Di-n-octyl phthalate (DnOP)	ug/kg	NA	290,000,000	NA	NA	20,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Fluoranthene	ug/kg	NA	730,000	5,500	1,000,000,000	130,000,000	57 J	2000	1200	90000[c]	860 J	2300	1100	580	190000[c]	16000[c]	130 J	320 U
Fluorene	ug/kg	NA	890,000	5,300	1,000,000,000	87,000,000	750 U	150 J	74 J	24000 J[c]	1500 U	590	350	110 J	37000 J[c]	4100 J	1200 U	320 U
Hexachlorobenzene	ug/kg	NA	1,800	350	220,000	37,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Hexachlorobutadiene	ug/kg	NA	72,000	91	710,000	470,000	110 U	220 U	44 U	4400 U	230 U	45 U	46 U	49 U	9800 U	880 U	190 U	48 U
Hexachlorocyclopentadiene	ug/kg	NA	320,000	NA	56,000	6,700,000	750 U	1500 U	290 U	29000 U	R	300 U	300 U	320 U	64000 U	R	R	320 U
Hexachloroethane	ug/kg	NA	1,200	1,800	79,000	730,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Indeno(1,2,3-cd)pyrene	ug/kg	NA	NA	NA	NA	80,000	750 U	630 J	470	11000 J	640 J	360	220 J	90 J	30000 J	2900 J	56 J	320 U
Isophorone	ug/kg	NA	62,000	26,000	NA	22,000,000	750 U	1500 U	16 J	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Naphthalene	ug/kg	NA	100,000	730	470,000	52,000,000	750 U	77 J	37 J	110000[bc]	41 J	690	890[c]	38 J	15000 J[c]	6000[c]	1200 U	320 U
Nitrobenzene	ug/kg	NA	330	3,600	170,000	340,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
N-Nitrosodi-n-propylamine	ug/kg	NA	330	NA	NA	5,400	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
N-Nitrosodiphenylamine	ug/kg	NA	22,000	NA	NA	7,800,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Pentachlorophenol	ug/kg	NA	22	26,500	NA	320,000	430 U	840 U	170 U	16000 U	860 U	170 U	170 U	180 U	37000 U	R	700 U	180 U
Phenanthrene	ug/kg	NA	160,000	2,100	5,100,000	5,200,000	110 J	1500	870	110000[c]	330 J	2400 J[c]	1100 J	550	180000[bc]	16000[c]	160 J	320 U
Phenol	ug/kg	NA	260,000	9,000	NA	230,000,000	750 U	1500 U	290 U	29000 U	1500 U	300 U	300 U	320 U	64000 U	5800 U	1200 U	320 U
Pyrene	ug/kg	NA	480,000	NA	1,000,000,000	84,000,000	58 J	2300	1400	110000	760 J	2000	930	460	160000	14000	100 J	5.2 J

Table 3

Soil Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

Sample Location:		Statewide Default Background Levels	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Direct Contact Criteria	GS-4A	MW19-45	MW19-45	MW19-46	MW19-47	MW19-50	MW19-50	MW19-50	MW19-50	MW19-52	MW19-59	SB19-115
Sample Date:							06/15/2016	02/08/2016	02/08/2016	02/08/2016	02/08/2016	02/04/2016	02/04/2016	02/04/2016	02/04/2016	02/04/2016	06/15/2016	02/03/2016
Sample Depth:							2-4 ft BGS	2-4 ft BGS	2-4 ft BGS Duplicate	7.5-9.5 ft BGS	7.5-9.5 ft BGS	3-5 ft BGS	3-5 ft BGS Duplicate	10-12 ft BGS	1-3 ft BGS	4-6 ft BGS	2-4 ft BGS	13-15 ft BGS
Sample Type:																		
Parameters	**Units**	**a**	**b**	**c**	**d**	**i**												
Metals		NA	NA	NA	NA	NA												
Antimony	ug/kg	NA	4,300	94,000	NA	670,000	180 J	7300 J[b]	9800 J[b]	310 U	8800 J[b]	410 J	610 J	98 J	2400 J	1300 J	490 J	56 J
Arsenic	ug/kg	5,800	4,600	4,600	NA	37,000	7800[abc]	44000[abci]	69000[abci]	2400	3300	2800	2100	9000[abc]	2800	4100	6500[abc]	1700
Barium	ug/kg	75,000	1,300,000	1,250,000	NA	130,000,000	63000	280000[a]	210000[a]	5900	60000	41000	32000	6800	72000	76000[a]	66000	9100
Beryllium	ug/kg	NA	51,000	948,000	NA	1,600,000	400	280	350	96 J	170	190	160	100 J	270	290	400	87 J
Cadmium	ug/kg	1,200	6,000	7,320	NA	2,100,000	310	4600[a]	5000[a]	100	24000[abc]	380	390	120	3800[a]	1800[a]	620	110
Chromium	ug/kg	18,000	1,000,000,000	6,620,000,000	NA	1,000,000,000	13000	16000	16000	5700	13000	7800	7800	3800	20000[a]	17000	15000	3600
Cobalt	ug/kg	6,800	2,000	2,000	NA	9,000,000	9200[abc]	3600	3400	1200	3000	2200	1700	1500	2000	3200	7700[abc]	1400
Copper	ug/kg	32,000	5,800,000	167,000	NA	73,000,000	18000	130000[a]	160000[a]	4800	28000	5700	4700	5700	11000	10000	19000	5300
Lead	ug/kg	21,000	700,000	10,600,000	NA	900,000	10000 J	--	--	2300	--	15000	14000	2500	--	68000	31000 J	2400
Lead - coarse fraction	ug/kg	21,000	700,000	10,600,000	NA	900,000	--	100000[a]	100000[a]	--	420000[a]	--	--	--	140000[a]	--	--	--
Lead - fine fraction	ug/kg	21,000	700,000	10,600,000	NA	900,000	--	120000[a]	160000[a]	--	160000[a]	--	--	--	140000[a]	--	--	--
Lead - total (calculated by fine/coarse fraction)	ug/kg	21,000	700,000	10,600,000	NA	900,000	--	100000[a]	110000[a]	--	360000[a]	--	--	--	140000[a]	--	--	--
Manganese	ug/kg	440,000	1,000	130,000	NA	90,000,000	360000	330000	350000	240000	310000	230000	190000	130000	260000	280000	300000	110000
Mercury	ug/kg	130	1,700	50	89,000	580,000	51 U	48 U	45 U	49 U	48 U	48 U	48 U	44 U	50 J	39 J	46 U	55 U
Nickel	ug/kg	20,000	100,000	166,000	NA	150,000,000	26000[a]	8300	8200	3900	12000	5500	4500	5400	5600	7900	23000	4500
Selenium	ug/kg	410	4,000	400	NA	9,600,000	1400[ac]	1600[ac]	1700[ac]	970[ac]	1200[ac]	480[ac]	440[ac]	770[ac]	1400[ac]	1400[ac]	1300[ac]	1100[ac]
Silver	ug/kg	1,000	13,000	100	NA	9,000,000	45 J	390	450	7.5 J	190	37 J	48 J	8 J	100 J	57 J	110 J	5.8 J
Thallium	ug/kg	NA	2,300	4,200	NA	130,000	350	240	340	60 J	75 J	50 J	50 J	89 J	88 J	74 J	340	37 J
Vanadium	ug/kg	NA	990,000	430,000	NA	5,500,000	17000	9900	9100	7600	9200	9900	8200	7300	8500	11000	19000	6700
Zinc	ug/kg	47,000	5,000,000	377,000	NA	630,000,000	55000[a]	550000 J[ac]	820000 J[ac]	16000 J	820000 J[a]	46000	40000	14000	130000[a]	100000[a]	61000[a]	19000
PCBs		NA	NA	NA	NA	NA												
Aroclor-1016 (PCB-1016)	ug/kg	NA	NA	NA	16,000,000	16,000	38 U	290 U	290 U	2900 U	15000 U	300 U	300 U	310 U	330 U	290 U	38 U	320 U
Aroclor-1221 (PCB-1221)	ug/kg	NA	NA	NA	16,000,000	16,000	38 U	290 U	290 U	2900 U	15000 U	300 U	300 U	310 U	330 U	290 U	38 U	320 U
Aroclor-1232 (PCB-1232)	ug/kg	NA	NA	NA	16,000,000	16,000	38 U	290 U	290 U	2900 U	15000 U	300 U	300 U	310 U	330 U	290 U	38 U	320 U
Aroclor-1242 (PCB-1242)	ug/kg	NA	NA	NA	16,000,000	16,000	38 U	290 U	290 U	2900 U	15000 U	300 U	300 U	310 U	330 U	290 U	61	320 U
Aroclor-1248 (PCB-1248)	ug/kg	NA	NA	NA	16,000,000	16,000	38 U	290 U	290 U	2900 U	15000 U	300 U	300 U	310 U	330 U	290 U	38 U	320 U
Aroclor-1254 (PCB-1254)	ug/kg	NA	NA	NA	16,000,000	16,000	38 U	290 U	290 U	2900 U	15000 U	300 U	300 U	310 U	330 U	290 U	66	320 U
Aroclor-1260 (PCB-1260)	ug/kg	NA	NA	NA	16,000,000	16,000	38 U	25 J	34 J	1600 J	3400 J	34 J	25 J	310 U	71 J	250 J	38 U	320 U
Total PCBs	ug/kg	NA	NA	NA	16,000,000	16,000	38 U	--	--	--	--	--	--	--	--	--	127	--

Notes:

(1) MDEQ (Michigan) Generic Soil Cleanup Criteria, administrative rule R 299.44 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended (Part 201 Groundwater Criteria).

NA - Criteria not available.
ND ( ) - Not present at or above the associated value.
-- Not analyzed.
ID - Insufficient data to develop criterion.
ug/kg - micrograms per kilograms.

2.6[ab] Indicates a concentration exceedance of Part 201 Cleanup Criteria.

J - Indicates an estimated value.
U - Not detected at the associated reporting limit.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC		MDEQ Generic Groundwater Cleanup Criteria: Residential and Nonresidential (1)												
Sample Location:		**Residential Drinking Water**	**Non-Residential Drinking Water**	**Groundwater Surface Water Interface**	**Residential Groundwater Volatilization to Indoor Air Inhalation**	**Non-Residential Groundwater Volatilization to Indoor Air Inhalation**	**Water Solubility**	**Flammability and Explosivity Screening Levels**	**GS-1**	**GS-1**	**GS-2**	**GS-2**	**GS-3**	**GS-3**
Sample ID:									**GW-17303-021716-CB-024**	**GW-17303-110116-DS-049**	**GW-17303-021816-CB-028**	**GW-17303-102616-JY-009**	**GW-17303-062216-JY-009**	**GW-17303-110116-DS-051**
Sample Date:									**02/17/2016**	**11/01/2016**	**02/18/2016**	**10/26/2016**	**06/22/2016**	**11/01/2016**
Parameters	**Units**	a	b	c	d	e	f	g						
VOCs														
1,1,1-Trichloroethane	mg/L	0.2 A	0.2 A	0.089	660	1300 S	1330	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.0085	0.035	0.078 X	12	77	2970	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.005 A	0.005 A	0.33 X	17	110	4420		0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.88	2.5	0.74	1000	2300	5060	380	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.007 A	0.007 A	0.13	0.2	1.3	2250	97	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.07 A	0.07 A	0.099 X	300 S	300 S	300		0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.0002 A	0.0002 A		0.22 S	1.2 S	1.23		0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.00005 A	0.00005 A	0.0057 X	2.4	15	4200	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.6 A	0.6 A	0.013	160 S	160 S	156		0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.005 A	0.005 A	0.36 X	9.6	59	8520	2500	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.005 A	0.005 A	0.23 X	16	36	2800	550	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.0066	0.019	0.028	18	41	111	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.075 A	0.075 A	0.017	16	74 S	73.8		0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	13	38	2.2	240000 S	240000 S	240000	ID	2 U	5 U	5 U	5 U	0.01 U	0.01 U
2-Hexanone	mg/L	1	2.9	ID	4200	8700	16000		2 U	5 U	5 U	5 U	0.01 U	0.01 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	1.8	5.2	ID	20000 S	20000 S	20000	ID	2 U	5 U	5 U	5 U	0.01 U	0.01 U
Acetone	mg/L	0.73	2.1	1.7	1000000 D,S	1000000 D,S	1000000	15000	2 U	5 U	5 U	5 U	0.01 U	0.01 U
Benzene	mg/L	0.005 A	0.005 A	0.2 X	5.6	35	1750	68	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.08 A,W	0.08 A,W	ID	4.8	37	6740	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Bromoform	mg/L	0.08 A,W	0.08 A,W	ID	470	3100 S	3100	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.01	0.029	0.035	4	9	14500	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.8	2.3	ID	250	550	1190	13	1 U	2.5 U	2.5 U	2.5 U	0.005 U	0.0017 J
Carbon tetrachloride	mg/L	0.005 A	0.005 A	0.045 X	0.37	2.4	793	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.1 A	0.1 A	0.025	210	470 S	472	160	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Chloroethane	mg/L	0.43	1.7	1.1 X	5700 S	5700 S	5740	110	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.08 A,W	0.08 A,W	0.35	28	180	7920	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.26	1.1	ID	8.6	45	6340	36	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.07 A	0.07 A	0.62	93	210	3500	530	0.2 U	0.5 U	**3.7 abc**	**3.5 abc**	0.00042 J	0.001 U
cis-1,3-Dichloropropene	mg/L								0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Cyclohexane	mg/L								0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.08 A,W	0.08 A,W	ID	14	110	2600	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Dichlorodifluoromethane (CFC-12)	mg/L	1.7	4.8	ID	220	300 S	300	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.074 E	0.074 E	0.018	110	170 S	169	43	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.8	2.3	0.028	56 S	56 S	56	29	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Methyl acetate	mg/L								2 U	5 U	5 U	5 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L								0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.04 E	0.04 E	7.1 X	47000 S	47000 S	46800	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 A	0.005 A	1.5 X	220	1400	17000	ID	1 U	2.5 U	2.5 U	2.5 U	0.005 U	0.005 U
Styrene	mg/L	0.1 A	0.1 A	0.08	170	310 S	310	140	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.005 A	0.005 A	0.06 X	25	170	200	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Toluene	mg/L	0.79 E	0.79 E	0.27	530 S	530 S	526	61	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.1 A	0.1 A	1.5 X	85	200	6300	230	0.2 U	0.5 U	**0.17 J ab**	0.5 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L								0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.005 A	0.005 A	0.2 X	2.2	4.9	1100	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	mg/L	2.6	7.3		1100 S	1100 S	1100	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Trifluorotrichloroethane (CFC-113)	mg/L	170 S	170 S	0.032	170 S	170 S	170	ID	0.2 U	0.5 U	0.5 U	0.5 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.002 A	0.002 A	0.013 X	1.1	13	2760	33	**7 abcd**	**9.1 abcd**	**14 abcde**	**13 abcd**	0.0011	0.001 U
Xylenes (total)	mg/L	0.28 E	0.28 E	0.041	190 S	190 S	186	70	0.4 U	1 U	1 U	1 U	0.002 U	0.002 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**GS-4**	**GS-4**	**GS-7**	**GS-16**	**GS-17**	**GS-17**	**GS-18**	**GS-18**	**GS-19**	**GS-19**	**GS-20**	**GS-20**
Sample ID:		**GW-17303-062216-JY-011**	**GW-17303-110216-DS-056**	**GW-17303-102816-JY-032**	**GW-17303-110216-DS-054**	**GW-17303-062116-JY-004**	**GW-17303-110116-DS-047**	**GW-17303-062116-JY-006**	**GW-17303-110116-DS-048**	**GW-17303-062216-JY-010**	**GW-17303-110116-DS-052**	**GW-17303-062216-JY-013**	**GW-17303-103116-DS-045**
Sample Date:		**06/22/2016**	**11/02/2016**	**10/28/2016**	**11/02/2016**	**06/21/2016**	**11/01/2016**	**06/21/2016**	**11/01/2016**	**06/22/2016**	**11/01/2016**	**06/22/2016**	**10/31/2016**
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.00034 J	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.00066 J	0.0011 J	0.002 U	0.0033 U	0.01 U	0.017 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.01 U	0.017 U	0.02 U	0.033 U	0.1 U	0.17 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.01 U	0.017 U	0.02 U	0.033 U	0.1 U	0.17 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.01 U	0.017 U	0.02 U	0.033 U	0.1 U	0.17 U
Acetone	mg/L	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.01 U	0.017 U	0.02 U	0.033 U	0.1 U	0.17 U
Benzene	mg/L	0.0014	0.00094 J	0.001 U	0.025 U	0.0018	0.0014	0.001 U	0.0017 U	0.001 J	0.0016 J	0.01 U	0.017 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.005 U	0.0084 U	0.01 U	0.017 U	0.05 U	0.083 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.011	0.00067 J	**0.087[ab]**	0.001 U	0.0019	0.022	0.046	0.017	0.02	**0.2[ab]**	**0.44[ab]**
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.0013	0.00073 J	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.01 U	0.017 U	0.02 U	0.033 U	0.1 U	0.17 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Methyl tert butyl ether (MTBE)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.005 U	0.0084 U	0.01 U	0.017 U	0.05 U	0.083 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.0004 J	0.00081 J	0.00066 J	0.0025 J	0.027	0.032
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	**0.012[ab]**	**0.014[ab]**	0.002 U	0.0033 U	**0.0056 J[ab]**	**0.0057 J[ab]**
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.001 U	0.001 U	0.001 U	0.025 U	0.001 U	0.001 U	0.001 U	0.0017 U	0.002 U	0.0033 U	0.01 U	0.017 U
Vinyl chloride	mg/L	**0.0026[ab]**	**0.063[abc]**	0.0008 J	**0.67[abc]**	**0.0025[ab]**	**0.0022[ab]**	**0.019[abc]**	**0.028[abc]**	**0.099[abc]**	**0.05[abc]**	**0.082[abc]**	**0.1[abc]**
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.05 U	0.002 U	0.002 U	0.002 U	0.0012 J	0.001 J	0.0067 U	0.02 U	0.033 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**GS-21**	**GS-21**	**IG-A1**	**IG-B1**	**IG-B4**	**IG-C3**	**IG-C3**	**IG-D2**	**IG-E4**	**IG-F4**	**IG-G3**	**IW-2**
Sample ID:		**GW-17303-062216-JY-014**	**GW-17303-103116-DS-036**	**GW-17303-103116-DS-044**	**GW-17303-103116-DS-043**	**GW-17303-103116-DS-042**	**GW-17303-102816-JY-022**	**GW-17303-102816-JY-023**	**GW-17303-102816-JY-025**	**GW-17303-103116-DS-038**	**GW-17303-103116-DS-040**	**GW-17303-102816-JY-024**	**GW-17303-110416-DS-067**
Sample Date:		**06/22/2016**	**10/31/2016**	**10/31/2016**	**10/31/2016**	**10/31/2016**	**10/28/2016**	**10/28/2016 Duplicate**	**10/28/2016**	**10/31/2016**	**10/31/2016**	**10/28/2016**	**11/04/2016**
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.00083 J	0.00075 J	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.25 U	0.25 U	0.014 U	0.01 U	0.014 U	0.02 U	2.5 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.25 U	0.25 U	0.014 U	0.01 U	0.014 U	0.02 U	2.5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.25 U	0.25 U	0.014 U	0.01 U	0.014 U	0.02 U	2.5 U
Acetone	mg/L	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	0.25 U	0.25 U	0.014 U	0.01 U	0.014 U	0.02 U	2.5 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.13 U	0.13 U	0.0072 U	0.005 U	0.0072 U	0.01 U	1.3 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
cis-1,2-Dichloroethene	mg/L	0.011	0.025	0.014	0.013	0.012	0.032	0.033	0.016	0.0058	0.04	0.018	**0.16 J[ab]**
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.25 U	0.25 U	0.014 U	0.01 U	0.014 U	0.02 U	2.5 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Methyl tert butyl ether (MTBE)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.13 U	0.13 U	0.0072 U	0.005 U	0.0072 U	0.01 U	1.3 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
trans-1,2-Dichloroethene	mg/L	0.00064 J	0.0014	0.0041	0.001 U	0.00034 J	0.025 U	0.025 U	0.00077 J	0.0025	0.0019	0.00074 J	0.25 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Trichloroethene	mg/L	0.00081 J	0.0018	0.00095 J	0.001 U	0.0015	0.025 U	0.025 U	0.00051 J	0.0029	0.0013 J	0.0024	0.25 U
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.025 U	0.0014 U	0.001 U	0.0014 U	0.002 U	0.25 U
Vinyl chloride	mg/L	**0.005[ab]**	**0.011[ab]**	**0.0045[ab]**	**0.012[ab]**	**0.0072[ab]**	**0.44[abc]**	**0.44[abc]**	**0.026[abc]**	0.0012	**0.016[abc]**	**0.04[abc]**	**3.3[abcd]**
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.05 U	0.05 U	0.0029 U	0.002 U	0.0029 U	0.004 U	0.5 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**IW-3**	**IW-6**	**IW-9**	**IW-9**	**IW-10**	**IW-17**	**IW-20**	**IW-26R**	**IW-26R**	**IW-30**	**IW-33**	**IW-34**
Sample ID:		**GW-17303-022316-CB-036**	**GW-17303-110316-DS-066**	**GW-17303-022316-CB-037**	**GW-17303-110316-DS-065**	**GW-17303-110416-DS-068**	**GW-17303-022316-CB-038**	**GW-17303-103116-DS-041**	**GW-17303-022316-CB-039**	**GW-17303-110316-DS-064**	**GW-17303-110316-DS-063**	**GW-17303-103116-DS-035**	**GW-17303-103116-DS-037**
Sample Date:		**02/23/2016**	**11/03/2016**	**02/23/2016**	**11/03/2016**	**11/04/2016**	**02/23/2016**	**10/31/2016**	**02/23/2016**	**11/03/2016**	**11/03/2016**	**10/31/2016**	**10/31/2016**
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,1,2,2-Tetrachloroethane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,1,2-Trichloroethane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,1-Dichloroethane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,1-Dichloroethene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,2,4-Trichlorobenzene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,2-Dichlorobenzene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.00037 J	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,2-Dichloroethane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,2-Dichloropropane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,3-Dichlorobenzene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
1,4-Dichlorobenzene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.17 U	25 U	2.5 U	1 U	2.5 U	0.01 U	0.5 U	3.3 U	2.5 U	5 U	10 U	2.5 U
2-Hexanone	mg/L	0.17 U	25 U	2.5 U	1 U	2.5 U	0.01 U	0.5 U	3.3 U	2.5 U	5 U	10 U	2.5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.17 U	25 U	2.5 U	1 U	2.5 U	0.01 U	0.5 U	3.3 U	2.5 U	5 U	10 U	2.5 U
Acetone	mg/L	0.17 U	25 U	2.5 U	1 U	2.5 U	0.0037 J	0.5 U	3.3 U	2.5 U	5 U	10 U	2.5 U
Benzene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	**0.53 abc**	0.0021	**0.035 J ab**	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Bromodichloromethane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Bromoform	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Bromomethane (Methyl bromide)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Carbon disulfide	mg/L	0.14 U	13 U	2.7 U	0.5 U	1.3 U	0.0093 U	0.25 U	1.7 U	1.3 U	2.5 U	5 U	1.3 U
Carbon tetrachloride	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Chlorobenzene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Chloroethane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Chloroform (Trichloromethane)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Chloromethane (Methyl chloride)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
cis-1,2-Dichloroethene	mg/L	0.037	**13 abc**	**0.98 abc**	**0.18 ab**	**1.1 abc**	0.016	**0.17 ab**	**0.32 J ab**	**0.79 abc**	**0.98 abc**	**0.95 J abc**	**3.8 abc**
cis-1,3-Dichloropropene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Cyclohexane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.01	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Dibromochloromethane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Ethylbenzene	mg/L	0.017 U	2.5 U	**0.14 J abc**	**0.054 J c**	**0.13 J abc**	0.0095	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Isopropyl benzene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.0069	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Methyl acetate	mg/L	0.17 U	25 U	2.5 U	1 U	2.5 U	0.01 U	0.5 U	3.3 U	2.5 U	5 U	10 U	2.5 U
Methyl cyclohexane	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.002	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Methyl tert butyl ether (MTBE)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Methylene chloride	mg/L	0.083 U	13 U	1.3 U	0.5 U	**0.14 J ab**	0.005 U	0.25 U	1.7 U	1.3 U	2.5 U	5 U	1.3 U
Styrene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Tetrachloroethene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Toluene	mg/L	0.017 U	2.5 U	**2.1 abc**	**0.42 c**	0.074 J	0.027	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
trans-1,2-Dichloroethene	mg/L	0.021	2.5 U	0.25 U	0.1 U	0.25 U	0.0035	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.073 J
trans-1,3-Dichloropropene	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Trichloroethene	mg/L	0.0047 J	2.5 U	0.25 U	0.1 U	0.25 U	0.00041 J	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Trichlorofluoromethane (CFC-11)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.017 U	2.5 U	0.25 U	0.1 U	0.25 U	0.001 U	0.05 U	0.33 U	0.25 U	0.5 U	1 U	0.25 U
Vinyl chloride	mg/L	**0.42 abc**	**59 abcdeg**	**6.4 abcd**	**1.6 abcd**	**3.5 abcd**	**0.03 abc**	**0.92 abc**	**4.5 abcd**	**4.1 abcd**	**9.1 abcd**	**16 abcde**	**6.1 abcd**
Xylenes (total)	mg/L	0.033 U	5 U	**0.88 abc**	**0.27 c**	**0.23 J c**	0.041	0.1 U	**0.18 J c**	0.5 U	1 U	2 U	0.5 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**MW-3**	**MW-4**	**MW-5**	**MW-5**	**MW-13**	**MW-14**	**MW-14**	**MW-14**	**MW-18**	**MW19-01**	**MW19-01**	**MW19-02**
Sample ID:		**GW-17303-021116-CB-021**	**GW-17303-103116-DS-033**	**GW-17303-021116-CB-018**	**GW-17303-102816-JY-027**	**GW-17303-102816-JY-030**	**GW-17303-021116-CB-016**	**GW-17303-110216-DS-057**	**GW-17303-110216-DS-058**	**GW-17303-102516-JY-001**	**GW-17303-021116-CB-020**	**GW-17303-102816-JY-031**	**GW-17303-021116-CB-019**
Sample Date:		**02/11/2016**	**10/31/2016**	**02/11/2016**	**10/28/2016**	**10/28/2016**	**02/11/2016**	**11/02/2016**	**11/02/2016 Duplicate**	**10/25/2016**	**02/11/2016**	**10/28/2016**	**02/11/2016**
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,1,2,2-Tetrachloroethane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,1,2-Trichloroethane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,1-Dichloroethane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,1-Dichloroethene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,2,4-Trichlorobenzene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,2-Dichlorobenzene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,2-Dichloroethane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,2-Dichloropropane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,3-Dichlorobenzene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
1,4-Dichlorobenzene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	2.5 U	0.01 U	5 U	3.3 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.08 U	0.11 U	1.7 U
2-Hexanone	mg/L	2.5 U	0.01 U	5 U	3.3 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.08 U	0.11 U	1.7 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	2.5 U	0.01 U	5 U	3.3 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.08 U	0.11 U	1.7 U
Acetone	mg/L	2.5 U	0.01 U	5 U	3.3 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.08 U	0.11 U	1.7 U
Benzene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Bromodichloromethane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Bromoform	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Bromomethane (Methyl bromide)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Carbon disulfide	mg/L	1.3 U	0.005 U	2.5 U	1.7 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.04 U	0.056 U	0.83 U
Carbon tetrachloride	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Chlorobenzene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Chloroethane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Chloroform (Trichloromethane)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Chloromethane (Methyl chloride)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
cis-1,2-Dichloroethene	mg/L	**2.2 [abc]**	0.001 U	**2.6 [abc]**	**3.6 [abc]**	0.0012	0.001 U	0.003	0.0023	0.001 U	**0.24 [ab]**	**0.22 [ab]**	**3.3 [abc]**
cis-1,3-Dichloropropene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Cyclohexane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Dibromochloromethane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Ethylbenzene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Isopropyl benzene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Methyl acetate	mg/L	2.5 U	0.01 U	5 U	3.3 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.08 U	0.11 U	1.7 U
Methyl cyclohexane	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Methyl tert butyl ether (MTBE)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Methylene chloride	mg/L	1.3 U	0.005 U	2.5 U	1.7 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.04 U	0.056 U	0.83 U
Styrene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Tetrachloroethene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Toluene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
trans-1,2-Dichloroethene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.016	0.018	**0.11 J [ab]**
trans-1,3-Dichloropropene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Trichloroethene	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Trichlorofluoromethane (CFC-11)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.25 U	0.001 U	0.5 U	0.33 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008 U	0.011 U	0.17 U
Vinyl chloride	mg/L	**9.1 [abcd]**	0.001 U	**9.8 [abcd]**	**9.8 [abcd]**	0.0015	0.00072 J	**0.025 [abc]**	**0.02 [abc]**	0.001 U	**0.0061 J [ab]**	**0.0056 J [ab]**	**4.7 [abcd]**
Xylenes (total)	mg/L	0.5 U	0.002 U	1 U	0.67 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.016 U	0.022 U	0.33 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**MW19-02**	**MW19-03**	**MW19-03**	**MW19-04**	**MW19-06**	**MW19-07**	**MW19-07**	**MW19-11**	**MW19-11**	**MW19-12**	**MW19-12**	**MW19-14**
Sample ID:		**GW-17303-102816-JY-028**	**GW-17303-021116-CB-017**	**GW-17303-110216-DS-059**	**GW-17303-021116-CB-015**	**GW-17303-110216-DS-060**	**GW-17303-021916-CB-033**	**GW-17303-102616-JY-011**	**GW-17303-022316-CB-035**	**GW-17303-102716-JY-015**	**GW-17303-021716-CB-023**	**GW-17303-102616-JY-008**	**GW-17303-021816-CB-029**
Sample Date:		**10/28/2016**	**02/11/2016**	**11/02/2016**	**02/11/2016**	**11/02/2016**	**02/19/2016**	**10/26/2016**	**02/23/2016**	**10/27/2016**	**02/17/2016**	**10/26/2016**	**02/18/2016**
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,1,2,2-Tetrachloroethane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,1,2-Trichloroethane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,1-Dichloroethane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,1-Dichloroethene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,2,4-Trichlorobenzene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,2-Dichlorobenzene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,2-Dichloroethane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,2-Dichloropropane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,3-Dichlorobenzene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
1,4-Dichlorobenzene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	2 U	0.29 U	0.5 U	0.01 U	0.17 U	1.1 U	2 U	10 U	170 U	0.4 U	2.5 U	2 U
2-Hexanone	mg/L	2 U	0.29 U	0.5 U	0.01 U	0.17 U	1.1 U	2 U	10 U	170 U	0.4 U	2.5 U	2 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	2 U	0.29 U	0.5 U	0.01 U	0.17 U	1.1 U	2 U	10 U	170 U	0.4 U	2.5 U	2 U
Acetone	mg/L	2 U	0.29 U	0.5 U	0.01 U	0.17 U	1.1 U	2 U	10 U	170 U	0.4 U	2.5 U	2 U
Benzene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Bromodichloromethane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Bromoform	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Bromomethane (Methyl bromide)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Carbon disulfide	mg/L	1 U	0.14 U	0.25 U	0.005 U	0.083 U	0.56 U	1 U	8.5 U	83 U	0.2 U	1.3 U	1 U
Carbon tetrachloride	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Chlorobenzene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	**0.16 [abc]**	**0.22 J [abc]**	0.2 U
Chloroethane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Chloroform (Trichloromethane)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Chloromethane (Methyl chloride)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
cis-1,2-Dichloroethene	mg/L	**3.2 [abc]**	**0.71 [abc]**	**1.2 [abc]**	0.0016	**0.36 [ab]**	**2.4 [abc]**	**2.1 [abc]**	**34 [abc]**	**320 [abcde]**	**0.76 [abc]**	**4.3 [abc]**	**0.081 J [ab]**
cis-1,3-Dichloropropene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Cyclohexane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Dibromochloromethane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Ethylbenzene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	**0.072 [c]**	**0.074 J [c]**	0.2 U
Isopropyl benzene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Methyl acetate	mg/L	2 U	0.29 U	0.5 U	0.01 U	0.17 U	1.1 U	2 U	10 U	170 U	0.4 U	2.5 U	2 U
Methyl cyclohexane	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Methyl tert butyl ether (MTBE)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Methylene chloride	mg/L	1 U	0.14 U	0.25 U	0.005 U	0.083 U	0.56 U	1 U	5 U	83 U	0.2 U	1.3 U	1 U
Styrene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Tetrachloroethene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Toluene	mg/L	0.2 U	0.029 U	0.05 U	0.00028 J	0.017 U	0.11 U	0.2 U	1 U	17 U	0.016 J	0.25 U	0.2 U
trans-1,2-Dichloroethene	mg/L	**0.11 J [ab]**	0.034	0.061	0.001 U	0.022	0.087 J	0.075 J	1 U	17 U	0.04 U	0.25 U	0.2 U
trans-1,3-Dichloropropene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Trichloroethene	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	**0.03 J [ab]**	0.2 U	1 U	17 U	**0.0088 J [ab]**	0.25 U	0.2 U
Trichlorofluoromethane (CFC-11)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.2 U	0.029 U	0.05 U	0.001 U	0.017 U	0.11 U	0.2 U	1 U	17 U	0.04 U	0.25 U	0.2 U
Vinyl chloride	mg/L	**3.6 [abcd]**	**0.51 [abc]**	**0.82 [abc]**	**0.0027 [ab]**	**0.13 [abc]**	**4 [abcd]**	**4.9 [abcd]**	**8.8 [abcd]**	**80 [abcdeg]**	**1.1 [abc]**	**5.7 [abcd]**	**4.8 [abcd]**
Xylenes (total)	mg/L	0.4 U	0.057 U	0.1 U	0.002 U	0.033 U	0.22 U	0.4 U	2 U	33 U	0.027 J	0.5 U	0.4 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**MW19-14**	**MW19-15**	**MW19-16**	**MW19-16**	**MW19-24**	**MW19-24**	**MW19-33**	**MW19-33**	**MW19-34**	**MW19-35**	**MW19-37**	**MW19-38**
Sample ID:		**GW-17303-110116-DS-053**	**GW-17303-021816-CB-027**	**GW-17303-021816-CB-026**	**GW-17303-103116-DS-046**	**GW-17303-021916-CB-032**	**GW-17303-102816-JY-029**	**GW-17303-102516-JY-002**	**GW-17303-102516-JY-003**	**GW-17303-102516-JY-004**	**GW-17303-102516-JY-005**	**GW-17303-021716-CB-025**	**GW-17303-021916-CB-030**
Sample Date:		**11/01/2016**	**02/18/2016**	**02/18/2016**	**10/31/2016**	**02/19/2016**	**10/28/2016**	**10/25/2016**	**10/25/2016 Duplicate**	**10/25/2016**	**10/25/2016**	**02/17/2016**	**02/19/2016**
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	2.5 U	0.67 U	0.5 U	1.3 U	0.05 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	2.5 U	0.67 U	0.5 U	1.3 U	0.05 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	2.5 U	0.67 U	0.5 U	1.3 U	0.05 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	2.5 U	0.67 U	0.5 U	1.3 U	0.05 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	**0.01[ab]**	**0.01[ab]**	**0.028[ab]**	**0.028[ab]**	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	1.3 U	0.33 U	0.25 U	0.63 U	0.025 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00069 J
Chlorobenzene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	**0.033[c]**	**0.032[c]**	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00026 J
Chloromethane (Methyl chloride)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	**0.1 J[ab]**	**0.86[abc]**	**0.98[abc]**	**1.2[abc]**	0.0042 J	0.0046 J	0.00032 J	0.00031 J	0.0041	0.002	0.001 U	0.024
cis-1,3-Dichloropropene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.0033	0.0033	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.0022	0.0021	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	2.5 U	0.67 U	0.5 U	1.3 U	0.05 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.006	0.0063	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	1.3 U	0.33 U	0.25 U	0.63 U	0.025 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00073 J
Toluene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.25 U	0.067 U	0.054	0.061 J	0.005 U	0.01 U	0.001 U	0.001 U	0.00058 J	0.001 U	0.001 U	0.0014
trans-1,3-Dichloropropene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	**0.025[ab]**	0.001 U	0.001 U	**0.022[ab]**
Trichlorofluoromethane (CFC-11)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.25 U	0.067 U	0.05 U	0.13 U	0.005 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	**5[abcd]**	**2.6[abcd]**	**1.6[abcd]**	**1.9[abcd]**	**0.13[abc]**	**0.13[abc]**	**0.0044[ab]**	**0.0045[ab]**	0.00057 J	0.001 U	0.00034 J	**0.011[ab]**
Xylenes (total)	mg/L	0.5 U	0.13 U	0.1 U	0.25 U	0.01 U	0.02 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**MW19-38**	**MW19-38**	**MW19-39**	**MW19-40**	**MW19-43**	**MW19-45**	**MW19-45**	**MW19-46**	**MW19-46**	**MW19-47**	**MW19-47**	**MW19-48**
Sample ID:		**GW-17303-021916-CB-031**	**GW-17303-102516-JY-007**	**GW-17303-021716-CB-022**	**GW-17303-103116-DS-034**	**GW-17303-103116-DS-039**	**GW-17303-022516-CB-045**	**GW-17303-102516-JY-006**	**GW-17303-022616-CB-050**	**GW-17303-102716-JY-013**	**GW-17303-022516-CB-046**	**GW-17303-102716-JY-014**	**GW-17303-022516-CB-047**
Sample Date:		**02/19/2016**	**10/25/2016**	**02/17/2016**	**10/31/2016**	**10/31/2016**	**02/25/2016**	**10/25/2016**	**02/26/2016**	**10/27/2016**	**02/25/2016**	**10/27/2016**	**02/25/2016**
		Duplicate											
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,1-Dichloroethane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.00036 J	0.00032 J	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,1-Dichloroethene	mg/L	0.00045 J	0.00073 J	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,2-Dichloroethane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,2-Dichloropropane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.00052 J	0.00046 J	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.01 U	0.025 U	0.033 U	0.01 U	1.7 U	0.01 U	0.01 U	0.1 U	0.25 U	0.56 U	0.29 U	0.67 U
2-Hexanone	mg/L	0.01 U	0.025 U	0.033 U	0.01 U	1.7 U	0.01 U	0.01 U	0.1 U	0.25 U	0.56 U	0.29 U	0.67 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.01 U	0.025 U	0.033 U	0.01 U	1.7 U	0.01 U	0.01 U	0.1 U	0.25 U	0.56 U	0.29 U	0.67 U
Acetone	mg/L	0.01 U	0.025 U	0.033 U	0.01 U	1.7 U	0.0013 J	0.01 U	0.1 U	0.25 U	0.062 J	0.29 U	0.67 U
Benzene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	**0.0086 J[ab]**	**0.01 J[ab]**	0.056 U	0.029 U	0.067 U
Bromodichloromethane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Bromoform	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Carbon disulfide	mg/L	0.005 U	0.013 U	0.017 U	0.005 U	0.83 U	0.005 U	0.005 U	0.05 U	0.13 U	0.28 U	0.14 U	0.33 U
Carbon tetrachloride	mg/L	0.00066 J	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Chlorobenzene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Chloroethane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Chloroform (Trichloromethane)	mg/L	0.00025 J	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
cis-1,2-Dichloroethene	mg/L	0.025	0.062	0.046	0.001 U	**1.2[abc]**	0.001 U	0.001 U	**0.096[ab]**	0.03	**1.3[abc]**	**0.13[ab]**	**1.5[abc]**
cis-1,3-Dichloropropene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Cyclohexane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Dibromochloromethane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Ethylbenzene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	**0.032[c]**	0.056 U	0.029 U	0.067 U
Isopropyl benzene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Methyl acetate	mg/L	0.01 U	0.025 U	0.033 U	0.01 U	1.7 U	0.01 U	0.01 U	0.1 U	0.25 U	0.56 U	0.29 U	0.67 U
Methyl cyclohexane	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Methyl tert butyl ether (MTBE)	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Methylene chloride	mg/L	0.005 U	0.013 U	0.017 U	0.005 U	0.83 U	0.005 U	0.005 U	0.05 U	0.13 U	0.28 U	0.14 U	0.33 U
Styrene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Tetrachloroethene	mg/L	0.00077 J	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Toluene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.013	0.062	0.056 U	0.029 U	0.067 U
trans-1,2-Dichloroethene	mg/L	0.0014	0.0033	0.0054	0.001 U	**0.64[ab]**	0.001 U	0.001 U	0.0087 J	0.025 U	0.082	0.0094 J	0.047 J
trans-1,3-Dichloropropene	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Trichloroethene	mg/L	**0.023[ab]**	**0.027[ab]**	**0.014[ab]**	0.001 U	**0.15 J[ab]**	0.0036	0.0041	**0.034[ab]**	**0.015 J[ab]**	**0.014 J[ab]**	**0.07[ab]**	**0.16[ab]**
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.001 U	0.0025 U	0.0033 U	0.001 U	0.17 U	0.001 U	0.001 U	0.01 U	0.025 U	0.056 U	0.029 U	0.067 U
Vinyl chloride	mg/L	**0.012[ab]**	**0.039[abc]**	**0.11[abc]**	0.001 U	**2.4[abcd]**	0.00093 J	0.00077 J	**0.35[abc]**	**0.046[abc]**	**1.7[abcd]**	**0.3[abc]**	**2.2[abcd]**
Xylenes (total)	mg/L	0.002 U	0.005 U	0.0067 U	0.002 U	0.33 U	0.002 U	0.002 U	0.038	**0.14[c]**	0.11 U	0.057 U	0.13 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**MW19-48**	**MW19-48**	**MW19-49**	**MW19-49**	**MW19-50**	**MW19-50**	**MW19-51**	**MW19-51**	**MW19-52**	**MW19-52**	**MW19-53**	**MW19-53**
Sample ID:		**GW-17303-102716-JY-016**	**GW-17303-102716-JY-017**	**GW-17303-022616-CB-051**	**GW-17303-102716-JY-018**	**GW-17303-022616-CB-052**	**GW-17303-102716-JY-019**	**GW-17303-022916-CB-054**	**GW-17303-102616-JY-012**	**GW-17303-022516-CB-048**	**GW-17303-102716-JY-020**	**GW-17303-022916-CB-055**	**GW-17303-102816-JY-026**
Sample Date:		**10/27/2016**	**10/27/2016 Duplicate**	**02/26/2016**	**10/27/2016**	**02/26/2016**	**10/27/2016**	**02/29/2016**	**10/26/2016**	**02/25/2016**	**10/27/2016**	**02/29/2016**	**10/28/2016**
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,1,2,2-Tetrachloroethane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,1,2-Trichloroethane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,1-Dichloroethane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,1-Dichloroethene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,2,4-Trichlorobenzene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,2-Dichlorobenzene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,2-Dichloroethane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.0024 J	0.017 U	0.25 U	0.5 U
1,2-Dichloropropane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,3-Dichlorobenzene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
1,4-Dichlorobenzene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	1.4 U	1.4 U	0.83 U	1.3 U	0.25 U	0.05 U	17 U	50 U	0.1 U	0.17 U	2.5 U	5 U
2-Hexanone	mg/L	1.4 U	1.4 U	0.83 U	1.3 U	0.25 U	0.05 U	17 U	50 U	0.1 U	0.17 U	2.5 U	5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	1.4 U	1.4 U	0.83 U	1.3 U	0.25 U	0.05 U	17 U	50 U	0.1 U	0.17 U	2.5 U	5 U
Acetone	mg/L	1.4 U	1.4 U	0.83 U	1.3 U	0.25 U	0.05 U	17 U	50 U	0.1 U	0.17 U	2.5 U	5 U
Benzene	mg/L	0.14 U	0.14 U	0.083 U	**0.05 J[ab]**	**0.032[ab]**	**0.027[ab]**	1.7 U	5 U	0.0037 J	0.017 U	0.25 U	0.5 U
Bromodichloromethane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Bromoform	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Bromomethane (Methyl bromide)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Carbon disulfide	mg/L	0.71 U	0.71 U	0.42 U	0.63 U	0.13 U	0.025 U	8.3 U	25 U	0.05 U	0.083 U	1.3 U	2.5 U
Carbon tetrachloride	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Chlorobenzene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Chloroethane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Chloroform (Trichloromethane)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Chloromethane (Methyl chloride)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
cis-1,2-Dichloroethene	mg/L	**1[abc]**	**1.2[abc]**	**2.5[abc]**	**0.76[abc]**	**0.79 J[abc]**	0.017	**4[abc]**	**5.6[abc]**	**0.16[ab]**	**0.14[ab]**	**1.8[abc]**	**1.2[abc]**
cis-1,3-Dichloropropene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Cyclohexane	mg/L	0.14 U	0.14 U	0.083 U	0.061 J	0.05	0.054	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Dibromochloromethane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Ethylbenzene	mg/L	0.14 U	0.14 U	**0.038 J[c]**	**0.21[abc]**	**0.12[abc]**	**0.14[abc]**	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Isopropyl benzene	mg/L	0.14 U	0.14 U	0.083 U	**0.091 J[c]**	**0.049[c]**	**0.051[c]**	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Methyl acetate	mg/L	1.4 U	1.4 U	0.83 U	1.3 U	0.25 U	0.05 U	17 U	50 U	0.1 U	0.17 U	2.5 U	5 U
Methyl cyclohexane	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.0072	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Methyl tert butyl ether (MTBE)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Methylene chloride	mg/L	0.71 U	0.71 U	0.42 U	0.63 U	0.13 U	0.025 U	8.3 U	25 U	0.05 U	0.083 U	1.3 U	2.5 U
Styrene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Tetrachloroethene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Toluene	mg/L	0.14 U	0.14 U	0.11	**0.67[c]**	0.043	0.031	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
trans-1,2-Dichloroethene	mg/L	0.059 J	0.061 J	0.034 J	0.13 U	0.0084 J	0.005 U	1.7 U	5 U	0.015	0.015 J	0.25 U	0.5 U
trans-1,3-Dichloropropene	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Trichloroethene	mg/L	**0.11 J[ab]**	**0.12 J[ab]**	0.083 U	0.13 U	**0.21[abc]**	0.0022 J	1.7 U	5 U	**0.023[ab]**	**0.033[ab]**	0.25 U	0.5 U
Trichlorofluoromethane (CFC-11)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.14 U	0.14 U	0.083 U	0.13 U	0.025 U	0.005 U	1.7 U	5 U	0.01 U	0.017 U	0.25 U	0.5 U
Vinyl chloride	mg/L	**2[abcd]**	**2.1[abcd]**	**1.3[abcd]**	**2.3[abcd]**	**0.27[abc]**	**0.03[abc]**	**57[abcdeg]**	**51[abcdeg]**	**0.3[abc]**	**0.16[abc]**	**6.2[abcd]**	**7.8[abcd]**
Xylenes (total)	mg/L	0.29 U	0.29 U	**0.12 J[c]**	**0.86[abc]**	**0.22[c]**	**0.21[c]**	3.3 U	10 U	0.02 U	0.033 U	0.5 U	1 U

Notes:

U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC													
Sample Location:		**MW19-54**	**MW19-54**	**MW19-55**	**MW19-55**	**MW19-56**	**MW19-56**	**MW19-56**	**MW19-57**	**MW19-57**	**MW19-58**	**MW19-58**	**MW19-58**
Sample ID:		**GW-17303-022916-CB-056**	**GW-17303-102616-JY-010**	**GW-17303-022416-CB-041**	**GW-17303-110316-DS-062**	**GW-17303-022416-CB-042**	**GW-17303-022416-CB-043**	**GW-17303-110316-DS-061**	**GW-17303-022416-CB-044**	**GW-17303-102816-JY-021**	**GW-17303-062216-JY-007**	**GW-17303-062216-JY-008**	**GW-17303-110116-DS-050**
Sample Date:		**02/29/2016**	**10/26/2016**	**02/24/2016**	**11/03/2016**	**02/24/2016**	**02/24/2016 Duplicate**	**11/03/2016**	**02/24/2016**	**10/28/2016**	**06/22/2016**	**06/22/2016 Duplicate**	**11/01/2016**
Parameters	**Units**												
VOCs													
1,1,1-Trichloroethane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,1,2-Trichloroethane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,1-Dichloroethane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,1-Dichloroethene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,2-Dichloroethane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,2-Dichloropropane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,3-Dichlorobenzene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
1,4-Dichlorobenzene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	5 U	2.5 U	0.25 U	0.33 U	0.56 U	0.5 U	0.5 U	0.4 U	0.67 U	0.002 J	0.0023 J	0.02 U
2-Hexanone	mg/L	5 U	2.5 U	0.25 U	0.33 U	0.56 U	0.5 U	0.5 U	0.4 U	0.67 U	0.01 U	0.01 U	0.02 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	5 U	2.5 U	0.25 U	0.33 U	0.56 U	0.5 U	0.5 U	0.4 U	0.67 U	0.01 U	0.01 U	0.02 U
Acetone	mg/L	5 U	2.5 U	0.25 U	0.33 U	0.091 J	0.062 J	0.5 U	0.4 U	0.67 U	0.01 U	0.01 U	0.02 U
Benzene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	**0.0077[ab]**	**0.0076[ab]**	**0.006[ab]**
Bromodichloromethane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Bromoform	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Bromomethane (Methyl bromide)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Carbon disulfide	mg/L	2.5 U	1.3 U	0.13 U	0.17 U	0.28 U	0.25 U	0.25 U	0.2 U	0.33 U	0.005 U	0.005 U	0.01 U
Carbon tetrachloride	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Chlorobenzene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Chloroethane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Chloroform (Trichloromethane)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.00051 J	0.00053 J	0.002 U
Chloromethane (Methyl chloride)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
cis-1,2-Dichloroethene	mg/L	**1.1[abc]**	**1.4[abc]**	**0.49[ab]**	**0.53[ab]**	**1[abc]**	**1[abc]**	**1.2[abc]**	**1.1[abc]**	**1.3[abc]**	0.0075	0.0075	0.0052
cis-1,3-Dichloropropene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Cyclohexane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.00058 J	0.001 U	0.002 U
Dibromochloromethane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Ethylbenzene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Isopropyl benzene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Methyl acetate	mg/L	5 U	2.5 U	0.25 U	0.33 U	0.56 U	0.5 U	0.5 U	0.4 U	0.67 U	0.01 U	0.01 U	0.02 U
Methyl cyclohexane	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Methyl tert butyl ether (MTBE)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Methylene chloride	mg/L	2.5 U	1.3 U	0.13 U	0.17 U	0.28 U	0.25 U	0.25 U	0.2 U	0.33 U	0.005 U	0.005 U	0.01 U
Styrene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Tetrachloroethene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Toluene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.00028 J	0.001 U	0.002 U
trans-1,2-Dichloroethene	mg/L	**0.15 J[ab]**	**0.13 J[ab]**	0.031	0.032 J	0.052 J	0.053	0.055	0.057	0.056 J	0.00046 J	0.00042 J	0.00064 J
trans-1,3-Dichloropropene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Trichloroethene	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.00039 J	0.00027 J	0.0007 J
Trichlorofluoromethane (CFC-11)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.5 U	0.25 U	0.025 U	0.033 U	0.056 U	0.05 U	0.05 U	0.04 U	0.067 U	0.001 U	0.001 U	0.002 U
Vinyl chloride	mg/L	**11[abcd]**	**12[abcd]**	**0.69[abc]**	**0.72[abc]**	**1[abc]**	**1[abc]**	**0.84[abc]**	**1.3[abcd]**	**1.5[abcd]**	0.0018	**0.0022[ab]**	**0.033[abc]**
Xylenes (total)	mg/L	1 U	0.5 U	0.05 U	0.067 U	0.11 U	0.1 U	0.1 U	0.08 U	0.13 U	0.002 U	0.002 U	0.004 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC									
Sample Location:		**MW19-59**	**MW19-59**	**QA/QC Trip Blank**	**QA/QC Trip Blank**	**QA/QC Trip Blank**	**QA/QC Trip Blank**	**QA/QC Trip Blank**	**QA/QC Trip Blank**
Sample ID:		**GW-17303-062216-JY-012**	**GW-17303-110216-DS-055**	**TB-17303-020316-CB-011**	**TB-17303-021116-CB-022**	**TB-17303-021816-CB-030**	**TB-17303-021916-CB-034**	**TB-17303-022316-CB-040**	**TB-17303-022516-CB-049**
Sample Date:		**06/22/2016**	**11/02/2016**	**02/03/2016**	**02/11/2016**	**02/18/2016**	**02/19/2016**	**02/23/2016**	**02/25/2016**
Parameters	**Units**								
VOCs									
1,1,1-Trichloroethane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	1.3 U	2.5 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	1.3 U	2.5 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	1.3 U	2.5 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	1.3 U	2.5 U	0.0011 J	0.01 U	0.0011 J	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.63 U	1.3 U	0.005 U	0.005 U	0.005 U	0.005 U	0.011	0.005 U
Carbon tetrachloride	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	**0.82**[abc]	**0.89**[abc]	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0003 J
cis-1,3-Dichloropropene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	1.3 U	2.5 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.63 U	1.3 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.13 U	0.25 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	**7.6**[abcd]	**8.1**[abcd]	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.25 U	0.5 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Table 4

Groundwater Analytical Results
2016 Summary Report
Former Willow Run CVO
Ypsilanti, Michigan

PAOC		QA/QC	QA/QC	QA/QC	QA/QC	QA/QC	QA/QC	QA/QC	QA/QC
Sample Location:		Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	TRIP BLANK	Trip Blank	Trip Blank
Sample ID:		TB-17303-022616-CB-053	TB-17303-022916-CB-057	TB-17303-062116	TB-17303-102516	TB-17303-102816	10/31/2016	TB-17303-110216	TB-17303-110416
Sample Date:		02/26/2016	02/29/2016	06/21/2016	10/25/2016	10/28/2016		11/02/2016	11/04/2016
Parameters	**Units**								
VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.0019 J	0.0018 J	0.0056 J	0.007 J	0.002 J	0.01 U	0.0032 J
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00055 J	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (CFC-113)	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
The groundwater results are compared to the MDEQ Part 201 clean up Criteria
RDW (a), GSI (c) and FAV (f) are only applicable for wells located in northern property boundary (including PAOC 18). The (sitewide) results are flagged for assessment purpose only.
The non-residential groundwater volatilization to Indoor Air Inhalation criteria (e) is used as a screening criteria to evaluate changing conditions and is not a relevant pathway.
A: Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0 parts per billion (ppb)
E: Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
S: Criterion defaults to the hazardous substance-specific water solubility limit.
W: Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking standard of 80 ug/L.

Appendices

Appendix A
2016 Stratigraphy Logs

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

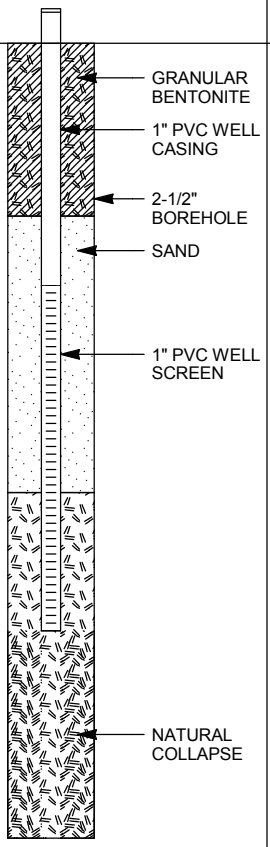
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-17
DATE COMPLETED: June 14, 2016
DRILLING METHOD: DIRECT PUSH/AIR HAMMER
FIELD PERSONNEL: D. RIVERS

NORTHING: 268758.84
EASTING: 13344023.22

TOP OF RISER 709.98
GROUND SURFACE 707.12

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SM/SC-SAND (FILL), with silt and clay, trace fine gravel, compact, fine to coarse grained, poorly graded, brown, moist	
4	CL-SILTY CLAY (FILL), trace fine sand and fine gravel, firm, low plasticity, grayish brown, moist	703.32
6	SC-CLAYEY SAND (FILL), with silt, loose, fine to coarse grained, poorly graded, brown, moist to wet	702.52
14	SP-SAND, trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, wet	693.12
16	OL-ORGANIC SANDY SILT, compact, fine sand, dark brown, moist, hydrogen sulfide-like odor	690.62
18	CL-SANDY CLAY, firm, trace silt, fine to coarse sand, low to non plastic, greenish gray, moist to wet	689.12
20	OL-ORGANIC SANDY SILT, compact, fine sand, dark brown, moist, hydrogen sulfide-like odor	687.62 687.12
22	SP-SAND, trace silt and clay, compact, fine to coarse grained, poorly graded, gray, wet - with silt, fine grained at 20.5ft BGS - trace silt, trace fine gravel, fine to coarse grained at 21.8ft BGS	684.92 684.12
28	CH-SILTY CLAY, trace fine sand to fine gravel, firm, medium to high plasticity, brownish gray, moist - REFUSAL at 23.0ft BGS	
30	END OF BOREHOLE @ 23.0ft BGS	



WELL DETAILS
Screened interval:
700.12 to 690.12ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
707.12 to 702.12ft BGS
0.00 to 5.00ft BGS
Material: GRANULAR BENTONITE
Sand Pack:
702.12 to 694.12ft BGS
5.00 to 13.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		85		0.9
				1.3
2DP		50		0.4
3DP		90		0.9
				1.1
4DP		90		0.4
				0.7
5DP		90		1.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

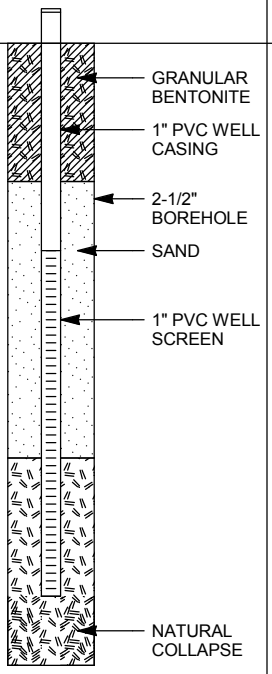
HOLE DESIGNATION: GS-18
DATE COMPLETED: June 14, 2016
DRILLING METHOD: DIRECT PUSH/AIR HAMMER
FIELD PERSONNEL: D. RIVERS

NORTHING: 268688.24
EASTING: 13344080.51

TOP OF RISER 707.96
GROUND SURFACE 704.80

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SM/SC-SAND (FILL), with silt and clay, trace fine gravel, compact, fine to coarse grained, poorly graded, brown, moist	
2	- trace glass and metal debris, grayish brown, wet at 2.0ft BGS	
4	- no debris, greenish gray at 5.0ft BGS	
6		
8		
10	SP-SAND, trace silt, compact, fine grained, poorly graded, dark gray, wet, slight petroleum-like odor	694.80
12	- greenish brown at 11.0ft BGS	
14	CH-SILTY CLAY, very soft, high plasticity, gray, moist, slight odor	691.80
16	SM-SILTY SAND, compact, fine grained, poorly graded, dark gray to black, wet, slight odor	690.60
18	- greenish brown at 14.6ft BGS	689.30
20	- dark gray to black at 14.9ft BGS	
22	CH-SILTY CLAY, trace fine sand to fine gravel, soft, medium to high plasticity, brownish gray, moist	686.80
24	- soft at 16.3ft BGS	
26	- REFUSAL at 18.0ft BGS	
28	END OF BOREHOLE @ 18.0ft BGS	
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
698.80 to 688.80ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
704.80 to 700.80ft BGS
0.00 to 4.00ft BGS
Material: GRANULAR BENTONITE
Sand Pack:
700.80 to 692.80ft BGS
4.00 to 12.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.8
1DP		66		
				1.1
				1.2
2DP		75		
				12.1
				49.1
3DP		85		
				109
				52.1
4DP		90		
				2.6

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

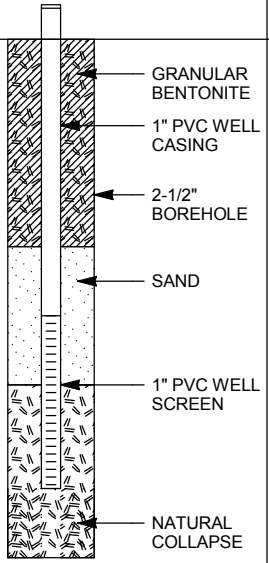
HOLE DESIGNATION: GS-19
DATE COMPLETED: June 15, 2016
DRILLING METHOD: DIRECT PUSH/AIR HAMMER
FIELD PERSONNEL: D. RIVERS

NORTHING: 268563.96
EASTING: 13344210.45

TOP OF RISER 703.93
GROUND SURFACE 700.90

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	CL-SILTY CLAY (FILL), trace fine sand to fine gravel, firm, low plasticity, brown, moist	
		695.90
6	CH-SILTY CLAY, trace fine sand to fine gravel, firm, medium to high plasticity, brownish gray, moist - soft at 6.3ft BGS	
		691.70
10	SM/SC-SILTY SAND, with clay, compact, fine grained, poorly graded, light and dark brown, wet	690.40
12	SM-SILTY SAND, compact, fine to coarse grained, poorly graded, brown, wet	688.90
	OL-ORGANIC SANDY SILT, compact, fine sand, dark brown, moist, hydrogen sulfide-like odor	687.90
14	CH-SILTY CLAY, trace fine sand to fine gravel, firm, medium to high plasticity, brownish gray, moist	685.90
16	END OF BOREHOLE @ 15.0ft BGS	
18		
20		
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
692.90 to 687.90ft BGS
8.00 to 13.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
700.90 to 694.90ft BGS
0.00 to 6.00ft BGS
Material: GRANULAR BENTONITE
Sand Pack:
694.90 to 690.90ft BGS
6.00 to 10.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		80		0.1
				0.1
				1.2
2DP		90		2.7
				2.7
3DP		85		3.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

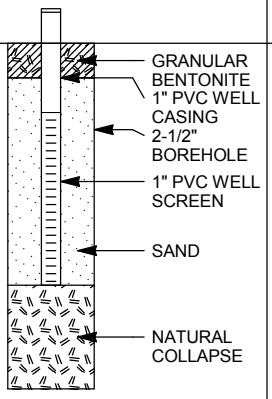
HOLE DESIGNATION: GS-20
DATE COMPLETED: June 13, 2016
DRILLING METHOD: DIRECT PUSH/AIR HAMMER
FIELD PERSONNEL: D. RIVERS

NORTHING: 268464.74
EASTING: 13344519.82

TOP OF RISER 704.43
GROUND SURFACE 701.12

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	SP-SAND (FILL), with silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist	700.32
4	SC-CLAYEY SAND (FILL), with silt, compact, non plastic, fine to coarse grained, poorly graded, gray, moist - moist to wet at 3.0ft BGS	697.12
6	GP-GRAVEL (FILL), loose, fine to coarse grained, gray, wet (crushed limestone)	696.12
8	CH-SILTY CLAY, trace fine sand to fine gravel, firm, medium to high plasticity, brownish gray, moist	
10	END OF BOREHOLE @ 10.0ft BGS	691.12

MONITORING WELL



WELL DETAILS
Screened interval:
699.12 to 694.12ft BGS
2.00 to 7.00ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
701.12 to 700.12ft BGS
0.00 to 1.00ft BGS
Material: GRANULAR BENTONITE
Sand Pack:
700.12 to 694.12ft BGS
1.00 to 7.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		100		1.2
				0.6
2DP		50		0.9
3DP		95		0.5

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

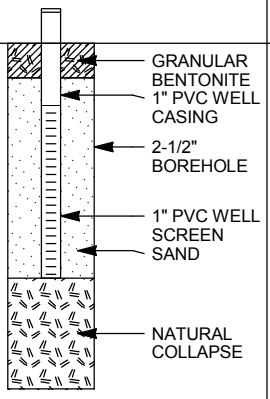
HOLE DESIGNATION: GS-21
DATE COMPLETED: June 13, 2016
DRILLING METHOD: DIRECT PUSH/AIR HAMMER
FIELD PERSONNEL: D. RIVERS

NORTHING: 268435.23
EASTING: 13344760.72

TOP OF RISER 707.86
GROUND SURFACE 704.01

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL/GRASS	703.51
2	CL-SILTY CLAY (FILL), with fine to coarse sand, firm, low plasticity, brown/gray, moist - 0.3' silty sand seam, fine grained, poorly graded, brownish gray, wet at 2.2ft BGS	
4		
6	- 0.1' silty sand seam, fine grained, gray, wet at 4.8ft BGS - 0.1' silty sand seam, fine grained, gray, wet at 6.1ft BGS	697.51
8	CH-SILTY CLAY, trace fine sand to fine gravel, firm, medium to high plasticity, brownish gray, moist	
10	- gray at 8.0ft BGS END OF BOREHOLE @ 10.0ft BGS	694.01
12		
14		
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
702.21 to 697.21ft BGS
1.80 to 6.80ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
704.01 to 703.01ft BGS
0.00 to 1.00ft BGS
Material: GRANULAR BENTONITE
Sand Pack:
703.01 to 697.21ft BGS
1.00 to 6.80ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		75		0.6
2DP		50		0.7
3DP		50		0.5
4DP		66		0.6
5DP		85		0.5

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-3A
DATE COMPLETED: June 14, 2016
DRILLING METHOD: DIRECT PUSH/AIR HAMMER
FIELD PERSONNEL: D. RIVERS

NORTHING: 268627.09
EASTING: 13344167.81

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	701.87						
0	CL-CLAY (FILL), with silt and fine to coarse sand, trace fine gravel, firm, low plasticity, brown, moist							0.1
2	- stiff, brownish gray at 1.0ft BGS			1DP		90		
4		697.87						0.1
6	CL-SILTY CLAY, trace fine sand to fine gravel, firm, low plasticity, gray, moist - with fine sand, trace coarse sand to coarse gravel at 6.0ft BGS							0.0
8			BACKFILLED WITH GRANULAR BENTONITE	2DP		90		
10	- trace fine sand to fine gravel at 9.0ft BGS							0.2
12	- soft at 11.0ft BGS - firm at 12.0ft BGS			3DP		66		0.1
14		687.87						0.1
16	OL-ORGANIC SANDY SILT, compact, fine sand, dark brown, moist, hydrogen sulfide-like odor	686.87						
	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: GS-4A
DATE COMPLETED: June 15, 2016
DRILLING METHOD: DIRECT PUSH/AIR HAMMER
FIELD PERSONNEL: D. RIVERS

NORTHING: 268512.81
EASTING: 13344270.27

GROUND SURFACE 699.45

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CL-SILTY CLAY (FILL), trace fine sand to fine gravel, firm, low plasticity, brown, moist							
2	- fractures, wet at 2.0ft BGS							10.2
		696.45		1DP (2-4' -002)		65		
4	CH-SILTY CLAY, trace fine sand to fine gravel, firm, medium to high plasticity, brownish gray, moist							14.5
6	- very soft at 5.0ft BGS		BACKFILLED WITH GRANULAR BENTONITE					6.9
8	- firm at 8.0ft BGS			2DP		75		7.6
10								
12				3DP		90		3.7
	- REFUSAL at 13.0ft BGS	686.45						
14	END OF BOREHOLE @ 13.0ft BGS							
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 CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

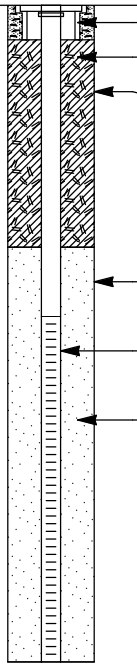
HOLE DESIGNATION: MW19-45
DATE COMPLETED: February 8, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268640.35
EASTING: 13343916.13

	ELEV. ft BGS
TOP OF CASING	717.25
GROUND SURFACE	717.21
TOP OF RISER	716.72

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	717.01
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, brown, moist	716.71
2		716.21
	CL-CLAY (FILL) with silt and fine to medium sand, firm, low plasticity, brown, moist	715.21
4	BRICK DEBRIS	714.91
	COAL AND CINDER DEBRIS	712.21
6	SP-SAND (FILL), trace clay, silt and fine to coarse gravel, compact, fine grained, brown, moist	
8	- 2" coal, cinder and glass debris at 3.3ft BGS - no clay at 4.5ft BGS	
10	SM-SILTY SAND (FILL), compact, fine grained, brown, moist to very moist	706.71
	CL-CLAY (FILL), with silt, trace fine sand, firm, low plasticity, brown, moist	705.71
12	SM-SILTY SAND, compact, fine grained, brown, wet	
14		
16	- gray at 16.5ft BGS	
18		698.86
	CL-SILTY CLAY, stiff, low plasticity, gray, moist	
20		
22	- trace fine sand at 22.3ft BGS	694.46
	SM-SILTY SAND, compact, fine grained, gray, wet	693.21
24	CL-SILTY CLAY, trace fine sand and fine to coarse gravel, stiff, low plasticity, gray, moist	
26		
28		
30	END OF BOREHOLE @ 30.0ft BGS	687.21
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
708.21 to 698.21ft BGS
9.00 to 19.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.21 to 710.21ft BGS
1.00 to 7.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
710.21 to 698.21ft BGS
7.00 to 19.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 2-4' -011/ 012		65		3.7
				7.1
				4.1
2DP		70		
				3.4
				5.3
3DP		100		
				4.1
				6.7
4DP		90		
				4.5
				4.4
5DP		100		
				4.0
				4.9
6DP		55		
				5.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

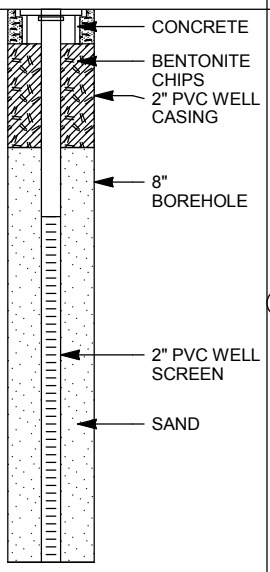
HOLE DESIGNATION: MW19-46
DATE COMPLETED: February 8, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268610.07
EASTING: 13344027.68

	ELEV. ft BGS
TOP OF CASING	716.19
GROUND SURFACE	716.19
TOP OF RISER	715.93

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	715.94
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	715.44 / 714.69
2	SP-SAND (FILL), trace silt, clay and fine to coarse gravel, compact, fine to medium grained, brown, moist	714.44
4	CONCRETE DEBRIS	711.19
6	SP-SAND (FILL), trace silt, clay and fine to coarse gravel, compact, fine to medium grained, brown, moist	
8	- no clay, with silt, with fine gravel, fine to coarse grained at 3.5ft BGS	
10	SM-SILTY SAND (FILL), compact, fine to medium grained, poorly graded, brown, wet	
	- moist at 5.8ft BGS	
12	- with staining at 8.5ft BGS	
	- brown, wet, sheen at 9.5ft BGS	
	- no sheen at 10.0ft BGS	
14	- gray at 12.0ft BGS	702.69
	ML-SILT, with fine sand, compact to dense, no plasticity, gray, moist	701.19
16	CL-SILTY CLAY, stiff, low plasticity, gray, moist	
18		
20	- trace fine to medium sand and fine to coarse gravel at 20.0ft BGS	
22		
24		
26	END OF BOREHOLE @ 25.0ft BGS	691.19
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
710.19 to 700.19ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.19 to 712.19ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.19 to 710.19ft BGS
4.00 to 6.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				7.3
1DP		75		5.7
				5.0
2DP		70		
7.5-9.5' -010				12.0
				9.1
3DP		95		107.3
				48.4
4DP		100		43.4
				11.1
5DP		95		7.2

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

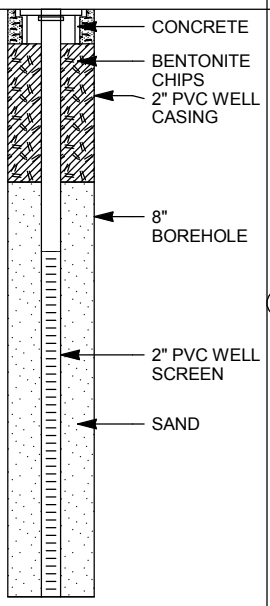
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-47
DATE COMPLETED: February 8, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268550.98
EASTING: 13344110.17

TOP OF CASING 715.29
GROUND SURFACE 715.18
TOP OF RISER 714.93

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	714.93
	GP-GRAVEL (FILL), compact, fine to coarse grained, gray, moist	714.33
2	SP-SAND (FILL), trace silt, clay and fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist	
4	- 1.5" paint sludge at 2.0ft BGS	
	- no clay, with silt at 4.0ft BGS	
6	- trace glass debris at 6.0ft BGS	
8		
		706.18
10	SM-SILTY SAND (FILL), compact, fine grained, brown, very moist to wet	
	- wet at 9.5ft BGS	
12	- with staining at 9.8ft BGS	
	- trace clay, dark gray, sheen at 10.0ft BGS	
	- no clay, brown at 12.0ft BGS	701.98
14	SP-SAND, with silt, compact, fine to medium grained, poorly graded, dark gray, wet, staining	
	- some staining at 13.5ft BGS	699.93
16	- gray, no staining at 14.0ft BGS	698.68
	SM-SILTY SAND, compact to dense, fine grained, gray, wet	
18	CL-SILTY CLAY, stiff, low plasticity, gray, moist	
	- trace fine to medium sand at 18.0ft BGS	
20	- trace fine to coarse gravel at 20.8ft BGS	
22		
24		
26		
28		
30	END OF BOREHOLE @ 30.0ft BGS	685.18
32		
34		
36		
38		



WELL DETAILS
Screened interval:
708.18 to 698.18ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
714.18 to 710.18ft BGS
1.00 to 5.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
710.18 to 698.18ft BGS
5.00 to 17.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				3.1
1DP		60		
				6.8
				10.9
2DP		45		
7.5-9.5' -009				15.5
				83.1
3DP		90		
				144.6
				212.8
4DP		85		
				34.7
				2.6
5DP		70		
				3.3
				2.8
6DP		50		
				2.8

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

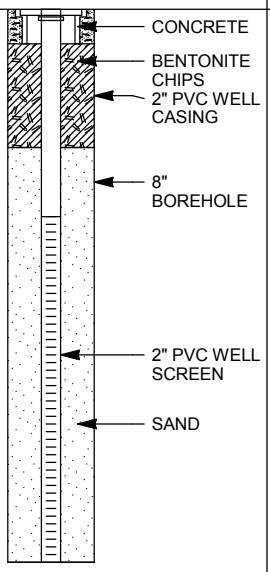
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-48
DATE COMPLETED: February 5, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268487.76
EASTING: 13344164.39

STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
GROUND SURFACE	715.34
TOP OF CASING	715.28
TOP OF RISER	715.02
ASPHALT	714.94
GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	714.14
SP-SAND (FILL), with silt, compact, fine to medium grained, poorly graded, brown, moist	
SM-SILTY SAND (FILL), compact, fine grained, brown, moist	710.34
ML-SILT (FILL), with clay, compact, no plasticity, brown, wet	708.09
SM-SILTY SAND, compact, fine grained, orangish brown, moist	707.34
- brown at 8.15ft BGS	
- very moist at 8.8ft BGS	
- wet at 9.3ft BGS	
- gray at 10.5ft BGS	
- compact to dense at 10.8ft BGS	
CL-SILTY CLAY, trace fine sand and fine gravel, firm to stiff, low plasticity, gray, moist	700.34
- trace fine to medium sand at 19.0ft BGS	
END OF BOREHOLE @ 25.0ft BGS	690.34

MONITORING WELL



WELL DETAILS
Screened interval:
709.34 to 699.34ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
714.34 to 711.34ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
711.34 to 699.34ft BGS
4.00 to 16.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.9
1DP		55		
				0.6
				1.7
2DP		80		
				4.4
				19.9
3DP		85		
				40.6
				387.9
4DP		75		
				103.0
				5.1
5DP		65		
				2.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

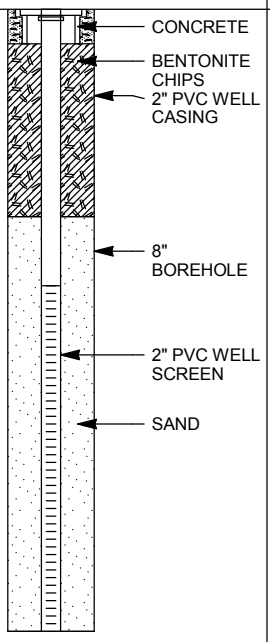
HOLE DESIGNATION: MW19-49
DATE COMPLETED: February 5, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268425.37
EASTING: 13344201.13

	ELEV. ft BGS
GROUND SURFACE	716.58
TOP OF CASING	716.58
TOP OF RISER	716.14

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	716.33
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	715.58
2	SP-SAND (FILL), with clay, trace silt and fine to coarse gravel, compact, fine grained, brown, moist	
4	- 2" wood debris at 1.5ft BGS	
	- no clay or gravel, with silt at 3.5ft BGS	
6	- trace clay at 5.0ft BGS	
	- very moist at 7.3ft BGS	
8	- no clay, moist at 7.8ft BGS	
	SM-SILTY SAND (FILL), compact, fine to medium grained, poorly graded, gray, moist	707.58
10	- very moist at 9.5ft BGS	
	- wet at 10.0ft BGS	705.33
12	CL-SILTY CLAY (FILL), with fine to medium sand, firm, low plasticity, gray, moist	704.08
14	SM-SILTY SAND, compact, fine grained, gray, wet	702.58
16	SP-SAND, with silt, compact, fine grained, gray, wet	
	- some staining at 17.4ft BGS	699.08
18	CL-SILTY CLAY, firm, moderate plasticity, gray, moist	
20		
22		
24	- trace fine sand at 25.0ft BGS	
26		
28		
30	END OF BOREHOLE @ 30.0ft BGS	686.58
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
708.58 to 698.58ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.58 to 710.58ft BGS
1.00 to 6.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
710.58 to 698.58ft BGS
6.00 to 18.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				1.8
1DP		80		
				2.2
				2.4
2DP		75		
				1.9
				2.1
3DP		85		
				1.3
				376.7
4DP		80		
				418.7
				17.1
5DP		95		
				14.9
				8.5
6DP		55		
				6.3

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

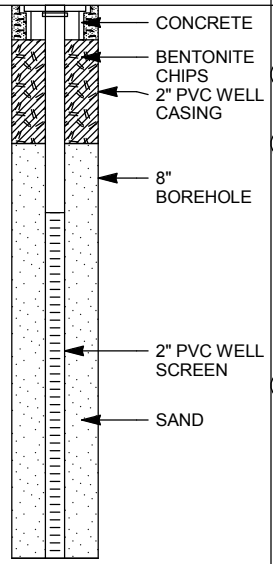
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-50
DATE COMPLETED: February 4, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268430.72
EASTING: 13344251.27

STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
GROUND SURFACE	716.23
TOP OF CASING	716.23
TOP OF RISER	715.69
ASPHALT	715.98
GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	715.48
SP-SAND (FILL), trace clay, compact, fine to medium grained, poorly graded, brown, moist - 2" wood debris at 1.5ft BGS	
- with clay, trace fine to coarse gravel, dark brown at 1.8ft BGS	711.73 711.23
CL-SILTY CLAY (FILL), trace fine to medium sand and rootlets, firm, low plasticity, gray, moist	708.48
SM-SILTY SAND (FILL), compact, fine grained, brown, moist	707.73
ML-SANDY SILT (FILL), compact, fine grained, brown, moist	
SP-SAND (FILL), with silt, compact, fine grained, orangish brown, moist - wet at 10.0ft BGS	704.73 703.98
CL-CLAY (FILL), with silt, and fine to medium sand, trace fine gravel, firm, low plasticity, brown, moist	701.23
SP-SAND, with silt, compact, fine grained, brown and gray, wet - gray at 12.5ft BGS - fine to coarse grained, staining, petroleum-like odor at 13.5ft BGS	
CL-SILTY CLAY, stiff, low plasticity, gray, moist - trace fine to medium sand at 19.5ft BGS	
END OF BOREHOLE @ 25.0ft BGS	691.23



WELL DETAILS
Screened interval:
710.23 to 700.23ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.23 to 712.23ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.23 to 700.23ft BGS
4.00 to 16.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1-3' -007 1DP		70		12.7
3-5' -004/ 005				6.0
2DP		70		5.5
				4.2
10-12' -006				4.7
3DP		85		667.4
				268.5
4DP		90		28.6
				10.7
5DP		90		9.4

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

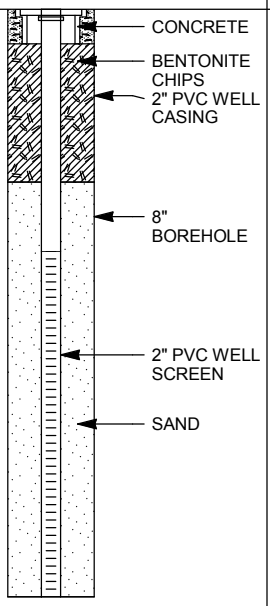
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-51
DATE COMPLETED: February 4, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268319.14
EASTING: 13344311.27

STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
GROUND SURFACE	716.16
TOP OF CASING	716.15
TOP OF RISER	715.81
ASPHALT	715.76
GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	715.26
SP-SAND (FILL), with silt, trace clay, compact, fine to medium grained, poorly graded, brown, moist	
- no clay at 2.0ft BGS	711.91
SM-SILTY SAND (FILL), compact, fine grained, brown, moist	709.16
SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist	707.91
CL-SILTY CLAY (FILL), with fine to medium sand, firm, low plasticity, brown, moist	706.76
- trace sand, gray at 8.8ft BGS	
ML-SANDY SILT, compact, fine grained, brown, wet	704.16
SM-SILTY SAND, compact, fine grained, brown, wet	
- gray at 13.5ft BGS	701.66
- fine to medium grained at 14.3ft BGS	
SM-SILTY SAND, compact, fine grained, gray, wet	699.66
CL-SILTY CLAY, stiff, low plasticity, gray, moist	698.41
ML-SILT, trace fine sand, compact, to dense, gray, wet	697.66
CL-SILTY CLAY, stiff, low plasticity, gray, moist	696.16
END OF BOREHOLE @ 20.0ft BGS	



WELL DETAILS
Screened interval:
709.16 to 699.16ft BGS
7.00 to 17.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.16 to 711.16ft BGS
1.00 to 5.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
711.16 to 699.16ft BGS
5.00 to 17.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				4.7
1DP		80		
				3.1
				4.3
2DP		70		
				3.5
				3.2
3DP		100		
				332.9
				430.6
4DP		100		
				14.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

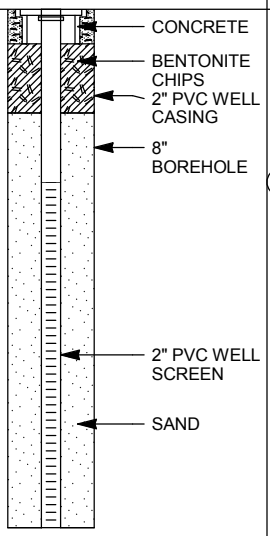
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-52
DATE COMPLETED: February 4, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268411.76
EASTING: 13344359.68

STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
GROUND SURFACE	715.72
TOP OF CASING	715.70
TOP OF RISER	715.25
ASPHALT	715.47
GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray	714.97
SP-SAND (FILL), with clay, trace fine to coarse gravel, glass and wood debris, compact, fine grained, brown, moist	713.22
- no glass or wood debris at 1.5ft BGS	712.72
CL-SILTY CLAY (FILL), trace fine to medium sand, firm, low plasticity, brown, moist	710.72
SP-SAND (FILL), with clay, trace fine to coarse gravel, fine grained, brown, moist	709.22
SM-SILTY SAND (FILL), compact, fine grained, dark greenish brown, moist	708.72
- brown at 6.0ft BGS	
ML-SANDY SILT (FILL), compact, fine grained, brown, moist	
SP-SAND, with silt, compact, fine grained, orangish brown, moist	702.47
- brown at 8.0ft BGS	
- wet at 10.0ft BGS	701.22
- trace fine gravel, fine to medium grained at 12.3ft BGS	
- gray at 12.8ft BGS	
SM-SILTY SAND, compact to dense, fine grained, gray, wet	
CL-SILTY CLAY, firm to stiff, low plasticity, gray, moist	
- trace fine to medium sand at 17.3ft BGS	
- trace fine gravel at 20.5ft BGS	
END OF BOREHOLE @ 25.0ft BGS	690.72



WELL DETAILS
Screened interval:
710.72 to 700.72ft BGS
5.00 to 15.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
714.72 to 712.72ft BGS
1.00 to 3.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
712.72 to 700.72ft BGS
3.00 to 15.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		75		5.8
4-6' -003				13.8
2DP		75		6.7
				4.4
3DP		80		17.8
				24.9
4DP		85		21.6
				1.5
5DP		85		2.0
				0.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (4-6' -003)

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

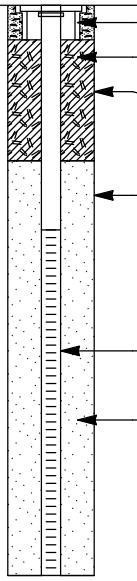
HOLE DESIGNATION: MW19-53
DATE COMPLETED: February 3, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268276.28
EASTING: 13344343.52

	ELEV. ft BGS
GROUND SURFACE	716.10
TOP OF CASING	716.07
TOP OF RISER	715.72

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	715.70
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	715.20
2	SP-SAND (FILL), trace silt, and fine gravel, compact, fine to medium grained, poorly graded, brown, moist	
4	- with silt at 3.9ft BGS	
	- trace fine to coarse gravel at 5.3ft BGS	
6	- trace silt at 7.0ft BGS	
8	SM-SILTY SAND (FILL), trace clay nodules, compact, fine grained, brown, moist	708.10
		706.60
10	CL-CLAY (FILL), with fine sand and silt, firm, low plasticity, brown, moist	706.10
12	SM-SILTY SAND, compact to dense, brown, wet	
	- gray at 11.0ft BGS	
14	- fine to medium grained at 14.3ft BGS	
	- fine grained at 14.4ft BGS	
16	CL-SILTY CLAY, trace fine sand, firm, low plasticity, gray, moist	700.60
18	- 4" silt lens, wet at 18.0ft BGS	
20	END OF BOREHOLE @ 20.0ft BGS	696.10
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
709.60 to 699.60ft BGS
6.50 to 16.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.10 to 711.60ft BGS
1.00 to 4.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
711.60 to 699.60ft BGS
4.50 to 16.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				5.2
1DP		75		
				6.2
				6.1
2DP		70		
				6.8
				7.7
3DP		75		
				76.5
				312.6
4DP		90		
				11.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

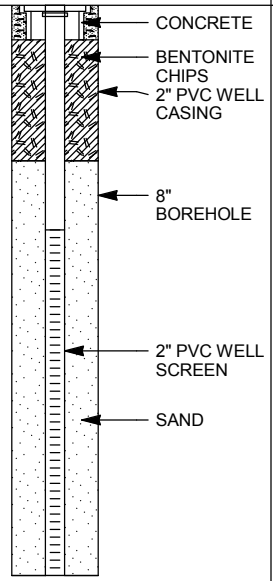
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-54
DATE COMPLETED: February 3, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268175.66
EASTING: 13344403.58

	ELEV. ft BGS
GROUND SURFACE	715.87
TOP OF CASING	715.87
TOP OF RISER	715.51

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	715.47
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	715.07
2	SP-SAND (FILL), trace silt and fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist	
4	- with silt, very moist at 4.5ft BGS	
	- with clay, moist at 5.0ft BGS	
6		
		708.87
8	SP-SAND, with silt, compact, fine grained, brown, moist	
	- fine to medium grained at 7.5ft BGS	
10	- with fine gravel, fine to coarse grained at 8.3ft BGS	
	- with fine to coarse gravel at 8.9ft BGS	
12	- with fine gravel at 9.3ft BGS	
	- wet at 11.0ft BGS	703.37
	- with fine to coarse gravel at 11.5ft BGS	702.22
14	CL-SILTY CLAY, trace fine sand, firm, low plasticity, brown, moist	
	- 1" silty sand lens at 12.8ft BGS	
16		699.87
	SP-SAND, with silt, compact, fine grained, gray, wet	
18	- fine to medium grained at 15.0ft BGS	
	- with fine gravel, trace silt, fine to coarse grained at 15.8ft BGS	
20		695.87
	CL-SILTY CLAY, trace fine sand, firm, low plasticity, gray, moist	
22	- 6" silt lens at 19.2ft BGS	
	END OF BOREHOLE @ 20.0ft BGS	
24		
26		
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
709.37 to 699.37ft BGS
6.50 to 16.50ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
714.87 to 711.37ft BGS
1.00 to 4.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
711.37 to 699.37ft BGS
4.50 to 16.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				1.6
1DP		70		
				1.9
				2.3
2DP		75		
				2.3
				3.4
3DP		70		
				17.0
				88.7
4DP		65		
				44.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-55
DATE COMPLETED: February 2, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268242.28
EASTING: 13344605.81

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE	715.85						
	TOP OF CASING	715.81						
	TOP OF RISER	715.36						
0	ASPHALT	715.50	CONCRETE					
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	715.00	BENTONITE CHIPS					1.6
2	SP-SAND (FILL), with clay, trace silt and fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist		2" PVC WELL CASING	1DP		70		
4	- no clay, with silt at 1.9ft BGS							1.5
6								1.6
	- fine to coarse grained at 7.5ft BGS		8" BOREHOLE					
8	- fine to medium grained at 8.0ft BGS			2DP		70		1.9
10	- fine to coarse grained at 10.0ft BGS		2" PVC WELL SCREEN					
	CL-SANDY CLAY (FILL), firm, low plasticity, fine to medium grained, brown, moist	705.35						1.6
12	SM-SILTY SAND, compact, fine grained, brown, moist	705.20	SAND	3DP		85		
14	- very moist to wet at 12.0ft BGS - wet at 14.0ft BGS							2.5
16	- fine to medium grained at 16.5ft BGS							51.6
	CL-SILTY CLAY, firm, moderate plasticity, gray, moist	698.35		4DP		75		7.1
18								
20	END OF BOREHOLE @ 20.0ft BGS	695.85						
22								
24								
26								
28								
30								
32								
34								
36								
38								

WELL DETAILS
Screened interval:
707.85 to 697.85ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
714.85 to 709.85ft BGS
1.00 to 6.00ft BGS
Material: BENTONTITE CHIPS
Sand Pack:
709.85 to 697.85ft BGS
6.00 to 18.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

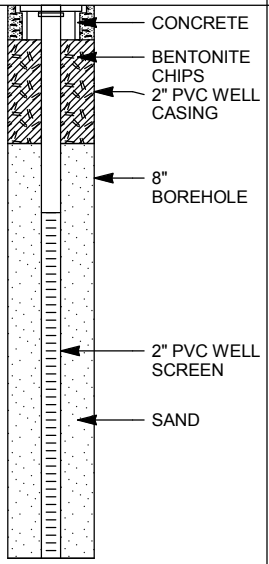
HOLE DESIGNATION: MW19-56
DATE COMPLETED: February 2, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268298.6
EASTING: 13344663.09

	ELEV. ft BGS
TOP OF CASING	714.15
GROUND SURFACE	714.13
TOP OF RISER	713.74

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	713.88
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	713.38
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine to medium grained, poorly graded, brown, moist	
4	- no gravel, with silt at 3.0ft BGS	
	- with clay, fine grained at 5.0ft BGS	
6	- gray at 5.5ft BGS	
	- no clay, brown at 6.5ft BGS	
8	CL-SANDY CLAY (FILL), firm, low plasticity, fine to medium grained, brown, moist	706.38
	- 2" silt sand lens at 8.2ft BGS	
10	- 5" silty sand lens at 8.8ft BGS	704.28
	- 2" silty sand lens, orangish brown at 9.5ft BGS	
12	SM-SILTY SAND, compact, fine grained, brown, wet	
14	- gray at 12.5ft BGS	700.63
	ML-SANDY SILT, compact, fine grained, gray, wet	699.63
16	SM-SILTY SAND, compact, fine to medium grained, gray, wet	698.88
18	CL-SILTY CLAY, trace fine to medium sand, firm, low plasticity, gray, moist	
20	END OF BOREHOLE @ 20.0ft BGS	694.13
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
708.13 to 698.13ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
713.13 to 710.13ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
710.13 to 698.13ft BGS
4.00 to 16.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				1.9
1DP		80		
				1.3
				1.6
2DP		75		
				2.0
				2.2
3DP		90		
				57.3
				17.5
4DP		70		
				2.5

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

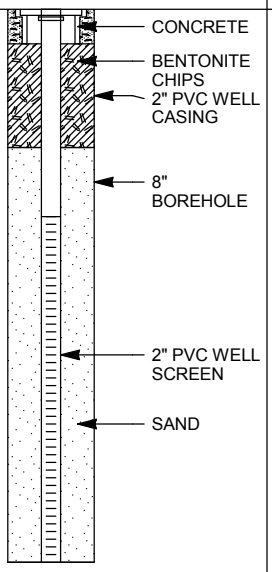
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-57
DATE COMPLETED: February 2, 2016
DRILLING METHOD: GEOPROBE/HSA
FIELD PERSONNEL: C. BONDY

NORTHING: 268363.2
EASTING: 13344504.92

	ELEV. ft BGS
TOP OF CASING	715.57
GROUND SURFACE	715.56
TOP OF RISER	715.13

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	ASPHALT	715.31
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	715.06
2	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine grained, brown, moist - with clay nodules at 2.5ft BGS - 4" silty clay lens at 3.0ft BGS - fine to medium grained at 3.6ft BGS - 2.5" sandy clay lens at 4.3ft BGS	
4		
6		
8	ML-SANDY SILT (FILL), compact, fine grained, brown and gray, wet	708.06
	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine grained, brown, moist	706.81
10	CL-SANDY CLAY (FILL), soft to firm, low plasticity, fine to medium grained, gray, very moist	705.56
12	- 2" sand seam, fine grained, orangish brown, wet at 11.3ft BGS	703.56
14	SM-SILTY SAND, compact, fine grained, brown, wet	
16	- gray at 14.5ft BGS	700.06
	CL-SILTY CLAY, trace fine to medium sand, firm, low plasticity, gray, moist	
18		
20	END OF BOREHOLE @ 20.0ft BGS	695.56
22		
24		
26		
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
709.56 to 699.56ft BGS
6.00 to 16.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
714.56 to 711.56ft BGS
1.00 to 4.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
711.56 to 699.56ft BGS
4.00 to 16.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		100		1.6
				2.7
				1.6
2DP		80		2.2
				1.6
3DP		80		21.7
				25.5
4DP		90		1.7

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

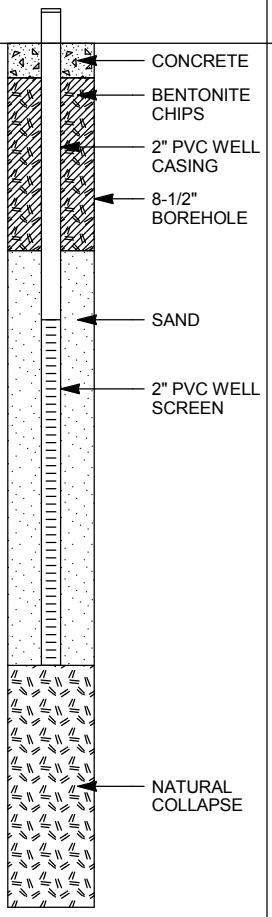
PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: MW19-58
DATE COMPLETED: June 15, 2016
DRILLING METHOD: DIRECT PUSH/HSA
FIELD PERSONNEL: D. RIVERS

NORTHING: 268613.06
EASTING: 13344154.48

	ELEV. ft BGS
TOP OF CASING	714.95
TOP OF RISER	714.38
GROUND SURFACE	711.20

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	TOPSOIL/GRASS	710.20
2	CL-SILTY CLAY (FILL), trace fine sand to fine gravel, firm, low plasticity, brown, moist	
4		
6	- brown/gray at 5.0ft BGS	
8		703.20
10	SP-SAND, trace silt, compact, fine grained, poorly graded, brown, moist - trace silt and fine gravel, grayish brown, wet at 9.6ft BGS	
12		
14		
16	- 0.2' piece of wood/log, black at 15.8ft BGS - dark gray to black at 16.0ft BGS	694.70
18	PT-PEAT, fiberous, dark brown, moist	693.90
	SP-SAND, trace silt, compact, fine grained, poorly graded, brown, moist	693.20
20	OL-ORGANIC SANDY SILT, trace clay and marl, compact, non plastic, dark brown, moist	691.20
22	CH-SILTY CLAY, trace fine sand to fine gravel, firm, medium to high plasticity, brownish gray, moist	
24		
26	END OF BOREHOLE @ 25.0ft BGS	686.20
28		
30		
32		
34		
36		
38		



WELL DETAILS
Screened interval:
703.20 to 693.20ft BGS
8.00 to 18.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
710.20 to 705.20ft BGS
1.00 to 6.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
705.20 to 693.20ft BGS
6.00 to 18.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		90		1.1
				0.4
				0.3
2DP		80		
				0.5
				0.4
3DP		75		
				0.2
				1.2
4DP		75		
				1.1
				0.6
5DP		75		
				0.5

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

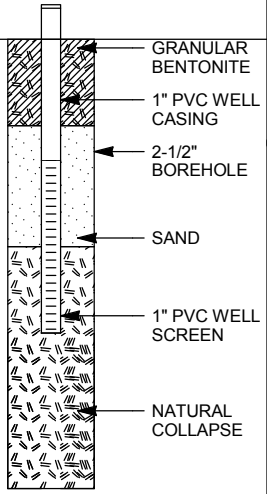
HOLE DESIGNATION: MW19-59
DATE COMPLETED: June 15, 2016
DRILLING METHOD: DIRECT PUSH/AIR HAMMER
FIELD PERSONNEL: D. RIVERS

NORTHING: 268495.98
EASTING: 13344265.53

TOP OF RISER 705.82
GROUND SURFACE 703.93

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft BGS
0	CL-SILTY CLAY (FILL), trace fine sand to fine gravel, firm, low plasticity, brown, moist	
2	- soft, brown/gray at 2.5ft BGS	
4		699.43
	SP-SAND, trace silt, compact, fine grained, poorly graded, greenish gray to black, wet	
6	- dark gray to black at 5.0ft BGS	697.93
	SM-SILTY SAND, trace clay, compact, fine grained, poorly graded, gray to black, wet	
8		695.93
	CH-SILTY CLAY, trace fine sand to fine gravel, firm, medium to high plasticity, brownish gray, moist	
10		
12		
	- REFUSAL at 13.0ft BGS	690.93
14	END OF BOREHOLE @ 13.0ft BGS	
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		
36		
38		

MONITORING WELL



WELL DETAILS
Screened interval:
700.43 to 695.43ft BGS
3.50 to 8.50ft BGS
Length: 5ft
Diameter: 1in
Slot Size: 0.010
Material: PVC
Seal:
703.93 to 701.43ft BGS
0.00 to 2.50ft BGS
Material: GRANULAR BENTONITE
Sand Pack:
701.43 to 697.93ft BGS
2.50 to 6.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 2-4' -001		85		115
				305
				125
2DP		90		
				159
3DP		90		30.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-114
DATE COMPLETED: February 3, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.25	ASPHALT					
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, wet	0.75						4.8
2	SP-SAND (FILL), with clay, trace silt and fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, wet			1DP		65		
4								5.1
	- no clay or gravel, with silt, fine grained, moist at 2.5ft BGS	5.00						
6	SM-SILTY SAND (FILL), compact, fine grained, brown, moist	6.25						5.8
	- 2" clay lens at 6.0ft BGS			2DP		80		
8	SP-SAND (FILL), with silt, compact, fine grained, brown, moist							4.7
		9.50						
10	- 3" orangish brown at 8.8ft BGS	9.85	BACKFILLED WITH BENTONITE CHIPS					
	CL-SANDY CLAY (FILL), firm, low plasticity, fine to medium sand, brown, moist							7.6
12	SP-SAND, with silt, compact, fine grained, brown, wet			3DP		75		
	- 2" silty clay lens at 10.5ft BGS	13.50						230.6
14	SM-SILTY SAND, compact to dense, fine grained, gray, wet							
16								263.0
	CL-SILTY CLAY, trace fine sand, firm to stiff, gray, moist	16.50						
18				4DP		100		
								2.9
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

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-115
DATE COMPLETED: February 3, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	ASPHALT	0.40
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	0.80
	SP-GRAVELLY SAND (FILL), trace silt, loose to compact, fine to coarse sand, fine gravel, poorly graded, brown, moist	
	- trace gravel, compact, fine to medium grained at 1.5ft BGS	4.00
	SM-SILTY SAND (FILL), compact, fine grained, brown, moist	
	SM-SILTY SAND, compact, fine grained, brown, wet	10.00
	- gray at 13.5ft BGS	
	CL-SILTY CLAY, trace fine sand, firm, medium plasticity, gray, moist	15.25
	END OF BOREHOLE @ 20.0ft BGS	20.00

BOREHOLE: ASPHALT; BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		70		2.5
				3.2
2DP		70		2.9
				3.4
3DP		70		3.4
13-15'-002				382.4
4DP		80		116.9
				6.9

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

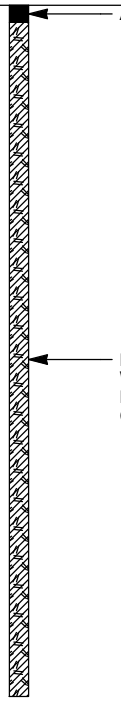
OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-116
DATE COMPLETED: February 1, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	ASPHALT	0.50
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	1.00
	SC-CLAYEY SAND (FILL), trace silt and fine to coarse gravel, compact, fine grained, brown, moist	2.25
	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist	5.00
	SM-SILTY SAND (FILL), trace clay, compact, fine grained, brown, moist	5.35
	SP-SAND (FILL), with silt, with fine to coarse gravel, compact, fine to coarse grained, poorly graded, brown, moist	10.00
	- very moist to wet at 7.0ft BGS	10.70
	- very moist at 7.5ft BGS	11.70
	- fine to medium grained, moist at 7.8ft BGS	
	CL-SILTY CLAY (FILL), trace fine to coarse sand and fine to coarse gravel, firm, low plasticity, gray, moist	15.00
	SP-SAND (FILL), with silt and clay nodules, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, gray, wet	18.00
	SP-SAND, with silt, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, gray, wet	20.00
	- 2" clay lens at 13.5ft BGS	
	- 1.5" clay lens at 14.5ft BGS	
	SM-SILTY SAND, compact, fine grained, gray, wet	
	CL-SILTY CLAY, trace fine sand, firm, low plasticity, gray, moist	
	- 1" silt lens at 18.5ft BGS	
	- 2" silt lens at 19.3ft BGS	
	END OF BOREHOLE @ 20.0ft BGS	



SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.8
1DP		70		
				1.0
				1.0
2DP		70		
				1.0
				0.7
3DP		85		
				0.8
				19.9
4DP		85		
				1.3

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-117
DATE COMPLETED: February 1, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	ASPHALT	0.50
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	0.65
	SP-SAND (FILL), with clay, trace fine to coarse gravel, compact, fine grained, brown, moist - with silt, no clay at 4.0ft BGS	5.00
	ML-SANDY SILT (FILL), compact, fine grained, brown, moist - wet at 6.0ft BGS	6.50
	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine grained, brown, moist - with clay at 9.0ft BGS	9.50
	CL-SILTY CLAY (FILL), with fine sand, firm, low plasticity, brown, moist	10.00
	SM-SILTY SAND, compact to dense, fine grained, brown, wet - compact, fine to medium grained, gray at 14.5ft BGS	17.00
	CL-SILTY CLAY, trace fine to medium sand, firm, moderate plasticity, gray, moist	20.00
	END OF BOREHOLE @ 20.0ft BGS	

BOREHOLE: ASPHALT; BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				0.9
1DP		70		
				1.2
				0.8
2DP		80		
				1.0
				1.0
3DP		80		
				2.8
				46.8
4DP		85		
				3.3

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-118
DATE COMPLETED: February 1, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	ASPHALT	0.50
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	1.00
		1.50
		2.20
	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist	
	SC-CLAYEY SAND (FILL), compact, fine to medium grained, poorly graded, dark brown, moist	6.00
	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist	7.00
	SC-CLAYEY SAND (FILL), compact, fine to medium grained, poorly graded, dark brown, moist	
	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to coarse grained, poorly graded, brown, very moist	
	- with gravel, moist at 8.0ft BGS	13.50
	- gravelly sand at 8.5ft BGS	
	- 3" orangish brown at 10.0ft BGS	14.50
	- wet at 13.0ft BGS	15.00
	SM-SILTY SAND, trace fine gravel, compact, fine to medium grained, poorly graded, brown, wet	
	CL-SILTY CLAY, trace fine sand, firm, moderate plasticity, gray, moist	
	END OF BOREHOLE @ 15.0ft BGS	

BOREHOLE: ASPHALT; BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
				1.1
1DP		60		
				1.0
				0.8
2DP		80		
				1.4
				1.2
3DP		60		
				5.2

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-119
DATE COMPLETED: February 1, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.50	ASPHALT					
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	1.00						2.3
2	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to coarse grained, poorly graded, brown, moist			1DP		75		
4								1.9
	SC-CLAYEY SAND (FILL), trace silt and fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist	5.00 5.70						
6								2.3
	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to coarse grained, poorly graded, brown, moist			2DP		75		
8								2.7
	- gravelly sand at 7.8ft BGS							
10	- with gravel at 9.2ft BGS	10.00	BACKFILLED WITH BENTONITE CHIPS					
	SP-SAND, with silt, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist							1.1
12				3DP		60		
	- very moist at 13.0ft BGS							
14	- with gravel, fine to coarse grained at 13.5ft BGS							1.7
	- wet at 14.0ft BGS							
16	- gray at 14.5ft BGS	16.00						--
	CL-SILTY CLAY, trace fine sand and fine gravel, firm, low plasticity, gray, moist			4DP		75		
18								--
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

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-120
DATE COMPLETED: February 1, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	ASPHALT	0.40
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	0.80
	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist	
	- fine to coarse grained at 5.3ft BGS	
	- orangish brown at 7.5ft BGS	
	SM-SILTY SAND, compact, fine grained, light brown, moist	8.00
	- light gray at 11.5ft BGS	
	- very moist at 13.0ft BGS	
	ML-SANDY SILT, compact, fine grained, gray, wet	13.50 14.00
	CL-SILTY CLAY, trace fine sand, firm, low plasticity, gray, moist	14.75
	- 2" silty sand seam at 14.25ft BGS	
	SM-SILTY SAND, compact, fine grained, gray, wet	17.00
	CL-SILTY CLAY, firm, moderate plasticity, gray, moist	20.00
	END OF BOREHOLE @ 20.0ft BGS	

BOREHOLE: ASPHALT; BACKFILLED WITH BENTONITE CHIPS

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP		60		2.1
				1.4
				1.5
2DP		70		
				2.3
				2.8
3DP		75		
				2.0
				1.4
4DP		75		
				2.2

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER - CVO
PROJECT NUMBER: 017303
CLIENT: RACER TRUST
LOCATION: YPSILANTI, MICHIGAN

HOLE DESIGNATION: SB19-121
DATE COMPLETED: February 1, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: C. BONDY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.50	ASPHALT					
	GP-GRAVEL (FILL), compact, fine to coarse grained, poorly graded, gray, moist	1.00						1.6
2	SP-SAND (FILL), with silt, trace fine to coarse gravel, compact, fine to medium grained, poorly graded, brown, moist			1DP		55		
4								1.2
6	- fine to coarse grained at 5.0ft BGS							1.8
8	- trace silty clay lenses at 8.0ft BGS - orangish brown at 8.8ft BGS		BACKFILLED WITH BENTONITE CHIPS	2DP		75		
	SM-SILTY SAND, compact, fine grained, brown, moist	9.25						1.1
10	ML-SANDY SILT, compact, fine grained, gray, moist	10.50 11.00						
12	SM-SILTY SAND, compact, fine grained, brown, wet			3DP		85		1.2
14	ML-SANDY SILT, compact, fine grained, gray, wet	14.00 14.30						2.0
16	CL-SILTY CLAY, firm, moderate plasticity, gray, moist	15.00						
	END OF BOREHOLE @ 15.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 017303-WI.GPJ CRA_CORP.GDT 12/15/16

Appendix B
Databox Figures

MW19-45	2/8/2016 2-4 ft BGS ug/kg
Metals	
Antimony	7300 J(A,B,C,E,F)/9800 J(A,B,C,E,F)
Arsenic	44000 (A,B,C,D,E,F,I)/69000 (A,B,C,D,E,F,I)
Barium	280000 (A,B,C,F)/210000 (A,B,C,F)
Beryllium	280 (A,B,C,F)/350 (A,B,C,F)
Cadmium	4600 (A,B,C,F)/5000 (A,B,C,F)
Chromium	16000/16000
Cobalt	3600/3400
Copper	130000 (A,B,C,F)/160000 (A,B,C,F)
Lead - total (calculated by fine/coarse fraction)	100000 (A,B,C,F)/110000 (A,B,C,F)
Nickel	8300/8200
Selenium	1600 (A,B,C,F,I)/1700 (A,B,C,F,I)
Thallium	240 (A,B,C,F)/340 (A,B,C,F)
Vanadium	9900 (A,B,C,F,G)/9100 (A,B,C,F,G)
Zinc	550000 J(A,B,C,F,G,I)/820000 J(A,B,C,F,G,I)
SVOCs	
2-Methylnaphthalene	31 J/20 J
Acenaphthene	220 J/100 J
Acenaphthylene	1500 U/5.9 J(I)
Anthracene	350 J(I)/200 J(I)
Benzo(a)anthracene	1100 J(A,B,C,E,F,G,I)/700 (A,B,C,E,F,G,I)
Benzo(a)pyrene	1000 J(A,B,C,E,F,I)/660 (A,B,C,E,F,I)
Benzo(b)fluoranthene	1500 (A,B,C,E,F,G,I)/960 (A,B,C,E,F,G,I)
Benzo(g,h,i)perylene	770 J(A,B,C,E,F,I)/570 (A,B,C,E,F,I)
Benzo(k)fluoranthene	590 J(A,B,C,E,F,G,I)/400 (A,B,C,E,F,G,I)
bis(2-Ethylhexyl)phthalate (DEHP)	1500 U/290 U
Carbazole	250 J(A,B,C,F)/100 J(A,B,C,F)
Chrysene	1300 J(A,B,C,E,F,G,I)/840 (A,B,C,E,F,G,I)
Dibenz(a,h)anthracene	200 J(A,B,C,E,F,G,I)/130 J(A,B,C,E,F,G,I)
Dibenzofuran	91 J(D,E)/50 J(D,E)
Di-n-butylphthalate (DBP)	310 J(A,B,C,F)/72 J(A,B,C,F)
Fluoranthene	2000/1200
Fluorene	150 J/74 J
Indeno(1,2,3-cd)pyrene	630 J(A,B,C,E,F,G,I)/470 (A,B,C,E,F,G,I)
Isophorone	1500 U/16 J(A,B,C,F)
Naphthalene	77 J/37 J
Phenanthrene	1500/870
Pyrene	2300 (I)/1400 (I)
VOCs	
Benzene	45 U/44 U
cis-1,2-Dichloroethene	45 U/44 U
Methylene chloride	220 U/220 U
Trichloroethene	94/110 (E)
Vinyl chloride	36 U/35 U

MW19-46	2/8/2016 7.5-9.5 ft BGS ug/kg
Metals	
Antimony	310 U
Arsenic	2400
Barium	5900
Beryllium	96 J(A,B,C,F)
Cadmium	100
Chromium	5700
Cobalt	1200
Copper	4800
Lead	2300
Nickel	3900
Selenium	970 (A,B,C,F,I)
Thallium	60 J(A,B,C,F)
Vanadium	7800 (A,B,C,F,G)
Zinc	16000 J
SVOCs	
2-Methylnaphthalene	24000 J(I)
Acenaphthene	25000 J(I)
Acenaphthylene	4700 J(I)
Anthracene	28000 J(I)
Benzo(a)anthracene	42000 (A,B,C,E,F,G,I)
Benzo(a)pyrene	29000 (A,B,C,D,E,F,I)
Benzo(b)fluoranthene	38000 (A,B,C,E,F,G,I)
Benzo(g,h,i)perylene	11000 J(A,B,C,E,F,I)
Benzo(k)fluoranthene	16000 J(A,B,C,E,F,G,I)
bis(2-Ethylhexyl)phthalate (DEHP)	29000 U
Carbazole	4700 J(A,B,C,F,I)
Chrysene	37000 (A,B,C,E,F,G,I)
Dibenz(a,h)anthracene	2900 J(A,B,C,E,F,G,I)
Dibenzofuran	13000 J(D,E,I)
Di-n-butylphthalate (DBP)	29000 U
Fluoranthene	90000 (I)
Fluorene	24000 J(I)
Indeno(1,2,3-cd)pyrene	11000 J(A,B,C,E,F,G,I)
Isophorone	29000 U
Naphthalene	110000 (E,I)
Phenanthrene	110000 (I)
Pyrene	110000 (I)
VOCs	
Benzene	42 U
cis-1,2-Dichloroethene	42 U
Methylene chloride	210 U
Trichloroethene	42 U
Vinyl chloride	33 U

MW19-47	2/8/2016 7.5-9.5 ft BGS ug/kg
Metals	
Antimony	8800 J(A,B,C,E,F)
Arsenic	3300
Barium	60000
Beryllium	170 (A,B,C,F)
Cadmium	24000 (A,B,C,E,F,I)
Chromium	13000
Cobalt	3000
Copper	28000
Lead - total (calculated by fine/coarse fraction)	360000 (A,B,C,F)
Nickel	12000
Selenium	1200 (A,B,C,F,I)
Thallium	75 J(A,B,C,F)
Vanadium	9200 (A,B,C,F,G)
Zinc	180000 J(A,B,C,F,G)
SVOCs	
2-Methylnaphthalene	27 J
Acenaphthene	1500 U
Acenaphthylene	1500 U
Anthracene	45 J(I)
Benzo(a)anthracene	530 J(A,B,C,E,F,G,I)
Benzo(a)pyrene	770 J(A,B,C,E,F,I)
Benzo(b)fluoranthene	1100 J(A,B,C,E,F,G,I)
Benzo(g,h,i)perylene	790 J(A,B,C,E,F,I)
Benzo(k)fluoranthene	400 J(A,B,C,E,F,G,I)
bis(2-Ethylhexyl)phthalate (DEHP)	1500 U
Carbazole	1500 U
Chrysene	730 J(A,B,C,E,F,G,I)
Dibenz(a,h)anthracene	170 J(A,B,C,E,F,G,I)
Dibenzofuran	1500 U
Di-n-butylphthalate (DBP)	430 J(A,B,C,F)
Fluoranthene	860 J
Fluorene	1500 U
Indeno(1,2,3-cd)pyrene	640 J(A,B,C,E,F,G,I)
Isophorone	1500 U
Naphthalene	41 J
Phenanthrene	330 J
Pyrene	760 J(I)
VOCs	
Benzene	88 U
cis-1,2-Dichloroethene	150
Methylene chloride	440 U
Trichloroethene	4900 (E,F,I)
Vinyl chloride	70 U

GS-4A	6/15/2016 2-4 ft BGS ug/kg
Metals	
Antimony	180 J(A,B,C,F)
Arsenic	7800 (A,B,C,E,F,I)
Barium	63000
Beryllium	400 (A,B,C,F)
Cadmium	310
Chromium	13000
Cobalt	9200 (A,B,C,E,F,I)
Copper	18000
Lead	10000 J
Nickel	26000 (A,B,C,F)
Selenium	1400 (A,B,C,F,I)
Thallium	350 (A,B,C,F)
Vanadium	17000 (A,B,C,F,G)
Zinc	55000 (A,B,C,F,G)
SVOCs	
2-Methylnaphthalene	82 J
Acenaphthene	750 U
Acenaphthylene	750 U
Anthracene	750 U
Benzo(a)anthracene	24 J(A,B,C,E,F,G,I)
Benzo(a)pyrene	27 J(A,B,C,E,F,I)
Benzo(b)fluoranthene	42 J(A,B,C,E,F,G,I)
Benzo(g,h,i)perylene	31 J(A,B,C,E,F,I)
Benzo(k)fluoranthene	750 U
bis(2-Ethylhexyl)phthalate (DEHP)	750 U
Carbazole	750 U
Chrysene	34 J(A,B,C,E,F,G,I)
Dibenz(a,h)anthracene	750 U
Dibenzofuran	750 U
Di-n-butylphthalate (DBP)	750 U
Fluoranthene	57 J
Fluorene	750 U
Indeno(1,2,3-cd)pyrene	750 U
Isophorone	750 U
Naphthalene	750 U
Phenanthrene	110 J
Pyrene	58 J(I)
VOCs	
Benzene	53 U
cis-1,2-Dichloroethene	53 U
Methylene chloride	260 U
Trichloroethene	53 U
Vinyl chloride	71 (E)

MW19-59	6/15/2016 2-4 ft BGS ug/kg
Metals	
Antimony	490 J(A,B,C,F)
Arsenic	6500 (A,B,C,E,F,I)
Barium	66000
Beryllium	400 (A,B,C,F)
Cadmium	620
Chromium	15000
Cobalt	7700 (A,B,C,E,F,I)
Copper	19000
Lead	31000 J(A,B,C,F)
Nickel	23000 (A,B,C,F)
Selenium	1300 (A,B,C,F,I)
Thallium	340 (A,B,C,F)
Vanadium	19000 (A,B,C,F,G)
Zinc	61000 (A,B,C,F,G)
SVOCs	
2-Methylnaphthalene	76 J
Acenaphthene	1200 U
Acenaphthylene	1200 U
Anthracene	30 J(I)
Benzo(a)anthracene	48 J(A,B,C,E,F,G,I)
Benzo(a)pyrene	62 J(A,B,C,E,F,I)
Benzo(b)fluoranthene	91 J(A,B,C,E,F,G,I)
Benzo(g,h,i)perylene	1200 U
Benzo(k)fluoranthene	32 J(A,B,C,E,F,G,I)
bis(2-Ethylhexyl)phthalate (DEHP)	1200 U
Carbazole	1200 U
Chrysene	80 J(A,B,C,E,F,G,I)
Dibenz(a,h)anthracene	1200 U
Dibenzofuran	1200 U
Di-n-butylphthalate (DBP)	1200 U
Fluoranthene	130 J
Fluorene	1200 U
Indeno(1,2,3-cd)pyrene	56 J(A,B,C,E,F,G,I)
Isophorone	1200 U
Naphthalene	1200 U
Phenanthrene	160 J
Pyrene	100 J(I)
VOCs	
Benzene	290 (E)
cis-1,2-Dichloroethene	53 U
Methylene chloride	260 U
Trichloroethene	53 U
Vinyl chloride	280 (E,I)

MW19-50	2/4/2016 1-3 ft BGS ug/kg	2/4/2016 3-5 ft BGS ug/kg	2/4/2016 10-12 ft BGS ug/kg
Metals			
Antimony	2400 J(A,B,C,F)	410 J(A,B,C,F)/610 J(A,B,C,F)	98 J(A,B,C,F)
Arsenic	2800	2800/2100	9000 (A,B,C,E,F,I)
Barium	72000	41000/32000	6800
Beryllium	270 (A,B,C,F)	190 (A,B,C,F)/160 (A,B,C,F)	100 J(A,B,C,F)
Cadmium	3800 (A,B,C,F)	380/390	120
Chromium	20000 (A,B,C,F)	7800/7800	3800
Cobalt	2000	2200/1700	1500
Copper	11000	5700/4700	5700
Lead	-	15000/14000	2500
Lead - total (calculated by fine/coarse fraction)	140000 (A,B,C,F)	-	-
Nickel	5600	5500/4500	5400
Selenium	1400 (A,B,C,F,I)	480 (A,B,C,F,I)/440 (A,B,C,F,I)	770 (A,B,C,F,I)
Thallium	88 J(A,B,C,F)	50 J(A,B,C,F)/50 J(A,B,C,F)	89 J(A,B,C,F)
Vanadium	8500 (A,B,C,F,G)	9900 (A,B,C,F,G)/8200 (A,B,C,F,G)	7300 (A,B,C,F,G)
Zinc	130000 (A,B,C,F,G)	46000/40000	14000
SVOCs			
2-Methylnaphthalene	5600 J(I)	110 J/84 J	16 J
Acenaphthene	29000 J(I)	570/460	77 J
Acenaphthylene	1100 J(I)	18 J(I)/11 J(I)	4.5 J(I)
Anthracene	52000 J(E,I)	660 (I)/310 (I)	150 J(I)
Benzo(a)anthracene	84000 (A,B,C,D,E,F,G,I)	1000 (A,B,C,E,F,G,I)/490 (A,B,C,E,F,G,I)	240 J(A,B,C,E,F,G,I)
Benzo(a)pyrene	71000 (A,B,C,D,E,F,I)	840 (A,B,C,E,F,I)/420 (A,B,C,E,F,I)	210 J(A,B,C,E,F,I)
Benzo(b)fluoranthene	97000 (A,B,C,D,E,F,G,I)	1100 (A,B,C,E,F,G,I)/540 (A,B,C,E,F,G,I)	280 J(A,B,C,E,F,G,I)
Benzo(g,h,i)perylene	32000 J(A,B,C,E,F,I)	380 (A,B,C,E,F,I)/260 J(A,B,C,E,F,I)	100 J(A,B,C,E,F,I)
Benzo(k)fluoranthene	35000 J(A,B,C,E,F,G,I)	500 (A,B,C,E,F,G,I)/270 J(A,B,C,E,F,G,I)	110 J(A,B,C,E,F,G,I)
bis(2-Ethylhexyl)phthalate (DEHP)	64000 U	45 J(A,B,C,E,F,I)/63 J(A,B,C,E,F,I)	28 J(A,B,C,E,F,I)
Carbazole	34000 J(A,B,C,F,I)	580 (A,B,C,F)/310 (A,B,C,F)	98 J(A,B,C,F,I)
Chrysene	87000 (A,B,C,E,F,G,I)	1100 (A,B,C,E,F,G,I)/550 (A,B,C,E,F,G,I)	270 J(A,B,C,E,F,G,I)
Dibenz(a,h)anthracene	10000 J(A,B,C,D,E,F,G,I)	120 J(A,B,C,E,F,G,I)/72 J(A,B,C,E,F,G,I)	29 J(A,B,C,E,F,G,I)
Dibenzofuran	21000 J(D,E,I)	400 (D,E)/270 J(D,E)	59 J(D,E)
Di-n-butylphthalate (DBP)	64000 U	200 J(A,B,C,F)/210 J(A,B,C,F)	320 U
Fluoranthene	190000 (I)	2300/1100	580
Fluorene	37000 J(I)	590/350	110 J
Indeno(1,2,3-cd)pyrene	30000 J(A,B,C,E,F,G,I)	360 (A,B,C,E,F,G,I)/220 J(A,B,C,E,F,G,I)	90 J(A,B,C,E,F,G,I)
Isophorone	64000 U	300 U/300 U	320 U
Naphthalene	15000 J(I)	690/890 (I)	38 J
Phenanthrene	180000 (E,I)	2400 J(I)/1100 J	550
Pyrene	160000 (I)	2000 (I)/930 (I)	460 (I)
VOCs			
Benzene	49 U	45 U/45 U	46 U
cis-1,2-Dichloroethene	49 U	45 U/45 U	89
Methylene chloride	240 U	230 U/150 J(E)	230 U
Trichloroethene	49 U	45 U/45 U	340 (E)
Vinyl chloride	39 U	36 U/36 U	37 U

SB19-115	2/3/2016 13-15 ft BGS ug/kg
Metals	
Antimony	56 J(A,B,C,F)
Arsenic	1700
Barium	9100
Beryllium	87 J(A,B,C,F)
Cadmium	110
Chromium	3600
Cobalt	1400
Copper	5300
Lead	2400
Nickel	4500
Selenium	1000 J(A,B,C,F,I)
Thallium	37 J(A,B,C,F)
Vanadium	6700 (A,B,C,F,G)
Zinc	19000
SVOCs	
2-Methylnaphthalene	320 U
Acenaphthene	320 U
Acenaphthylene	320 U
Anthracene	320 U
Benzo(a)anthracene	320 U
Benzo(a)pyrene	320 U
Benzo(b)fluoranthene	320 U
Benzo(g,h,i)perylene	320 U
Benzo(k)fluoranthene	320 U
bis(2-Ethylhexyl)phthalate (DEHP)	320 U
Carbazole	320 U
Chrysene	320 U
Dibenz(a,h)anthracene	320 U
Dibenzofuran	320 U
Di-n-butylphthalate (DBP)	320 U
Fluoranthene	320 U
Fluorene	320 U
Indeno(1,2,3-cd)pyrene	320 U
Isophorone	320 U
Naphthalene	320 U
Phenanthrene	320 U
Pyrene	5.2 J(I)
VOCs	
Benzene	480 U
cis-1,2-Dichloroethene	9600 (E)
Methylene chloride	2400 U
Trichloroethene	780 (E)
Vinyl chloride	17000 (E,F,I)

MW19-52	2/4/2016 4-6 ft BGS ug/kg
Metals	
Antimony	1300 J(A,B,C,F)
Arsenic	4100
Barium	76000 (A,B,C,F)
Beryllium	290 (A,B,C,F)
Cadmium	1800 (A,B,C,F)
Chromium	17000
Cobalt	3200
Copper	10000
Lead	68000 (A,B,C,F)
Nickel	7900
Selenium	1400 (A,B,C,F,I)
Thallium	74 J(A,B,C,F)
Vanadium	11000 (A,B,C,F,G)
Zinc	100000 (A,B,C,F,G)
SVOCs	
2-Methylnaphthalene	1800 J
Acenaphthene	3500 J
Acenaphthylene	220 J(I)
Anthracene	3200 J(I)
Benzo(a)anthracene	5800 (A,B,C,E,F,G,I)
Benzo(a)pyrene	5500 J(A,B,C,E,F,I)
Benzo(b)fluoranthene	7500 (A,B,C,E,F,G,I)
Benzo(g,h,i)perylene	3300 J(A,B,C,E,F,I)
Benzo(k)fluoranthene	2600 J(A,B,C,E,F,G,I)
bis(2-Ethylhexyl)phthalate (DEHP)	5800 U
Carbazole	3200 J(A,B,C,F,I)
Chrysene	6200 (A,B,C,E,F,G,I)
Dibenz(a,h)anthracene	740 J(A,B,C,E,F,G,I)
Dibenzofuran	2700 J(D,E,I)
Di-n-butylphthalate (DBP)	5800 U
Fluoranthene	16000 (I)
Fluorene	4100 J
Indeno(1,2,3-cd)pyrene	2900 J(A,B,C,E,F,G,I)
Isophorone	5800 U
Naphthalene	6000 (I)
Phenanthrene	16000 (I)
Pyrene	14000 (I)
VOCs	
Benzene	41 U
cis-1,2-Dichloroethene	79
Methylene chloride	200 U
Trichloroethene	41 U
Vinyl chloride	45 (E)

No	Revision	Date	Initial

0 40 80ft

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- DITCH, STREAM OR RIVER
- FENCE LINE
- TREE LINE
- FORMER SLUDGE LINE
- UTILITY POLE

NOTES

DATA PRESENTED IN THE DATABOXES ARE ONLY FOR THE CONSTITUENTS OF CONCERN (COC) AS DEFINED IN THE REPORT TEXT. IF A COC WAS NEVER SAMPLED AT A LOCATION, THAT COC IS NOT SHOWN IN THE DATABOX AT THAT LOCATION.

ALL CONSTITUENTS OF CONCERN CONCENTRATIONS IN mg/L.

NS - NOT SAMPLED

U - THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

J - THE ASSOCIATED VALUE IS QUALIFIED AS AN ESTIMATED QUANTITY

UJ - THE ANALYTE WAS REPORTED OR QUALIFIED AS NOT DETECTED HOWEVER THE SAMPLE REPORT LIMIT IS QUALIFIED AS AN ESTIMATED VALUE AND MAY BE INACCURATE OR IMPRECISE

* - MW2 CONVERTED TO IW-33

SOIL
- A NONRESIDENTIAL FINITE VSIC FOR 2 METER SOURCE THICKNESS
- B NONRESIDENTIAL FINITE VSIC FOR 5 METER SOURCE THICKNESS
- C NONRESIDENTIAL INFINITE SOURCE VOLATILE SOIL INHALATION CRITERIA (VSIC)
- D NONRESIDENTIAL DIRECT CONTACT CRITERIA
- E NONRESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- F NONRESIDENTIAL SOIL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA
- G NONRESIDENTIAL PARTICULATE SOIL INHALATION CRITERIA
- H GROUNDWATER SURFACE WATER INTERFACE PROTECTION CRITERIA
- I SOIL SATURATION CONCENTRATION SCREENING LEVELS

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

LOCATION
PARAMETER
DATE
RESULT
EXCEEDANCE

SB19-03	2/8/2016
VOCs	
1,1,2,2-Tetrachloroethane	0.2 U
1,1,2-Trichloroethane	0.2 U
1,1-Dichloroethene	0.2 U
1,2-Dichloroethane	0.2 U
1,2-Dichloropropane	0.2 U
1,3-Dichlorobenzene	0.2 U
4-Methyl-2-pentanone (ethyl ketone) (MEK)	1 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	10 U
Acetone	5 U
Benzene	0.2 U
Carbon tetrachloride	0.2 U
Chlorobenzene	0.2 U
cis-1,2-Dichloroethene	0.2 U
Ethylbenzene	0.2 U
Methylene chloride	0.5 U
Methyl tert butyl ether (MTBE)	1 U
Methylene chloride	1 U
Tetrachloroethene	0.2 U
Toluene	0.2 U
trans-1,2-Dichloroethene	0.16 J(E)
Trichloroethene	0.2 U
Trifluorotrichloroethane (Freon 113)	0.2 U
Vinyl chloride	0.8 U (E,I)
Xylenes (total)	0.6 U

DRAWING STATUS

Status	Date	Initial

COMPANY VEHICLE OPERATIONS AREA

YPSILANTI, MICHIGAN

SITE MAP WITH SOIL ANALYTICAL RESULTS FEBRUARY AND JUNE 2016

GHD

Source Reference:

Project Manager:	Reviewed By:	Date:	
PROJ_MAN	REVIEW_BY	MAY 2018	
Scale: HORZ_SC	Project No: 017303-T05	Report No: 033	Drawing No: B-1

017303-T05(033)GN-DE003 MAY 3, 2018

MW19-39	2/17/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	3.3 U
Chlorobenzene	3.3 U
cis-1,2-Dichloroethene	46
Ethylbenzene	3.3 U
Isopropyl benzene	3.3 U
Toluene	3.3 U
trans-1,2-Dichloroethene	5.4
Trichloroethene	14 (E)
Vinyl chloride	110 (D,E)
Xylenes (total)	6.7 U

GS-17	6/21/2016 ug/L	11/1/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1.8	1.4
Chlorobenzene	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.9
Ethylbenzene	1.0 U	1.0 U
Isopropyl benzene	1.0 U	1.0 U
Toluene	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U
Vinyl chloride	2.5 (E)	2.2 (E)
Xylenes (total)	2.0 U	2.0 U

GS-18	6/21/2016 ug/L	11/1/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1.0 U	1.7 U
Chlorobenzene	1.0 U	1.7 U
cis-1,2-Dichloroethene	22	46
Ethylbenzene	1.0 U	1.7 U
Isopropyl benzene	1.0 U	1.7 U
Toluene	1.0 U	1.7 U
trans-1,2-Dichloroethene	0.40 J	0.81 J
Trichloroethene	12 (E)	14 (E)
Vinyl chloride	19 (D,E)	28 (D,E)
Xylenes (total)	2.0 U	1.2 J

GS-3	6/22/2016 ug/L	11/1/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U
cis-1,2-Dichloroethene	0.42 J	1.0 U
Ethylbenzene	1.0 U	1.0 U
Isopropyl benzene	1.0 U	1.0 U
Toluene	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U
Vinyl chloride	1.1	1.0 U
Xylenes (total)	2.0 U	2.0 U

GS-19	6/22/2016 ug/L	11/1/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1.0 J	1.6 J
Chlorobenzene	2.0 U	3.3 U
cis-1,2-Dichloroethene	17	20
Ethylbenzene	2.0 U	3.3 U
Isopropyl benzene	2.0 U	3.3 U
Toluene	2.0 U	3.3 U
trans-1,2-Dichloroethene	0.66 J	2.5 J
Trichloroethene	2.0 U	3.3 U
Vinyl chloride	99 (D,E)	50 (D,E)
Xylenes (total)	1.0 J	6.7 U

GS-4	6/22/2016 ug/L	11/2/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1.4	250 U
Chlorobenzene	1.0 U	250 U
cis-1,2-Dichloroethene	1.0 U	890 (D,E,H)
Ethylbenzene	1.0 U	250 U
Isopropyl benzene	1.0 U	250 U
Toluene	1.0 U	250 U
trans-1,2-Dichloroethene	1.0 U	250 U
Trichloroethene	1.0 U	250 U
Vinyl chloride	2.6 (E,H)	8100 (D,E,H,I)
Xylenes (total)	2.0 U	500 U

MW19-15	2/18/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	67 U
Chlorobenzene	67 U
cis-1,2-Dichloroethene	860 (D,E,H)
Ethylbenzene	67 U
Isopropyl benzene	67 U
Toluene	67 U
trans-1,2-Dichloroethene	67 U
Trichloroethene	67 U
Vinyl chloride	2600 (D,E,H,I)
Xylenes (total)	130 U

GS-16	11/2/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	25 U
Chlorobenzene	25 U
cis-1,2-Dichloroethene	87 (E)
Ethylbenzene	25 U
Isopropyl benzene	25 U
Toluene	25 U
trans-1,2-Dichloroethene	25 U
Trichloroethene	25 U
Vinyl chloride	670 (D,E)
Xylenes (total)	50 U

MW19-16	2/18/2016 ug/L	10/31/2016 ug/L
Metals		
Iron	2600 (E,H)	-
Iron (dissolved)	3000 (E,H)	-
Manganese	560 (E,H)	-
Manganese (dissolved)	610 (E,H)	-
VOCs		
Benzene	50 U	130 U
Chlorobenzene	50 U	130 U
cis-1,2-Dichloroethene	980 (D,E,H)	1200 (D,E,H)
Ethylbenzene	50 U	130 U
Isopropyl benzene	50 U	130 U
Toluene	50 U	130 U
trans-1,2-Dichloroethene	54	61 J
Trichloroethene	50 U	130 U
Vinyl chloride	1600 (D,E,H,I)	1900 (D,E,H,I)
Xylenes (total)	100 U	250 U

MW19-12	2/17/2016 ug/L	10/26/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	40 U	250 U
Chlorobenzene	160 (D,E,H)	220 JD,E,H)
cis-1,2-Dichloroethene	760 (D,E,H)	4300 (D,E,H)
Ethylbenzene	72 (D)	74 J(D)
Isopropyl benzene	40 U	250 U
Toluene	16 J	250 U
trans-1,2-Dichloroethene	40 U	250 U
Trichloroethene	8.8 J(E,H)	250 U
Vinyl chloride	1100 (D,E,H)	5700 (D,E,H,I)
Xylenes (total)	27 J	500 U

MW19-35	10/25/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	2.0
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	1.0 U
Xylenes (total)	2.0 U

MW19-37	2/17/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	1.0 U
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	0.34 J
Xylenes (total)	2.0 U

MW19-45	2/25/2016 ug/L	10/25/2016 ug/L
Metals		
Iron	1200 (E)	-
Iron (dissolved)	960 (E)	-
Manganese	410 (E)	-
Manganese (dissolved)	420 (E)	-
VOCs		
Benzene	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U
Isopropyl benzene	1.0 U	1.0 U
Toluene	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U
Trichloroethene	3.6	4.1
Vinyl chloride	0.93 J	0.77 J
Xylenes (total)	2.0 U	2.0 U

MW19-38	2/19/2016 ug/L	10/25/2016 ug/L
Metals		
Iron	1700 (E)/1800 (E)	-
Iron (dissolved)	1300 (E)/1200 (E)	-
Manganese	88 (E)/120 (E)	-
Manganese (dissolved)	190 (E)/200 (E)	-
VOCs		
Benzene	1.0 U/1.0 U	2.5 U
Chlorobenzene	1.0 U/1.0 U	2.5 U
cis-1,2-Dichloroethene	24/25	62
Ethylbenzene	1.0 U/1.0 U	2.5 U
Isopropyl benzene	1.0 U/1.0 U	2.5 U
Toluene	1.0 U/1.0 U	2.5 U
trans-1,2-Dichloroethene	1.4/1.4	3.3
Trichloroethene	22 (E)/23 (E)	27 (E)
Vinyl chloride	11 (E)/12 (E)	39 (D,E)
Xylenes (total)	2.0 U/2.0 U	5.0 U

MW19-46	2/26/2016 ug/L	10/27/2016 ug/L
VOCs		
Benzene	8.6 J(E)	10 J(E)
Chlorobenzene	10 U	25 U
cis-1,2-Dichloroethene	96 (E)	30
Ethylbenzene	10 U	32 (D)
Isopropyl benzene	10 U	25 U
Toluene	13	62
trans-1,2-Dichloroethene	8.7 J	25 U
Trichloroethene	34 (E)	15 J(E)
Vinyl chloride	350 (D,E)	46 (D,E)
Xylenes (total)	38	140 (D)

GS-1	2/17/2016 ug/L	11/1/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	200 U	500 U
Chlorobenzene	200 U	500 U
cis-1,2-Dichloroethene	200 U	500 U
Ethylbenzene	200 U	500 U
Isopropyl benzene	200 U	500 U
Toluene	200 U	500 U
trans-1,2-Dichloroethene	200 U	500 U
Trichloroethene	200 U	500 U
Vinyl chloride	7000 (D,E,H,I)	9100 (D,E,H,I)
Xylenes (total)	400 U	1000 U

MW19-47	2/25/2016 ug/L	10/27/2016 ug/L
Metals		
Iron	1600 (E)	-
Iron (dissolved)	1300 (E)	-
Manganese	820 (E)	-
Manganese (dissolved)	810 (E)	-
VOCs		
Benzene	56 U	29 U
Chlorobenzene	56 U	29 U
cis-1,2-Dichloroethene	1300 (D,E)	130 (E)
Ethylbenzene	56 U	29 U
Isopropyl benzene	56 U	29 U
Toluene	56 U	29 U
trans-1,2-Dichloroethene	82	9.4 J
Trichloroethene	14 J(E)	70 (E)
Vinyl chloride	1700 (D,E)	300 (D,E)
Xylenes (total)	110 U	57 U

MW19-58	6/22/2016 ug/L	11/1/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	7.7 (E)/7.6 (E)	6.0 (E)
Chlorobenzene	1.0 U/1.0 U	2.0 U
cis-1,2-Dichloroethene	7.5/7.5	5.2
Ethylbenzene	1.0 U/1.0 U	2.0 U
Isopropyl benzene	1.0 U/1.0 U	2.0 U
Toluene	0.28 J/1.0 U	2.0 U
trans-1,2-Dichloroethene	0.46 J/0.42 J	0.64 J
Trichloroethene	0.39 J/0.27 J	0.70 J
Vinyl chloride	1.8/2.2 (E)	33 (D,E)
Xylenes (total)	2.0 U/2.0 U	4.0 U

MW19-48	2/25/2016 ug/L	10/27/2016 ug/L
Metals		
Iron	1700 (E)	-
Iron (dissolved)	1600 (E)	-
Manganese	280 (E)	-
Manganese (dissolved)	280 (E)	-
VOCs		
Benzene	67 U	140 U/140 U
Chlorobenzene	67 U	140 U/140 U
cis-1,2-Dichloroethene	1500 (D,E)	1000 (D,E)/1200 (D,E)
Ethylbenzene	67 U	140 U/140 U
Isopropyl benzene	67 U	140 U/140 U
Toluene	67 U	140 U/140 U
trans-1,2-Dichloroethene	47 J	59 J/61 J
Trichloroethene	160 (E)	110 J(E)/120 J(E)
Vinyl chloride	2200 (D,E)	2000 (D,E)/2100 (D,E)
Xylenes (total)	130 U	290 U/290 U

MW19-49	2/26/2016 ug/L	10/27/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	83 U	50 J(E)
Chlorobenzene	83 U	130 U
cis-1,2-Dichloroethene	2500 (D,E)	760 (D,E)
Ethylbenzene	36 J(D)	210 (D,E)
Isopropyl benzene	83 U	91 J(D)
Toluene	110	670 (D)
trans-1,2-Dichloroethene	34 J	130 U
Trichloroethene	83 U	130 U
Vinyl chloride	1300 (D,E)	2300 (D,E)
Xylenes (total)	120 J(D)	860 (D,E)

MW19-14	2/18/2016 ug/L	11/1/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	200 U	250 U
Chlorobenzene	200 U	250 U
cis-1,2-Dichloroethene	81 J(E,H)	100 J(E,H)
Ethylbenzene	200 U	250 U
Isopropyl benzene	200 U	250 U
Toluene	200 U	250 U
trans-1,2-Dichloroethene	200 U	250 U
Trichloroethene	200 U	250 U
Vinyl chloride	4800 (D,E,H,I)	5000 (D,E,H,I)
Xylenes (total)	400 U	500 U

MW-3	2/11/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	250 U
Chlorobenzene	250 U
cis-1,2-Dichloroethene	2200 (D,E)
Ethylbenzene	250 U
Isopropyl benzene	250 U
Toluene	250 U
trans-1,2-Dichloroethene	250 U
Trichloroethene	250 U
Vinyl chloride	9100 (D,E)
Xylenes (total)	500 U

MW19-50	2/26/2016 ug/L
VOCs	
Benzene	32 (E)
Chlorobenzene	25 U
cis-1,2-Dichloroethene	790 JD,E)
Ethylbenzene	120 (D,E)
Isopropyl benzene	49 (D)
Toluene	43
trans-1,2-Dichloroethene	8.4 J
Trichloroethene	210 (D,E)
Vinyl chloride	270 (D,E)
Xylenes (total)	220 (D)

MW19-24	2/19/2016 ug/L
Metals	
Manganese	4100 (E,H)
Iron	4100 (E,H)
Iron (dissolved)	210 (E,H)
Manganese (dissolved)	210 (E,H)
VOCs	
Benzene	10 (E,H)
Chlorobenzene	5.0 U
cis-1,2-Dichloroethene	4.2 J
Ethylbenzene	5.0 U
Isopropyl benzene	5.0 U
Toluene	5.0 U
trans-1,2-Dichloroethene	5.0 U
Trichloroethene	5.0 U
Vinyl chloride	130 (D,E,H)
Xylenes (total)	10 U

GS-2	2/18/2016 ug/L	10/26/2016 ug/L
Metals		
Iron	3300 (E,H)	-
Iron (dissolved)	3300 (E,H)	-
Manganese	110 (E,H)	-
Manganese (dissolved)	110 (E,H)	-
VOCs		
Benzene	500 U	500 U
Chlorobenzene	500 U	500 U
cis-1,2-Dichloroethene	3700 (E,E,H)	3500 (D,E,H)
Ethylbenzene	500 U	500 U
Isopropyl benzene	500 U	500 U
Toluene	500 U	500 U
trans-1,2-Dichloroethene	170 J(E,H)	500 U
Trichloroethene	500 U	500 U
Vinyl chloride	14000 (D,E,F,H,I)	13000 (D,E,H,I)
Xylenes (total)	1000 U	1000 U

MW19-59	6/22/2016 ug/L	11/2/2016 ug/L
VOCs		
Benzene	130 U	0.94 J
Chlorobenzene	130 U	1.0 U
cis-1,2-Dichloroethene	820 (D,E)	11
Ethylbenzene	130 U	1.0 U
Isopropyl benzene	130 U	1.0 U
Toluene	130 U	1.0 U
trans-1,2-Dichloroethene	130 U	1.0 U
Trichloroethene	130 U	1.0 U
Vinyl chloride	7600 (D,E)	63 (D,E)
Xylenes (total)	250 U	2.0 U

MW19-52	2/25/2016 ug/L	10/27/2016 ug/L
Metals		
Iron	470 (E)	-
Iron (dissolved)	290	-
Manganese	730 (E)	-
Manganese (dissolved)	720 (E)	-
VOCs		
Benzene	3.7 J	17 U
Chlorobenzene	10 U	17 U
cis-1,2-Dichloroethene	160 (E)	140 (E)
Ethylbenzene	10 U	17 U
Isopropyl benzene	10 U	17 U
Toluene	10 U	17 U
trans-1,2-Dichloroethene	15	15 J
Trichloroethene	23 (E)	33 (E)
Vinyl chloride	300 (D,E)	160 (D,E)
Xylenes (total)	20 U	33 U

GS-20	6/22/2016 ug/L	10/31/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	10 U	17 U
Chlorobenzene	10 U	17 U
cis-1,2-Dichloroethene	200 (E)	440 (E)
Ethylbenzene	10 U	17 U
Isopropyl benzene	10 U	17 U
Toluene	10 U	17 U
trans-1,2-Dichloroethene	27	32
Trichloroethene	5.6 J(E)	5.7 J(E)
Vinyl chloride	82 (D,E)	100 (D,E)
Xylenes (total)	20 U	33 U

IG-A1	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	14
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	4.1
Trichloroethene	0.95 J
Vinyl chloride	4.5 (E)
Xylenes (total)	2.0 U

IG-B1	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	13
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	12 (E)
Xylenes (total)	2.0 U

GS-21	6/22/2016 ug/L	10/31/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U
cis-1,2-Dichloroethene	11	25
Ethylbenzene	1.0 U	1.0 U
Isopropyl benzene	1.0 U	1.0 U
Toluene	1.0 U	1.0 U
trans-1,2-Dichloroethene	0.64 J	1.4
Trichloroethene	0.81 J	1.8
Vinyl chloride	5.0 (E)	11 (E)
Xylenes (total)	2.0 U	2.0 U

IG-F4	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.4 U
Chlorobenzene	1.4 U
cis-1,2-Dichloroethene	40
Ethylbenzene	1.4 U
Isopropyl benzene	1.4 U
Toluene	1.4 U
trans-1,2-Dichloroethene	1.9
Trichloroethene	3.3 J
Vinyl chloride	16 (D,E)
Xylenes (total)	2.9 U

IG-E4	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	5.8
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	2.5
Trichloroethene	2.9
Vinyl chloride	1.2
Xylenes (total)	2.0 U

IG-G3	10/28/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	2.0 U
Chlorobenzene	2.0 U
cis-1,2-Dichloroethene	18
Ethylbenzene	2.0 U
Isopropyl benzene	2.0 U
Toluene	2.0 U
trans-1,2-Dichloroethene	0.74 J
Trichloroethene	2.4
Vinyl chloride	40 (D,E)
Xylenes (total)	4.0 U

IG-B4	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	12
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	0.34 J
Trichloroethene	1.5
Vinyl chloride	7.2 (E)
Xylenes (total)	2.0 U

IG-D2	10/28/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.4 U
Chlorobenzene	1.4 U
cis-1,2-Dichloroethene	16
Ethylbenzene	1.4 U
Isopropyl benzene	1.4 U
Toluene	1.4 U
trans-1,2-Dichloroethene	0.77 J
Trichloroethene	0.51 J
Vinyl chloride	26 (D,E)
Xylenes (total)	2.9 U

IG-C3	10/28/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	25 U/25 U
Chlorobenzene	25 U/25 U
cis-1,2-Dichloroethene	32/33
Ethylbenzene	25 U/25 U
Isopropyl benzene	25 U/25 U
Toluene	25 U/25 U
trans-1,2-Dichloroethene	25 U/25 U
Trichloroethene	25 U/25 U
Vinyl chloride	440 (D,E)/440 (D,E)
Xylenes (total)	50 U/50 U

No	Revision	Date	Initial

0 40 80ft

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- DITCH, STREAM OR RIVER
- FENCE LINE
- TREE LINE
- FORMER SLUDGE LINE
- UTILITY POLE

NOTES

DATA PRESENTED IN THE DATABOXES ARE ONLY FOR THE CONSTITUENTS OF CONCERN (COC)
AS DEFINED IN THE REPORT TEXT. IF A COC WAS NEVER SAMPLED AT A LOCATION, THAT COC IS NOT SHOWN IN THE DATABOX AT THAT LOCATION.

ALL CONSTITUENTS OF CONCERN CONCENTRATIONS IN mg/L.

NS - NOT SAMPLED

U - THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

J - THE ASSOCIATED VALUE IS QUALIFIED AS AN ESTIMATED QUANTITY

UJ - THE ANALYTE WAS REPORTED OR QUALIFIED AS NOT DETECTED HOWEVER THE SAMPLE REPORT LIMIT IS QUALIFIED AS AN ESTIMATED VALUE AND MAY BE INACCURATE OR IMPRECISE

* - MW2 CONVERTED TO IW-33

GROUNDWATER
A FLAMMABILITY AND EXPLOSIVITY SCREENING LEVELS
B GROUNDWATER SURFACE WATER INTERFACE
C NON-RESIDENTIAL DRINKING WATER
D NON-RESIDENTIAL GROUNDWATER VOLATILIZATION TO INDOOR AIR INHALATION
E WATER SOLUBILITY
F RESIDENTIAL DRINKING WATER
G RESIDENTIAL GROUNDWATER VOLATILIZATION TO INDOOR AIR INHALATION

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

LOCATION
PARAMETER
DATE
RESULT
EXCEEDANCE

MW19-10	7/28/2004
1,1,1,2-Tetrachloroethane	0.2 U
1,1,2-Trichloroethane	0.2 U
1,1-Dichloroethene	0.2 U
1,2-Dichlorobenzene	0.2 U
1,3-Dichlorobenzene	0.2 U
1,4-Dichlorobenzene	0.2 U
4-Butanone (Methyl ethyl ketone) (MEK)	5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	5 U
Acetone	5 U
Benzene	0.2 U
Carbon tetrachloride	0.2 U
Chlorobenzene	0.2 U
cis-1,2-Dichloroethene	0.8 J(E)
Ethylbenzene	0.2 U
Isopropyl benzene	1 U
Methyl tert-butyl ether (MTBE)	0.2 U
Methylene chloride	1 U
Tetrachloroethene	0.2 U
Toluene	0.2 U
trans-1,2-Dichloroethene	0.76 J(E)
Trichloroethene	0.2 U
Trifluorotrichloroethane (Freon 113)	1 U
Vinyl chloride	0.8 J(D,E)
Xylenes (total)	0.6 U

DRAWING STATUS

Status	Date	Initial

COMPANY VEHICLE OPERATIONS AREA

YPSILANTI, MICHIGAN

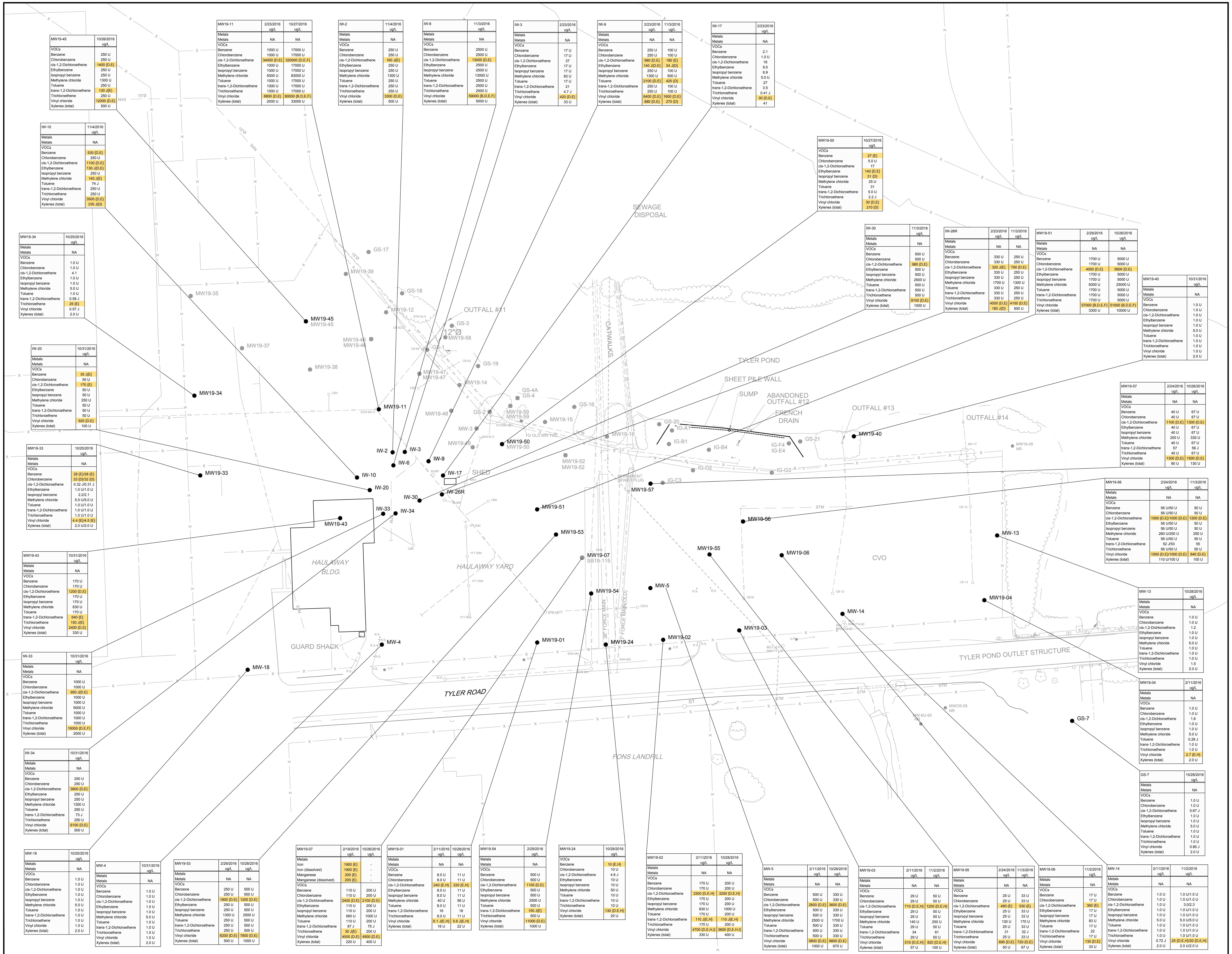
SITE MAP WITH NORTHERN WELLS GROUNDWATER ANALYTICAL RESULTS - FEBRUARY, JUNE AND OCTOBER 2016

GHD

Source Reference:

Project Manager:	Reviewed By:	Date:	
PROJ_MAN	REVIEW_BY	MAY 2018	
Scale: HORZ_SC	Project N°: 017303-T05	Report N°: 033	Drawing N°: B-2

017303-T05(033)GN-DE004 MAY 3, 2018



MW19-45	10/26/2016 ug/L
VOCs	
Benzene	250 U
Chlorobenzene	250 U
cis-1,2-Dichloroethene	1400 {D,E}
Ethylbenzene	250 U
Isopropyl benzene	250 U
Methylene chloride	1300 U
Toluene	250 U
trans-1,2-Dichloroethene	130 J{E}
Trichloroethene	250 U
Vinyl chloride	12000 {D,E}
Xylenes (total)	500 U

MW19-11	2/23/2016 ug/L	10/27/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1000 U	17000 U
Chlorobenzene	1000 U	17000 U
cis-1,2-Dichloroethene	34000 {D,E}	320000 {D,E,F}
Ethylbenzene	1000 U	17000 U
Isopropyl benzene	1000 U	17000 U
Methylene chloride	5000 U	83000 U
Toluene	1000 U	17000 U
trans-1,2-Dichloroethene	1000 U	17000 U
Trichloroethene	1000 U	17000 U
Vinyl chloride	8800 {D,E}	80000 {B,D,E,F}
Xylenes (total)	2000 U	33000 U

IW-2	11/4/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	250 U
Chlorobenzene	250 U
cis-1,2-Dichloroethene	160 J{E}
Ethylbenzene	250 U
Isopropyl benzene	250 U
Methylene chloride	1300 U
Toluene	250 U
trans-1,2-Dichloroethene	250 U
Trichloroethene	250 U
Vinyl chloride	3300 {D,E}
Xylenes (total)	500 U

IW-6	11/3/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	2500 U
Chlorobenzene	2500 U
cis-1,2-Dichloroethene	13000 {D,E}
Ethylbenzene	2500 U
Isopropyl benzene	2500 U
Methylene chloride	13000 U
Toluene	2500 U
trans-1,2-Dichloroethene	2500 U
Trichloroethene	2500 U
Vinyl chloride	59000 {B,D,E,F}
Xylenes (total)	5000 U

IW-3	2/23/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	17 U
Chlorobenzene	17 U
cis-1,2-Dichloroethene	37
Ethylbenzene	17 U
Isopropyl benzene	17 U
Methylene chloride	83 U
Toluene	17 U
trans-1,2-Dichloroethene	21
Trichloroethene	4.7 J
Vinyl chloride	420 {D,E}
Xylenes (total)	33 U

IW-9	2/23/2016 ug/L	11/3/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	250 U	100 U
Chlorobenzene	250 U	100 U
cis-1,2-Dichloroethene	980 {D,E}	180 {E}
Ethylbenzene	140 J{D,E}	54 J{D}
Isopropyl benzene	250 U	100 U
Methylene chloride	1300 U	500 U
Toluene	2100 {D,E}	420 {D}
trans-1,2-Dichloroethene	250 U	100 U
Trichloroethene	250 U	100 U
Vinyl chloride	6400 {D,E}	1600 {D,E}
Xylenes (total)	880 {D,E}	270 {D}

IW-17	2/23/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	2.1
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	16
Ethylbenzene	9.5
Isopropyl benzene	6.9
Methylene chloride	5.0 U
Toluene	27
trans-1,2-Dichloroethene	3.5
Trichloroethene	0.41 J
Vinyl chloride	30 {D,E}
Xylenes (total)	41

IW-10	11/4/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	530 {D,E}
Chlorobenzene	250 U
cis-1,2-Dichloroethene	1100 {D,E}
Ethylbenzene	130 J{D,E}
Isopropyl benzene	250 U
Methylene chloride	140 J{E}
Toluene	74 J
trans-1,2-Dichloroethene	250 U
Trichloroethene	250 U
Vinyl chloride	3500 {D,E}
Xylenes (total)	230 J{D}

MW19-50	10/27/2016 ug/L
VOCs	
Benzene	27 {E}
Chlorobenzene	5.0 U
cis-1,2-Dichloroethene	17
Ethylbenzene	140 {D,E}
Isopropyl benzene	51 {D}
Methylene chloride	25 U
Toluene	31
trans-1,2-Dichloroethene	5.0 U
Trichloroethene	2.2 J
Vinyl chloride	30 {D,E}
Xylenes (total)	210 {D}

MW19-34	10/25/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	4.1
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Methylene chloride	5.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	0.58 J
Trichloroethene	25 {E}
Vinyl chloride	0.57 J
Xylenes (total)	2.0 U

IW-30	11/3/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	500 U
Chlorobenzene	500 U
cis-1,2-Dichloroethene	980 {D,E}
Ethylbenzene	500 U
Isopropyl benzene	500 U
Methylene chloride	2500 U
Toluene	500 U
trans-1,2-Dichloroethene	500 U
Trichloroethene	500 U
Vinyl chloride	9100 {D,E}
Xylenes (total)	1000 U

IW-26R	2/23/2016 ug/L	11/3/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	330 U	250 U
Chlorobenzene	330 U	250 U
cis-1,2-Dichloroethene	320 J{E}	790 {D,E}
Ethylbenzene	330 U	250 U
Isopropyl benzene	330 U	250 U
Methylene chloride	1700 U	1300 U
Toluene	330 U	250 U
trans-1,2-Dichloroethene	330 U	250 U
Trichloroethene	330 U	250 U
Vinyl chloride	4500 {D,E}	4100 {D,E}
Xylenes (total)	180 J{D}	500 U

MW19-51	2/29/2016 ug/L	10/26/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1700 U	5000 U
Chlorobenzene	1700 U	5000 U
cis-1,2-Dichloroethene	4000 {D,E}	5600 {D,E}
Ethylbenzene	1700 U	5000 U
Isopropyl benzene	1700 U	5000 U
Methylene chloride	8300 U	25000 U
Toluene	1700 U	5000 U
trans-1,2-Dichloroethene	1700 U	5000 U
Trichloroethene	1700 U	5000 U
Vinyl chloride	57000 {B,D,E,F}	51000 {B,D,E,F}
Xylenes (total)	3300 U	10000 U

MW19-40	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	1.0 U
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Methylene chloride	5.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	1.0 U
Xylenes (total)	2.0 U

IW-20	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	35 J{E}
Chlorobenzene	50 U
cis-1,2-Dichloroethene	170 {E}
Ethylbenzene	50 U
Isopropyl benzene	50 U
Methylene chloride	250 U
Toluene	50 U
trans-1,2-Dichloroethene	50 U
Trichloroethene	50 U
Vinyl chloride	920 {D,E}
Xylenes (total)	100 U

MW19-57	2/24/2016 ug/L	10/28/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	40 U	67 U
Chlorobenzene	40 U	67 U
cis-1,2-Dichloroethene	1100 {D,E}	1300 {D,E}
Ethylbenzene	40 U	67 U
Isopropyl benzene	40 U	67 U
Methylene chloride	200 U	330 U
Toluene	40 U	67 U
trans-1,2-Dichloroethene	57	56 J
Trichloroethene	40 U	67 U
Vinyl chloride	1300 {D,E}	1500 {D,E}
Xylenes (total)	80 U	130 U

MW19-33	10/25/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	28 {E}/28 {E}
Chlorobenzene	33 {D}/32 {D}
cis-1,2-Dichloroethene	0.32 J/0.31 J
Ethylbenzene	1.0 U/1.0 U
Isopropyl benzene	2.2/2.1
Methylene chloride	5.0 U/5.0 U
Toluene	1.0 U/1.0 U
trans-1,2-Dichloroethene	1.0 U/1.0 U
Trichloroethene	1.0 U/1.0 U
Vinyl chloride	4.4 {E}/4.5 {E}
Xylenes (total)	2.0 U/2.0 U

MW19-56	2/24/2016 ug/L	11/3/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	56 U/50 U	50 U
Chlorobenzene	56 U/50 U	50 U
cis-1,2-Dichloroethene	1000 {D,E}/1000 {D,E}	1200 {D,E}
Ethylbenzene	56 U/50 U	50 U
Isopropyl benzene	56 U/50 U	50 U
Methylene chloride	280 U/250 U	250 U
Toluene	56 U/50 U	50 U
trans-1,2-Dichloroethene	52 J/53	55
Trichloroethene	56 U/50 U	50 U
Vinyl chloride	1000 {D,E}/1000 {D,E}	840 {D,E}
Xylenes (total)	110 U/100 U	100 U

MW19-43	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	170 U
Chlorobenzene	170 U
cis-1,2-Dichloroethene	1200 {D,E}
Ethylbenzene	170 U
Isopropyl benzene	170 U
Methylene chloride	830 U
Toluene	170 U
trans-1,2-Dichloroethene	640 {E}
Trichloroethene	150 J{E}
Vinyl chloride	2400 {D,E}
Xylenes (total)	330 U

MW-13	10/28/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	1.2
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Methylene chloride	5.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	1.5
Xylenes (total)	2.0 U

IW-33	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1000 U
Chlorobenzene	1000 U
cis-1,2-Dichloroethene	950 J{D,E}
Ethylbenzene	1000 U
Isopropyl benzene	1000 U
Methylene chloride	5000 U
Toluene	1000 U
trans-1,2-Dichloroethene	1000 U
Trichloroethene	1000 U
Vinyl chloride	16000 {D,E,F}
Xylenes (total)	2000 U

MW19-04	2/11/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	1.6
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Methylene chloride	5.0 U
Toluene	0.28 J
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	2.7 {E,H}
Xylenes (total)	2.0 U

IW-34	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	250 U
Chlorobenzene	250 U
cis-1,2-Dichloroethene	3800 {D,E}
Ethylbenzene	250 U
Isopropyl benzene	250 U
Methylene chloride	1300 U
Toluene	250 U
trans-1,2-Dichloroethene	73 J
Trichloroethene	250 U
Vinyl chloride	6100 {D,E}
Xylenes (total)	500 U

GS-7	10/28/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	0.67 J
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Methylene chloride	5.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	0.80 J
Xylenes (total)	2.0 U

MW-18	10/25/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	1.0 U
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Methylene chloride	5.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	1.0 U
Xylenes (total)	2.0 U

MW-4	10/31/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	1.0 U
Chlorobenzene	1.0 U
cis-1,2-Dichloroethene	1.0 U
Ethylbenzene	1.0 U
Isopropyl benzene	1.0 U
Methylene chloride	5.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
Trichloroethene	1.0 U
Vinyl chloride	1.0 U
Xylenes (total)	2.0 U

MW19-53	2/29/2016 ug/L	10/28/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	250 U	500 U
Chlorobenzene	250 U	500 U
cis-1,2-Dichloroethene	1800 {D,E}	1200 {D,E}
Ethylbenzene	250 U	500 U
Isopropyl benzene	250 U	500 U
Methylene chloride	1300 U	2500 U
Toluene	250 U	500 U
trans-1,2-Dichloroethene	250 U	500 U
Trichloroethene	250 U	500 U
Vinyl chloride	6200 {D,E}	7800 {D,E}
Xylenes (total)	500 U	1000 U

MW19-07	2/19/2016 ug/L	10/26/2016 ug/L
Metals		
Iron	1900 {E}	-
Iron (dissolved)	1900 {E}	-
Manganese	200 {E}	-
Manganese (dissolved)	200 {E}	-
VOCs		
Benzene	110 U	200 U
Chlorobenzene	110 U	200 U
cis-1,2-Dichloroethene	2400 {D,E}	2100 {D,E}
Ethylbenzene	110 U	200 U
Isopropyl benzene	110 U	200 U
Methylene chloride	560 U	1000 U
Toluene	110 U	200 U
trans-1,2-Dichloroethene	87 J	75 J
Trichloroethene	30 J{E}	200 U
Vinyl chloride	4000 {D,E}	4900 {D,E}
Xylenes (total)	220 U	400 U

MW19-01	2/11/2016 ug/L	10/28/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	8.0 U	11 U
Chlorobenzene	8.0 U	11 U
cis-1,2-Dichloroethene	240 {E,H}	220 {E,H}
Ethylbenzene	8.0 U	11 U
Isopropyl benzene	8.0 U	11 U
Methylene chloride	40 U	56 U
Toluene	8.0 U	11 U
trans-1,2-Dichloroethene	16	18
Trichloroethene	8.0 U	11 U
Vinyl chloride	6.1 J{E,H}	5.6 J{E,H}
Xylenes (total)	16 U	22 U

MW19-54	2/29/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	500 U
Chlorobenzene	500 U
cis-1,2-Dichloroethene	1100 {D,E}
Ethylbenzene	500 U
Isopropyl benzene	500 U
Methylene chloride	2500 U
Toluene	500 U
trans-1,2-Dichloroethene	150 J{E}
Trichloroethene	500 U
Vinyl chloride	11000 {D,E}
Xylenes (total)	1000 U

MW19-24	10/28/2016 ug/L
VOCs	
Benzene	10 {E,H}
Chlorobenzene	10 U
cis-1,2-Dichloroethene	4.6 J
Ethylbenzene	10 U
Isopropyl benzene	10 U
Methylene chloride	50 U
Toluene	10 U
trans-1,2-Dichloroethene	10 U
Trichloroethene	10 U
Vinyl chloride	130 {D,E,H}
Xylenes (total)	20 U

MW19-02	2/11/2016 ug/L	10/28/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	170 U	200 U
Chlorobenzene	170 U	200 U
cis-1,2-Dichloroethene	3300 {D,E,H}	3200 {D,E,H}
Ethylbenzene	170 U	200 U
Isopropyl benzene	170 U	200 U
Methylene chloride	830 U	1000 U
Toluene	170 U	200 U
trans-1,2-Dichloroethene	110 J{E,H}	110 J{E,H}
Trichloroethene	170 U	200 U
Vinyl chloride	4700 {D,E,H,I}	3600 {D,E,H,I}
Xylenes (total)	330 U	400 U

MW-5	2/11/2016 ug/L	10/28/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	500 U	330 U
Chlorobenzene	500 U	330 U
cis-1,2-Dichloroethene	2600 {D,E}	3600 {D,E}
Ethylbenzene	500 U	330 U
Isopropyl benzene	500 U	330 U
Methylene chloride	2500 U	1700 U
Toluene	500 U	330 U
trans-1,2-Dichloroethene	500 U	330 U
Trichloroethene	500 U	330 U
Vinyl chloride	9800 {D,E}	9800 {D,E}
Xylenes (total)	1000 U	670 U

MW19-03	2/11/2016 ug/L	11/2/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	29 U	50 U
Chlorobenzene	29 U	50 U
cis-1,2-Dichloroethene	710 {D,E,H}	1200 {D,E,H}
Ethylbenzene	29 U	50 U
Isopropyl benzene	29 U	50 U
Methylene chloride	140 U	250 U
Toluene	29 U	50 U
trans-1,2-Dichloroethene	34	61
Trichloroethene	29 U	50 U
Vinyl chloride	510 {D,E,H}	820 {D,E,H}
Xylenes (total)	57 U	100 U

MW19-55	2/24/2016 ug/L	11/3/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	25 U	33 U
Chlorobenzene	25 U	33 U
cis-1,2-Dichloroethene	490 {E}	530 {E}
Ethylbenzene	25 U	33 U
Isopropyl benzene	25 U	33 U
Methylene chloride	130 U	170 U
Toluene	25 U	33 U
trans-1,2-Dichloroethene	31	32 J
Trichloroethene	25 U	33 U
Vinyl chloride	690 {D,E}	720 {D,E}
Xylenes (total)	50 U	67 U

MW19-06	11/2/2016 ug/L
Metals	
Metals	NA
VOCs	
Benzene	17 U
Chlorobenzene	17 U
cis-1,2-Dichloroethene	360 {E}
Ethylbenzene	17 U
Isopropyl benzene	17 U
Methylene chloride	83 U
Toluene	17 U
trans-1,2-Dichloroethene	22
Trichloroethene	17 U
Vinyl chloride	130 {D,E}
Xylenes (total)	33 U

MW-14	2/11/2016 ug/L	11/2/2016 ug/L
Metals		
Metals	NA	NA
VOCs		
Benzene	1.0 U	1.0 U/1.0 U
Chlorobenzene	1.0 U	1.0 U/1.0 U
cis-1,2-Dichloroethene	1.0 U	3.0/2.3
Ethylbenzene	1.0 U	1.0 U/1.0 U
Isopropyl benzene	1.0 U	1.0 U/1.0 U
Methylene chloride	5.0 U	5.0 U/5.0 U
Toluene	1.0 U	1.0 U/1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U/1.0 U
Trichloroethene	1.0 U	1.0 U/1.0 U
Vinyl chloride	0.72 J	25 {D,E,H}/20 {D,E,H}
Xylenes (total)	2.0 U	2.0 U/2.0 U

Nº	Revision	Date	Initial

0 40 80ft

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- DITCH, STREAM OR RIVER
- FENCE LINE
- TREE LINE
- FORMER SLUDGE LINE
- U.P. UTILITY POLE

NOTES

DATA PRESENTED IN THE DATABOXES ARE ONLY FOR THE CONSTITUENTS OF CONCERN (COC)
AS DEFINED IN THE REPORT TEXT. IF A COC WAS NEVER SAMPLED AT A LOCATION, THAT COC IS NOT SHOWN IN THE DATABOX AT THAT LOCATION.

ALL CONSTITUENTS OF CONCERN CONCENTRATIONS IN mg/L.

NS - NOT SAMPLED

U - THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

J - THE ASSOCIATED VALUE IS QUALIFIED AS AN ESTIMATED QUANTITY

UJ - THE ANALYTE WAS REPORTED OR QUALIFIED AS NOT DETECTED HOWEVER THE SAMPLE REPORT LIMIT IS QUALIFIED AS AN ESTIMATED VALUE AND MAY BE INACCURATE OR IMPRECISE

* - MW2 CONVERTED TO IW-33

GROUNDWATER
- A FLAMMABILITY AND EXPLOSIVITY SCREENING LEVELS
- B GROUNDWATER SURFACE WATER INTERFACE
- C NON-RESIDENTIAL DRINKING WATER
- D NON-RESIDENTIAL GROUNDWATER VOLATILIZATION TO INDOOR AIR INHALATION
- E WATER SOLUBILITY
- F RESIDENTIAL DRINKING WATER
- G RESIDENTIAL GROUNDWATER VOLATILIZATION TO INDOOR AIR INHALATION

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

LOCATION — DATE
PARAMETER — RESULT
EXCEEDANCE

SB19-33	2/28/2006
VOCs	
1,1,2,2-Tetrachloroethane	0.2 U
1,1,2-Trichloroethane	0.2 U
1,1-Dichloroethene	0.2 U
1,2-Dichloroethane	0.2 U
1,2-Dichloropropane	0.2 U
1,3-Dichlorobenzene	0.2 U
2-Butanone (Methyl ethyl ketone) (MEK)	5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	10 U
Acetone	5 U
Benzene	0.2 U
Carbon tetrachloride	0.2 U
Chlorobenzene	0.2 U
cis-1,2-Dichloroethene	4.8 {D,E}
Ethylbenzene	0.2 U
Isopropyl benzene	1 U
Methyl tert butyl ether (MTBE)	1 U
Methylene chloride	1 U
Tetrachloroethene	0.2 U
Toluene	0.2 U
trans-1,2-Dichloroethene	0.18 J{E}
Trichloroethene	0.2 U
Trifluorotrichloroethane (Freon 113)	0.2 U
Vinyl chloride	6.6 {C,D,E}
Xylenes (total)	0.4 U

DRAWING STATUS

Status	Date	Initial

COMPANY VEHICLE OPERATIONS AREA

YPSILANTI, MICHIGAN

SITE MAP WITH CENTRAL, SOUTHERN, EASTERN AND WESTERN GROUNDWATER ANALYTICAL RESULTS - FEBRUARY, JUNE AND OCTOBER 2016

Source Reference:

Project Manager: PROJ_MAN	Reviewed By: REVIEW_BY	Date: MAY 2018	
Scale: HORZ_SC	Project Nº: 017303-T05	Report Nº: 033	Drawing Nº: B-3

017303-T05(033)GN-DE005 MAY 3, 2018

Appendix C
Trend Analyses

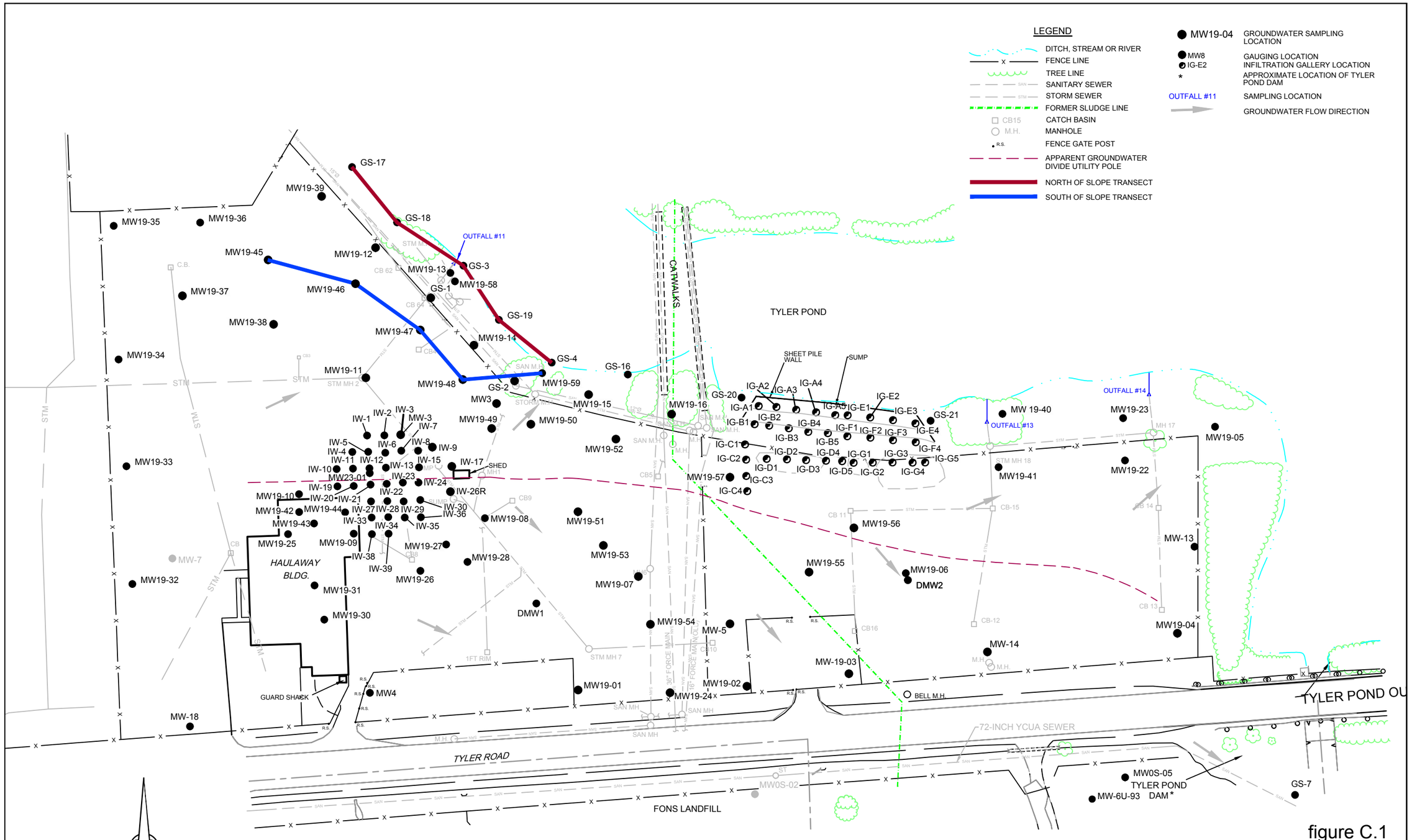


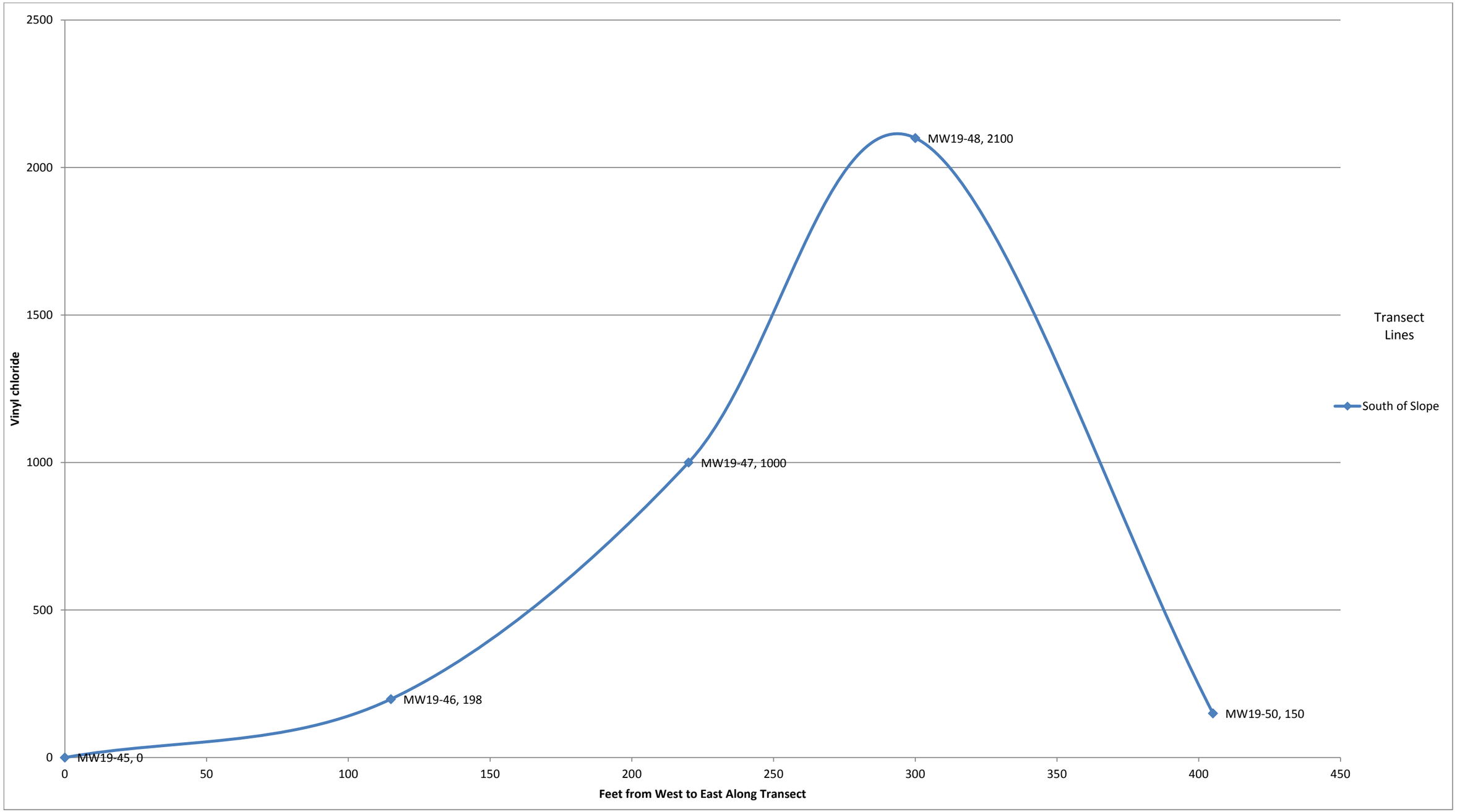
figure C.1

TRANSECT LINES FOR THE TREND ANALYSIS - SITE SUMMARY REPORT
FORMER GENERAL MOTORS COMPANY VEHICLE OPERATIONS PROPERTY
Ypsilanti, Michigan

017303-2018(033)GN-DE001 JUL 6, 2018

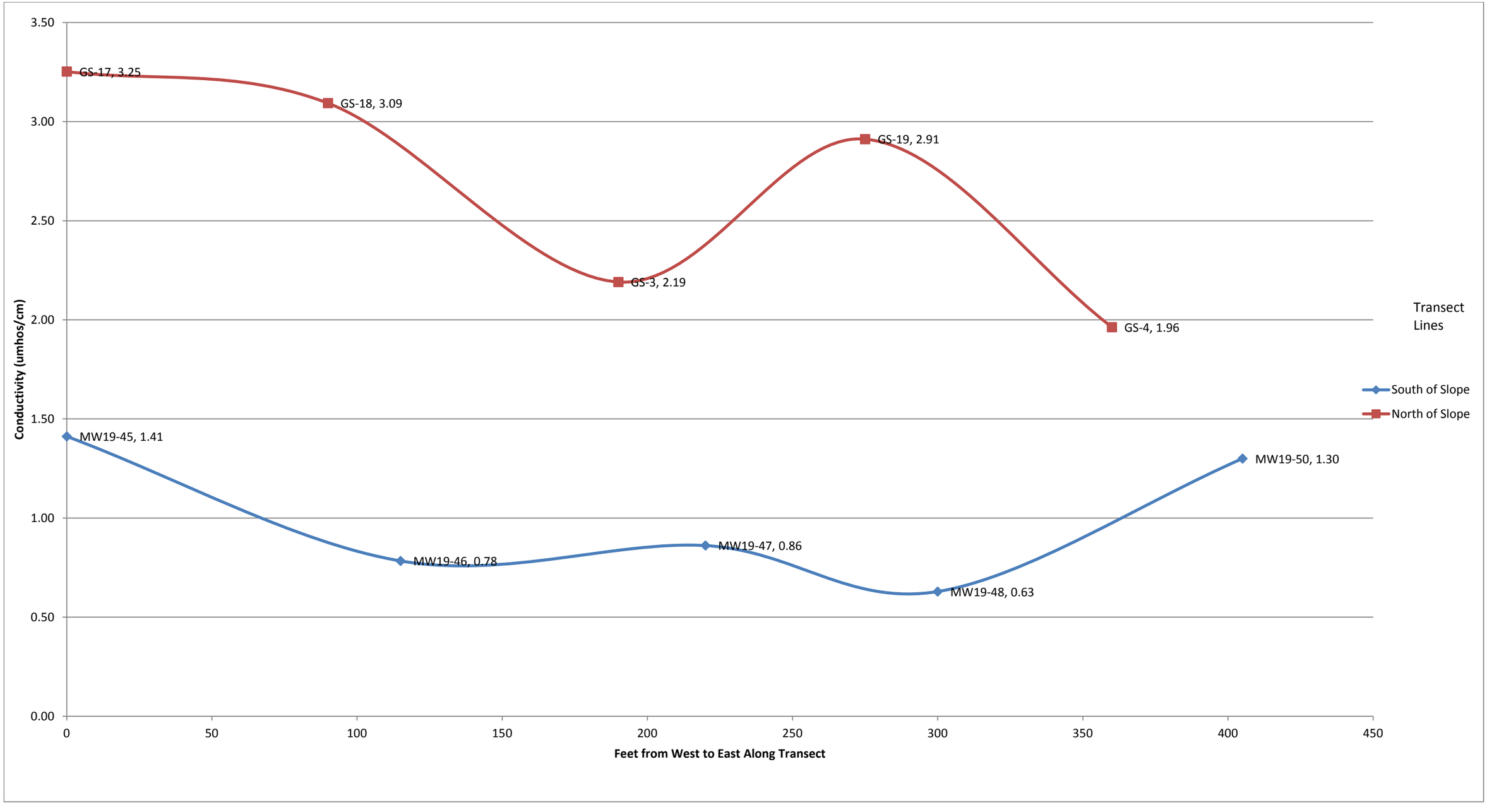
APPENDIX C

VINYL CHLORIDE - TREND ANALYSIS
FORMER WILLOW RUN CVO
YPSILANTI, MICHIGAN



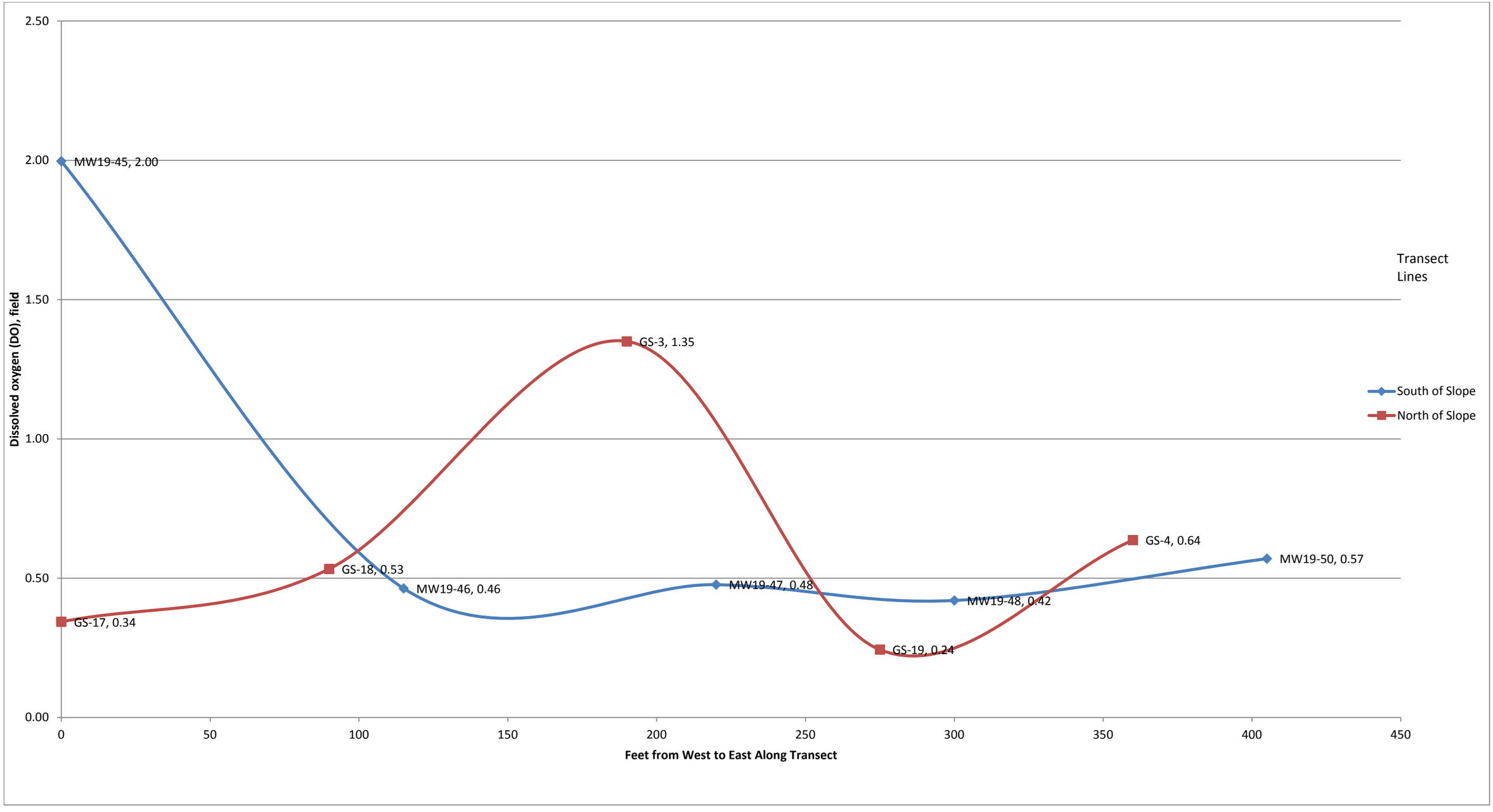
APPENDIX C

CONDUCTIVITY - TREND ANALYSIS
FORMER WILLOW RUN CVO
YPSILANTI, MICHIGAN



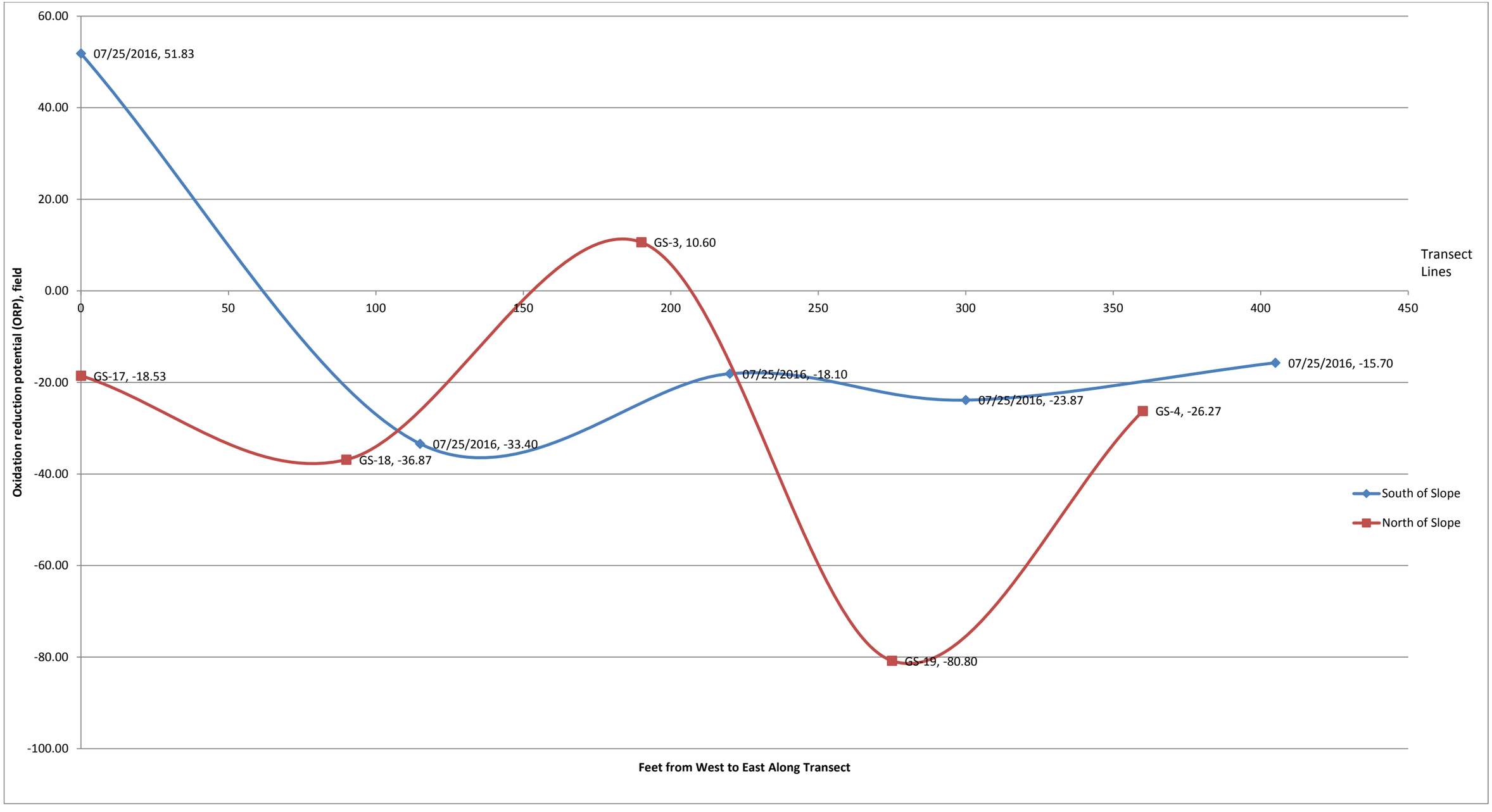
APPENDIX C

DISSOLVED OXYGEN - TREND ANALYSIS
FORMER WILLOW RUN CVO
YPSILANTI, MICHIGAN



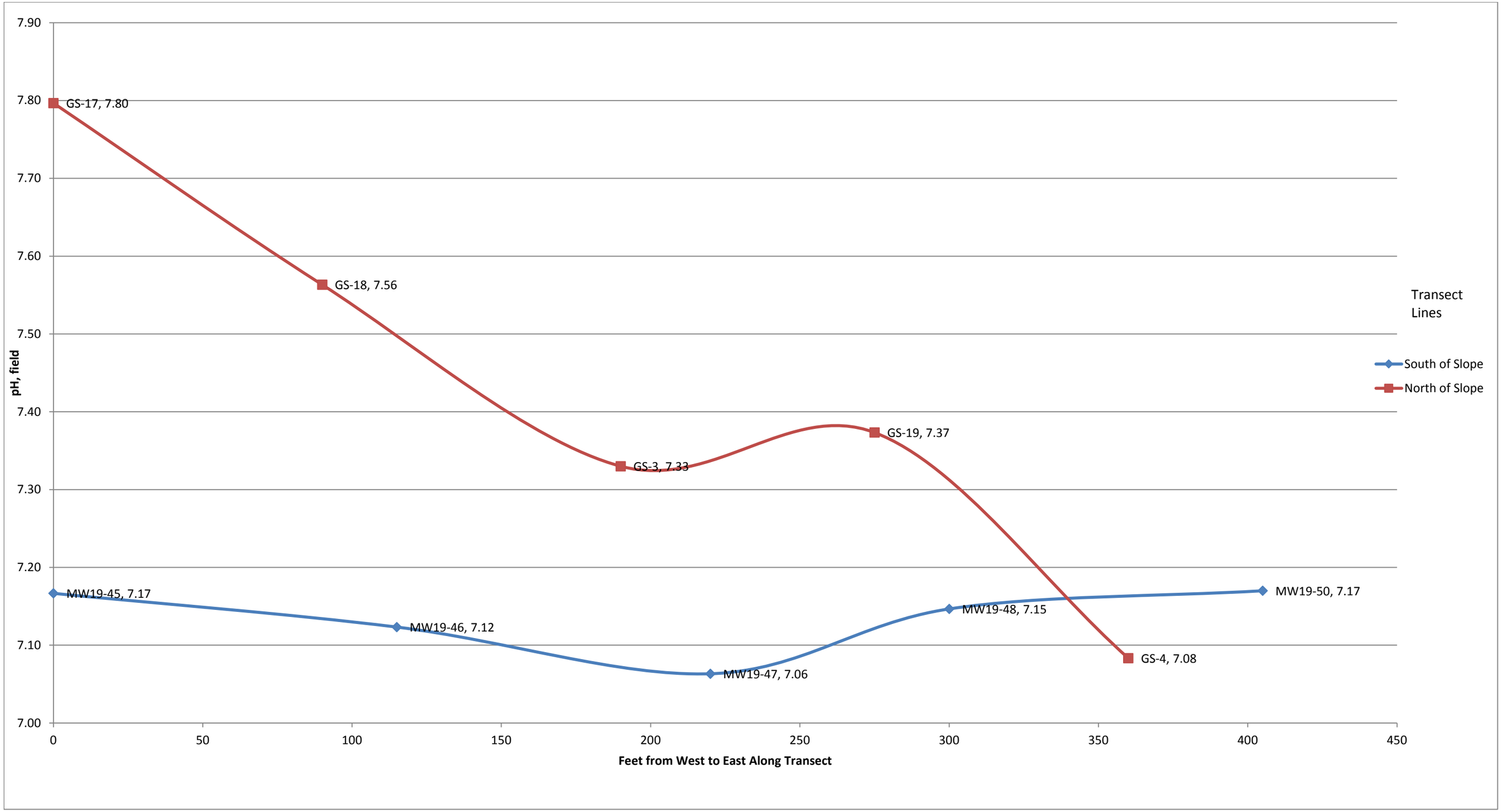
APPENDIX C

OXIDATION REDUCTION POTENTIAL - TREND ANALYSIS
FORMER WILLOW RUN CVO
YPSILANTI, MICHIGAN



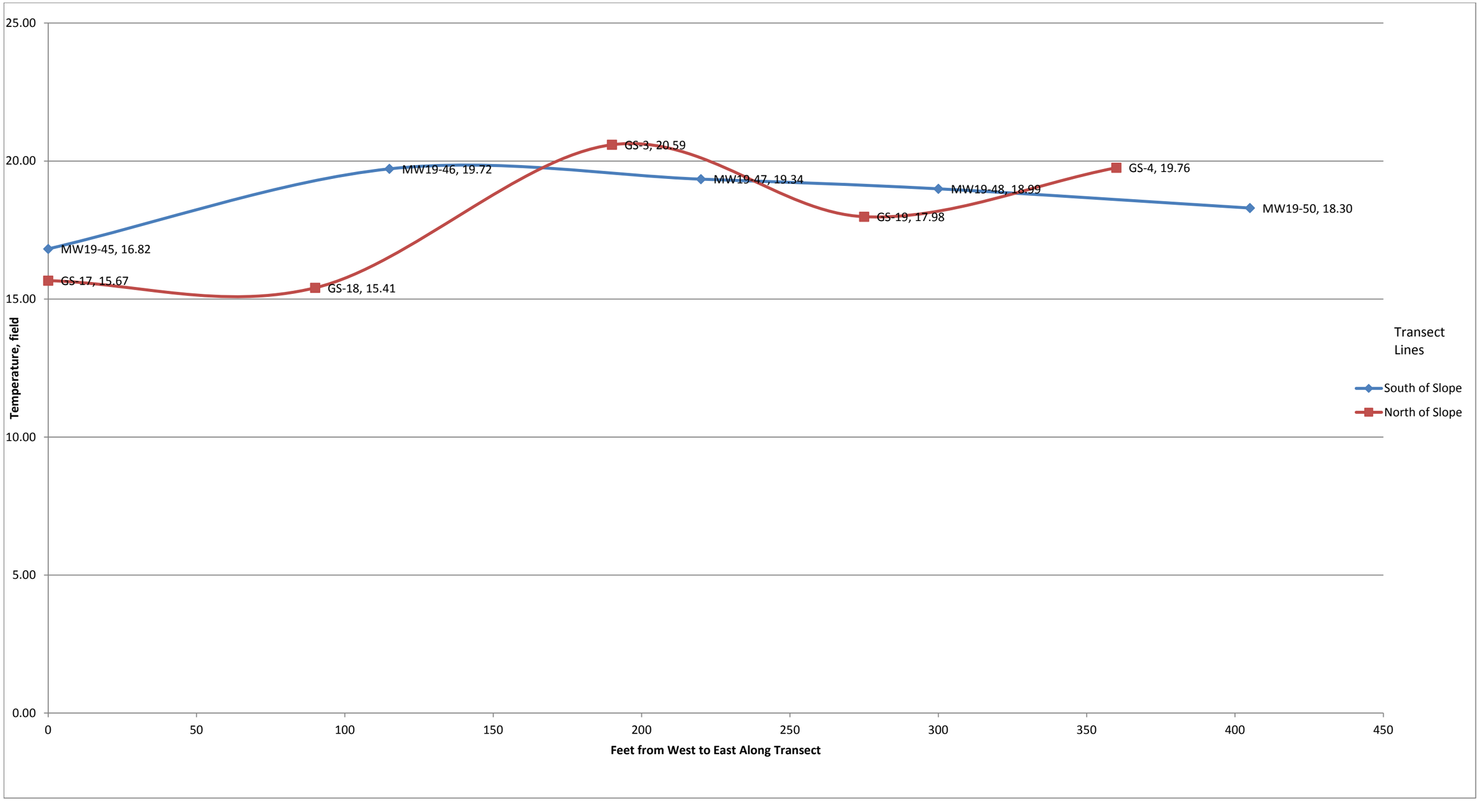
APPENDIX C

pH - TREND ANALYSIS
FORMER WILLOW RUN CVO
YPSILANTI, MICHIGAN



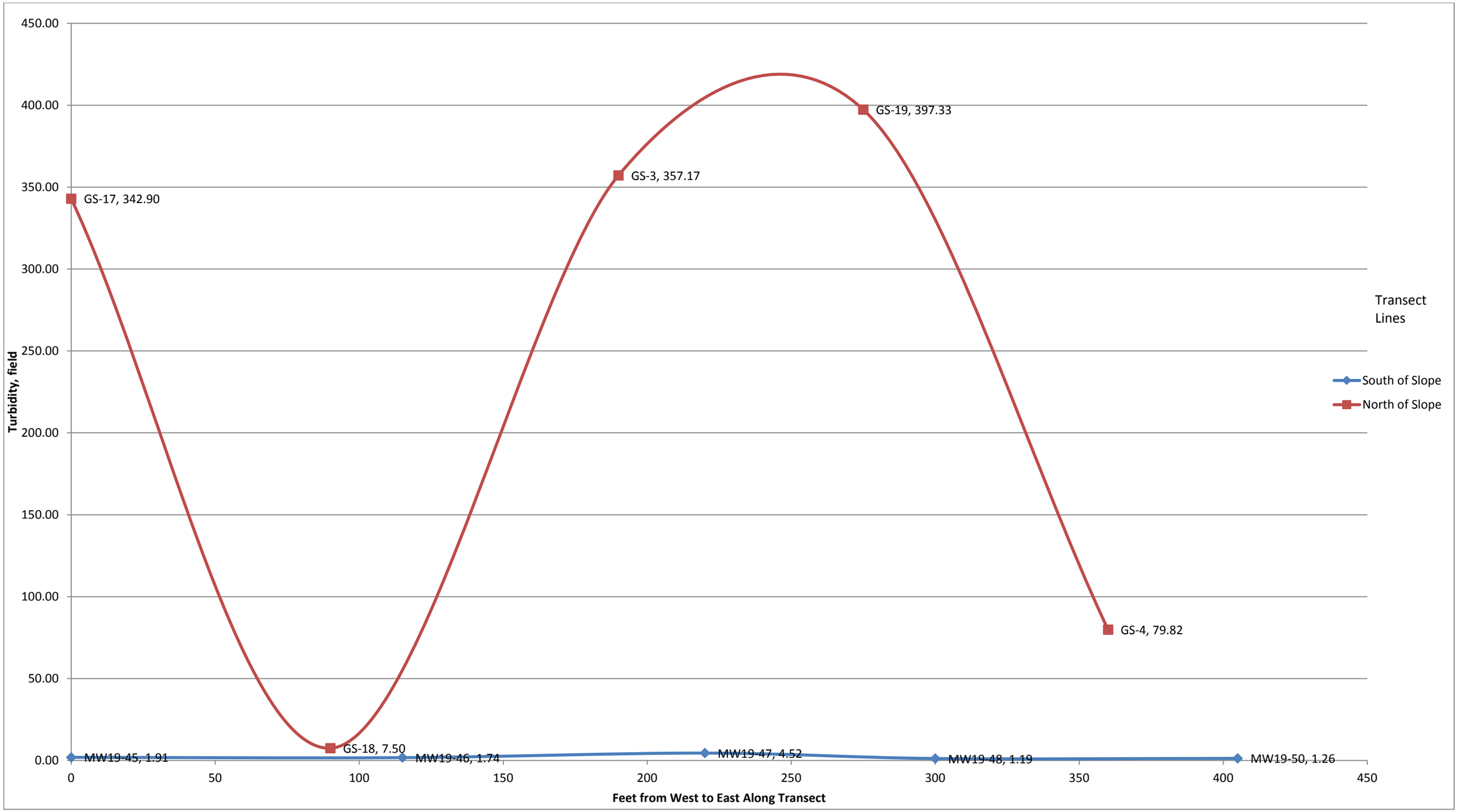
APPENDIX C

TEMPERATURE - TREND ANALYSIS
FORMER WILLOW RUN CVO
YPSILANTI, MICHIGAN



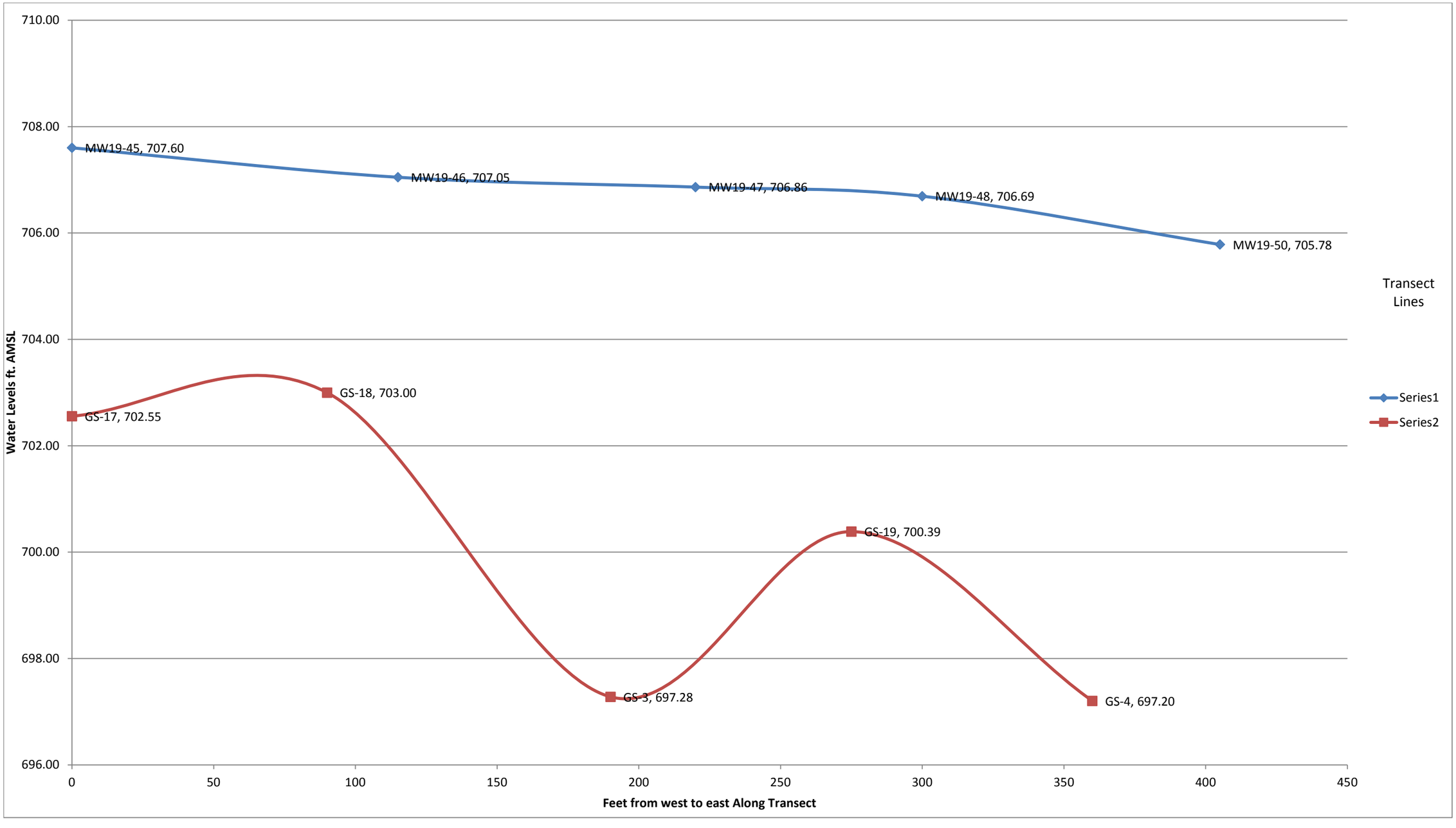
APPENDIX C

TURBIDITY - TREND ANALYSIS
FORMER WILLOW RUN CVO
YPSILANTI, MICHIGAN



APPENDIX C

WATER LEVELS - TREND ANALYSIS
FORMER WILLOW RUN CVO
YPSILANTI, MICHIGAN



Appendix D
Data Validation Memos and Analytical Reports

Memorandum

December 12, 2016

To:	Tom Kinney	Ref. No.:	017303-T02-03Y16
From:	Nancy Bergstrom/tl/100/Det	Tel:	734-453-5123

Subject: **Analytical Results and Reduced Validation**
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in support of the 2016 Groundwater Sampling at the Willow Run Company Vehicle Operations Site during October and November 2016. Samples were submitted to TestAmerica Laboratories, Inc., located in North Canton, Ohio. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes/laboratory control samples (LCS)/matrix spikes (MS) and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

i) "Quality Assurance Project Plan (QAPP) for the RCRA Facility Investigation (RFI) Work Plan, Company Vehicle Operations", Revision 1, February 2, 2012

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

iii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

Items ii) and iii) will subsequently be referred to as the "Guidelines" in this Memorandum.

GHD
14496 Sheldon Rd., Ste 200 Plymouth Michigan 48170 USA
T 734 453 5123 F 734 453 3792 W www.ghd.com

REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (4 +/- 2°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect or method blank detections were associated with investigative samples that reported non-detect concentrations.

4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC), semi-volatile organic compound (SVOC) and polychlorinated biphenyl (PCB) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries were within the laboratory control limits.

5. Laboratory Control Sample (LCS) Analyses

LCS and/or laboratory control sample duplicates (LCSD) are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS(/LCSD) were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Organic Analyses

The LCS/LCSD contained all compounds of interest (VOC and SVOC) or the compounds specified in the method (PCB). The LCS recoveries of several VOC exceeded the percent recovery criteria for various LCS. These analytes were not detected in the associated investigative samples and qualification was not required. All remaining LCS recoveries and RPDs were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

Inorganic Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

Organic Analyses

The MS/MSD samples were spiked with all compounds of interest. The MS/MSD recoveries of one VOC exceeded the percent recovery criteria for one MS/MSD sample. This analyte was not detected in the associated investigative sample and qualification was not required. All remaining percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of five trip blank samples and four field duplicate sample sets.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, five trip blanks were submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest or trip blank detections were associated with investigative samples that reported non-detect concentrations.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, four field duplicate samples were collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one times the RL value for water samples.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were reported as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Table 1

Sample Collection and Analysis Summary
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters					Comments
					TCL VOC	TCLP VOC	TCLP SVOC	TCLP Metals	PCB	
TA SDG No.: 240-71416-1										
GW-17303-102516-JY-001	MW-18	Water	10/25/2016	09:00	X	--	--	--	--	
GW-17303-102516-JY-002	MW19-33	Water	10/25/2016	09:50	X	--	--	--	--	
GW-17303-102516-JY-003	MW19-33	Water	10/25/2016	09:55	X	--	--	--	--	FD (MW19-33)
GW-17303-102516-JY-004	MW19-34	Water	10/25/2016	10:50	X	--	--	--	--	
GW-17303-102516-JY-005	MW19-35	Water	10/25/2016	11:50	X	--	--	--	--	
GW-17303-102516-JY-006	MW19-45	Water	10/25/2016	12:45	X	--	--	--	--	
GW-17303-102516-JY-007	MW19-38	Water	10/25/2016	14:00	X	--	--	--	--	
GW-17303-102616-JY-008	MW19-12	Water	10/26/2016	10:00	X	--	--	--	--	
GW-17303-102616-JY-009	GS-2	Water	10/26/2016	12:25	X	--	--	--	--	
GW-17303-102616-JY-010	MW19-45	Water	10/26/2016	09:50	X	--	--	--	--	
GW-17303-102616-JY-011	MW19-07	Water	10/26/2016	10:45	X	--	--	--	--	MS/MSD
GW-17303-102616-JY-012	MW19-51	Water	10/26/2016	11:40	X	--	--	--	--	
GW-17303-102716-JY-013	MW19-46	Water	10/27/2016	09:20	X	--	--	--	--	MS/MSD
GW-17303-102716-JY-014	MW19-47	Water	10/27/2016	10:10	X	--	--	--	--	
GW-17303-102716-JY-015	MW19-11	Water	10/27/2016	11:20	X	--	--	--	--	
GW-17303-102716-JY-016	MW19-48	Water	10/27/2016	12:10	X	--	--	--	--	
GW-17303-102716-JY-017	MW19-48	Water	10/27/2016	12:15	X	--	--	--	--	FD (MW19-48)
GW-17303-102716-JY-018	MW19-49	Water	10/27/2016	13:05	X	--	--	--	--	
GW-17303-102716-JY-019	MW19-50	Water	10/27/2016	14:00	X	--	--	--	--	
GW-17303-102716-JY-020	MW19-52	Water	10/27/2016	15:00	X	--	--	--	--	
TB-17303-102516	--	Water	10/25/2016	--	X	--	--	--	--	TB
TA SDG No.: 240-71478-1										
GW-17303-102816-JY-021	MW19-57	Water	10/28/2016	09:30	X	--	--	--	--	
GW-17303-102816-JY-022	IG-C3	Water	10/28/2016	10:15	X	--	--	--	--	
GW-17303-102816-JY-023	IG-C3	Water	10/28/2016	10:20	X	--	--	--	--	FD (IG-C3)
GW-17303-102816-JY-024	IG-G3	Water	10/28/2016	11:15	X	--	--	--	--	
GW-17303-102816-JY-025	IG-D2	Water	10/28/2016	12:15	X	--	--	--	--	
GW-17303-102816-JY-026	MW19-53	Water	10/28/2016	09:10	X	--	--	--	--	
GW-17303-102816-JY-027	MW-5	Water	10/28/2016	10:20	X	--	--	--	--	
GW-17303-102816-JY-028	MW19-02	Water	10/28/2016	11:25	X	--	--	--	--	MS/MSD
GW-17303-102816-JY-029	MW19-24	Water	10/28/2016	12:40	X	--	--	--	--	

Table 1

Sample Collection and Analysis Summary
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters					Comments
					TCL VOC	TCLP VOC	TCLP SVOC	TCLP Metals	PCB	
TA SDG No.: 240-71478-1										
GW-17303-102816-JY-030	MW-13	Water	10/28/2016	13:15	X	--	--	--	--	
GW-17303-102816-JY-031	MW19-01	Water	10/28/2016	13:50	X	--	--	--	--	
GW-17303-102816-JY-032	GS-7	Water	10/28/2016	14:20	X	--	--	--	--	
TB-17303-102816	--	Water	10/28/2016	--	X	--	--	--	--	TB
TA SDG No.: 240-71561-1										
GW-17303-103116-DS-033	MW-4	Water	10/31/2016	09:00	X	--	--	--	--	
GW-17303-103116-DS-034	MW19-40	Water	10/31/2016	08:50	X	--	--	--	--	
GW-17303-103116-DS-035	IW-33	Water	10/31/2016	09:50	X	--	--	--	--	
GW-17303-103116-DS-036	GS-21	Water	10/31/2016	09:35	X	--	--	--	--	
GW-17303-103116-DS-037	IW-34	Water	10/31/2016	11:00	X	--	--	--	--	
GW-17303-103116-DS-038	IG-E4	Water	10/31/2016	10:45	X	--	--	--	--	
GW-17303-103116-DS-039	MW19-43	Water	10/31/2016	13:05	X	--	--	--	--	
GW-17303-103116-DS-040	IG-F4	Water	10/31/2016	11:40	X	--	--	--	--	
GW-17303-103116-DS-041	IW-20	Water	10/31/2016	14:05	X	--	--	--	--	
GW-17303-103116-DS-042	IG-B4	Water	10/31/2016	12:35	X	--	--	--	--	
GW-17303-103116-DS-043	IG-B1	Water	10/31/2016	13:25	X	--	--	--	--	
GW-17303-103116-DS-044	IG-A1	Water	10/31/2016	14:15	X	--	--	--	--	
GW-17303-103116-DS-045	GS-20	Water	10/31/2016	15:05	X	--	--	--	--	
GW-17303-103116-DS-046	MW19-16	Water	10/31/2016	16:00	X	--	--	--	--	
GW-17303-110116-DS-047	GS-17	Water	11/01/2016	09:35	X	--	--	--	--	
GW-17303-110116-DS-048	GS-18	Water	11/01/2016	10:35	X	--	--	--	--	
GW-17303-110116-DS-049	GS-1	Water	11/01/2016	11:30	X	--	--	--	--	
GW-17303-110116-DS-050	MW19-58	Water	11/01/2016	12:15	X	--	--	--	--	
GW-17303-110116-DS-051	GS-3	Water	11/01/2016	12:50	X	--	--	--	--	
GW-17303-110116-DS-052	GS-19	Water	11/01/2016	13:55	X	--	--	--	--	
GW-17303-110116-DS-053	MW19-14	Water	11/01/2016	14:55	X	--	--	--	--	
TRIP BLANK	--	Water	10/31/2016	--	X	--	--	--	--	TB
TA SDG No.: 240-71686-1										
GW-17303-110216-DS-054	GS-16	Water	11/02/2016	08:55	X	--	--	--	--	
GW-17303-110216-DS-055	GS-4	Water	11/02/2016	10:05	X	--	--	--	--	
GW-17303-110216-DS-056	MW19-59	Water	11/02/2016	10:55	X	--	--	--	--	
GW-17303-110216-DS-057	MW-14	Water	11/02/2016	12:15	X	--	--	--	--	
GW-17303-110216-DS-058	MW-14	Water	11/02/2016	12:20	X	--	--	--	--	FD (MW-14)

Table 1

Sample Collection and Analysis Summary
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters					Comments
					TCL VOC	TCLP VOC	TCLP SVOC	TCLP Metals	PCB	
TA SDG No.: 240-71686-1										
GW-17303-110216-DS-059	MW19-03	Water	11/02/2016	13:15	X	--	--	--	--	
GW-17303-110216-DS-060	MW19-06	Water	11/02/2016	14:25	X	--	--	--	--	MS/MSD
GW-17303-110316-DS-061	MW19-56	Water	11/03/2016	08:45	X	--	--	--	--	MS/MSD
GW-17303-110316-DS-062	MW19-55	Water	11/03/2016	09:45	X	--	--	--	--	
GW-17303-110316-DS-063	IW-30	Water	11/03/2016	10:50	X	--	--	--	--	
GW-17303-110316-DS-064	IW-26R	Water	11/03/2016	11:55	X	--	--	--	--	
GW-17303-110316-DS-065	IW-9	Water	11/03/2016	12:45	X	--	--	--	--	
GW-17303-110316-DS-066	IW-6	Water	11/03/2016	13:40	X	--	--	--	--	
TB-17303-110216	--	Water	11/02/2016	--	X	--	--	--	--	TB
TA SDG No.: 240-71787-1										
GW-17303-110416-DS-067	IW-2	Water	11/04/2016	08:30	X	--	--	--	--	
GW-17303-110416-DS-068	IW-10	Water	11/04/2016	09:15	X	--	--	--	--	
WW-17303-110416-DS-001	Waste	Water	11/04/2016	09:35	--	X	X	X	X	
WW-17303-110416-DS-002	Waste	Water	11/04/2016	09:45	--	X	X	X	X	
TB-17303-110416	--	Water	11/04/2016	--	X	--	--	--	--	TB

Notes:

FD	- Field Duplicate sample of sample in parenthesis
MS/MSD	- Matrix Spike/Matrix Spike Duplicate
TB	- Trip Blank
TCL	- Target Compound List
TCLP	- Toxicity Characteristic Leaching Procedure
VOC	- Volatile Organic Compounds
SVOC	- Semi-volatile Organic Compounds
PCB	- Polychlorinated biphenyls
TA-NC	- TestAmerica Laboratories, Inc. - North Canton, Ohio
SDG	- Sample Delivery Group

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-1	GS-2	GS-3	GS-4	GS-7
Sample Name:		GW-17303-110116-DS-049	GW-17303-102616-JY-009	GW-17303-110116-DS-051	GW-17303-110216-DS-055	GW-17303-102816-JY-032
Sample Date:		11/01/2016	10/26/2016	11/01/2016	11/02/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,1,2-Trichloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,1-Dichloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,1-Dichloroethene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dichlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dichloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dichloropropane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,3-Dichlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,4-Dichlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5000 U	5000 U	10 U	2500 U	10 U
2-Hexanone	µg/L	5000 U	5000 U	10 U	2500 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5000 U	5000 U	10 U	2500 U	10 U
Acetone	µg/L	5000 U	5000 U	10 U	2500 U	10 U
Benzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Bromodichloromethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Bromoform	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Carbon disulfide	µg/L	2500 U	2500 U	1.7 J	1300 U	5.0 U
Carbon tetrachloride	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Chlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Chloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Chloroform (Trichloromethane)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
cis-1,2-Dichloroethene	µg/L	500 U	3500	1.0 U	890	0.67 J
cis-1,3-Dichloropropene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Cyclohexane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Dibromochloromethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Ethylbenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Isopropyl benzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Methyl acetate	µg/L	5000 U	5000 U	10 U	2500 U	10 U
Methyl cyclohexane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Methylene chloride	µg/L	2500 U	2500 U	5.0 U	1300 U	5.0 U
Styrene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Tetrachloroethene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Toluene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
trans-1,2-Dichloroethene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
trans-1,3-Dichloropropene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Trichloroethene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-1	GS-2	GS-3	GS-4	GS-7
Sample Name:		GW-17303-110116-DS-049	GW-17303-102616-JY-009	GW-17303-110116-DS-051	GW-17303-110216-DS-055	GW-17303-102816-JY-032
Sample Date:		11/01/2016	10/26/2016	11/01/2016	11/02/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Vinyl chloride	µg/L	9100	13000	1.0 U	8100	0.80 J
Xylenes (total)	µg/L	1000 U	1000 U	2.0 U	500 U	2.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-1	GS-2	GS-3	GS-4	GS-7
Sample Name:		GW-17303-110116-DS-049	GW-17303-102616-JY-009	GW-17303-110116-DS-051	GW-17303-110216-DS-055	GW-17303-102816-JY-032
Sample Date:		11/01/2016	10/26/2016	11/01/2016	11/02/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-16	GS-17	GS-18	GS-19	GS-20
Sample Name:		GW-17303-110216-DS-054	GW-17303-110116-DS-047	GW-17303-110116-DS-048	GW-17303-110116-DS-052	GW-17303-103116-DS-045
Sample Date:		11/02/2016	11/01/2016	11/01/2016	11/01/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,1,2,2-Tetrachloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,1,2-Trichloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,1-Dichloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,1-Dichloroethene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2,4-Trichlorobenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dichlorobenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dichloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dichloropropane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,3-Dichlorobenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,4-Dichlorobenzene	µg/L	25 U	1.0 U	1.1 J	3.3 U	17 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	250 U	10 U	17 U	33 U	170 U
2-Hexanone	µg/L	250 U	10 U	17 U	33 U	170 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	250 U	10 U	17 U	33 U	170 U
Acetone	µg/L	250 U	10 U	17 U	33 U	170 U
Benzene	µg/L	25 U	1.4	1.7 U	1.6 J	17 U
Bromodichloromethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Bromoform	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Bromomethane (Methyl bromide)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Carbon disulfide	µg/L	130 U	5.0 U	8.4 U	17 U	83 U
Carbon tetrachloride	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Chlorobenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Chloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Chloroform (Trichloromethane)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Chloromethane (Methyl chloride)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
cis-1,2-Dichloroethene	µg/L	87	1.9	46	20	440
cis-1,3-Dichloropropene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Cyclohexane	µg/L	25 U	0.73 J	1.7 U	3.3 U	17 U
Dibromochloromethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Dichlorodifluoromethane (CFC-12)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Ethylbenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Isopropyl benzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Methyl acetate	µg/L	250 U	10 U	17 U	33 U	170 U
Methyl cyclohexane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Methyl tert butyl ether (MTBE)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Methylene chloride	µg/L	130 U	5.0 U	8.4 U	17 U	83 U
Styrene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Tetrachloroethene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Toluene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
trans-1,2-Dichloroethene	µg/L	25 U	1.0 U	0.81 J	2.5 J	32
trans-1,3-Dichloropropene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Trichloroethene	µg/L	25 U	1.0 U	14	3.3 U	5.7 J

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-16	GS-17	GS-18	GS-19	GS-20
Sample Name:		GW-17303-110216-DS-054	GW-17303-110116-DS-047	GW-17303-110116-DS-048	GW-17303-110116-DS-052	GW-17303-103116-DS-045
Sample Date:		11/02/2016	11/01/2016	11/01/2016	11/01/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Trifluorotrichloroethane (CFC-113)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Vinyl chloride	µg/L	670	2.2	28	50	100
Xylenes (total)	µg/L	50 U	2.0 U	1.2 J	6.7 U	33 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-16	GS-17	GS-18	GS-19	GS-20
Sample Name:		GW-17303-110216-DS-054	GW-17303-110116-DS-047	GW-17303-110116-DS-048	GW-17303-110116-DS-052	GW-17303-103116-DS-045
Sample Date:		11/02/2016	11/01/2016	11/01/2016	11/01/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-21	IG-A1	IG-B1	IG-B4	IG-C3
Sample Name:		GW-17303-103116-DS-036	GW-17303-103116-DS-044	GW-17303-103116-DS-043	GW-17303-103116-DS-042	GW-17303-102816-JY-022
Sample Date:		10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	0.83 J	0.75 J	25 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U	250 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	250 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U	250 U
Acetone	µg/L	10 U	10 U	10 U	10 U	250 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	130 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
cis-1,2-Dichloroethene	µg/L	25	14	13	12	32
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	250 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	130 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
trans-1,2-Dichloroethene	µg/L	1.4	4.1	1.0 U	0.34 J	25 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Trichloroethene	µg/L	1.8	0.95 J	1.0 U	1.5	25 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-21	IG-A1	IG-B1	IG-B4	IG-C3
Sample Name:		GW-17303-103116-DS-036	GW-17303-103116-DS-044	GW-17303-103116-DS-043	GW-17303-103116-DS-042	GW-17303-102816-JY-022
Sample Date:		10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Vinyl chloride	µg/L	11	4.5	12	7.2	440
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	50 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-21	IG-A1	IG-B1	IG-B4	IG-C3
Sample Name:		GW-17303-103116-DS-036	GW-17303-103116-DS-044	GW-17303-103116-DS-043	GW-17303-103116-DS-042	GW-17303-102816-JY-022
Sample Date:		10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IG-C3	IG-D2	IG-E4	IG-F4	IG-G3
Sample Name:		GW-17303-102816-JY-023	GW-17303-102816-JY-025	GW-17303-103116-DS-038	GW-17303-103116-DS-040	GW-17303-102816-JY-024
Sample Date:		10/28/2016	10/28/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
		Duplicate				
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,1,2-Trichloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,1-Dichloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,1-Dichloroethene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dichlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dichloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dichloropropane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,3-Dichlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,4-Dichlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	250 U	14 U	10 U	14 U	20 U
2-Hexanone	µg/L	250 U	14 U	10 U	14 U	20 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	250 U	14 U	10 U	14 U	20 U
Acetone	µg/L	250 U	14 U	10 U	14 U	20 U
Benzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Bromodichloromethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Bromoform	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Carbon disulfide	µg/L	130 U	7.2 U	5.0 U	7.2 U	10 U
Carbon tetrachloride	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Chlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Chloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Chloroform (Trichloromethane)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
cis-1,2-Dichloroethene	µg/L	33	16	5.8	40	18
cis-1,3-Dichloropropene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Cyclohexane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Dibromochloromethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Ethylbenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Isopropyl benzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Methyl acetate	µg/L	250 U	14 U	10 U	14 U	20 U
Methyl cyclohexane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Methyl tert butyl ether (MTBE)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Methylene chloride	µg/L	130 U	7.2 U	5.0 U	7.2 U	10 U
Styrene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Tetrachloroethene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Toluene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
trans-1,2-Dichloroethene	µg/L	25 U	0.77 J	2.5	1.9	0.74 J
trans-1,3-Dichloropropene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Trichloroethene	µg/L	25 U	0.51 J	2.9	1.3 J	2.4

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IG-C3	IG-D2	IG-E4	IG-F4	IG-G3
Sample Name:		GW-17303-102816-JY-023	GW-17303-102816-JY-025	GW-17303-103116-DS-038	GW-17303-103116-DS-040	GW-17303-102816-JY-024
Sample Date:		10/28/2016	10/28/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
		Duplicate				
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Vinyl chloride	µg/L	440	26	1.2	16	40
Xylenes (total)	µg/L	50 U	2.9 U	2.0 U	2.9 U	4.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IG-C3	IG-D2	IG-E4	IG-F4	IG-G3
Sample Name:		GW-17303-102816-JY-023	GW-17303-102816-JY-025	GW-17303-103116-DS-038	GW-17303-103116-DS-040	GW-17303-102816-JY-024
Sample Date:		10/28/2016	10/28/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
		Duplicate				
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-2	IW-6	IW-9	IW-10	IW-20
Sample Name:		GW-17303-110416-DS-067	GW-17303-110316-DS-066	GW-17303-110316-DS-065	GW-17303-110416-DS-068	GW-17303-103116-DS-041
Sample Date:		11/04/2016	11/03/2016	11/03/2016	11/04/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,1,2,2-Tetrachloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,1,2-Trichloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,1-Dichloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,1-Dichloroethene	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2,4-Trichlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dichlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dichloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dichloropropane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,3-Dichlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
1,4-Dichlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
2-Hexanone	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
Acetone	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
Benzene	µg/L	250 U	2500 U	100 U	530	35 J
Bromodichloromethane	µg/L	250 U	2500 U	100 U	250 U	50 U
Bromoform	µg/L	250 U	2500 U	100 U	250 U	50 U
Bromomethane (Methyl bromide)	µg/L	250 U	2500 U	100 U	250 U	50 U
Carbon disulfide	µg/L	1300 U	13000 U	500 U	1300 U	250 U
Carbon tetrachloride	µg/L	250 U	2500 U	100 U	250 U	50 U
Chlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
Chloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
Chloroform (Trichloromethane)	µg/L	250 U	2500 U	100 U	250 U	50 U
Chloromethane (Methyl chloride)	µg/L	250 U	2500 U	100 U	250 U	50 U
cis-1,2-Dichloroethene	µg/L	160 J	13000	180	1100	170
cis-1,3-Dichloropropene	µg/L	250 U	2500 U	100 U	250 U	50 U
Cyclohexane	µg/L	250 U	2500 U	100 U	250 U	50 U
Dibromochloromethane	µg/L	250 U	2500 U	100 U	250 U	50 U
Dichlorodifluoromethane (CFC-12)	µg/L	250 U	2500 U	100 U	250 U	50 U
Ethylbenzene	µg/L	250 U	2500 U	54 J	130 J	50 U
Isopropyl benzene	µg/L	250 U	2500 U	100 U	250 U	50 U
Methyl acetate	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
Methyl cyclohexane	µg/L	250 U	2500 U	100 U	250 U	50 U
Methyl tert butyl ether (MTBE)	µg/L	250 U	2500 U	100 U	250 U	50 U
Methylene chloride	µg/L	1300 U	13000 U	500 U	140 J	250 U
Styrene	µg/L	250 U	2500 U	100 U	250 U	50 U
Tetrachloroethene	µg/L	250 U	2500 U	100 U	250 U	50 U
Toluene	µg/L	250 U	2500 U	420	74 J	50 U
trans-1,2-Dichloroethene	µg/L	250 U	2500 U	100 U	250 U	50 U
trans-1,3-Dichloropropene	µg/L	250 U	2500 U	100 U	250 U	50 U
Trichloroethene	µg/L	250 U	2500 U	100 U	250 U	50 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-2	IW-6	IW-9	IW-10	IW-20
Sample Name:		GW-17303-110416-DS-067	GW-17303-110316-DS-066	GW-17303-110316-DS-065	GW-17303-110416-DS-068	GW-17303-103116-DS-041
Sample Date:		11/04/2016	11/03/2016	11/03/2016	11/04/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	250 U	2500 U	100 U	250 U	50 U
Trifluorotrichloroethane (CFC-113)	µg/L	250 U	2500 U	100 U	250 U	50 U
Vinyl chloride	µg/L	3300	59000	1600	3500	920
Xylenes (total)	µg/L	500 U	5000 U	270	230 J	100 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-2	IW-6	IW-9	IW-10	IW-20
Sample Name:		GW-17303-110416-DS-067	GW-17303-110316-DS-066	GW-17303-110316-DS-065	GW-17303-110416-DS-068	GW-17303-103116-DS-041
Sample Date:		11/04/2016	11/03/2016	11/03/2016	11/04/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-26R	IW-30	IW-33	IW-34	MW-4
Sample Name:		GW-17303-110316-DS-064	GW-17303-110316-DS-063	GW-17303-103116-DS-035	GW-17303-103116-DS-037	GW-17303-103116-DS-033
Sample Date:		11/03/2016	11/03/2016	10/31/2016	10/31/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,1,2-Trichloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,1-Dichloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,1-Dichloroethene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dichlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dichloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dichloropropane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,3-Dichlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,4-Dichlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
2-Hexanone	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
Acetone	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
Benzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Bromodichloromethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Bromoform	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Carbon disulfide	µg/L	1300 U	2500 U	5000 U	1300 U	5.0 U
Carbon tetrachloride	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Chlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Chloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Chloroform (Trichloromethane)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
cis-1,2-Dichloroethene	µg/L	790	980	950 J	3800	1.0 U
cis-1,3-Dichloropropene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Cyclohexane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Dibromochloromethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Ethylbenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Isopropyl benzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Methyl acetate	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
Methyl cyclohexane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Methylene chloride	µg/L	1300 U	2500 U	5000 U	1300 U	5.0 U
Styrene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Tetrachloroethene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Toluene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
trans-1,2-Dichloroethene	µg/L	250 U	500 U	1000 U	73 J	1.0 U
trans-1,3-Dichloropropene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Trichloroethene	µg/L	250 U	500 U	1000 U	250 U	1.0 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-26R	IW-30	IW-33	IW-34	MW-4
Sample Name:		GW-17303-110316-DS-064	GW-17303-110316-DS-063	GW-17303-103116-DS-035	GW-17303-103116-DS-037	GW-17303-103116-DS-033
Sample Date:		11/03/2016	11/03/2016	10/31/2016	10/31/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Vinyl chloride	µg/L	4100	9100	16000	6100	1.0 U
Xylenes (total)	µg/L	500 U	1000 U	2000 U	500 U	2.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-26R	IW-30	IW-33	IW-34	MW-4
Sample Name:		GW-17303-110316-DS-064	GW-17303-110316-DS-063	GW-17303-103116-DS-035	GW-17303-103116-DS-037	GW-17303-103116-DS-033
Sample Date:		11/03/2016	11/03/2016	10/31/2016	10/31/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW-5	MW-13	MW-14	MW-14	MW-18
Sample Name:		GW-17303-102816-JY-027	GW-17303-102816-JY-030	GW-17303-110216-DS-057	GW-17303-110216-DS-058	GW-17303-102516-JY-001
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/25/2016
Depth:		--	--	--	--	--
					Duplicate	
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	3300 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	3300 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	3300 U	10 U	10 U	10 U	10 U
Acetone	µg/L	3300 U	10 U	10 U	10 U	10 U
Benzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1700 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	3600	1.2	3.0	2.3	1.0 U
cis-1,3-Dichloropropene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	3300 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1700 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW-5	MW-13	MW-14	MW-14	MW-18
Sample Name:		GW-17303-102816-JY-027	GW-17303-102816-JY-030	GW-17303-110216-DS-057	GW-17303-110216-DS-058	GW-17303-102516-JY-001
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/25/2016
Depth:		--	--	--	--	--
					Duplicate	
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	9800	1.5	25	20	1.0 U
Xylenes (total)	µg/L	670 U	2.0 U	2.0 U	2.0 U	2.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW-5	MW-13	MW-14	MW-14	MW-18
Sample Name:		GW-17303-102816-JY-027	GW-17303-102816-JY-030	GW-17303-110216-DS-057	GW-17303-110216-DS-058	GW-17303-102516-JY-001
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/25/2016
Depth:		--	--	--	--	--
					Duplicate	
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-01	MW19-02	MW19-03	MW19-06	MW19-07
Sample Name:		GW-17303-102816-JY-031	GW-17303-102816-JY-028	GW-17303-110216-DS-059	GW-17303-110216-DS-060	GW-17303-102616-JY-011
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/26/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,1,2,2-Tetrachloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,1,2-Trichloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,1-Dichloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,1-Dichloroethene	µg/L	11 U	200 U	50 U	17 U	200 U
1,2,4-Trichlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dichlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dichloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dichloropropane	µg/L	11 U	200 U	50 U	17 U	200 U
1,3-Dichlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
1,4-Dichlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	110 U	2000 U	500 U	170 U	2000 U
2-Hexanone	µg/L	110 U	2000 U	500 U	170 U	2000 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	110 U	2000 U	500 U	170 U	2000 U
Acetone	µg/L	110 U	2000 U	500 U	170 U	2000 U
Benzene	µg/L	11 U	200 U	50 U	17 U	200 U
Bromodichloromethane	µg/L	11 U	200 U	50 U	17 U	200 U
Bromoform	µg/L	11 U	200 U	50 U	17 U	200 U
Bromomethane (Methyl bromide)	µg/L	11 U	200 U	50 U	17 U	200 U
Carbon disulfide	µg/L	56 U	1000 U	250 U	83 U	1000 U
Carbon tetrachloride	µg/L	11 U	200 U	50 U	17 U	200 U
Chlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
Chloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
Chloroform (Trichloromethane)	µg/L	11 U	200 U	50 U	17 U	200 U
Chloromethane (Methyl chloride)	µg/L	11 U	200 U	50 U	17 U	200 U
cis-1,2-Dichloroethene	µg/L	220	3200	1200	360	2100
cis-1,3-Dichloropropene	µg/L	11 U	200 U	50 U	17 U	200 U
Cyclohexane	µg/L	11 U	200 U	50 U	17 U	200 U
Dibromochloromethane	µg/L	11 U	200 U	50 U	17 U	200 U
Dichlorodifluoromethane (CFC-12)	µg/L	11 U	200 U	50 U	17 U	200 U
Ethylbenzene	µg/L	11 U	200 U	50 U	17 U	200 U
Isopropyl benzene	µg/L	11 U	200 U	50 U	17 U	200 U
Methyl acetate	µg/L	110 U	2000 U	500 U	170 U	2000 U
Methyl cyclohexane	µg/L	11 U	200 U	50 U	17 U	200 U
Methyl tert butyl ether (MTBE)	µg/L	11 U	200 U	50 U	17 U	200 U
Methylene chloride	µg/L	56 U	1000 U	250 U	83 U	1000 U
Styrene	µg/L	11 U	200 U	50 U	17 U	200 U
Tetrachloroethene	µg/L	11 U	200 U	50 U	17 U	200 U
Toluene	µg/L	11 U	200 U	50 U	17 U	200 U
trans-1,2-Dichloroethene	µg/L	18	110 J	61	22	75 J
trans-1,3-Dichloropropene	µg/L	11 U	200 U	50 U	17 U	200 U
Trichloroethene	µg/L	11 U	200 U	50 U	17 U	200 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-01	MW19-02	MW19-03	MW19-06	MW19-07
Sample Name:		GW-17303-102816-JY-031	GW-17303-102816-JY-028	GW-17303-110216-DS-059	GW-17303-110216-DS-060	GW-17303-102616-JY-011
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/26/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	11 U	200 U	50 U	17 U	200 U
Trifluorotrichloroethane (CFC-113)	µg/L	11 U	200 U	50 U	17 U	200 U
Vinyl chloride	µg/L	5.6 J	3600	820	130	4900
Xylenes (total)	µg/L	22 U	400 U	100 U	33 U	400 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-01	MW19-02	MW19-03	MW19-06	MW19-07
Sample Name:		GW-17303-102816-JY-031	GW-17303-102816-JY-028	GW-17303-110216-DS-059	GW-17303-110216-DS-060	GW-17303-102616-JY-011
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/26/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-11	MW19-12	MW19-14	MW19-16	MW19-24
Sample Name:		GW-17303-102716-JY-015	GW-17303-102616-JY-008	GW-17303-110116-DS-053	GW-17303-103116-DS-046	GW-17303-102816-JY-029
Sample Date:		10/27/2016	10/26/2016	11/01/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,1,2-Trichloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,1-Dichloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,1-Dichloroethene	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2,4-Trichlorobenzene	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dichlorobenzene	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dichloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dichloropropane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,3-Dichlorobenzene	µg/L	17000 U	250 U	250 U	130 U	10 U
1,4-Dichlorobenzene	µg/L	17000 U	250 U	250 U	130 U	10 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
2-Hexanone	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
Acetone	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
Benzene	µg/L	17000 U	250 U	250 U	130 U	10
Bromodichloromethane	µg/L	17000 U	250 U	250 U	130 U	10 U
Bromoform	µg/L	17000 U	250 U	250 U	130 U	10 U
Bromomethane (Methyl bromide)	µg/L	17000 U	250 U	250 U	130 U	10 U
Carbon disulfide	µg/L	83000 U	1300 U	1300 U	630 U	50 U
Carbon tetrachloride	µg/L	17000 U	250 U	250 U	130 U	10 U
Chlorobenzene	µg/L	17000 U	220 J	250 U	130 U	10 U
Chloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
Chloroform (Trichloromethane)	µg/L	17000 U	250 U	250 U	130 U	10 U
Chloromethane (Methyl chloride)	µg/L	17000 U	250 U	250 U	130 U	10 U
cis-1,2-Dichloroethene	µg/L	320000	4300	100 J	1200	4.6 J
cis-1,3-Dichloropropene	µg/L	17000 U	250 U	250 U	130 U	10 U
Cyclohexane	µg/L	17000 U	250 U	250 U	130 U	10 U
Dibromochloromethane	µg/L	17000 U	250 U	250 U	130 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	17000 U	250 U	250 U	130 U	10 U
Ethylbenzene	µg/L	17000 U	74 J	250 U	130 U	10 U
Isopropyl benzene	µg/L	17000 U	250 U	250 U	130 U	10 U
Methyl acetate	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
Methyl cyclohexane	µg/L	17000 U	250 U	250 U	130 U	10 U
Methyl tert butyl ether (MTBE)	µg/L	17000 U	250 U	250 U	130 U	10 U
Methylene chloride	µg/L	83000 U	1300 U	1300 U	630 U	50 U
Styrene	µg/L	17000 U	250 U	250 U	130 U	10 U
Tetrachloroethene	µg/L	17000 U	250 U	250 U	130 U	10 U
Toluene	µg/L	17000 U	250 U	250 U	130 U	10 U
trans-1,2-Dichloroethene	µg/L	17000 U	250 U	250 U	61 J	10 U
trans-1,3-Dichloropropene	µg/L	17000 U	250 U	250 U	130 U	10 U
Trichloroethene	µg/L	17000 U	250 U	250 U	130 U	10 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-11	MW19-12	MW19-14	MW19-16	MW19-24
Sample Name:		GW-17303-102716-JY-015	GW-17303-102616-JY-008	GW-17303-110116-DS-053	GW-17303-103116-DS-046	GW-17303-102816-JY-029
Sample Date:		10/27/2016	10/26/2016	11/01/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	17000 U	250 U	250 U	130 U	10 U
Trifluorotrichloroethane (CFC-113)	µg/L	17000 U	250 U	250 U	130 U	10 U
Vinyl chloride	µg/L	80000	5700	5000	1900	130
Xylenes (total)	µg/L	33000 U	500 U	500 U	250 U	20 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-11	MW19-12	MW19-14	MW19-16	MW19-24
Sample Name:		GW-17303-102716-JY-015	GW-17303-102616-JY-008	GW-17303-110116-DS-053	GW-17303-103116-DS-046	GW-17303-102816-JY-029
Sample Date:		10/27/2016	10/26/2016	11/01/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-33	MW19-33	MW19-34	MW19-35	MW19-38
Sample Name:		GW-17303-102516-JY-002	GW-17303-102516-JY-003	GW-17303-102516-JY-004	GW-17303-102516-JY-005	GW-17303-102516-JY-007
Sample Date:		10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	0.73 J
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U	25 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	25 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U	25 U
Acetone	µg/L	10 U	10 U	10 U	10 U	25 U
Benzene	µg/L	28	28	1.0 U	1.0 U	2.5 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	13 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Chlorobenzene	µg/L	33	32	1.0 U	1.0 U	2.5 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
cis-1,2-Dichloroethene	µg/L	0.32 J	0.31 J	4.1	2.0	62
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Cyclohexane	µg/L	3.3	3.3	1.0 U	1.0 U	2.5 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Isopropyl benzene	µg/L	2.2	2.1	1.0 U	1.0 U	2.5 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	25 U
Methyl cyclohexane	µg/L	6.0	6.3	1.0 U	1.0 U	2.5 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	13 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	0.58 J	1.0 U	3.3
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Trichloroethene	µg/L	1.0 U	1.0 U	25	1.0 U	27

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-33	MW19-33	MW19-34	MW19-35	MW19-38
Sample Name:		GW-17303-102516-JY-002	GW-17303-102516-JY-003	GW-17303-102516-JY-004	GW-17303-102516-JY-005	GW-17303-102516-JY-007
Sample Date:		10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Vinyl chloride	µg/L	4.4	4.5	0.57 J	1.0 U	39
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-33	MW19-33	MW19-34	MW19-35	MW19-38
Sample Name:		GW-17303-102516-JY-002	GW-17303-102516-JY-003	GW-17303-102516-JY-004	GW-17303-102516-JY-005	GW-17303-102516-JY-007
Sample Date:		10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-40	MW19-43	MW19-45	MW19-45	MW19-46
Sample Name:		GW-17303-103116-DS-034	GW-17303-103116-DS-039	GW-17303-102516-JY-006	GW-17303-102616-JY-010	GW-17303-102716-JY-013
Sample Date:		10/31/2016	10/31/2016	10/25/2016	10/26/2016	10/27/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,1,2-Trichloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,1-Dichloroethane	µg/L	1.0 U	170 U	0.32 J	250 U	25 U
1,1-Dichloroethene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dichlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dichloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dichloropropane	µg/L	1.0 U	170 U	0.46 J	250 U	25 U
1,3-Dichlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,4-Dichlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	1700 U	10 U	2500 U	250 U
2-Hexanone	µg/L	10 U	1700 U	10 U	2500 U	250 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	1700 U	10 U	2500 U	250 U
Acetone	µg/L	10 U	1700 U	10 U	2500 U	250 U
Benzene	µg/L	1.0 U	170 U	1.0 U	250 U	10 J
Bromodichloromethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Bromoform	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Carbon disulfide	µg/L	5.0 U	830 U	5.0 U	1300 U	130 U
Carbon tetrachloride	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Chlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Chloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Chloroform (Trichloromethane)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1200	1.0 U	1400	30
cis-1,3-Dichloropropene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Cyclohexane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Dibromochloromethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Ethylbenzene	µg/L	1.0 U	170 U	1.0 U	250 U	32
Isopropyl benzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Methyl acetate	µg/L	10 U	1700 U	10 U	2500 U	250 U
Methyl cyclohexane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Methylene chloride	µg/L	5.0 U	830 U	5.0 U	1300 U	130 U
Styrene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Tetrachloroethene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Toluene	µg/L	1.0 U	170 U	1.0 U	250 U	62
trans-1,2-Dichloroethene	µg/L	1.0 U	640	1.0 U	130 J	25 U
trans-1,3-Dichloropropene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Trichloroethene	µg/L	1.0 U	150 J	4.1	250 U	15 J

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-40	MW19-43	MW19-45	MW19-45	MW19-46
Sample Name:		GW-17303-103116-DS-034	GW-17303-103116-DS-039	GW-17303-102516-JY-006	GW-17303-102616-JY-010	GW-17303-102716-JY-013
Sample Date:		10/31/2016	10/31/2016	10/25/2016	10/26/2016	10/27/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Vinyl chloride	µg/L	1.0 U	2400	0.77 J	12000	46
Xylenes (total)	µg/L	2.0 U	330 U	2.0 U	500 U	140
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-40	MW19-43	MW19-45	MW19-45	MW19-46
Sample Name:		GW-17303-103116-DS-034	GW-17303-103116-DS-039	GW-17303-102516-JY-006	GW-17303-102616-JY-010	GW-17303-102716-JY-013
Sample Date:		10/31/2016	10/31/2016	10/25/2016	10/26/2016	10/27/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-47	MW19-48	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-102716-JY-014	GW-17303-102716-JY-016	GW-17303-102716-JY-017	GW-17303-102716-JY-018	GW-17303-102716-JY-019
Sample Date:		10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,1,2-Trichloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,1-Dichloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,1-Dichloroethene	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dichlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dichloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dichloropropane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,3-Dichlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,4-Dichlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	290 U	1400 U	1400 U	1300 U	50 U
2-Hexanone	µg/L	290 U	1400 U	1400 U	1300 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	290 U	1400 U	1400 U	1300 U	50 U
Acetone	µg/L	290 U	1400 U	1400 U	1300 U	50 U
Benzene	µg/L	29 U	140 U	140 U	50 J	27
Bromodichloromethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
Bromoform	µg/L	29 U	140 U	140 U	130 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Carbon disulfide	µg/L	140 U	710 U	710 U	630 U	25 U
Carbon tetrachloride	µg/L	29 U	140 U	140 U	130 U	5.0 U
Chlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Chloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
Chloroform (Trichloromethane)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	29 U	140 U	140 U	130 U	5.0 U
cis-1,2-Dichloroethene	µg/L	130	1000	1200	760	17
cis-1,3-Dichloropropene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Cyclohexane	µg/L	29 U	140 U	140 U	61 J	54
Dibromochloromethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Ethylbenzene	µg/L	29 U	140 U	140 U	210	140
Isopropyl benzene	µg/L	29 U	140 U	140 U	91 J	51
Methyl acetate	µg/L	290 U	1400 U	1400 U	1300 U	50 U
Methyl cyclohexane	µg/L	29 U	140 U	140 U	130 U	7.2
Methyl tert butyl ether (MTBE)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Methylene chloride	µg/L	140 U	710 U	710 U	630 U	25 U
Styrene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Tetrachloroethene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Toluene	µg/L	29 U	140 U	140 U	670	31
trans-1,2-Dichloroethene	µg/L	9.4 J	59 J	61 J	130 U	5.0 U
trans-1,3-Dichloropropene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Trichloroethene	µg/L	70	110 J	120 J	130 U	2.2 J

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-47	MW19-48	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-102716-JY-014	GW-17303-102716-JY-016	GW-17303-102716-JY-017	GW-17303-102716-JY-018	GW-17303-102716-JY-019
Sample Date:		10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Vinyl chloride	µg/L	300	2000	2100	2300	30
Xylenes (total)	µg/L	57 U	290 U	290 U	860	210
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-47	MW19-48	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-102716-JY-014	GW-17303-102716-JY-016	GW-17303-102716-JY-017	GW-17303-102716-JY-018	GW-17303-102716-JY-019
Sample Date:		10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-55	MW19-56
Sample Name:		GW-17303-102616-JY-012	GW-17303-102716-JY-020	GW-17303-102816-JY-026	GW-17303-110316-DS-062	GW-17303-110316-DS-061
Sample Date:		10/26/2016	10/27/2016	10/28/2016	11/03/2016	11/03/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,1,2,2-Tetrachloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,1,2-Trichloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,1-Dichloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,1-Dichloroethene	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2,4-Trichlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dichlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dichloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dichloropropane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,3-Dichlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
1,4-Dichlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	50000 U	170 U	5000 U	330 U	500 U
2-Hexanone	µg/L	50000 U	170 U	5000 U	330 U	500 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	50000 U	170 U	5000 U	330 U	500 U
Acetone	µg/L	50000 U	170 U	5000 U	330 U	500 U
Benzene	µg/L	5000 U	17 U	500 U	33 U	50 U
Bromodichloromethane	µg/L	5000 U	17 U	500 U	33 U	50 U
Bromoform	µg/L	5000 U	17 U	500 U	33 U	50 U
Bromomethane (Methyl bromide)	µg/L	5000 U	17 U	500 U	33 U	50 U
Carbon disulfide	µg/L	25000 U	83 U	2500 U	170 U	250 U
Carbon tetrachloride	µg/L	5000 U	17 U	500 U	33 U	50 U
Chlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
Chloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
Chloroform (Trichloromethane)	µg/L	5000 U	17 U	500 U	33 U	50 U
Chloromethane (Methyl chloride)	µg/L	5000 U	17 U	500 U	33 U	50 U
cis-1,2-Dichloroethene	µg/L	5600	140	1200	530	1200
cis-1,3-Dichloropropene	µg/L	5000 U	17 U	500 U	33 U	50 U
Cyclohexane	µg/L	5000 U	17 U	500 U	33 U	50 U
Dibromochloromethane	µg/L	5000 U	17 U	500 U	33 U	50 U
Dichlorodifluoromethane (CFC-12)	µg/L	5000 U	17 U	500 U	33 U	50 U
Ethylbenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
Isopropyl benzene	µg/L	5000 U	17 U	500 U	33 U	50 U
Methyl acetate	µg/L	50000 U	170 U	5000 U	330 U	500 U
Methyl cyclohexane	µg/L	5000 U	17 U	500 U	33 U	50 U
Methyl tert butyl ether (MTBE)	µg/L	5000 U	17 U	500 U	33 U	50 U
Methylene chloride	µg/L	25000 U	83 U	2500 U	170 U	250 U
Styrene	µg/L	5000 U	17 U	500 U	33 U	50 U
Tetrachloroethene	µg/L	5000 U	17 U	500 U	33 U	50 U
Toluene	µg/L	5000 U	17 U	500 U	33 U	50 U
trans-1,2-Dichloroethene	µg/L	5000 U	15 J	500 U	32 J	55
trans-1,3-Dichloropropene	µg/L	5000 U	17 U	500 U	33 U	50 U
Trichloroethene	µg/L	5000 U	33	500 U	33 U	50 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-55	MW19-56
Sample Name:		GW-17303-102616-JY-012	GW-17303-102716-JY-020	GW-17303-102816-JY-026	GW-17303-110316-DS-062	GW-17303-110316-DS-061
Sample Date:		10/26/2016	10/27/2016	10/28/2016	11/03/2016	11/03/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	5000 U	17 U	500 U	33 U	50 U
Trifluorotrichloroethane (CFC-113)	µg/L	5000 U	17 U	500 U	33 U	50 U
Vinyl chloride	µg/L	51000	160	7800	720	840
Xylenes (total)	µg/L	10000 U	33 U	1000 U	67 U	100 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-55	MW19-56
Sample Name:		GW-17303-102616-JY-012	GW-17303-102716-JY-020	GW-17303-102816-JY-026	GW-17303-110316-DS-062	GW-17303-110316-DS-061
Sample Date:		10/26/2016	10/27/2016	10/28/2016	11/03/2016	11/03/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-57	MW19-58	MW19-59	Waste	Waste
Sample Name:		GW-17303-102816-JY-021	GW-17303-110116-DS-050	GW-17303-110216-DS-056	WW-17303-110416-DS-001	WW-17303-110416-DS-002
Sample Date:		10/28/2016	11/01/2016	11/02/2016	11/04/2016	11/04/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,1,2,2-Tetrachloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,1,2-Trichloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,1-Dichloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,1-Dichloroethene	µg/L	67 U	2.0 U	1.0 U	--	--
1,2,4-Trichlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dichlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dichloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dichloropropane	µg/L	67 U	2.0 U	1.0 U	--	--
1,3-Dichlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
1,4-Dichlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	670 U	20 U	10 U	--	--
2-Hexanone	µg/L	670 U	20 U	10 U	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	670 U	20 U	10 U	--	--
Acetone	µg/L	670 U	20 U	10 U	--	--
Benzene	µg/L	67 U	6.0	0.94 J	--	--
Bromodichloromethane	µg/L	67 U	2.0 U	1.0 U	--	--
Bromoform	µg/L	67 U	2.0 U	1.0 U	--	--
Bromomethane (Methyl bromide)	µg/L	67 U	2.0 U	1.0 U	--	--
Carbon disulfide	µg/L	330 U	10 U	5.0 U	--	--
Carbon tetrachloride	µg/L	67 U	2.0 U	1.0 U	--	--
Chlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
Chloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
Chloroform (Trichloromethane)	µg/L	67 U	2.0 U	1.0 U	--	--
Chloromethane (Methyl chloride)	µg/L	67 U	2.0 U	1.0 U	--	--
cis-1,2-Dichloroethene	µg/L	1300	5.2	11	--	--
cis-1,3-Dichloropropene	µg/L	67 U	2.0 U	1.0 U	--	--
Cyclohexane	µg/L	67 U	2.0 U	1.0 U	--	--
Dibromochloromethane	µg/L	67 U	2.0 U	1.0 U	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	67 U	2.0 U	1.0 U	--	--
Ethylbenzene	µg/L	67 U	2.0 U	1.0 U	--	--
Isopropyl benzene	µg/L	67 U	2.0 U	1.0 U	--	--
Methyl acetate	µg/L	670 U	20 U	10 U	--	--
Methyl cyclohexane	µg/L	67 U	2.0 U	1.0 U	--	--
Methyl tert butyl ether (MTBE)	µg/L	67 U	2.0 U	1.0 U	--	--
Methylene chloride	µg/L	330 U	10 U	5.0 U	--	--
Styrene	µg/L	67 U	2.0 U	1.0 U	--	--
Tetrachloroethene	µg/L	67 U	2.0 U	1.0 U	--	--
Toluene	µg/L	67 U	2.0 U	1.0 U	--	--
trans-1,2-Dichloroethene	µg/L	56 J	0.64 J	1.0 U	--	--
trans-1,3-Dichloropropene	µg/L	67 U	2.0 U	1.0 U	--	--
Trichloroethene	µg/L	67 U	0.70 J	1.0 U	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-57	MW19-58	MW19-59	Waste	Waste
Sample Name:		GW-17303-102816-JY-021	GW-17303-110116-DS-050	GW-17303-110216-DS-056	WW-17303-110416-DS-001	WW-17303-110416-DS-002
Sample Date:		10/28/2016	11/01/2016	11/02/2016	11/04/2016	11/04/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	67 U	2.0 U	1.0 U	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	67 U	2.0 U	1.0 U	--	--
Vinyl chloride	µg/L	1500	33	63	--	--
Xylenes (total)	µg/L	130 U	4.0 U	2.0 U	--	--
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	0.095 U	0.21
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	0.095 U	0.075 J
Total PCBs	µg/L	--	--	--	0.095 U	0.285
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	0.025 U	0.025 U
1,2-Dichloroethane	mg/L	--	--	--	0.025 U	0.025 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	0.25 U	0.25 U
Benzene	mg/L	--	--	--	0.025 U	0.025 U
Carbon tetrachloride	mg/L	--	--	--	0.025 U	0.025 U
Chlorobenzene	mg/L	--	--	--	0.025 U	0.025 U
Chloroform (Trichloromethane)	mg/L	--	--	--	0.025 U	0.025 U
Tetrachloroethene	mg/L	--	--	--	0.025 U	0.025 U
Trichloroethene	mg/L	--	--	--	0.025 U	0.025 U
Vinyl chloride	mg/L	--	--	--	0.59	1.7
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	0.0040 U	0.0040 U
2,4,5-Trichlorophenol	mg/L	--	--	--	0.0040 U	0.0040 U
2,4,6-Trichlorophenol	mg/L	--	--	--	0.0040 U	0.0040 U
2,4-Dinitrotoluene	mg/L	--	--	--	0.0040 U	0.0040 U
2-Methylphenol	mg/L	--	--	--	0.0040 U	0.0040 U
3&4-Methylphenol	mg/L	--	--	--	0.0040 U	0.0040 U
Hexachlorobenzene	mg/L	--	--	--	0.00080 U	0.00080 U
Hexachlorobutadiene	mg/L	--	--	--	0.0040 U	0.0040 U
Hexachloroethane	mg/L	--	--	--	0.0040 U	0.0040 U
Nitrobenzene	mg/L	--	--	--	0.0040 U	0.0040 U
Pentachlorophenol	mg/L	--	--	--	0.016 U	0.016 U
Pyridine	mg/L	--	--	--	0.0040 U	0.0040 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-57	MW19-58	MW19-59	Waste	Waste
Sample Name:		GW-17303-102816-JY-021	GW-17303-110116-DS-050	GW-17303-110216-DS-056	WW-17303-110416-DS-001	WW-17303-110416-DS-002
Sample Date:		10/28/2016	11/01/2016	11/02/2016	11/04/2016	11/04/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	0.050 U	0.050 U
Barium	mg/L	--	--	--	0.047 J	0.10 J
Cadmium	mg/L	--	--	--	0.00036 J	0.00039 J
Chromium	mg/L	--	--	--	0.0065 J	0.00082 J
Lead	mg/L	--	--	--	0.050 U	0.050 U
Mercury	mg/L	--	--	--	0.0020 U	0.0020 U
Selenium	mg/L	--	--	--	0.050 U	0.050 U
Silver	mg/L	--	--	--	0.050 U	0.050 U

Notes:

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

Table 3

Analytical Methods
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

Parameter	Method	Matrix	Holding Time	
			Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
TCL VOC	SW-846 8260B	Water	-	14
TCLP VOC	SW-846 1311/8260B	Water	14	14
TCLP SVOC	SW-846 1311/8270C	Water	14/7	40
TCLP Metals (except Mercury)	SW-846 1311/6010B	Water	180	180
TCLP Mercury	SW-846 1311/7470A	Water	28	28
PCB	SW-846 8082	Water	7	40

Notes:

Method References:

SW-846	- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions
TCL	- Target Compound List
TCLP	- Toxicity Characteristic Leaching Procedure
VOC	- Volatile Organic Compounds
SVOC	- Semi-volatile Organic Compounds
PCB	- Polychlorinated biphenyls

Memorandum

December 12, 2016

To:	Tom Kinney	Ref. No.:	017303-T02-03Y16
From:	Nancy Bergstrom/tl/100/Det	Tel:	734-453-5123

Subject: **Analytical Results and Reduced Validation**
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in support of the 2016 Groundwater Sampling at the Willow Run Company Vehicle Operations Site during October and November 2016. Samples were submitted to TestAmerica Laboratories, Inc., located in North Canton, Ohio. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes/laboratory control samples (LCS)/matrix spikes (MS) and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

i) "Quality Assurance Project Plan (QAPP) for the RCRA Facility Investigation (RFI) Work Plan, Company Vehicle Operations", Revision 1, February 2, 2012

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

iii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

Items ii) and iii) will subsequently be referred to as the "Guidelines" in this Memorandum.

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2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (4 +/- 2°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect or method blank detections were associated with investigative samples that reported non-detect concentrations.

4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC), semi-volatile organic compound (SVOC) and polychlorinated biphenyl (PCB) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries were within the laboratory control limits.

5. Laboratory Control Sample (LCS) Analyses

LCS and/or laboratory control sample duplicates (LCSD) are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS(/LCSD) were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Organic Analyses

The LCS/LCSD contained all compounds of interest (VOC and SVOC) or the compounds specified in the method (PCB). The LCS recoveries of several VOC exceeded the percent recovery criteria for various LCS. These analytes were not detected in the associated investigative samples and qualification was not required. All remaining LCS recoveries and RPDs were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

Inorganic Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

Organic Analyses

The MS/MSD samples were spiked with all compounds of interest. The MS/MSD recoveries of one VOC exceeded the percent recovery criteria for one MS/MSD sample. This analyte was not detected in the associated investigative sample and qualification was not required. All remaining percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of five trip blank samples and four field duplicate sample sets.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, five trip blanks were submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest or trip blank detections were associated with investigative samples that reported non-detect concentrations.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, four field duplicate samples were collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one times the RL value for water samples.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were reported as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Table 1

Sample Collection and Analysis Summary
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters					Comments
					TCL VOC	TCLP VOC	TCLP SVOC	TCLP Metals	PCB	
TA SDG No.: 240-71416-1										
GW-17303-102516-JY-001	MW-18	Water	10/25/2016	09:00	X	--	--	--	--	
GW-17303-102516-JY-002	MW19-33	Water	10/25/2016	09:50	X	--	--	--	--	
GW-17303-102516-JY-003	MW19-33	Water	10/25/2016	09:55	X	--	--	--	--	FD (MW19-33)
GW-17303-102516-JY-004	MW19-34	Water	10/25/2016	10:50	X	--	--	--	--	
GW-17303-102516-JY-005	MW19-35	Water	10/25/2016	11:50	X	--	--	--	--	
GW-17303-102516-JY-006	MW19-45	Water	10/25/2016	12:45	X	--	--	--	--	
GW-17303-102516-JY-007	MW19-38	Water	10/25/2016	14:00	X	--	--	--	--	
GW-17303-102616-JY-008	MW19-12	Water	10/26/2016	10:00	X	--	--	--	--	
GW-17303-102616-JY-009	GS-2	Water	10/26/2016	12:25	X	--	--	--	--	
GW-17303-102616-JY-010	MW19-45	Water	10/26/2016	09:50	X	--	--	--	--	
GW-17303-102616-JY-011	MW19-07	Water	10/26/2016	10:45	X	--	--	--	--	MS/MSD
GW-17303-102616-JY-012	MW19-51	Water	10/26/2016	11:40	X	--	--	--	--	
GW-17303-102716-JY-013	MW19-46	Water	10/27/2016	09:20	X	--	--	--	--	MS/MSD
GW-17303-102716-JY-014	MW19-47	Water	10/27/2016	10:10	X	--	--	--	--	
GW-17303-102716-JY-015	MW19-11	Water	10/27/2016	11:20	X	--	--	--	--	
GW-17303-102716-JY-016	MW19-48	Water	10/27/2016	12:10	X	--	--	--	--	
GW-17303-102716-JY-017	MW19-48	Water	10/27/2016	12:15	X	--	--	--	--	FD (MW19-48)
GW-17303-102716-JY-018	MW19-49	Water	10/27/2016	13:05	X	--	--	--	--	
GW-17303-102716-JY-019	MW19-50	Water	10/27/2016	14:00	X	--	--	--	--	
GW-17303-102716-JY-020	MW19-52	Water	10/27/2016	15:00	X	--	--	--	--	
TB-17303-102516	--	Water	10/25/2016	--	X	--	--	--	--	TB
TA SDG No.: 240-71478-1										
GW-17303-102816-JY-021	MW19-57	Water	10/28/2016	09:30	X	--	--	--	--	
GW-17303-102816-JY-022	IG-C3	Water	10/28/2016	10:15	X	--	--	--	--	
GW-17303-102816-JY-023	IG-C3	Water	10/28/2016	10:20	X	--	--	--	--	FD (IG-C3)
GW-17303-102816-JY-024	IG-G3	Water	10/28/2016	11:15	X	--	--	--	--	
GW-17303-102816-JY-025	IG-D2	Water	10/28/2016	12:15	X	--	--	--	--	
GW-17303-102816-JY-026	MW19-53	Water	10/28/2016	09:10	X	--	--	--	--	
GW-17303-102816-JY-027	MW-5	Water	10/28/2016	10:20	X	--	--	--	--	
GW-17303-102816-JY-028	MW19-02	Water	10/28/2016	11:25	X	--	--	--	--	MS/MSD
GW-17303-102816-JY-029	MW19-24	Water	10/28/2016	12:40	X	--	--	--	--	

Table 1

Sample Collection and Analysis Summary
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters					Comments
					TCL VOC	TCLP VOC	TCLP SVOC	TCLP Metals	PCB	
TA SDG No.: 240-71478-1										
GW-17303-102816-JY-030	MW-13	Water	10/28/2016	13:15	X	--	--	--	--	
GW-17303-102816-JY-031	MW19-01	Water	10/28/2016	13:50	X	--	--	--	--	
GW-17303-102816-JY-032	GS-7	Water	10/28/2016	14:20	X	--	--	--	--	
TB-17303-102816	--	Water	10/28/2016	--	X	--	--	--	--	TB
TA SDG No.: 240-71561-1										
GW-17303-103116-DS-033	MW-4	Water	10/31/2016	09:00	X	--	--	--	--	
GW-17303-103116-DS-034	MW19-40	Water	10/31/2016	08:50	X	--	--	--	--	
GW-17303-103116-DS-035	IW-33	Water	10/31/2016	09:50	X	--	--	--	--	
GW-17303-103116-DS-036	GS-21	Water	10/31/2016	09:35	X	--	--	--	--	
GW-17303-103116-DS-037	IW-34	Water	10/31/2016	11:00	X	--	--	--	--	
GW-17303-103116-DS-038	IG-E4	Water	10/31/2016	10:45	X	--	--	--	--	
GW-17303-103116-DS-039	MW19-43	Water	10/31/2016	13:05	X	--	--	--	--	
GW-17303-103116-DS-040	IG-F4	Water	10/31/2016	11:40	X	--	--	--	--	
GW-17303-103116-DS-041	IW-20	Water	10/31/2016	14:05	X	--	--	--	--	
GW-17303-103116-DS-042	IG-B4	Water	10/31/2016	12:35	X	--	--	--	--	
GW-17303-103116-DS-043	IG-B1	Water	10/31/2016	13:25	X	--	--	--	--	
GW-17303-103116-DS-044	IG-A1	Water	10/31/2016	14:15	X	--	--	--	--	
GW-17303-103116-DS-045	GS-20	Water	10/31/2016	15:05	X	--	--	--	--	
GW-17303-103116-DS-046	MW19-16	Water	10/31/2016	16:00	X	--	--	--	--	
GW-17303-110116-DS-047	GS-17	Water	11/01/2016	09:35	X	--	--	--	--	
GW-17303-110116-DS-048	GS-18	Water	11/01/2016	10:35	X	--	--	--	--	
GW-17303-110116-DS-049	GS-1	Water	11/01/2016	11:30	X	--	--	--	--	
GW-17303-110116-DS-050	MW19-58	Water	11/01/2016	12:15	X	--	--	--	--	
GW-17303-110116-DS-051	GS-3	Water	11/01/2016	12:50	X	--	--	--	--	
GW-17303-110116-DS-052	GS-19	Water	11/01/2016	13:55	X	--	--	--	--	
GW-17303-110116-DS-053	MW19-14	Water	11/01/2016	14:55	X	--	--	--	--	
TRIP BLANK	--	Water	10/31/2016	--	X	--	--	--	--	TB
TA SDG No.: 240-71686-1										
GW-17303-110216-DS-054	GS-16	Water	11/02/2016	08:55	X	--	--	--	--	
GW-17303-110216-DS-055	GS-4	Water	11/02/2016	10:05	X	--	--	--	--	
GW-17303-110216-DS-056	MW19-59	Water	11/02/2016	10:55	X	--	--	--	--	
GW-17303-110216-DS-057	MW-14	Water	11/02/2016	12:15	X	--	--	--	--	
GW-17303-110216-DS-058	MW-14	Water	11/02/2016	12:20	X	--	--	--	--	FD (MW-14)

Table 1

Sample Collection and Analysis Summary
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters					Comments
					TCL VOC	TCLP VOC	TCLP SVOC	TCLP Metals	PCB	
TA SDG No.: 240-71686-1										
GW-17303-110216-DS-059	MW19-03	Water	11/02/2016	13:15	X	--	--	--	--	
GW-17303-110216-DS-060	MW19-06	Water	11/02/2016	14:25	X	--	--	--	--	MS/MSD
GW-17303-110316-DS-061	MW19-56	Water	11/03/2016	08:45	X	--	--	--	--	MS/MSD
GW-17303-110316-DS-062	MW19-55	Water	11/03/2016	09:45	X	--	--	--	--	
GW-17303-110316-DS-063	IW-30	Water	11/03/2016	10:50	X	--	--	--	--	
GW-17303-110316-DS-064	IW-26R	Water	11/03/2016	11:55	X	--	--	--	--	
GW-17303-110316-DS-065	IW-9	Water	11/03/2016	12:45	X	--	--	--	--	
GW-17303-110316-DS-066	IW-6	Water	11/03/2016	13:40	X	--	--	--	--	
TB-17303-110216	--	Water	11/02/2016	--	X	--	--	--	--	TB
TA SDG No.: 240-71787-1										
GW-17303-110416-DS-067	IW-2	Water	11/04/2016	08:30	X	--	--	--	--	
GW-17303-110416-DS-068	IW-10	Water	11/04/2016	09:15	X	--	--	--	--	
WW-17303-110416-DS-001	Waste	Water	11/04/2016	09:35	--	X	X	X	X	
WW-17303-110416-DS-002	Waste	Water	11/04/2016	09:45	--	X	X	X	X	
TB-17303-110416	--	Water	11/04/2016	--	X	--	--	--	--	TB

Notes:

FD	- Field Duplicate sample of sample in parenthesis
MS/MSD	- Matrix Spike/Matrix Spike Duplicate
TB	- Trip Blank
TCL	- Target Compound List
TCLP	- Toxicity Characteristic Leaching Procedure
VOC	- Volatile Organic Compounds
SVOC	- Semi-volatile Organic Compounds
PCB	- Polychlorinated biphenyls
TA-NC	- TestAmerica Laboratories, Inc. - North Canton, Ohio
SDG	- Sample Delivery Group

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-1	GS-2	GS-3	GS-4	GS-7
Sample Name:		GW-17303-110116-DS-049	GW-17303-102616-JY-009	GW-17303-110116-DS-051	GW-17303-110216-DS-055	GW-17303-102816-JY-032
Sample Date:		11/01/2016	10/26/2016	11/01/2016	11/02/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,1,2-Trichloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,1-Dichloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,1-Dichloroethene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dichlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dichloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,2-Dichloropropane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,3-Dichlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
1,4-Dichlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5000 U	5000 U	10 U	2500 U	10 U
2-Hexanone	µg/L	5000 U	5000 U	10 U	2500 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5000 U	5000 U	10 U	2500 U	10 U
Acetone	µg/L	5000 U	5000 U	10 U	2500 U	10 U
Benzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Bromodichloromethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Bromoform	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Carbon disulfide	µg/L	2500 U	2500 U	1.7 J	1300 U	5.0 U
Carbon tetrachloride	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Chlorobenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Chloroethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Chloroform (Trichloromethane)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
cis-1,2-Dichloroethene	µg/L	500 U	3500	1.0 U	890	0.67 J
cis-1,3-Dichloropropene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Cyclohexane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Dibromochloromethane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Ethylbenzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Isopropyl benzene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Methyl acetate	µg/L	5000 U	5000 U	10 U	2500 U	10 U
Methyl cyclohexane	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Methylene chloride	µg/L	2500 U	2500 U	5.0 U	1300 U	5.0 U
Styrene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Tetrachloroethene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Toluene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
trans-1,2-Dichloroethene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
trans-1,3-Dichloropropene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Trichloroethene	µg/L	500 U	500 U	1.0 U	250 U	1.0 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-1	GS-2	GS-3	GS-4	GS-7
Sample Name:		GW-17303-110116-DS-049	GW-17303-102616-JY-009	GW-17303-110116-DS-051	GW-17303-110216-DS-055	GW-17303-102816-JY-032
Sample Date:		11/01/2016	10/26/2016	11/01/2016	11/02/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	500 U	500 U	1.0 U	250 U	1.0 U
Vinyl chloride	µg/L	9100	13000	1.0 U	8100	0.80 J
Xylenes (total)	µg/L	1000 U	1000 U	2.0 U	500 U	2.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-1	GS-2	GS-3	GS-4	GS-7
Sample Name:		GW-17303-110116-DS-049	GW-17303-102616-JY-009	GW-17303-110116-DS-051	GW-17303-110216-DS-055	GW-17303-102816-JY-032
Sample Date:		11/01/2016	10/26/2016	11/01/2016	11/02/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-16	GS-17	GS-18	GS-19	GS-20
Sample Name:		GW-17303-110216-DS-054	GW-17303-110116-DS-047	GW-17303-110116-DS-048	GW-17303-110116-DS-052	GW-17303-103116-DS-045
Sample Date:		11/02/2016	11/01/2016	11/01/2016	11/01/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,1,2,2-Tetrachloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,1,2-Trichloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,1-Dichloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,1-Dichloroethene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2,4-Trichlorobenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dichlorobenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dichloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,2-Dichloropropane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,3-Dichlorobenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
1,4-Dichlorobenzene	µg/L	25 U	1.0 U	1.1 J	3.3 U	17 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	250 U	10 U	17 U	33 U	170 U
2-Hexanone	µg/L	250 U	10 U	17 U	33 U	170 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	250 U	10 U	17 U	33 U	170 U
Acetone	µg/L	250 U	10 U	17 U	33 U	170 U
Benzene	µg/L	25 U	1.4	1.7 U	1.6 J	17 U
Bromodichloromethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Bromoform	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Bromomethane (Methyl bromide)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Carbon disulfide	µg/L	130 U	5.0 U	8.4 U	17 U	83 U
Carbon tetrachloride	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Chlorobenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Chloroethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Chloroform (Trichloromethane)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Chloromethane (Methyl chloride)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
cis-1,2-Dichloroethene	µg/L	87	1.9	46	20	440
cis-1,3-Dichloropropene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Cyclohexane	µg/L	25 U	0.73 J	1.7 U	3.3 U	17 U
Dibromochloromethane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Dichlorodifluoromethane (CFC-12)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Ethylbenzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Isopropyl benzene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Methyl acetate	µg/L	250 U	10 U	17 U	33 U	170 U
Methyl cyclohexane	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Methyl tert butyl ether (MTBE)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Methylene chloride	µg/L	130 U	5.0 U	8.4 U	17 U	83 U
Styrene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Tetrachloroethene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Toluene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
trans-1,2-Dichloroethene	µg/L	25 U	1.0 U	0.81 J	2.5 J	32
trans-1,3-Dichloropropene	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Trichloroethene	µg/L	25 U	1.0 U	14	3.3 U	5.7 J

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-16	GS-17	GS-18	GS-19	GS-20
Sample Name:		GW-17303-110216-DS-054	GW-17303-110116-DS-047	GW-17303-110116-DS-048	GW-17303-110116-DS-052	GW-17303-103116-DS-045
Sample Date:		11/02/2016	11/01/2016	11/01/2016	11/01/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Trifluorotrichloroethane (CFC-113)	µg/L	25 U	1.0 U	1.7 U	3.3 U	17 U
Vinyl chloride	µg/L	670	2.2	28	50	100
Xylenes (total)	µg/L	50 U	2.0 U	1.2 J	6.7 U	33 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-16	GS-17	GS-18	GS-19	GS-20
Sample Name:		GW-17303-110216-DS-054	GW-17303-110116-DS-047	GW-17303-110116-DS-048	GW-17303-110116-DS-052	GW-17303-103116-DS-045
Sample Date:		11/02/2016	11/01/2016	11/01/2016	11/01/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-21	IG-A1	IG-B1	IG-B4	IG-C3
Sample Name:		GW-17303-103116-DS-036	GW-17303-103116-DS-044	GW-17303-103116-DS-043	GW-17303-103116-DS-042	GW-17303-102816-JY-022
Sample Date:		10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	0.83 J	0.75 J	25 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U	250 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	250 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U	250 U
Acetone	µg/L	10 U	10 U	10 U	10 U	250 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	130 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
cis-1,2-Dichloroethene	µg/L	25	14	13	12	32
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	250 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	130 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
trans-1,2-Dichloroethene	µg/L	1.4	4.1	1.0 U	0.34 J	25 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Trichloroethene	µg/L	1.8	0.95 J	1.0 U	1.5	25 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-21	IG-A1	IG-B1	IG-B4	IG-C3
Sample Name:		GW-17303-103116-DS-036	GW-17303-103116-DS-044	GW-17303-103116-DS-043	GW-17303-103116-DS-042	GW-17303-102816-JY-022
Sample Date:		10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	25 U
Vinyl chloride	µg/L	11	4.5	12	7.2	440
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	50 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		GS-21	IG-A1	IG-B1	IG-B4	IG-C3
Sample Name:		GW-17303-103116-DS-036	GW-17303-103116-DS-044	GW-17303-103116-DS-043	GW-17303-103116-DS-042	GW-17303-102816-JY-022
Sample Date:		10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IG-C3	IG-D2	IG-E4	IG-F4	IG-G3
Sample Name:		GW-17303-102816-JY-023	GW-17303-102816-JY-025	GW-17303-103116-DS-038	GW-17303-103116-DS-040	GW-17303-102816-JY-024
Sample Date:		10/28/2016	10/28/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
		Duplicate				
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,1,2-Trichloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,1-Dichloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,1-Dichloroethene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dichlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dichloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,2-Dichloropropane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,3-Dichlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
1,4-Dichlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	250 U	14 U	10 U	14 U	20 U
2-Hexanone	µg/L	250 U	14 U	10 U	14 U	20 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	250 U	14 U	10 U	14 U	20 U
Acetone	µg/L	250 U	14 U	10 U	14 U	20 U
Benzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Bromodichloromethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Bromoform	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Carbon disulfide	µg/L	130 U	7.2 U	5.0 U	7.2 U	10 U
Carbon tetrachloride	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Chlorobenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Chloroethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Chloroform (Trichloromethane)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
cis-1,2-Dichloroethene	µg/L	33	16	5.8	40	18
cis-1,3-Dichloropropene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Cyclohexane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Dibromochloromethane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Ethylbenzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Isopropyl benzene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Methyl acetate	µg/L	250 U	14 U	10 U	14 U	20 U
Methyl cyclohexane	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Methyl tert butyl ether (MTBE)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Methylene chloride	µg/L	130 U	7.2 U	5.0 U	7.2 U	10 U
Styrene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Tetrachloroethene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Toluene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
trans-1,2-Dichloroethene	µg/L	25 U	0.77 J	2.5	1.9	0.74 J
trans-1,3-Dichloropropene	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Trichloroethene	µg/L	25 U	0.51 J	2.9	1.3 J	2.4

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IG-C3	IG-D2	IG-E4	IG-F4	IG-G3
Sample Name:		GW-17303-102816-JY-023	GW-17303-102816-JY-025	GW-17303-103116-DS-038	GW-17303-103116-DS-040	GW-17303-102816-JY-024
Sample Date:		10/28/2016	10/28/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
		Duplicate				
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	25 U	1.4 U	1.0 U	1.4 U	2.0 U
Vinyl chloride	µg/L	440	26	1.2	16	40
Xylenes (total)	µg/L	50 U	2.9 U	2.0 U	2.9 U	4.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IG-C3	IG-D2	IG-E4	IG-F4	IG-G3
Sample Name:		GW-17303-102816-JY-023	GW-17303-102816-JY-025	GW-17303-103116-DS-038	GW-17303-103116-DS-040	GW-17303-102816-JY-024
Sample Date:		10/28/2016	10/28/2016	10/31/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
		Duplicate				
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-2	IW-6	IW-9	IW-10	IW-20
Sample Name:		GW-17303-110416-DS-067	GW-17303-110316-DS-066	GW-17303-110316-DS-065	GW-17303-110416-DS-068	GW-17303-103116-DS-041
Sample Date:		11/04/2016	11/03/2016	11/03/2016	11/04/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,1,2,2-Tetrachloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,1,2-Trichloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,1-Dichloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,1-Dichloroethene	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2,4-Trichlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dichlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dichloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,2-Dichloropropane	µg/L	250 U	2500 U	100 U	250 U	50 U
1,3-Dichlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
1,4-Dichlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
2-Hexanone	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
Acetone	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
Benzene	µg/L	250 U	2500 U	100 U	530	35 J
Bromodichloromethane	µg/L	250 U	2500 U	100 U	250 U	50 U
Bromoform	µg/L	250 U	2500 U	100 U	250 U	50 U
Bromomethane (Methyl bromide)	µg/L	250 U	2500 U	100 U	250 U	50 U
Carbon disulfide	µg/L	1300 U	13000 U	500 U	1300 U	250 U
Carbon tetrachloride	µg/L	250 U	2500 U	100 U	250 U	50 U
Chlorobenzene	µg/L	250 U	2500 U	100 U	250 U	50 U
Chloroethane	µg/L	250 U	2500 U	100 U	250 U	50 U
Chloroform (Trichloromethane)	µg/L	250 U	2500 U	100 U	250 U	50 U
Chloromethane (Methyl chloride)	µg/L	250 U	2500 U	100 U	250 U	50 U
cis-1,2-Dichloroethene	µg/L	160 J	13000	180	1100	170
cis-1,3-Dichloropropene	µg/L	250 U	2500 U	100 U	250 U	50 U
Cyclohexane	µg/L	250 U	2500 U	100 U	250 U	50 U
Dibromochloromethane	µg/L	250 U	2500 U	100 U	250 U	50 U
Dichlorodifluoromethane (CFC-12)	µg/L	250 U	2500 U	100 U	250 U	50 U
Ethylbenzene	µg/L	250 U	2500 U	54 J	130 J	50 U
Isopropyl benzene	µg/L	250 U	2500 U	100 U	250 U	50 U
Methyl acetate	µg/L	2500 U	25000 U	1000 U	2500 U	500 U
Methyl cyclohexane	µg/L	250 U	2500 U	100 U	250 U	50 U
Methyl tert butyl ether (MTBE)	µg/L	250 U	2500 U	100 U	250 U	50 U
Methylene chloride	µg/L	1300 U	13000 U	500 U	140 J	250 U
Styrene	µg/L	250 U	2500 U	100 U	250 U	50 U
Tetrachloroethene	µg/L	250 U	2500 U	100 U	250 U	50 U
Toluene	µg/L	250 U	2500 U	420	74 J	50 U
trans-1,2-Dichloroethene	µg/L	250 U	2500 U	100 U	250 U	50 U
trans-1,3-Dichloropropene	µg/L	250 U	2500 U	100 U	250 U	50 U
Trichloroethene	µg/L	250 U	2500 U	100 U	250 U	50 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-2	IW-6	IW-9	IW-10	IW-20
Sample Name:		GW-17303-110416-DS-067	GW-17303-110316-DS-066	GW-17303-110316-DS-065	GW-17303-110416-DS-068	GW-17303-103116-DS-041
Sample Date:		11/04/2016	11/03/2016	11/03/2016	11/04/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	250 U	2500 U	100 U	250 U	50 U
Trifluorotrichloroethane (CFC-113)	µg/L	250 U	2500 U	100 U	250 U	50 U
Vinyl chloride	µg/L	3300	59000	1600	3500	920
Xylenes (total)	µg/L	500 U	5000 U	270	230 J	100 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-2	IW-6	IW-9	IW-10	IW-20
Sample Name:		GW-17303-110416-DS-067	GW-17303-110316-DS-066	GW-17303-110316-DS-065	GW-17303-110416-DS-068	GW-17303-103116-DS-041
Sample Date:		11/04/2016	11/03/2016	11/03/2016	11/04/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-26R	IW-30	IW-33	IW-34	MW-4
Sample Name:		GW-17303-110316-DS-064	GW-17303-110316-DS-063	GW-17303-103116-DS-035	GW-17303-103116-DS-037	GW-17303-103116-DS-033
Sample Date:		11/03/2016	11/03/2016	10/31/2016	10/31/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,1,2-Trichloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,1-Dichloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,1-Dichloroethene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dichlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dichloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,2-Dichloropropane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,3-Dichlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
1,4-Dichlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
2-Hexanone	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
Acetone	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
Benzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Bromodichloromethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Bromoform	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Carbon disulfide	µg/L	1300 U	2500 U	5000 U	1300 U	5.0 U
Carbon tetrachloride	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Chlorobenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Chloroethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Chloroform (Trichloromethane)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
cis-1,2-Dichloroethene	µg/L	790	980	950 J	3800	1.0 U
cis-1,3-Dichloropropene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Cyclohexane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Dibromochloromethane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Ethylbenzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Isopropyl benzene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Methyl acetate	µg/L	2500 U	5000 U	10000 U	2500 U	10 U
Methyl cyclohexane	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Methylene chloride	µg/L	1300 U	2500 U	5000 U	1300 U	5.0 U
Styrene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Tetrachloroethene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Toluene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
trans-1,2-Dichloroethene	µg/L	250 U	500 U	1000 U	73 J	1.0 U
trans-1,3-Dichloropropene	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Trichloroethene	µg/L	250 U	500 U	1000 U	250 U	1.0 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-26R	IW-30	IW-33	IW-34	MW-4
Sample Name:		GW-17303-110316-DS-064	GW-17303-110316-DS-063	GW-17303-103116-DS-035	GW-17303-103116-DS-037	GW-17303-103116-DS-033
Sample Date:		11/03/2016	11/03/2016	10/31/2016	10/31/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	250 U	500 U	1000 U	250 U	1.0 U
Vinyl chloride	µg/L	4100	9100	16000	6100	1.0 U
Xylenes (total)	µg/L	500 U	1000 U	2000 U	500 U	2.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		IW-26R	IW-30	IW-33	IW-34	MW-4
Sample Name:		GW-17303-110316-DS-064	GW-17303-110316-DS-063	GW-17303-103116-DS-035	GW-17303-103116-DS-037	GW-17303-103116-DS-033
Sample Date:		11/03/2016	11/03/2016	10/31/2016	10/31/2016	10/31/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW-5	MW-13	MW-14	MW-14	MW-18
Sample Name:		GW-17303-102816-JY-027	GW-17303-102816-JY-030	GW-17303-110216-DS-057	GW-17303-110216-DS-058	GW-17303-102516-JY-001
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/25/2016
Depth:		--	--	--	--	--
					Duplicate	
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	3300 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	3300 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	3300 U	10 U	10 U	10 U	10 U
Acetone	µg/L	3300 U	10 U	10 U	10 U	10 U
Benzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1700 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	3600	1.2	3.0	2.3	1.0 U
cis-1,3-Dichloropropene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	3300 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1700 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW-5	MW-13	MW-14	MW-14	MW-18
Sample Name:		GW-17303-102816-JY-027	GW-17303-102816-JY-030	GW-17303-110216-DS-057	GW-17303-110216-DS-058	GW-17303-102516-JY-001
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/25/2016
Depth:		--	--	--	--	--
					Duplicate	
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	330 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	9800	1.5	25	20	1.0 U
Xylenes (total)	µg/L	670 U	2.0 U	2.0 U	2.0 U	2.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW-5	MW-13	MW-14	MW-14	MW-18
Sample Name:		GW-17303-102816-JY-027	GW-17303-102816-JY-030	GW-17303-110216-DS-057	GW-17303-110216-DS-058	GW-17303-102516-JY-001
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/25/2016
Depth:		--	--	--	--	--
					Duplicate	
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-01	MW19-02	MW19-03	MW19-06	MW19-07
Sample Name:		GW-17303-102816-JY-031	GW-17303-102816-JY-028	GW-17303-110216-DS-059	GW-17303-110216-DS-060	GW-17303-102616-JY-011
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/26/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,1,2,2-Tetrachloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,1,2-Trichloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,1-Dichloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,1-Dichloroethene	µg/L	11 U	200 U	50 U	17 U	200 U
1,2,4-Trichlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dichlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dichloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
1,2-Dichloropropane	µg/L	11 U	200 U	50 U	17 U	200 U
1,3-Dichlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
1,4-Dichlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	110 U	2000 U	500 U	170 U	2000 U
2-Hexanone	µg/L	110 U	2000 U	500 U	170 U	2000 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	110 U	2000 U	500 U	170 U	2000 U
Acetone	µg/L	110 U	2000 U	500 U	170 U	2000 U
Benzene	µg/L	11 U	200 U	50 U	17 U	200 U
Bromodichloromethane	µg/L	11 U	200 U	50 U	17 U	200 U
Bromoform	µg/L	11 U	200 U	50 U	17 U	200 U
Bromomethane (Methyl bromide)	µg/L	11 U	200 U	50 U	17 U	200 U
Carbon disulfide	µg/L	56 U	1000 U	250 U	83 U	1000 U
Carbon tetrachloride	µg/L	11 U	200 U	50 U	17 U	200 U
Chlorobenzene	µg/L	11 U	200 U	50 U	17 U	200 U
Chloroethane	µg/L	11 U	200 U	50 U	17 U	200 U
Chloroform (Trichloromethane)	µg/L	11 U	200 U	50 U	17 U	200 U
Chloromethane (Methyl chloride)	µg/L	11 U	200 U	50 U	17 U	200 U
cis-1,2-Dichloroethene	µg/L	220	3200	1200	360	2100
cis-1,3-Dichloropropene	µg/L	11 U	200 U	50 U	17 U	200 U
Cyclohexane	µg/L	11 U	200 U	50 U	17 U	200 U
Dibromochloromethane	µg/L	11 U	200 U	50 U	17 U	200 U
Dichlorodifluoromethane (CFC-12)	µg/L	11 U	200 U	50 U	17 U	200 U
Ethylbenzene	µg/L	11 U	200 U	50 U	17 U	200 U
Isopropyl benzene	µg/L	11 U	200 U	50 U	17 U	200 U
Methyl acetate	µg/L	110 U	2000 U	500 U	170 U	2000 U
Methyl cyclohexane	µg/L	11 U	200 U	50 U	17 U	200 U
Methyl tert butyl ether (MTBE)	µg/L	11 U	200 U	50 U	17 U	200 U
Methylene chloride	µg/L	56 U	1000 U	250 U	83 U	1000 U
Styrene	µg/L	11 U	200 U	50 U	17 U	200 U
Tetrachloroethene	µg/L	11 U	200 U	50 U	17 U	200 U
Toluene	µg/L	11 U	200 U	50 U	17 U	200 U
trans-1,2-Dichloroethene	µg/L	18	110 J	61	22	75 J
trans-1,3-Dichloropropene	µg/L	11 U	200 U	50 U	17 U	200 U
Trichloroethene	µg/L	11 U	200 U	50 U	17 U	200 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-01	MW19-02	MW19-03	MW19-06	MW19-07
Sample Name:		GW-17303-102816-JY-031	GW-17303-102816-JY-028	GW-17303-110216-DS-059	GW-17303-110216-DS-060	GW-17303-102616-JY-011
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/26/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	11 U	200 U	50 U	17 U	200 U
Trifluorotrichloroethane (CFC-113)	µg/L	11 U	200 U	50 U	17 U	200 U
Vinyl chloride	µg/L	5.6 J	3600	820	130	4900
Xylenes (total)	µg/L	22 U	400 U	100 U	33 U	400 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-01	MW19-02	MW19-03	MW19-06	MW19-07
Sample Name:		GW-17303-102816-JY-031	GW-17303-102816-JY-028	GW-17303-110216-DS-059	GW-17303-110216-DS-060	GW-17303-102616-JY-011
Sample Date:		10/28/2016	10/28/2016	11/02/2016	11/02/2016	10/26/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-11	MW19-12	MW19-14	MW19-16	MW19-24
Sample Name:		GW-17303-102716-JY-015	GW-17303-102616-JY-008	GW-17303-110116-DS-053	GW-17303-103116-DS-046	GW-17303-102816-JY-029
Sample Date:		10/27/2016	10/26/2016	11/01/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,1,2-Trichloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,1-Dichloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,1-Dichloroethene	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2,4-Trichlorobenzene	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dichlorobenzene	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dichloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,2-Dichloropropane	µg/L	17000 U	250 U	250 U	130 U	10 U
1,3-Dichlorobenzene	µg/L	17000 U	250 U	250 U	130 U	10 U
1,4-Dichlorobenzene	µg/L	17000 U	250 U	250 U	130 U	10 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
2-Hexanone	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
Acetone	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
Benzene	µg/L	17000 U	250 U	250 U	130 U	10
Bromodichloromethane	µg/L	17000 U	250 U	250 U	130 U	10 U
Bromoform	µg/L	17000 U	250 U	250 U	130 U	10 U
Bromomethane (Methyl bromide)	µg/L	17000 U	250 U	250 U	130 U	10 U
Carbon disulfide	µg/L	83000 U	1300 U	1300 U	630 U	50 U
Carbon tetrachloride	µg/L	17000 U	250 U	250 U	130 U	10 U
Chlorobenzene	µg/L	17000 U	220 J	250 U	130 U	10 U
Chloroethane	µg/L	17000 U	250 U	250 U	130 U	10 U
Chloroform (Trichloromethane)	µg/L	17000 U	250 U	250 U	130 U	10 U
Chloromethane (Methyl chloride)	µg/L	17000 U	250 U	250 U	130 U	10 U
cis-1,2-Dichloroethene	µg/L	320000	4300	100 J	1200	4.6 J
cis-1,3-Dichloropropene	µg/L	17000 U	250 U	250 U	130 U	10 U
Cyclohexane	µg/L	17000 U	250 U	250 U	130 U	10 U
Dibromochloromethane	µg/L	17000 U	250 U	250 U	130 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	17000 U	250 U	250 U	130 U	10 U
Ethylbenzene	µg/L	17000 U	74 J	250 U	130 U	10 U
Isopropyl benzene	µg/L	17000 U	250 U	250 U	130 U	10 U
Methyl acetate	µg/L	170000 U	2500 U	2500 U	1300 U	100 U
Methyl cyclohexane	µg/L	17000 U	250 U	250 U	130 U	10 U
Methyl tert butyl ether (MTBE)	µg/L	17000 U	250 U	250 U	130 U	10 U
Methylene chloride	µg/L	83000 U	1300 U	1300 U	630 U	50 U
Styrene	µg/L	17000 U	250 U	250 U	130 U	10 U
Tetrachloroethene	µg/L	17000 U	250 U	250 U	130 U	10 U
Toluene	µg/L	17000 U	250 U	250 U	130 U	10 U
trans-1,2-Dichloroethene	µg/L	17000 U	250 U	250 U	61 J	10 U
trans-1,3-Dichloropropene	µg/L	17000 U	250 U	250 U	130 U	10 U
Trichloroethene	µg/L	17000 U	250 U	250 U	130 U	10 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-11	MW19-12	MW19-14	MW19-16	MW19-24
Sample Name:		GW-17303-102716-JY-015	GW-17303-102616-JY-008	GW-17303-110116-DS-053	GW-17303-103116-DS-046	GW-17303-102816-JY-029
Sample Date:		10/27/2016	10/26/2016	11/01/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	17000 U	250 U	250 U	130 U	10 U
Trifluorotrichloroethane (CFC-113)	µg/L	17000 U	250 U	250 U	130 U	10 U
Vinyl chloride	µg/L	80000	5700	5000	1900	130
Xylenes (total)	µg/L	33000 U	500 U	500 U	250 U	20 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-11	MW19-12	MW19-14	MW19-16	MW19-24
Sample Name:		GW-17303-102716-JY-015	GW-17303-102616-JY-008	GW-17303-110116-DS-053	GW-17303-103116-DS-046	GW-17303-102816-JY-029
Sample Date:		10/27/2016	10/26/2016	11/01/2016	10/31/2016	10/28/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-33	MW19-33	MW19-34	MW19-35	MW19-38
Sample Name:		GW-17303-102516-JY-002	GW-17303-102516-JY-003	GW-17303-102516-JY-004	GW-17303-102516-JY-005	GW-17303-102516-JY-007
Sample Date:		10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	0.73 J
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U	25 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	25 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U	25 U
Acetone	µg/L	10 U	10 U	10 U	10 U	25 U
Benzene	µg/L	28	28	1.0 U	1.0 U	2.5 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	13 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Chlorobenzene	µg/L	33	32	1.0 U	1.0 U	2.5 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
cis-1,2-Dichloroethene	µg/L	0.32 J	0.31 J	4.1	2.0	62
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Cyclohexane	µg/L	3.3	3.3	1.0 U	1.0 U	2.5 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Isopropyl benzene	µg/L	2.2	2.1	1.0 U	1.0 U	2.5 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	25 U
Methyl cyclohexane	µg/L	6.0	6.3	1.0 U	1.0 U	2.5 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	13 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	0.58 J	1.0 U	3.3
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Trichloroethene	µg/L	1.0 U	1.0 U	25	1.0 U	27

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-33	MW19-33	MW19-34	MW19-35	MW19-38
Sample Name:		GW-17303-102516-JY-002	GW-17303-102516-JY-003	GW-17303-102516-JY-004	GW-17303-102516-JY-005	GW-17303-102516-JY-007
Sample Date:		10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
Vinyl chloride	µg/L	4.4	4.5	0.57 J	1.0 U	39
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-33	MW19-33	MW19-34	MW19-35	MW19-38
Sample Name:		GW-17303-102516-JY-002	GW-17303-102516-JY-003	GW-17303-102516-JY-004	GW-17303-102516-JY-005	GW-17303-102516-JY-007
Sample Date:		10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-40	MW19-43	MW19-45	MW19-45	MW19-46
Sample Name:		GW-17303-103116-DS-034	GW-17303-103116-DS-039	GW-17303-102516-JY-006	GW-17303-102616-JY-010	GW-17303-102716-JY-013
Sample Date:		10/31/2016	10/31/2016	10/25/2016	10/26/2016	10/27/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,1,2-Trichloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,1-Dichloroethane	µg/L	1.0 U	170 U	0.32 J	250 U	25 U
1,1-Dichloroethene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dichlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dichloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,2-Dichloropropane	µg/L	1.0 U	170 U	0.46 J	250 U	25 U
1,3-Dichlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
1,4-Dichlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	1700 U	10 U	2500 U	250 U
2-Hexanone	µg/L	10 U	1700 U	10 U	2500 U	250 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	1700 U	10 U	2500 U	250 U
Acetone	µg/L	10 U	1700 U	10 U	2500 U	250 U
Benzene	µg/L	1.0 U	170 U	1.0 U	250 U	10 J
Bromodichloromethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Bromoform	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Carbon disulfide	µg/L	5.0 U	830 U	5.0 U	1300 U	130 U
Carbon tetrachloride	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Chlorobenzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Chloroethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Chloroform (Trichloromethane)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1200	1.0 U	1400	30
cis-1,3-Dichloropropene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Cyclohexane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Dibromochloromethane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Ethylbenzene	µg/L	1.0 U	170 U	1.0 U	250 U	32
Isopropyl benzene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Methyl acetate	µg/L	10 U	1700 U	10 U	2500 U	250 U
Methyl cyclohexane	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Methylene chloride	µg/L	5.0 U	830 U	5.0 U	1300 U	130 U
Styrene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Tetrachloroethene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Toluene	µg/L	1.0 U	170 U	1.0 U	250 U	62
trans-1,2-Dichloroethene	µg/L	1.0 U	640	1.0 U	130 J	25 U
trans-1,3-Dichloropropene	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Trichloroethene	µg/L	1.0 U	150 J	4.1	250 U	15 J

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-40	MW19-43	MW19-45	MW19-45	MW19-46
Sample Name:		GW-17303-103116-DS-034	GW-17303-103116-DS-039	GW-17303-102516-JY-006	GW-17303-102616-JY-010	GW-17303-102716-JY-013
Sample Date:		10/31/2016	10/31/2016	10/25/2016	10/26/2016	10/27/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	170 U	1.0 U	250 U	25 U
Vinyl chloride	µg/L	1.0 U	2400	0.77 J	12000	46
Xylenes (total)	µg/L	2.0 U	330 U	2.0 U	500 U	140
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-40	MW19-43	MW19-45	MW19-45	MW19-46
Sample Name:		GW-17303-103116-DS-034	GW-17303-103116-DS-039	GW-17303-102516-JY-006	GW-17303-102616-JY-010	GW-17303-102716-JY-013
Sample Date:		10/31/2016	10/31/2016	10/25/2016	10/26/2016	10/27/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-47	MW19-48	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-102716-JY-014	GW-17303-102716-JY-016	GW-17303-102716-JY-017	GW-17303-102716-JY-018	GW-17303-102716-JY-019
Sample Date:		10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,1,2-Trichloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,1-Dichloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,1-Dichloroethene	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dichlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dichloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,2-Dichloropropane	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,3-Dichlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
1,4-Dichlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	290 U	1400 U	1400 U	1300 U	50 U
2-Hexanone	µg/L	290 U	1400 U	1400 U	1300 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	290 U	1400 U	1400 U	1300 U	50 U
Acetone	µg/L	290 U	1400 U	1400 U	1300 U	50 U
Benzene	µg/L	29 U	140 U	140 U	50 J	27
Bromodichloromethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
Bromoform	µg/L	29 U	140 U	140 U	130 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Carbon disulfide	µg/L	140 U	710 U	710 U	630 U	25 U
Carbon tetrachloride	µg/L	29 U	140 U	140 U	130 U	5.0 U
Chlorobenzene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Chloroethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
Chloroform (Trichloromethane)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	29 U	140 U	140 U	130 U	5.0 U
cis-1,2-Dichloroethene	µg/L	130	1000	1200	760	17
cis-1,3-Dichloropropene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Cyclohexane	µg/L	29 U	140 U	140 U	61 J	54
Dibromochloromethane	µg/L	29 U	140 U	140 U	130 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Ethylbenzene	µg/L	29 U	140 U	140 U	210	140
Isopropyl benzene	µg/L	29 U	140 U	140 U	91 J	51
Methyl acetate	µg/L	290 U	1400 U	1400 U	1300 U	50 U
Methyl cyclohexane	µg/L	29 U	140 U	140 U	130 U	7.2
Methyl tert butyl ether (MTBE)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Methylene chloride	µg/L	140 U	710 U	710 U	630 U	25 U
Styrene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Tetrachloroethene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Toluene	µg/L	29 U	140 U	140 U	670	31
trans-1,2-Dichloroethene	µg/L	9.4 J	59 J	61 J	130 U	5.0 U
trans-1,3-Dichloropropene	µg/L	29 U	140 U	140 U	130 U	5.0 U
Trichloroethene	µg/L	70	110 J	120 J	130 U	2.2 J

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-47	MW19-48	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-102716-JY-014	GW-17303-102716-JY-016	GW-17303-102716-JY-017	GW-17303-102716-JY-018	GW-17303-102716-JY-019
Sample Date:		10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	29 U	140 U	140 U	130 U	5.0 U
Vinyl chloride	µg/L	300	2000	2100	2300	30
Xylenes (total)	µg/L	57 U	290 U	290 U	860	210
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-47	MW19-48	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-102716-JY-014	GW-17303-102716-JY-016	GW-17303-102716-JY-017	GW-17303-102716-JY-018	GW-17303-102716-JY-019
Sample Date:		10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-55	MW19-56
Sample Name:		GW-17303-102616-JY-012	GW-17303-102716-JY-020	GW-17303-102816-JY-026	GW-17303-110316-DS-062	GW-17303-110316-DS-061
Sample Date:		10/26/2016	10/27/2016	10/28/2016	11/03/2016	11/03/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,1,2,2-Tetrachloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,1,2-Trichloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,1-Dichloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,1-Dichloroethene	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2,4-Trichlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dichlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dichloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,2-Dichloropropane	µg/L	5000 U	17 U	500 U	33 U	50 U
1,3-Dichlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
1,4-Dichlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	50000 U	170 U	5000 U	330 U	500 U
2-Hexanone	µg/L	50000 U	170 U	5000 U	330 U	500 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	50000 U	170 U	5000 U	330 U	500 U
Acetone	µg/L	50000 U	170 U	5000 U	330 U	500 U
Benzene	µg/L	5000 U	17 U	500 U	33 U	50 U
Bromodichloromethane	µg/L	5000 U	17 U	500 U	33 U	50 U
Bromoform	µg/L	5000 U	17 U	500 U	33 U	50 U
Bromomethane (Methyl bromide)	µg/L	5000 U	17 U	500 U	33 U	50 U
Carbon disulfide	µg/L	25000 U	83 U	2500 U	170 U	250 U
Carbon tetrachloride	µg/L	5000 U	17 U	500 U	33 U	50 U
Chlorobenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
Chloroethane	µg/L	5000 U	17 U	500 U	33 U	50 U
Chloroform (Trichloromethane)	µg/L	5000 U	17 U	500 U	33 U	50 U
Chloromethane (Methyl chloride)	µg/L	5000 U	17 U	500 U	33 U	50 U
cis-1,2-Dichloroethene	µg/L	5600	140	1200	530	1200
cis-1,3-Dichloropropene	µg/L	5000 U	17 U	500 U	33 U	50 U
Cyclohexane	µg/L	5000 U	17 U	500 U	33 U	50 U
Dibromochloromethane	µg/L	5000 U	17 U	500 U	33 U	50 U
Dichlorodifluoromethane (CFC-12)	µg/L	5000 U	17 U	500 U	33 U	50 U
Ethylbenzene	µg/L	5000 U	17 U	500 U	33 U	50 U
Isopropyl benzene	µg/L	5000 U	17 U	500 U	33 U	50 U
Methyl acetate	µg/L	50000 U	170 U	5000 U	330 U	500 U
Methyl cyclohexane	µg/L	5000 U	17 U	500 U	33 U	50 U
Methyl tert butyl ether (MTBE)	µg/L	5000 U	17 U	500 U	33 U	50 U
Methylene chloride	µg/L	25000 U	83 U	2500 U	170 U	250 U
Styrene	µg/L	5000 U	17 U	500 U	33 U	50 U
Tetrachloroethene	µg/L	5000 U	17 U	500 U	33 U	50 U
Toluene	µg/L	5000 U	17 U	500 U	33 U	50 U
trans-1,2-Dichloroethene	µg/L	5000 U	15 J	500 U	32 J	55
trans-1,3-Dichloropropene	µg/L	5000 U	17 U	500 U	33 U	50 U
Trichloroethene	µg/L	5000 U	33	500 U	33 U	50 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-55	MW19-56
Sample Name:		GW-17303-102616-JY-012	GW-17303-102716-JY-020	GW-17303-102816-JY-026	GW-17303-110316-DS-062	GW-17303-110316-DS-061
Sample Date:		10/26/2016	10/27/2016	10/28/2016	11/03/2016	11/03/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	5000 U	17 U	500 U	33 U	50 U
Trifluorotrichloroethane (CFC-113)	µg/L	5000 U	17 U	500 U	33 U	50 U
Vinyl chloride	µg/L	51000	160	7800	720	840
Xylenes (total)	µg/L	10000 U	33 U	1000 U	67 U	100 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	--	--
Total PCBs	µg/L	--	--	--	--	--
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	--	--
1,2-Dichloroethane	mg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	--	--
Benzene	mg/L	--	--	--	--	--
Carbon tetrachloride	mg/L	--	--	--	--	--
Chlorobenzene	mg/L	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	--	--	--	--	--
Tetrachloroethene	mg/L	--	--	--	--	--
Trichloroethene	mg/L	--	--	--	--	--
Vinyl chloride	mg/L	--	--	--	--	--
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	--	--	--	--	--
2-Methylphenol	mg/L	--	--	--	--	--
3&4-Methylphenol	mg/L	--	--	--	--	--
Hexachlorobenzene	mg/L	--	--	--	--	--
Hexachlorobutadiene	mg/L	--	--	--	--	--
Hexachloroethane	mg/L	--	--	--	--	--
Nitrobenzene	mg/L	--	--	--	--	--
Pentachlorophenol	mg/L	--	--	--	--	--
Pyridine	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-55	MW19-56
Sample Name:		GW-17303-102616-JY-012	GW-17303-102716-JY-020	GW-17303-102816-JY-026	GW-17303-110316-DS-062	GW-17303-110316-DS-061
Sample Date:		10/26/2016	10/27/2016	10/28/2016	11/03/2016	11/03/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Silver	mg/L	--	--	--	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-57	MW19-58	MW19-59	Waste	Waste
Sample Name:		GW-17303-102816-JY-021	GW-17303-110116-DS-050	GW-17303-110216-DS-056	WW-17303-110416-DS-001	WW-17303-110416-DS-002
Sample Date:		10/28/2016	11/01/2016	11/02/2016	11/04/2016	11/04/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,1,2,2-Tetrachloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,1,2-Trichloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,1-Dichloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,1-Dichloroethene	µg/L	67 U	2.0 U	1.0 U	--	--
1,2,4-Trichlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dichlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dichloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
1,2-Dichloropropane	µg/L	67 U	2.0 U	1.0 U	--	--
1,3-Dichlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
1,4-Dichlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	670 U	20 U	10 U	--	--
2-Hexanone	µg/L	670 U	20 U	10 U	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	670 U	20 U	10 U	--	--
Acetone	µg/L	670 U	20 U	10 U	--	--
Benzene	µg/L	67 U	6.0	0.94 J	--	--
Bromodichloromethane	µg/L	67 U	2.0 U	1.0 U	--	--
Bromoform	µg/L	67 U	2.0 U	1.0 U	--	--
Bromomethane (Methyl bromide)	µg/L	67 U	2.0 U	1.0 U	--	--
Carbon disulfide	µg/L	330 U	10 U	5.0 U	--	--
Carbon tetrachloride	µg/L	67 U	2.0 U	1.0 U	--	--
Chlorobenzene	µg/L	67 U	2.0 U	1.0 U	--	--
Chloroethane	µg/L	67 U	2.0 U	1.0 U	--	--
Chloroform (Trichloromethane)	µg/L	67 U	2.0 U	1.0 U	--	--
Chloromethane (Methyl chloride)	µg/L	67 U	2.0 U	1.0 U	--	--
cis-1,2-Dichloroethene	µg/L	1300	5.2	11	--	--
cis-1,3-Dichloropropene	µg/L	67 U	2.0 U	1.0 U	--	--
Cyclohexane	µg/L	67 U	2.0 U	1.0 U	--	--
Dibromochloromethane	µg/L	67 U	2.0 U	1.0 U	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	67 U	2.0 U	1.0 U	--	--
Ethylbenzene	µg/L	67 U	2.0 U	1.0 U	--	--
Isopropyl benzene	µg/L	67 U	2.0 U	1.0 U	--	--
Methyl acetate	µg/L	670 U	20 U	10 U	--	--
Methyl cyclohexane	µg/L	67 U	2.0 U	1.0 U	--	--
Methyl tert butyl ether (MTBE)	µg/L	67 U	2.0 U	1.0 U	--	--
Methylene chloride	µg/L	330 U	10 U	5.0 U	--	--
Styrene	µg/L	67 U	2.0 U	1.0 U	--	--
Tetrachloroethene	µg/L	67 U	2.0 U	1.0 U	--	--
Toluene	µg/L	67 U	2.0 U	1.0 U	--	--
trans-1,2-Dichloroethene	µg/L	56 J	0.64 J	1.0 U	--	--
trans-1,3-Dichloropropene	µg/L	67 U	2.0 U	1.0 U	--	--
Trichloroethene	µg/L	67 U	0.70 J	1.0 U	--	--

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-57	MW19-58	MW19-59	Waste	Waste
Sample Name:		GW-17303-102816-JY-021	GW-17303-110116-DS-050	GW-17303-110216-DS-056	WW-17303-110416-DS-001	WW-17303-110416-DS-002
Sample Date:		10/28/2016	11/01/2016	11/02/2016	11/04/2016	11/04/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	67 U	2.0 U	1.0 U	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	67 U	2.0 U	1.0 U	--	--
Vinyl chloride	µg/L	1500	33	63	--	--
Xylenes (total)	µg/L	130 U	4.0 U	2.0 U	--	--
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1221 (PCB-1221)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1232 (PCB-1232)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1242 (PCB-1242)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1248 (PCB-1248)	µg/L	--	--	--	0.095 U	0.21
Aroclor-1254 (PCB-1254)	µg/L	--	--	--	0.095 U	0.097 U
Aroclor-1260 (PCB-1260)	µg/L	--	--	--	0.095 U	0.075 J
Total PCBs	µg/L	--	--	--	0.095 U	0.285
Volatile Organic Compounds, TCLP						
1,1-Dichloroethene	mg/L	--	--	--	0.025 U	0.025 U
1,2-Dichloroethane	mg/L	--	--	--	0.025 U	0.025 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	--	--	--	0.25 U	0.25 U
Benzene	mg/L	--	--	--	0.025 U	0.025 U
Carbon tetrachloride	mg/L	--	--	--	0.025 U	0.025 U
Chlorobenzene	mg/L	--	--	--	0.025 U	0.025 U
Chloroform (Trichloromethane)	mg/L	--	--	--	0.025 U	0.025 U
Tetrachloroethene	mg/L	--	--	--	0.025 U	0.025 U
Trichloroethene	mg/L	--	--	--	0.025 U	0.025 U
Vinyl chloride	mg/L	--	--	--	0.59	1.7
Semivolatile Organic Compounds, TCLP						
1,4-Dichlorobenzene	mg/L	--	--	--	0.0040 U	0.0040 U
2,4,5-Trichlorophenol	mg/L	--	--	--	0.0040 U	0.0040 U
2,4,6-Trichlorophenol	mg/L	--	--	--	0.0040 U	0.0040 U
2,4-Dinitrotoluene	mg/L	--	--	--	0.0040 U	0.0040 U
2-Methylphenol	mg/L	--	--	--	0.0040 U	0.0040 U
3&4-Methylphenol	mg/L	--	--	--	0.0040 U	0.0040 U
Hexachlorobenzene	mg/L	--	--	--	0.00080 U	0.00080 U
Hexachlorobutadiene	mg/L	--	--	--	0.0040 U	0.0040 U
Hexachloroethane	mg/L	--	--	--	0.0040 U	0.0040 U
Nitrobenzene	mg/L	--	--	--	0.0040 U	0.0040 U
Pentachlorophenol	mg/L	--	--	--	0.016 U	0.016 U
Pyridine	mg/L	--	--	--	0.0040 U	0.0040 U

Table 2

Validated Analytical Summary Results
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
October and November 2016

Location ID:		MW19-57	MW19-58	MW19-59	Waste	Waste
Sample Name:		GW-17303-102816-JY-021	GW-17303-110116-DS-050	GW-17303-110216-DS-056	WW-17303-110416-DS-001	WW-17303-110416-DS-002
Sample Date:		10/28/2016	11/01/2016	11/02/2016	11/04/2016	11/04/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Metals, TCLP						
Arsenic	mg/L	--	--	--	0.050 U	0.050 U
Barium	mg/L	--	--	--	0.047 J	0.10 J
Cadmium	mg/L	--	--	--	0.00036 J	0.00039 J
Chromium	mg/L	--	--	--	0.0065 J	0.00082 J
Lead	mg/L	--	--	--	0.050 U	0.050 U
Mercury	mg/L	--	--	--	0.0020 U	0.0020 U
Selenium	mg/L	--	--	--	0.050 U	0.050 U
Silver	mg/L	--	--	--	0.050 U	0.050 U

Notes:

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

Table 3

Analytical Methods
2016 Groundwater Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
October and November 2016

Parameter	Method	Matrix	Holding Time	
			Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
TCL VOC	SW-846 8260B	Water	-	14
TCLP VOC	SW-846 1311/8260B	Water	14	14
TCLP SVOC	SW-846 1311/8270C	Water	14/7	40
TCLP Metals (except Mercury)	SW-846 1311/6010B	Water	180	180
TCLP Mercury	SW-846 1311/7470A	Water	28	28
PCB	SW-846 8082	Water	7	40

Notes:

Method References:

SW-846	- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions
TCL	- Target Compound List
TCLP	- Toxicity Characteristic Leaching Procedure
VOC	- Volatile Organic Compounds
SVOC	- Semi-volatile Organic Compounds
PCB	- Polychlorinated biphenyls

Memorandum

To:	Beth Landale	Ref. No.:	017303-T05-02Y16
From:	Ruth Mickle/tl/176/Det	Date:	April 6, 2016

Re: **Analytical Results and Reduced Validation**
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

1. Introduction

This document details a reduced validation of analytical results for surface water, groundwater and soil samples collected at the Willow Run Company Vehicle Operations Site during February 2016. Samples were submitted to TestAmerica Laboratories, Inc., located in North Canton, Ohio. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Tables 2A-2D. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, duplicate data, recovery data from surrogate spikes/laboratory control samples (LCS)/matrix spikes (MS) and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

i) "Quality Assurance Project Plan (QAPP) for the RCRA Facility Investigation (RFI) Work Plan, Company Vehicle Operations", Revision 1, February 2, 2012

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

iii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

Items ii) and iii) will subsequently be referred to as the "Guidelines" in this Memorandum.

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2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (4 +/- 2°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Table 4 presents the sample results qualified due to analyte concentrations in the method blanks. All remaining method blank results were non-detect or the investigative sample results were greater than five times (ten times for common lab contaminants) the method blank results, indicating that laboratory contamination was not a factor.

4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for polychlorinated biphenyl (PCB), volatile organic compound (VOC) and semi-volatile organic compound (SVOC) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. In some cases, surrogates were diluted out and could not be assessed due to the presence of high concentrations of target analytes. Table 5 presents the outlying surrogate recoveries that resulted in data qualification. The associated PCB results were qualified estimated, as noted in the table. The remaining surrogate recoveries met the above criteria for investigative samples.

5. Laboratory Control Sample (LCS) Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

5.1 Organic Analyses

The LCS contained all compounds of interest. All LCS were within the laboratory control limits, demonstrating acceptable analytical accuracy.

5.2 Inorganics Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analytes of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1. The laboratory performed additional site-specific MS/MSD analyses internally.

6.1 Organic Analyses

The matrix spike samples were spiked with all compounds of interest, except PCBs which were spiked with the compounds specified in the method.

Several percent recoveries were reported outside the control limits. Table 6 presents outlying matrix spike data. The associated sample results were qualified as estimated or rejected, as noted in the table. In some instances, qualification was not required since the sample concentration of the spiked parameter was more than four times the spike amount. In that case, data qualification was not required.

6.2 Inorganics Analyses

The matrix spike samples were spiked with the analytes of interest and the results were evaluated using the "Guidelines".

Several percent recoveries were reported outside the control limits. Table 6 presents outlying matrix spike data. The associated sample results were qualified as estimated, as noted in the table. In some instances, qualification was not required since the sample concentration of the spiked parameter was more than four times the spike amount. In that case, data qualification was not required.

7. Field QA/QC Samples

The field QA/QC consisted of eleven trip blank samples and five field duplicate sample sets.

7.1 Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, eleven trip blanks were submitted to the laboratory for VOC analysis. Table 7 presents the sample results qualified due to detections in the trip blanks. All remaining results were non-detect for the compounds of interest or the sample results were previously qualified due to method blank contamination.

7.2 Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, five field duplicate samples were collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 and 100 for water and soil samples, respectively. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one or two times the RL value for water and soil samples, respectively.

The majority of field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision. Table 8 presents non-comparable phenanthrene results for one field duplicate set. The associated sample data were qualified estimated, as noted in the table.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Tables 2A-2D unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Tables 2A-2D are acceptable with the specific exceptions and qualifications noted herein.

Table 1

Sample Collection and Analysis Summary
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs.)	Final Sample Depth (ft. bgs.)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: TCL VOC	TCL SVOC	PCB	T & D-Fe and Mn	Site Metals	Dissolved Gases	Anions	Total Alkalinity	TOC	Comments
TestAmerica Lot No.: 240-60481																
GW-17303-020116-CB-001	SB19-121	water	---	---	02/01/2016	10:15	X	--	--	--	--	--	--	--	--	
GW-17303-020116-CB-002	SB19-120	water	---	---	02/01/2016	11:25	X	--	--	--	--	--	--	--	--	
GW-17303-020116-CB-003	SB19-119	water	---	---	02/01/2016	12:30	X	--	--	--	--	--	--	--	--	
GW-17303-020116-CB-004	SB19-118	water	---	---	02/01/2016	14:10	X	--	--	--	--	--	--	--	--	
GW-17303-020116-CB-005	SB19-117	water	---	---	02/01/2016	15:15	X	--	--	--	--	--	--	--	--	
GW-17303-020116-CB-006	SB19-117	water	---	---	02/01/2016	15:30	X	--	--	--	--	--	--	--	--	Field Duplicate of -CB-005
GW-17303-020116-CB-007	SB19-116	water	---	---	02/01/2016	16:25	X	--	--	--	--	--	--	--	--	
TB-17303-020116-CB-008	Trip Blank	water	---	---	02/01/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank
TestAmerica Lot No.: 240-60612																
GW-17303-020316-CB-009	SB19-115	water	---	---	02/03/2016	12:25	X	--	--	--	--	--	--	--	--	
GW-17303-020316-CB-010	SB19-114	water	---	---	02/03/2016	13:55	X	--	--	--	--	--	--	--	--	
TB-17303-020316-CB-011	Trip Blank	water	---	---	02/03/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank
SO-17303-020316-CB-002	SB19-115	solid	13	15	02/03/2016	12:00	X	X	X	--	X	--	--	--	--	
SO-17303-020416-CB-003	MW19-52	solid	4	6	02/04/2016	10:30	X	X	X	--	X	--	--	--	--	MS/MSD (partial parameter)
SO-17303-020416-CB-004	MW19-50	solid	3	5	02/04/2016	12:50	X	X	X	--	X	--	--	--	--	
SO-17303-020416-CB-005	MW19-50	solid	3	5	02/04/2016	13:00	X	X	X	--	X	--	--	--	--	Field Duplicate of -CB-004
SO-17303-020416-CB-006	MW19-50	solid	10	12	02/04/2016	13:10	X	X	X	--	X	--	--	--	--	
SO-17303-020416-CB-007	MW19-50	solid	1	3	02/04/2016	13:20	X	X	X	--	X	--	--	--	--	
TB-17303-020416-CB-008	Trip Blank	water	---	---	02/04/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank
TestAmerica Lot No.: 240-60708																
SO-17303-020816-CB-009	MW19-47	solid	7.5	9.5	02/08/2016	8:50	X	X	X	--	X	--	--	--	--	MS/MSD (partial parameter)
SO-17303-020816-CB-010	MW19-16	solid	7.5	9.5	02/08/2016	12:00	X	X	X	--	X	--	--	--	--	
SO-17303-020816-CB-011	MW19-45	solid	2	4	02/08/2016	15:00	X	X	X	--	X	--	--	--	--	
SO-17303-020816-CB-012	MW19-45	solid	2	4	02/08/2016	15:15	X	X	X	--	X	--	--	--	--	Field Duplicate of -CB-011
TB-17303-020816-CB-013	Trip Blank	water	---	---	02/08/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank
TestAmerica Lot No.: 240-60834																
SW-17303-021016-CB-012	OutFall #11	water	---	---	02/10/2016	14:50	X	--	--	--	--	--	--	--	--	
SW-17303-021016-CB-013	OutFall #13	water	---	---	02/10/2016	15:00	X	--	--	--	--	--	--	--	--	
SW-17303-021016-CB-014	OutFall #14	water	---	---	02/10/2016	15:10	X	--	--	--	--	--	--	--	--	
GW-17303-021116-CB-015	MW19-04	water	---	---	02/11/2016	15:05	X	--	--	--	--	--	--	--	--	
GW-17303-021116-CB-016	MW-14	water	---	---	02/11/2016	9:45	X	--	--	--	--	--	--	--	--	MS/MSD
GW-17303-021116-CB-017	MW19-03	water	---	---	02/11/2016	11:45	X	--	--	--	--	--	--	--	--	
GW-17303-021116-CB-018	MW-5	water	---	---	02/11/2016	11:25	X	--	--	--	--	--	--	--	--	
GW-17303-021116-CB-019	MW19-02	water	---	---	02/11/2016	14:40	X	--	--	--	--	--	--	--	--	
GW-17303-021116-CB-020	MW19-01	water	---	---	02/11/2016	15:45	X	--	--	--	--	--	--	--	--	
TB-17303-021116-CB-022	Trip Blank	water	---	---	02/11/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank
GW-17303-021116-CB-021	MW-3	water	---	---	02/11/2016	16:10	X	--	--	--	--	--	--	--	--	
TestAmerica Lot No.: 240-61103																
GW-17303-021716-CB-022	MW19-39	water	---	---	02/17/2016	11:15	X	--	--	--	--	--	--	--	--	
GW-17303-021716-CB-023	MW19-12	water	---	---	02/17/2016	12:55	X	--	--	--	--	--	--	--	--	
GW-17303-021716-CB-024	GS-1	water	---	---	02/17/2016	14:15	X	--	--	--	--	--	--	--	--	
GW-17303-021716-CB-025	MW19-37	water	---	---	02/17/2016	15:45	X	--	--	--	--	--	--	--	--	
GW-17303-021816-CB-026	MW19-16	water	---	---	02/18/2016	9:55	X	--	--	X	--	X	X	X	X	MS/MSD (partial parameter)
GW-17303-021816-CB-027	MW19-15	water	---	---	02/18/2016	11:40	X	--	--	--	--	--	--	--	--	
GW-17303-021816-CB-028	GS-2	water	---	---	02/18/2016	13:10	X	--	--	X	--	X	X	X	X	
GW-17303-021816-CB-029	MW19-14	water	---	---	02/18/2016	14:40	X	--	--	--	--	--	--	--	--	
TB-17303-021816-CB-030	Trip Blank	water	---	---	02/18/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank

Table 1

Sample Collection and Analysis Summary
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs.)	Final Sample Depth (ft. bgs.)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: TCL VOC	TCL SVOC	PCB	T & D-Fe and Mn	Site Metals	Dissolved Gases	Anions	Total Alkalinity	TOC	Comments
TestAmerica Lot No.: 240-61167																
GW-17303-021916-CB-030	MW19-38	water	---	---	02/19/2016	9:55	X	--	--	--	X	X	X	X	X	
GW-17303-021916-CB-031	MW19-38	water	---	---	02/19/2016	10:15	X	--	--	--	X	X	X	X	X	Field Duplicate of -CB-030
GW-17303-021916-CB-032	MW19-24	water	---	---	02/19/2016	11:20	X	--	--	--	X	X	X	X	X	
GW-17303-021916-CB-033	MW19-07	water	---	---	02/19/2016	12:40	X	--	--	--	X	X	X	X	X	
TB-17303-021916-CB-034	Trip Blank	water	---	---	02/19/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank
TestAmerica Lot No.: 240-61363																
GW-17303-022316-CB-035	MW19-11	water	---	---	02/23/2016	11:25	X	--	--	--	--	--	--	--	--	
GW-17303-022316-CB-036	IW-3	water	---	---	02/23/2016	13:10	X	--	--	--	--	--	--	--	--	
GW-17303-022316-CB-037	IW-9	water	---	---	02/23/2016	14:20	X	--	--	--	--	--	--	--	--	
GW-17303-022316-CB-038	IW-17	water	---	---	02/23/2016	15:10	X	--	--	--	--	--	--	--	--	
GW-17303-022316-CB-039	IW-26R	water	---	---	02/23/2016	16:00	X	--	--	--	--	--	--	--	--	
TB-17303-022316-CB-040	Trip Blank	water	---	---	02/23/2016	--	X		--	--	--	--	--	--		Trip Blank
TestAmerica Lot No.: 240-61416							X	--	--	--	--	--	--	--	--	
GW-17303-022416-CB-041	MW19-55	water	---	---	02/24/2016	15:30	X	--	--	--	--	--	--	--	--	
GW-17303-022416-CB-042	MW19-56	water	---	---	02/24/2016	16:05	X	--	--	--	--	--	--	--	--	
GW-17303-022416-CB-043	MW19-56	water	---	---	02/24/2016	16:20	X	--	--	--	--	--	--	--	--	Field Duplicate of -CB-042
GW-17303-022416-CB-044	MW19-57	water	---	---	02/24/2016	17:00	X	--	--	--	--	--	--	--	--	
GW-17303-022516-CB-045	MW19-45	water	---	---	02/25/2016	10:30	X	--	--	X	--	X	X	X	X	
GW-17303-022516-CB-046	MW19-47	water	---	---	02/25/2016	12:15	X	--	--	X	--	X	X	X	X	MS/MSD (partial parameter)
GW-17303-022516-CB-047	MW19-48	water	---	---	02/25/2016	13:45	X	--	--	X	--	X	X	X	X	
GW-17303-022516-CB-048	MW19-52	water	---	---	02/25/2016	14:50	X	--	--	X	--	X	X	X	X	MS/MSD (partial parameter)
TB-17303-022516-CB-049	Trip Blank	water	---	---	02/25/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank
TestAmerica Lot No.: 240-61481																
GW-17303-022616-CB-050	MW19-46	water	---	---	02/26/2016	11:30	X	--	--	--	--	--	--	--	--	MS/MSD
GW-17303-022616-CB-051	MW19-49	water	---	---	02/26/2016	13:25	X	--	--	--	--	--	--	--	--	
GW-17303-022616-CB-052	MW19-50	water	---	---	02/26/2016	14:40	X	--	--	--	--	--	--	--	--	MS/MSD
TB-17303-022616-CB-053	Trip Blank	water	---	---	02/26/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank
TestAmerica Lot No.: 240-61543																
GW-17303-022916-CB-054	MW19-51	water	---	---	02/29/2016	10:40	X	--	--	--	--	--	--	--	--	
GW-17303-022916-CB-055	MW19-53	water	---	---	02/29/2016	11:45	X	--	--	--	--	--	--	--	--	
GW-17303-022916-CB-056	MW19-54	water	---	---	02/29/2016	13:25	X	--	--	--	--	--	--	--	--	
TB-17303-022916-CB-057	Trip Blank	water	---	---	02/29/2016	--	X	--	--	--	--	--	--	--	--	Trip Blank

Notes:

ft bgs - Feet below ground surface
MS/MSD - Matrix Spike/Matrix Spike Duplicate
PCB - Polychlorinated biphenyl
Site Metals List - Antimony, Arsenic, Barium,Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc
TCL - Target Compound List
TOC - Total Organic Carbon
T & D Fe and Mn - Total & Dissolved Iron and Manganese
SVOC - Semivolatile Organic Compound
VOC - Volatile Organic Compound

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		GS-1	GS-2	IW-3	IW-9	IW-17
Sample Name:		GW-17303-021716-CB-024	GW-17303-021816-CB-028	GW-17303-022316-CB-036	GW-17303-022316-CB-037	GW-17303-022316-CB-038
Sample Date:		02/17/2016	02/18/2016	02/23/2016	02/23/2016	02/23/2016
Depth:		--	--	--	--	--
Parameters	Unit					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200 U	500 U	--	--	--
1,1,1-Trichloroethane	µg/L	--	--	17 U	250 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	200 U	500 U	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	--	--	17 U	250 U	1.0 U
1,1,2-Trichloroethane	µg/L	200 U	500 U	--	--	--
1,1,2-Trichloroethane	µg/L	--	--	17 U	250 U	1.0 U
1,1-Dichloroethane	µg/L	200 U	500 U	--	--	--
1,1-Dichloroethane	µg/L	--	--	17 U	250 U	1.0 U
1,1-Dichloroethene	µg/L	200 U	500 U	--	--	--
1,1-Dichloroethene	µg/L	--	--	17 U	250 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	200 U	500 U	--	--	--
1,2,4-Trichlorobenzene	µg/L	--	--	17 U	250 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	200 U	500 U	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	17 U	250 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	200 U	500 U	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	17 U	250 U	1.0 U
1,2-Dichlorobenzene	µg/L	200 U	500 U	--	--	--
1,2-Dichlorobenzene	µg/L	--	--	17 U	250 U	0.37 J
1,2-Dichloroethane	µg/L	200 U	500 U	--	--	--
1,2-Dichloroethane	µg/L	--	--	17 U	250 U	1.0 U
1,2-Dichloropropane	µg/L	200 U	500 U	--	--	--
1,2-Dichloropropane	µg/L	--	--	17 U	250 U	1.0 U
1,3-Dichlorobenzene	µg/L	200 U	500 U	--	--	--
1,3-Dichlorobenzene	µg/L	--	--	17 U	250 U	1.0 U
1,4-Dichlorobenzene	µg/L	200 U	500 U	--	--	--
1,4-Dichlorobenzene	µg/L	--	--	17 U	250 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	2000 U	5000 U	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	170 U	2500 U	10 U
2-Hexanone	µg/L	2000 U	5000 U	--	--	--
2-Hexanone	µg/L	--	--	170 U	2500 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	2000 U	5000 U	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	170 U	2500 U	10 U
Acetone	µg/L	2000 U	5000 U	--	--	--
Acetone	µg/L	--	--	170 U	2500 U	3.7 J
Benzene	µg/L	200 U	500 U	--	--	--
Benzene	µg/L	--	--	17 U	250 U	2.1
Bromodichloromethane	µg/L	200 U	500 U	--	--	--
Bromodichloromethane	µg/L	--	--	17 U	250 U	1.0 U
Bromoform	µg/L	200 U	500 U	--	--	--
Bromoform	µg/L	--	--	17 U	250 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	200 U	500 U	--	--	--
Bromomethane (Methyl bromide)	µg/L	--	--	17 U	250 U	1.0 U
Carbon disulfide	µg/L	1000 U	2500 U	--	--	--
Carbon disulfide	µg/L	--	--	140 U	2700 U	9.3 U

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		GS-1	GS-2	IW-3	IW-9	IW-17
Sample Name:		GW-17303-021716-CB-024	GW-17303-021816-CB-028	GW-17303-022316-CB-036	GW-17303-022316-CB-037	GW-17303-022316-CB-038
Sample Date:		02/17/2016	02/18/2016	02/23/2016	02/23/2016	02/23/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Carbon tetrachloride	µg/L	200 U	500 U	--	--	--
Carbon tetrachloride	µg/L	--	--	17 U	250 U	1.0 U
Chlorobenzene	µg/L	200 U	500 U	--	--	--
Chlorobenzene	µg/L	--	--	17 U	250 U	1.0 U
Chloroethane	µg/L	200 U	500 U	--	--	--
Chloroethane	µg/L	--	--	17 U	250 U	1.0 U
Chloroform (Trichloromethane)	µg/L	200 U	500 U	--	--	--
Chloroform (Trichloromethane)	µg/L	--	--	17 U	250 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	200 U	500 U	--	--	--
Chloromethane (Methyl chloride)	µg/L	--	--	17 U	250 U	1.0 U
cis-1,2-Dichloroethene	µg/L	200 U	3700	--	--	--
cis-1,2-Dichloroethene	µg/L	--	--	37	980	16
cis-1,3-Dichloropropene	µg/L	200 U	500 U	--	--	--
cis-1,3-Dichloropropene	µg/L	--	--	17 U	250 U	1.0 U
Cyclohexane	µg/L	200 U	500 U	--	--	--
Cyclohexane	µg/L	--	--	17 U	250 U	10
Dibromochloromethane	µg/L	200 U	500 U	--	--	--
Dibromochloromethane	µg/L	--	--	17 U	250 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	200 U	500 U	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	17 U	250 U	1.0 U
Ethylbenzene	µg/L	200 U	500 U	--	--	--
Ethylbenzene	µg/L	--	--	17 U	140 J	9.5
Isopropyl benzene	µg/L	200 U	500 U	--	--	--
Isopropyl benzene	µg/L	--	--	17 U	250 U	6.9
Methyl acetate	µg/L	2000 U	5000 U	--	--	--
Methyl acetate	µg/L	--	--	170 U	2500 U	10 U
Methyl cyclohexane	µg/L	200 U	500 U	--	--	--
Methyl cyclohexane	µg/L	--	--	17 U	250 U	2.0
Methyl tert butyl ether (MTBE)	µg/L	200 U	500 U	--	--	--
Methyl tert butyl ether (MTBE)	µg/L	--	--	17 U	250 U	1.0 U
Methylene chloride	µg/L	1000 U	2500 U	--	--	--
Methylene chloride	µg/L	--	--	83 U	1300 U	5.0 U
Styrene	µg/L	200 U	500 U	--	--	--
Styrene	µg/L	--	--	17 U	250 U	1.0 U
Tetrachloroethene	µg/L	200 U	500 U	--	--	--
Tetrachloroethene	µg/L	--	--	17 U	250 U	1.0 U
Toluene	µg/L	200 U	500 U	--	--	--
Toluene	µg/L	--	--	17 U	2100	27
trans-1,2-Dichloroethene	µg/L	200 U	170 J	--	--	--
trans-1,2-Dichloroethene	µg/L	--	--	21	250 U	3.5
trans-1,3-Dichloropropene	µg/L	200 U	500 U	--	--	--
trans-1,3-Dichloropropene	µg/L	--	--	17 U	250 U	1.0 U
Trichloroethene	µg/L	200 U	500 U	--	--	--
Trichloroethene	µg/L	--	--	4.7 J	250 U	0.41 J

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		GS-1	GS-2	IW-3	IW-9	IW-17
Sample Name:		GW-17303-021716-CB-024	GW-17303-021816-CB-028	GW-17303-022316-CB-036	GW-17303-022316-CB-037	GW-17303-022316-CB-038
Sample Date:		02/17/2016	02/18/2016	02/23/2016	02/23/2016	02/23/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	200 U	500 U	--	--	--
Trichlorofluoromethane (CFC-11)	µg/L	--	--	17 U	250 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	200 U	500 U	--	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	17 U	250 U	1.0 U
Vinyl chloride	µg/L	7000	14000	--	--	--
Vinyl chloride	µg/L	--	--	420	6400	30
Xylenes (total)	µg/L	400 U	1000 U	--	--	--
Xylenes (total)	µg/L	--	--	33 U	880	41
Metals						
Iron	µg/L	--	3300	--	--	--
Iron (dissolved)	µg/L	--	3300	--	--	--
Manganese	µg/L	--	110	--	--	--
Manganese (dissolved)	µg/L	--	110	--	--	--
Dissolved Gases						
Ethane	µg/L	--	7.3	--	--	--
Ethene	µg/L	--	720	--	--	--
Methane	µg/L	--	230	--	--	--
Wet Chemistry						
Alkalinity, total (as CaCO3)	mg/L	--	380	--	--	--
Chloride	mg/L	--	160 J	--	--	--
Nitrate (as N)	mg/L	--	0.18	--	--	--
Sulfate	mg/L	--	16 J	--	--	--
Total organic carbon (TOC)	mg/L	--	3.0	--	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		IW-26R	MW-3	MW-5	MW-14	MW19-01
Sample Name:		GW-17303-022316-CB-039	GW-17303-021116-CB-021	GW-17303-021116-CB-018	GW-17303-021116-CB-016	GW-17303-021116-CB-020
Sample Date:		02/23/2016	02/11/2016	02/11/2016	02/11/2016	02/11/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,1,1-Trichloroethane	µg/L	330 U	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,1,2,2-Tetrachloroethane	µg/L	330 U	--	--	--	--
1,1,2-Trichloroethane	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,1,2-Trichloroethane	µg/L	330 U	--	--	--	--
1,1-Dichloroethane	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,1-Dichloroethane	µg/L	330 U	--	--	--	--
1,1-Dichloroethene	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,1-Dichloroethene	µg/L	330 U	--	--	--	--
1,2,4-Trichlorobenzene	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,2,4-Trichlorobenzene	µg/L	330 U	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	330 U	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	330 U	--	--	--	--
1,2-Dichlorobenzene	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,2-Dichlorobenzene	µg/L	330 U	--	--	--	--
1,2-Dichloroethane	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,2-Dichloroethane	µg/L	330 U	--	--	--	--
1,2-Dichloropropane	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,2-Dichloropropane	µg/L	330 U	--	--	--	--
1,3-Dichlorobenzene	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,3-Dichlorobenzene	µg/L	330 U	--	--	--	--
1,4-Dichlorobenzene	µg/L	--	250 U	500 U	1.0 U	8.0 U
1,4-Dichlorobenzene	µg/L	330 U	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	2500 U	5000 U	10 U	80 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	3300 U	--	--	--	--
2-Hexanone	µg/L	--	2500 U	5000 U	10 U	80 U
2-Hexanone	µg/L	3300 U	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	2500 U	5000 U	10 U	80 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	3300 U	--	--	--	--
Acetone	µg/L	--	2500 U	5000 U	10 U	80 U
Acetone	µg/L	3300 U	--	--	--	--
Benzene	µg/L	--	250 U	500 U	1.0 U	8.0 U
Benzene	µg/L	330 U	--	--	--	--
Bromodichloromethane	µg/L	--	250 U	500 U	1.0 U	8.0 U
Bromodichloromethane	µg/L	330 U	--	--	--	--
Bromoform	µg/L	--	250 U	500 U	1.0 U	8.0 U
Bromoform	µg/L	330 U	--	--	--	--
Bromomethane (Methyl bromide)	µg/L	--	250 U	500 U	1.0 U	8.0 U
Bromomethane (Methyl bromide)	µg/L	330 U	--	--	--	--
Carbon disulfide	µg/L	--	1300 U	2500 U	5.0 U	40 U
Carbon disulfide	µg/L	1700 U	--	--	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		IW-26R	MW-3	MW-5	MW-14	MW19-01
Sample Name:		GW-17303-022316-CB-039	GW-17303-021116-CB-021	GW-17303-021116-CB-018	GW-17303-021116-CB-016	GW-17303-021116-CB-020
Sample Date:		02/23/2016	02/11/2016	02/11/2016	02/11/2016	02/11/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Carbon tetrachloride	µg/L	--	250 U	500 U	1.0 U	8.0 U
Carbon tetrachloride	µg/L	330 U	--	--	--	--
Chlorobenzene	µg/L	--	250 U	500 U	1.0 U	8.0 U
Chlorobenzene	µg/L	330 U	--	--	--	--
Chloroethane	µg/L	--	250 U	500 U	1.0 U	8.0 U
Chloroethane	µg/L	330 U	--	--	--	--
Chloroform (Trichloromethane)	µg/L	--	250 U	500 U	1.0 U	8.0 U
Chloroform (Trichloromethane)	µg/L	330 U	--	--	--	--
Chloromethane (Methyl chloride)	µg/L	--	250 U	500 U	1.0 U	8.0 U
Chloromethane (Methyl chloride)	µg/L	330 U	--	--	--	--
cis-1,2-Dichloroethene	µg/L	--	2200	2600	1.0 U	240
cis-1,2-Dichloroethene	µg/L	320 J	--	--	--	--
cis-1,3-Dichloropropene	µg/L	--	250 U	500 U	1.0 U	8.0 U
cis-1,3-Dichloropropene	µg/L	330 U	--	--	--	--
Cyclohexane	µg/L	--	250 U	500 U	1.0 U	8.0 U
Cyclohexane	µg/L	330 U	--	--	--	--
Dibromochloromethane	µg/L	--	250 U	500 U	1.0 U	8.0 U
Dibromochloromethane	µg/L	330 U	--	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	--	250 U	500 U	1.0 U	8.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	330 U	--	--	--	--
Ethylbenzene	µg/L	--	250 U	500 U	1.0 U	8.0 U
Ethylbenzene	µg/L	330 U	--	--	--	--
Isopropyl benzene	µg/L	--	250 U	500 U	1.0 U	8.0 U
Isopropyl benzene	µg/L	330 U	--	--	--	--
Methyl acetate	µg/L	--	2500 U	5000 U	10 U	80 U
Methyl acetate	µg/L	3300 U	--	--	--	--
Methyl cyclohexane	µg/L	--	250 U	500 U	1.0 U	8.0 U
Methyl cyclohexane	µg/L	330 U	--	--	--	--
Methyl tert butyl ether (MTBE)	µg/L	--	250 U	500 U	1.0 U	8.0 U
Methyl tert butyl ether (MTBE)	µg/L	330 U	--	--	--	--
Methylene chloride	µg/L	--	1300 U	2500 U	5.0 U	40 U
Methylene chloride	µg/L	1700 U	--	--	--	--
Styrene	µg/L	--	250 U	500 U	1.0 U	8.0 U
Styrene	µg/L	330 U	--	--	--	--
Tetrachloroethene	µg/L	--	250 U	500 U	1.0 U	8.0 U
Tetrachloroethene	µg/L	330 U	--	--	--	--
Toluene	µg/L	--	250 U	500 U	1.0 U	8.0 U
Toluene	µg/L	330 U	--	--	--	--
trans-1,2-Dichloroethene	µg/L	--	250 U	500 U	1.0 U	16
trans-1,2-Dichloroethene	µg/L	330 U	--	--	--	--
trans-1,3-Dichloropropene	µg/L	--	250 U	500 U	1.0 U	8.0 U
trans-1,3-Dichloropropene	µg/L	330 U	--	--	--	--
Trichloroethene	µg/L	--	250 U	500 U	1.0 U	8.0 U
Trichloroethene	µg/L	330 U	--	--	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		IW-26R	MW-3	MW-5	MW-14	MW19-01
Sample Name:		GW-17303-022316-CB-039	GW-17303-021116-CB-021	GW-17303-021116-CB-018	GW-17303-021116-CB-016	GW-17303-021116-CB-020
Sample Date:		02/23/2016	02/11/2016	02/11/2016	02/11/2016	02/11/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	--	250 U	500 U	1.0 U	8.0 U
Trichlorofluoromethane (CFC-11)	µg/L	330 U	--	--	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	--	250 U	500 U	1.0 U	8.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	330 U	--	--	--	--
Vinyl chloride	µg/L	--	9100	9800	0.72 J	6.1 J
Vinyl chloride	µg/L	4500	--	--	--	--
Xylenes (total)	µg/L	--	500 U	1000 U	2.0 U	16 U
Xylenes (total)	µg/L	180 J	--	--	--	--
Metals						
Iron	µg/L	--	--	--	--	--
Iron (dissolved)	µg/L	--	--	--	--	--
Manganese	µg/L	--	--	--	--	--
Manganese (dissolved)	µg/L	--	--	--	--	--
Dissolved Gases						
Ethane	µg/L	--	--	--	--	--
Ethene	µg/L	--	--	--	--	--
Methane	µg/L	--	--	--	--	--
Wet Chemistry						
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-02	MW19-03	MW19-04	MW19-07	MW19-11
Sample Name:		GW-17303-021116-CB-019	GW-17303-021116-CB-017	GW-17303-021116-CB-015	GW-17303-021916-CB-033	GW-17303-022316-CB-035
Sample Date:		02/11/2016	02/11/2016	02/11/2016	02/19/2016	02/23/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	170 U	29 U	1.0 U	110 U	--
1,1,1-Trichloroethane	µg/L	--	--	--	--	1000 U
1,1,2,2-Tetrachloroethane	µg/L	170 U	29 U	1.0 U	110 U	--
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	1000 U
1,1,2-Trichloroethane	µg/L	170 U	29 U	1.0 U	110 U	--
1,1,2-Trichloroethane	µg/L	--	--	--	--	1000 U
1,1-Dichloroethane	µg/L	170 U	29 U	1.0 U	110 U	--
1,1-Dichloroethane	µg/L	--	--	--	--	1000 U
1,1-Dichloroethene	µg/L	170 U	29 U	1.0 U	110 U	--
1,1-Dichloroethene	µg/L	--	--	--	--	1000 U
1,2,4-Trichlorobenzene	µg/L	170 U	29 U	1.0 U	110 U	--
1,2,4-Trichlorobenzene	µg/L	--	--	--	--	1000 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	170 U	29 U	1.0 U	110 U	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	--	--	1000 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	170 U	29 U	1.0 U	110 U	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	--	--	1000 U
1,2-Dichlorobenzene	µg/L	170 U	29 U	1.0 U	110 U	--
1,2-Dichlorobenzene	µg/L	--	--	--	--	1000 U
1,2-Dichloroethane	µg/L	170 U	29 U	1.0 U	110 U	--
1,2-Dichloroethane	µg/L	--	--	--	--	1000 U
1,2-Dichloropropane	µg/L	170 U	29 U	1.0 U	110 U	--
1,2-Dichloropropane	µg/L	--	--	--	--	1000 U
1,3-Dichlorobenzene	µg/L	170 U	29 U	1.0 U	110 U	--
1,3-Dichlorobenzene	µg/L	--	--	--	--	1000 U
1,4-Dichlorobenzene	µg/L	170 U	29 U	1.0 U	110 U	--
1,4-Dichlorobenzene	µg/L	--	--	--	--	1000 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	1700 U	290 U	10 U	1100 U	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	--	--	10000 U
2-Hexanone	µg/L	1700 U	290 U	10 U	1100 U	--
2-Hexanone	µg/L	--	--	--	--	10000 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	1700 U	290 U	10 U	1100 U	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	--	--	10000 U
Acetone	µg/L	1700 U	290 U	10 U	1100 U	--
Acetone	µg/L	--	--	--	--	10000 U
Benzene	µg/L	170 U	29 U	1.0 U	110 U	--
Benzene	µg/L	--	--	--	--	1000 U
Bromodichloromethane	µg/L	170 U	29 U	1.0 U	110 U	--
Bromodichloromethane	µg/L	--	--	--	--	1000 U
Bromoform	µg/L	170 U	29 U	1.0 U	110 U	--
Bromoform	µg/L	--	--	--	--	1000 U
Bromomethane (Methyl bromide)	µg/L	170 U	29 U	1.0 U	110 U	--
Bromomethane (Methyl bromide)	µg/L	--	--	--	--	1000 U
Carbon disulfide	µg/L	830 U	140 U	5.0 U	560 U	--
Carbon disulfide	µg/L	--	--	--	--	8500 U

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-02	MW19-03	MW19-04	MW19-07	MW19-11
Sample Name:		GW-17303-021116-CB-019	GW-17303-021116-CB-017	GW-17303-021116-CB-015	GW-17303-021916-CB-033	GW-17303-022316-CB-035
Sample Date:		02/11/2016	02/11/2016	02/11/2016	02/19/2016	02/23/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Carbon tetrachloride	µg/L	170 U	29 U	1.0 U	110 U	--
Carbon tetrachloride	µg/L	--	--	--	--	1000 U
Chlorobenzene	µg/L	170 U	29 U	1.0 U	110 U	--
Chlorobenzene	µg/L	--	--	--	--	1000 U
Chloroethane	µg/L	170 U	29 U	1.0 U	110 U	--
Chloroethane	µg/L	--	--	--	--	1000 U
Chloroform (Trichloromethane)	µg/L	170 U	29 U	1.0 U	110 U	--
Chloroform (Trichloromethane)	µg/L	--	--	--	--	1000 U
Chloromethane (Methyl chloride)	µg/L	170 U	29 U	1.0 U	110 U	--
Chloromethane (Methyl chloride)	µg/L	--	--	--	--	1000 U
cis-1,2-Dichloroethene	µg/L	3300	710	1.6	2400	--
cis-1,2-Dichloroethene	µg/L	--	--	--	--	34000
cis-1,3-Dichloropropene	µg/L	170 U	29 U	1.0 U	110 U	--
cis-1,3-Dichloropropene	µg/L	--	--	--	--	1000 U
Cyclohexane	µg/L	170 U	29 U	1.0 U	110 U	--
Cyclohexane	µg/L	--	--	--	--	1000 U
Dibromochloromethane	µg/L	170 U	29 U	1.0 U	110 U	--
Dibromochloromethane	µg/L	--	--	--	--	1000 U
Dichlorodifluoromethane (CFC-12)	µg/L	170 U	29 U	1.0 U	110 U	--
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	--	--	1000 U
Ethylbenzene	µg/L	170 U	29 U	1.0 U	110 U	--
Ethylbenzene	µg/L	--	--	--	--	1000 U
Isopropyl benzene	µg/L	170 U	29 U	1.0 U	110 U	--
Isopropyl benzene	µg/L	--	--	--	--	1000 U
Methyl acetate	µg/L	1700 U	290 U	10 U	1100 U	--
Methyl acetate	µg/L	--	--	--	--	10000 U
Methyl cyclohexane	µg/L	170 U	29 U	1.0 U	110 U	--
Methyl cyclohexane	µg/L	--	--	--	--	1000 U
Methyl tert butyl ether (MTBE)	µg/L	170 U	29 U	1.0 U	110 U	--
Methyl tert butyl ether (MTBE)	µg/L	--	--	--	--	1000 U
Methylene chloride	µg/L	830 U	140 U	5.0 U	560 U	--
Methylene chloride	µg/L	--	--	--	--	5000 U
Styrene	µg/L	170 U	29 U	1.0 U	110 U	--
Styrene	µg/L	--	--	--	--	1000 U
Tetrachloroethene	µg/L	170 U	29 U	1.0 U	110 U	--
Tetrachloroethene	µg/L	--	--	--	--	1000 U
Toluene	µg/L	170 U	29 U	0.28 J	110 U	--
Toluene	µg/L	--	--	--	--	1000 U
trans-1,2-Dichloroethene	µg/L	110 J	34	1.0 U	87 J	--
trans-1,2-Dichloroethene	µg/L	--	--	--	--	1000 U
trans-1,3-Dichloropropene	µg/L	170 U	29 U	1.0 U	110 U	--
trans-1,3-Dichloropropene	µg/L	--	--	--	--	1000 U
Trichloroethene	µg/L	170 U	29 U	1.0 U	30 J	--
Trichloroethene	µg/L	--	--	--	--	1000 U

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-02	MW19-03	MW19-04	MW19-07	MW19-11
Sample Name:		GW-17303-021116-CB-019	GW-17303-021116-CB-017	GW-17303-021116-CB-015	GW-17303-021916-CB-033	GW-17303-022316-CB-035
Sample Date:		02/11/2016	02/11/2016	02/11/2016	02/19/2016	02/23/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	170 U	29 U	1.0 U	110 U	--
Trichlorofluoromethane (CFC-11)	µg/L	--	--	--	--	1000 U
Trifluorotrichloroethane (CFC-113)	µg/L	170 U	29 U	1.0 U	110 U	--
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	--	--	1000 U
Vinyl chloride	µg/L	4700	510	2.7	4000	--
Vinyl chloride	µg/L	--	--	--	--	8800
Xylenes (total)	µg/L	330 U	57 U	2.0 U	220 U	--
Xylenes (total)	µg/L	--	--	--	--	2000 U
Metals						
Iron	µg/L	--	--	--	1900	--
Iron (dissolved)	µg/L	--	--	--	1900	--
Manganese	µg/L	--	--	--	200	--
Manganese (dissolved)	µg/L	--	--	--	200	--
Dissolved Gases						
Ethane	µg/L	--	--	--	39	--
Ethene	µg/L	--	--	--	320	--
Methane	µg/L	--	--	--	1100	--
Wet Chemistry						
Alkalinity, total (as CaCO3)	mg/L	--	--	--	340	--
Chloride	mg/L	--	--	--	48	--
Nitrate (as N)	mg/L	--	--	--	0.43	--
Sulfate	mg/L	--	--	--	26	--
Total organic carbon (TOC)	mg/L	--	--	--	2.7	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-12	MW19-14	MW19-15	MW19-16	MW19-24
Sample Name:		GW-17303-021716-CB-023	GW-17303-021816-CB-029	GW-17303-021816-CB-027	GW-17303-021816-CB-026	GW-17303-021916-CB-032
Sample Date:		02/17/2016	02/18/2016	02/18/2016	02/18/2016	02/19/2016
Depth:		--	--	--	--	--
Parameters	Unit					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,1,1-Trichloroethane	µg/L	--	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--
1,1,2-Trichloroethane	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,1,2-Trichloroethane	µg/L	--	--	--	--	--
1,1-Dichloroethane	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,1-Dichloroethane	µg/L	--	--	--	--	--
1,1-Dichloroethene	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,1-Dichloroethene	µg/L	--	--	--	--	--
1,2,4-Trichlorobenzene	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	--	--	--
1,2-Dichlorobenzene	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,2-Dichlorobenzene	µg/L	--	--	--	--	--
1,2-Dichloroethane	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,2-Dichloroethane	µg/L	--	--	--	--	--
1,2-Dichloropropane	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,2-Dichloropropane	µg/L	--	--	--	--	--
1,3-Dichlorobenzene	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,3-Dichlorobenzene	µg/L	--	--	--	--	--
1,4-Dichlorobenzene	µg/L	40 U	200 U	67 U	50 U	5.0 U
1,4-Dichlorobenzene	µg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	400 U	2000 U	670 U	500 U	50 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	--	--	--
2-Hexanone	µg/L	400 U	2000 U	670 U	500 U	50 U
2-Hexanone	µg/L	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	400 U	2000 U	670 U	500 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	--	--	--
Acetone	µg/L	400 U	2000 U	670 U	500 U	50 U
Acetone	µg/L	--	--	--	--	--
Benzene	µg/L	40 U	200 U	67 U	50 U	10
Benzene	µg/L	--	--	--	--	--
Bromodichloromethane	µg/L	40 U	200 U	67 U	50 U	5.0 U
Bromodichloromethane	µg/L	--	--	--	--	--
Bromoform	µg/L	40 U	200 U	67 U	50 U	5.0 U
Bromoform	µg/L	--	--	--	--	--
Bromomethane (Methyl bromide)	µg/L	40 U	200 U	67 U	50 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	--	--	--	--	--
Carbon disulfide	µg/L	200 U	1000 U	330 U	250 U	25 U
Carbon disulfide	µg/L	--	--	--	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-12	MW19-14	MW19-15	MW19-16	MW19-24
Sample Name:		GW-17303-021716-CB-023	GW-17303-021816-CB-029	GW-17303-021816-CB-027	GW-17303-021816-CB-026	GW-17303-021916-CB-032
Sample Date:		02/17/2016	02/18/2016	02/18/2016	02/18/2016	02/19/2016
Depth:		--	--	--	--	--
Parameters	Unit					
Volatile Organic Compounds						
Carbon tetrachloride	µg/L	40 U	200 U	67 U	50 U	5.0 U
Carbon tetrachloride	µg/L	--	--	--	--	--
Chlorobenzene	µg/L	160	200 U	67 U	50 U	5.0 U
Chlorobenzene	µg/L	--	--	--	--	--
Chloroethane	µg/L	40 U	200 U	67 U	50 U	5.0 U
Chloroethane	µg/L	--	--	--	--	--
Chloroform (Trichloromethane)	µg/L	40 U	200 U	67 U	50 U	5.0 U
Chloroform (Trichloromethane)	µg/L	--	--	--	--	--
Chloromethane (Methyl chloride)	µg/L	40 U	200 U	67 U	50 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	--	--	--	--	--
cis-1,2-Dichloroethene	µg/L	760	81 J	860	980	4.2 J
cis-1,2-Dichloroethene	µg/L	--	--	--	--	--
cis-1,3-Dichloropropene	µg/L	40 U	200 U	67 U	50 U	5.0 U
cis-1,3-Dichloropropene	µg/L	--	--	--	--	--
Cyclohexane	µg/L	40 U	200 U	67 U	50 U	5.0 U
Cyclohexane	µg/L	--	--	--	--	--
Dibromochloromethane	µg/L	40 U	200 U	67 U	50 U	5.0 U
Dibromochloromethane	µg/L	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	40 U	200 U	67 U	50 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	--	--	--
Ethylbenzene	µg/L	72	200 U	67 U	50 U	5.0 U
Ethylbenzene	µg/L	--	--	--	--	--
Isopropyl benzene	µg/L	40 U	200 U	67 U	50 U	5.0 U
Isopropyl benzene	µg/L	--	--	--	--	--
Methyl acetate	µg/L	400 U	2000 U	670 U	500 U	50 U
Methyl acetate	µg/L	--	--	--	--	--
Methyl cyclohexane	µg/L	40 U	200 U	67 U	50 U	5.0 U
Methyl cyclohexane	µg/L	--	--	--	--	--
Methyl tert butyl ether (MTBE)	µg/L	40 U	200 U	67 U	50 U	5.0 U
Methyl tert butyl ether (MTBE)	µg/L	--	--	--	--	--
Methylene chloride	µg/L	200 U	1000 U	330 U	250 U	25 U
Methylene chloride	µg/L	--	--	--	--	--
Styrene	µg/L	40 U	200 U	67 U	50 U	5.0 U
Styrene	µg/L	--	--	--	--	--
Tetrachloroethene	µg/L	40 U	200 U	67 U	50 U	5.0 U
Tetrachloroethene	µg/L	--	--	--	--	--
Toluene	µg/L	16 J	200 U	67 U	50 U	5.0 U
Toluene	µg/L	--	--	--	--	--
trans-1,2-Dichloroethene	µg/L	40 U	200 U	67 U	54	5.0 U
trans-1,2-Dichloroethene	µg/L	--	--	--	--	--
trans-1,3-Dichloropropene	µg/L	40 U	200 U	67 U	50 U	5.0 U
trans-1,3-Dichloropropene	µg/L	--	--	--	--	--
Trichloroethene	µg/L	8.8 J	200 U	67 U	50 U	5.0 U
Trichloroethene	µg/L	--	--	--	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-12	MW19-14	MW19-15	MW19-16	MW19-24
Sample Name:		GW-17303-021716-CB-023	GW-17303-021816-CB-029	GW-17303-021816-CB-027	GW-17303-021816-CB-026	GW-17303-021916-CB-032
Sample Date:		02/17/2016	02/18/2016	02/18/2016	02/18/2016	02/19/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	40 U	200 U	67 U	50 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	--	--	--	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	40 U	200 U	67 U	50 U	5.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	--	--	--
Vinyl chloride	µg/L	1100	4800	2600	1600	130
Vinyl chloride	µg/L	--	--	--	--	--
Xylenes (total)	µg/L	27 J	400 U	130 U	100 U	10 U
Xylenes (total)	µg/L	--	--	--	--	--
Metals						
Iron	µg/L	--	--	--	2600	4100
Iron (dissolved)	µg/L	--	--	--	3000	4100
Manganese	µg/L	--	--	--	560	210
Manganese (dissolved)	µg/L	--	--	--	610	210
Dissolved Gases						
Ethane	µg/L	--	--	--	0.37 J	220
Ethene	µg/L	--	--	--	240	1600
Methane	µg/L	--	--	--	360	1400
Wet Chemistry						
Alkalinity, total (as CaCO3)	mg/L	--	--	--	430	490
Chloride	mg/L	--	--	--	100 J	180
Nitrate (as N)	mg/L	--	--	--	0.10 U	0.10 U
Sulfate	mg/L	--	--	--	56 J	23
Total organic carbon (TOC)	mg/L	--	--	--	2.8	3.9

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-37	MW19-38	MW19-38	MW19-39	MW19-45
Sample Name:		GW-17303-021716-CB-025	GW-17303-021916-CB-030	GW-17303-021916-CB-031	GW-17303-021716-CB-022	GW-17303-022516-CB-045
Sample Date:		02/17/2016	02/19/2016	02/19/2016	02/17/2016	02/25/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	Unit					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,1,1-Trichloroethane	µg/L	--	--	--	--	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,1,2-Trichloroethane	µg/L	--	--	--	--	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,1-Dichloroethane	µg/L	--	--	--	--	0.36 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	0.45 J	3.3 U	--
1,1-Dichloroethene	µg/L	--	--	--	--	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,2,4-Trichlorobenzene	µg/L	--	--	--	--	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	--	--	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	--	--	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,2-Dichlorobenzene	µg/L	--	--	--	--	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,2-Dichloroethane	µg/L	--	--	--	--	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,2-Dichloropropane	µg/L	--	--	--	--	0.52 J
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,3-Dichlorobenzene	µg/L	--	--	--	--	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
1,4-Dichlorobenzene	µg/L	--	--	--	--	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	33 U	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	--	--	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	33 U	--
2-Hexanone	µg/L	--	--	--	--	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	33 U	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	--	--	10 U
Acetone	µg/L	10 U	10 U	10 U	33 U	--
Acetone	µg/L	--	--	--	--	1.3 J
Benzene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Benzene	µg/L	--	--	--	--	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Bromodichloromethane	µg/L	--	--	--	--	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Bromoform	µg/L	--	--	--	--	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Bromomethane (Methyl bromide)	µg/L	--	--	--	--	1.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	17 U	--
Carbon disulfide	µg/L	--	--	--	--	5.0 U

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-37	MW19-38	MW19-38	MW19-39	MW19-45
Sample Name:		GW-17303-021716-CB-025	GW-17303-021916-CB-030	GW-17303-021916-CB-031	GW-17303-021716-CB-022	GW-17303-022516-CB-045
Sample Date:		02/17/2016	02/19/2016	02/19/2016	02/17/2016	02/25/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	Unit					
Volatile Organic Compounds						
Carbon tetrachloride	µg/L	1.0 U	0.69 J	0.66 J	3.3 U	--
Carbon tetrachloride	µg/L	--	--	--	--	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Chlorobenzene	µg/L	--	--	--	--	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Chloroethane	µg/L	--	--	--	--	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	0.26 J	0.25 J	3.3 U	--
Chloroform (Trichloromethane)	µg/L	--	--	--	--	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Chloromethane (Methyl chloride)	µg/L	--	--	--	--	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	24	25	46	--
cis-1,2-Dichloroethene	µg/L	--	--	--	--	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
cis-1,3-Dichloropropene	µg/L	--	--	--	--	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Cyclohexane	µg/L	--	--	--	--	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Dibromochloromethane	µg/L	--	--	--	--	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	--	--	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Ethylbenzene	µg/L	--	--	--	--	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Isopropyl benzene	µg/L	--	--	--	--	1.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	33 U	--
Methyl acetate	µg/L	--	--	--	--	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Methyl cyclohexane	µg/L	--	--	--	--	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Methyl tert butyl ether (MTBE)	µg/L	--	--	--	--	1.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	17 U	--
Methylene chloride	µg/L	--	--	--	--	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Styrene	µg/L	--	--	--	--	1.0 U
Tetrachloroethene	µg/L	1.0 U	0.73 J	0.77 J	3.3 U	--
Tetrachloroethene	µg/L	--	--	--	--	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Toluene	µg/L	--	--	--	--	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.4	1.4	5.4	--
trans-1,2-Dichloroethene	µg/L	--	--	--	--	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
trans-1,3-Dichloropropene	µg/L	--	--	--	--	1.0 U
Trichloroethene	µg/L	1.0 U	22	23	14	--
Trichloroethene	µg/L	--	--	--	--	3.6

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-37	MW19-38	MW19-38	MW19-39	MW19-45
Sample Name:		GW-17303-021716-CB-025	GW-17303-021916-CB-030	GW-17303-021916-CB-031	GW-17303-021716-CB-022	GW-17303-022516-CB-045
Sample Date:		02/17/2016	02/19/2016	02/19/2016	02/17/2016	02/25/2016
Depth:		--	--	--	--	--
				Duplicate		
Parameters	Unit					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Trichlorofluoromethane (CFC-11)	µg/L	--	--	--	--	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	3.3 U	--
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	--	--	1.0 U
Vinyl chloride	µg/L	0.34 J	11	12	110	--
Vinyl chloride	µg/L	--	--	--	--	0.93 J
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	6.7 U	--
Xylenes (total)	µg/L	--	--	--	--	2.0 U
Metals						
Iron	µg/L	--	1700	1800	--	1200
Iron (dissolved)	µg/L	--	1300	1200	--	960
Manganese	µg/L	--	98	120	--	410
Manganese (dissolved)	µg/L	--	190	200	--	420
Dissolved Gases						
Ethane	µg/L	--	0.50 U	0.50 U	--	0.50 U
Ethene	µg/L	--	0.50 U	0.50 U	--	0.50 U
Methane	µg/L	--	2.6	2.9	--	16
Wet Chemistry						
Alkalinity, total (as CaCO3)	mg/L	--	320	340	--	440
Chloride	mg/L	--	85	86	--	530
Nitrate (as N)	mg/L	--	0.80	0.80	--	2.0
Sulfate	mg/L	--	55	55	--	110
Total organic carbon (TOC)	mg/L	--	1.2	1.2	--	0.75 J

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-46	MW19-47	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-022616-CB-050	GW-17303-022516-CB-046	GW-17303-022516-CB-047	GW-17303-022616-CB-051	GW-17303-022616-CB-052
Sample Date:		02/26/2016	02/25/2016	02/25/2016	02/26/2016	02/26/2016
Depth:		--	--	--	--	--
Parameters	Unit					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	--	--	--	--	--
1,1,1-Trichloroethane	µg/L	10 U	56 U	67 U	83 U	25 U
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	10 U	56 U	67 U	83 U	25 U
1,1,2-Trichloroethane	µg/L	--	--	--	--	--
1,1,2-Trichloroethane	µg/L	10 U	56 U	67 U	83 U	25 U
1,1-Dichloroethane	µg/L	--	--	--	--	--
1,1-Dichloroethane	µg/L	10 U	56 U	67 U	83 U	25 U
1,1-Dichloroethene	µg/L	--	--	--	--	--
1,1-Dichloroethene	µg/L	10 U	56 U	67 U	83 U	25 U
1,2,4-Trichlorobenzene	µg/L	--	--	--	--	--
1,2,4-Trichlorobenzene	µg/L	10 U	56 U	67 U	83 U	25 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	56 U	67 U	83 U	25 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	10 U	56 U	67 U	83 U	25 U
1,2-Dichlorobenzene	µg/L	--	--	--	--	--
1,2-Dichlorobenzene	µg/L	10 U	56 U	67 U	83 U	25 U
1,2-Dichloroethane	µg/L	--	--	--	--	--
1,2-Dichloroethane	µg/L	10 U	56 U	67 U	83 U	25 U
1,2-Dichloropropane	µg/L	--	--	--	--	--
1,2-Dichloropropane	µg/L	10 U	56 U	67 U	83 U	25 U
1,3-Dichlorobenzene	µg/L	--	--	--	--	--
1,3-Dichlorobenzene	µg/L	10 U	56 U	67 U	83 U	25 U
1,4-Dichlorobenzene	µg/L	--	--	--	--	--
1,4-Dichlorobenzene	µg/L	10 U	56 U	67 U	83 U	25 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	100 U	560 U	670 U	830 U	250 U
2-Hexanone	µg/L	--	--	--	--	--
2-Hexanone	µg/L	100 U	560 U	670 U	830 U	250 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	100 U	560 U	670 U	830 U	250 U
Acetone	µg/L	--	--	--	--	--
Acetone	µg/L	100 U	62 J	670 U	830 U	250 U
Benzene	µg/L	--	--	--	--	--
Benzene	µg/L	8.6 J	56 U	67 U	83 U	32
Bromodichloromethane	µg/L	--	--	--	--	--
Bromodichloromethane	µg/L	10 U	56 U	67 U	83 U	25 U
Bromoform	µg/L	--	--	--	--	--
Bromoform	µg/L	10 U	56 U	67 U	83 U	25 U
Bromomethane (Methyl bromide)	µg/L	--	--	--	--	--
Bromomethane (Methyl bromide)	µg/L	10 U	56 U	67 U	83 U	25 U
Carbon disulfide	µg/L	--	--	--	--	--
Carbon disulfide	µg/L	50 U	280 U	330 U	420 U	130 U

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-46	MW19-47	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-022616-CB-050	GW-17303-022516-CB-046	GW-17303-022516-CB-047	GW-17303-022616-CB-051	GW-17303-022616-CB-052
Sample Date:		02/26/2016	02/25/2016	02/25/2016	02/26/2016	02/26/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Carbon tetrachloride	µg/L	--	--	--	--	--
Carbon tetrachloride	µg/L	10 U	56 U	67 U	83 U	25 U
Chlorobenzene	µg/L	--	--	--	--	--
Chlorobenzene	µg/L	10 U	56 U	67 U	83 U	25 U
Chloroethane	µg/L	--	--	--	--	--
Chloroethane	µg/L	10 U	56 U	67 U	83 U	25 U
Chloroform (Trichloromethane)	µg/L	--	--	--	--	--
Chloroform (Trichloromethane)	µg/L	10 U	56 U	67 U	83 U	25 U
Chloromethane (Methyl chloride)	µg/L	--	--	--	--	--
Chloromethane (Methyl chloride)	µg/L	10 U	56 U	67 U	83 U	25 U
cis-1,2-Dichloroethene	µg/L	--	--	--	--	--
cis-1,2-Dichloroethene	µg/L	96	1300	1500	2500	790 J
cis-1,3-Dichloropropene	µg/L	--	--	--	--	--
cis-1,3-Dichloropropene	µg/L	10 U	56 U	67 U	83 U	25 U
Cyclohexane	µg/L	--	--	--	--	--
Cyclohexane	µg/L	10 U	56 U	67 U	83 U	50
Dibromochloromethane	µg/L	--	--	--	--	--
Dibromochloromethane	µg/L	10 U	56 U	67 U	83 U	25 U
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	56 U	67 U	83 U	25 U
Ethylbenzene	µg/L	--	--	--	--	--
Ethylbenzene	µg/L	10 U	56 U	67 U	38 J	120
Isopropyl benzene	µg/L	--	--	--	--	--
Isopropyl benzene	µg/L	10 U	56 U	67 U	83 U	49
Methyl acetate	µg/L	--	--	--	--	--
Methyl acetate	µg/L	100 U	560 U	670 U	830 U	250 U
Methyl cyclohexane	µg/L	--	--	--	--	--
Methyl cyclohexane	µg/L	10 U	56 U	67 U	83 U	25 U
Methyl tert butyl ether (MTBE)	µg/L	--	--	--	--	--
Methyl tert butyl ether (MTBE)	µg/L	10 U	56 U	67 U	83 U	25 U
Methylene chloride	µg/L	--	--	--	--	--
Methylene chloride	µg/L	50 U	280 U	330 U	420 U	130 U
Styrene	µg/L	--	--	--	--	--
Styrene	µg/L	10 U	56 U	67 U	83 U	25 U
Tetrachloroethene	µg/L	--	--	--	--	--
Tetrachloroethene	µg/L	10 U	56 U	67 U	83 U	25 U
Toluene	µg/L	--	--	--	--	--
Toluene	µg/L	13	56 U	67 U	110	43
trans-1,2-Dichloroethene	µg/L	--	--	--	--	--
trans-1,2-Dichloroethene	µg/L	8.7 J	82	47 J	34 J	8.4 J
trans-1,3-Dichloropropene	µg/L	--	--	--	--	--
trans-1,3-Dichloropropene	µg/L	10 U	56 U	67 U	83 U	25 U
Trichloroethene	µg/L	--	--	--	--	--
Trichloroethene	µg/L	34	14 J	160	83 U	210

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-46	MW19-47	MW19-48	MW19-49	MW19-50
Sample Name:		GW-17303-022616-CB-050	GW-17303-022516-CB-046	GW-17303-022516-CB-047	GW-17303-022616-CB-051	GW-17303-022616-CB-052
Sample Date:		02/26/2016	02/25/2016	02/25/2016	02/26/2016	02/26/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	µg/L	10 U	56 U	67 U	83 U	25 U
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	--	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	10 U	56 U	67 U	83 U	25 U
Vinyl chloride	µg/L	--	--	--	--	--
Vinyl chloride	µg/L	350	1700	2200	1300	270
Xylenes (total)	µg/L	--	--	--	--	--
Xylenes (total)	µg/L	38	110 U	130 U	120 J	220
Metals						
Iron	µg/L	--	1600	1700	--	--
Iron (dissolved)	µg/L	--	1300	1600	--	--
Manganese	µg/L	--	820	280	--	--
Manganese (dissolved)	µg/L	--	810	260	--	--
Dissolved Gases						
Ethane	µg/L	--	1.6	3.0	--	--
Ethene	µg/L	--	23	250	--	--
Methane	µg/L	--	160	200	--	--
Wet Chemistry						
Alkalinity, total (as CaCO3)	mg/L	--	370	300	--	--
Chloride	mg/L	--	93	39	--	--
Nitrate (as N)	mg/L	--	0.10 U	0.10 U	--	--
Sulfate	mg/L	--	34	33	--	--
Total organic carbon (TOC)	mg/L	--	3.3	2.3	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-54	MW19-55
Sample Name:		GW-17303-022916-CB-054	GW-17303-022516-CB-048	GW-17303-022916-CB-055	GW-17303-022916-CB-056	GW-17303-022416-CB-041
Sample Date:		02/29/2016	02/25/2016	02/29/2016	02/29/2016	02/24/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	--	--	--	--	--
1,1,1-Trichloroethane	µg/L	1700 U	10 U	250 U	500 U	25 U
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	1700 U	10 U	250 U	500 U	25 U
1,1,2-Trichloroethane	µg/L	--	--	--	--	--
1,1,2-Trichloroethane	µg/L	1700 U	10 U	250 U	500 U	25 U
1,1-Dichloroethane	µg/L	--	--	--	--	--
1,1-Dichloroethane	µg/L	1700 U	10 U	250 U	500 U	25 U
1,1-Dichloroethene	µg/L	--	--	--	--	--
1,1-Dichloroethene	µg/L	1700 U	10 U	250 U	500 U	25 U
1,2,4-Trichlorobenzene	µg/L	--	--	--	--	--
1,2,4-Trichlorobenzene	µg/L	1700 U	10 U	250 U	500 U	25 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1700 U	10 U	250 U	500 U	25 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1700 U	10 U	250 U	500 U	25 U
1,2-Dichlorobenzene	µg/L	--	--	--	--	--
1,2-Dichlorobenzene	µg/L	1700 U	10 U	250 U	500 U	25 U
1,2-Dichloroethane	µg/L	--	--	--	--	--
1,2-Dichloroethane	µg/L	1700 U	2.4 J	250 U	500 U	25 U
1,2-Dichloropropane	µg/L	--	--	--	--	--
1,2-Dichloropropane	µg/L	1700 U	10 U	250 U	500 U	25 U
1,3-Dichlorobenzene	µg/L	--	--	--	--	--
1,3-Dichlorobenzene	µg/L	1700 U	10 U	250 U	500 U	25 U
1,4-Dichlorobenzene	µg/L	--	--	--	--	--
1,4-Dichlorobenzene	µg/L	1700 U	10 U	250 U	500 U	25 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	17000 U	100 U	2500 U	5000 U	250 U
2-Hexanone	µg/L	--	--	--	--	--
2-Hexanone	µg/L	17000 U	100 U	2500 U	5000 U	250 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	17000 U	100 U	2500 U	5000 U	250 U
Acetone	µg/L	--	--	--	--	--
Acetone	µg/L	17000 U	100 U	2500 U	5000 U	250 U
Benzene	µg/L	--	--	--	--	--
Benzene	µg/L	1700 U	3.7 J	250 U	500 U	25 U
Bromodichloromethane	µg/L	--	--	--	--	--
Bromodichloromethane	µg/L	1700 U	10 U	250 U	500 U	25 U
Bromoform	µg/L	--	--	--	--	--
Bromoform	µg/L	1700 U	10 U	250 U	500 U	25 U
Bromomethane (Methyl bromide)	µg/L	--	--	--	--	--
Bromomethane (Methyl bromide)	µg/L	1700 U	10 U	250 U	500 U	25 U
Carbon disulfide	µg/L	--	--	--	--	--
Carbon disulfide	µg/L	8300 U	50 U	1300 U	2500 U	130 U

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-54	MW19-55
Sample Name:		GW-17303-022916-CB-054	GW-17303-022516-CB-048	GW-17303-022916-CB-055	GW-17303-022916-CB-056	GW-17303-022416-CB-041
Sample Date:		02/29/2016	02/25/2016	02/29/2016	02/29/2016	02/24/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Carbon tetrachloride	µg/L	--	--	--	--	--
Carbon tetrachloride	µg/L	1700 U	10 U	250 U	500 U	25 U
Chlorobenzene	µg/L	--	--	--	--	--
Chlorobenzene	µg/L	1700 U	10 U	250 U	500 U	25 U
Chloroethane	µg/L	--	--	--	--	--
Chloroethane	µg/L	1700 U	10 U	250 U	500 U	25 U
Chloroform (Trichloromethane)	µg/L	--	--	--	--	--
Chloroform (Trichloromethane)	µg/L	1700 U	10 U	250 U	500 U	25 U
Chloromethane (Methyl chloride)	µg/L	--	--	--	--	--
Chloromethane (Methyl chloride)	µg/L	1700 U	10 U	250 U	500 U	25 U
cis-1,2-Dichloroethene	µg/L	--	--	--	--	--
cis-1,2-Dichloroethene	µg/L	4000	160	1800	1100	490
cis-1,3-Dichloropropene	µg/L	--	--	--	--	--
cis-1,3-Dichloropropene	µg/L	1700 U	10 U	250 U	500 U	25 U
Cyclohexane	µg/L	--	--	--	--	--
Cyclohexane	µg/L	1700 U	10 U	250 U	500 U	25 U
Dibromochloromethane	µg/L	--	--	--	--	--
Dibromochloromethane	µg/L	1700 U	10 U	250 U	500 U	25 U
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	1700 U	10 U	250 U	500 U	25 U
Ethylbenzene	µg/L	--	--	--	--	--
Ethylbenzene	µg/L	1700 U	10 U	250 U	500 U	25 U
Isopropyl benzene	µg/L	--	--	--	--	--
Isopropyl benzene	µg/L	1700 U	10 U	250 U	500 U	25 U
Methyl acetate	µg/L	--	--	--	--	--
Methyl acetate	µg/L	17000 U	100 U	2500 U	5000 U	250 U
Methyl cyclohexane	µg/L	--	--	--	--	--
Methyl cyclohexane	µg/L	1700 U	10 U	250 U	500 U	25 U
Methyl tert butyl ether (MTBE)	µg/L	--	--	--	--	--
Methyl tert butyl ether (MTBE)	µg/L	1700 U	10 U	250 U	500 U	25 U
Methylene chloride	µg/L	--	--	--	--	--
Methylene chloride	µg/L	8300 U	50 U	1300 U	2500 U	130 U
Styrene	µg/L	--	--	--	--	--
Styrene	µg/L	1700 U	10 U	250 U	500 U	25 U
Tetrachloroethene	µg/L	--	--	--	--	--
Tetrachloroethene	µg/L	1700 U	10 U	250 U	500 U	25 U
Toluene	µg/L	--	--	--	--	--
Toluene	µg/L	1700 U	10 U	250 U	500 U	25 U
trans-1,2-Dichloroethene	µg/L	--	--	--	--	--
trans-1,2-Dichloroethene	µg/L	1700 U	15	250 U	150 J	31
trans-1,3-Dichloropropene	µg/L	--	--	--	--	--
trans-1,3-Dichloropropene	µg/L	1700 U	10 U	250 U	500 U	25 U
Trichloroethene	µg/L	--	--	--	--	--
Trichloroethene	µg/L	1700 U	23	250 U	500 U	25 U

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-51	MW19-52	MW19-53	MW19-54	MW19-55
Sample Name:		GW-17303-022916-CB-054	GW-17303-022516-CB-048	GW-17303-022916-CB-055	GW-17303-022916-CB-056	GW-17303-022416-CB-041
Sample Date:		02/29/2016	02/25/2016	02/29/2016	02/29/2016	02/24/2016
Depth:		--	--	--	--	--
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	µg/L	1700 U	10 U	250 U	500 U	25 U
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	--	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	1700 U	10 U	250 U	500 U	25 U
Vinyl chloride	µg/L	--	--	--	--	--
Vinyl chloride	µg/L	57000	300	6200	11000	690
Xylenes (total)	µg/L	--	--	--	--	--
Xylenes (total)	µg/L	3300 U	20 U	500 U	1000 U	50 U
Metals						
Iron	µg/L	--	470	--	--	--
Iron (dissolved)	µg/L	--	290	--	--	--
Manganese	µg/L	--	730	--	--	--
Manganese (dissolved)	µg/L	--	720	--	--	--
Dissolved Gases						
Ethane	µg/L	--	0.73	--	--	--
Ethene	µg/L	--	300	--	--	--
Methane	µg/L	--	160	--	--	--
Wet Chemistry						
Alkalinity, total (as CaCO3)	mg/L	--	510	--	--	--
Chloride	mg/L	--	28	--	--	--
Nitrate (as N)	mg/L	--	0.33	--	--	--
Sulfate	mg/L	--	130	--	--	--
Total organic carbon (TOC)	mg/L	--	2.5	--	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-56	MW19-56	MW19-57	OutFall #11	OutFall #13
Sample Name:		GW-17303-022416-CB-042	GW-17303-022416-CB-043	GW-17303-022416-CB-044	SW-17303-021016-CB-012	SW-17303-021016-CB-013
Sample Date:		02/24/2016	02/24/2016	02/24/2016	02/10/2016	02/10/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	Unit					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	--	--	--	1.0 U	1.0 U
1,1,1-Trichloroethane	µg/L	56 U	50 U	40 U	--	--
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	56 U	50 U	40 U	--	--
1,1,2-Trichloroethane	µg/L	--	--	--	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	56 U	50 U	40 U	--	--
1,1-Dichloroethane	µg/L	--	--	--	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	56 U	50 U	40 U	--	--
1,1-Dichloroethene	µg/L	--	--	--	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	56 U	50 U	40 U	--	--
1,2,4-Trichlorobenzene	µg/L	--	--	--	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	56 U	50 U	40 U	--	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--	--	--	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	56 U	50 U	40 U	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--	--	--	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	56 U	50 U	40 U	--	--
1,2-Dichlorobenzene	µg/L	--	--	--	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	56 U	50 U	40 U	--	--
1,2-Dichloroethane	µg/L	--	--	--	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	56 U	50 U	40 U	--	--
1,2-Dichloropropane	µg/L	--	--	--	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	56 U	50 U	40 U	--	--
1,3-Dichlorobenzene	µg/L	--	--	--	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	56 U	50 U	40 U	--	--
1,4-Dichlorobenzene	µg/L	--	--	--	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	56 U	50 U	40 U	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--	--	--	10 U	10 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	560 U	500 U	400 U	--	--
2-Hexanone	µg/L	--	--	--	10 U	10 U
2-Hexanone	µg/L	560 U	500 U	400 U	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--	--	--	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	560 U	500 U	400 U	--	--
Acetone	µg/L	--	--	--	10 U	10 U
Acetone	µg/L	91 J	62 J	400 U	--	--
Benzene	µg/L	--	--	--	1.0 U	1.0 U
Benzene	µg/L	56 U	50 U	40 U	--	--
Bromodichloromethane	µg/L	--	--	--	1.0 U	1.0 U
Bromodichloromethane	µg/L	56 U	50 U	40 U	--	--
Bromoform	µg/L	--	--	--	1.0 U	1.0 U
Bromoform	µg/L	56 U	50 U	40 U	--	--
Bromomethane (Methyl bromide)	µg/L	--	--	--	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	56 U	50 U	40 U	--	--
Carbon disulfide	µg/L	--	--	--	5.0 U	5.0 U
Carbon disulfide	µg/L	280 U	250 U	200 U	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-56	MW19-56	MW19-57	OutFall #11	OutFall #13
Sample Name:		GW-17303-022416-CB-042	GW-17303-022416-CB-043	GW-17303-022416-CB-044	SW-17303-021016-CB-012	SW-17303-021016-CB-013
Sample Date:		02/24/2016	02/24/2016	02/24/2016	02/10/2016	02/10/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	Unit					
Volatile Organic Compounds						
Carbon tetrachloride	µg/L	--	--	--	1.0 U	1.0 U
Carbon tetrachloride	µg/L	56 U	50 U	40 U	--	--
Chlorobenzene	µg/L	--	--	--	1.0 U	1.0 U
Chlorobenzene	µg/L	56 U	50 U	40 U	--	--
Chloroethane	µg/L	--	--	--	1.0 U	1.0 U
Chloroethane	µg/L	56 U	50 U	40 U	--	--
Chloroform (Trichloromethane)	µg/L	--	--	--	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	56 U	50 U	40 U	--	--
Chloromethane (Methyl chloride)	µg/L	--	--	--	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	56 U	50 U	40 U	--	--
cis-1,2-Dichloroethene	µg/L	--	--	--	1.5	11
cis-1,2-Dichloroethene	µg/L	1000	1000	1100	--	--
cis-1,3-Dichloropropene	µg/L	--	--	--	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	56 U	50 U	40 U	--	--
Cyclohexane	µg/L	--	--	--	1.0 U	1.0 U
Cyclohexane	µg/L	56 U	50 U	40 U	--	--
Dibromochloromethane	µg/L	--	--	--	1.0 U	1.0 U
Dibromochloromethane	µg/L	56 U	50 U	40 U	--	--
Dichlorodifluoromethane (CFC-12)	µg/L	--	--	--	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	56 U	50 U	40 U	--	--
Ethylbenzene	µg/L	--	--	--	1.0 U	1.0 U
Ethylbenzene	µg/L	56 U	50 U	40 U	--	--
Isopropyl benzene	µg/L	--	--	--	1.0 U	1.0 U
Isopropyl benzene	µg/L	56 U	50 U	40 U	--	--
Methyl acetate	µg/L	--	--	--	10 U	10 U
Methyl acetate	µg/L	560 U	500 U	400 U	--	--
Methyl cyclohexane	µg/L	--	--	--	1.0 U	1.0 U
Methyl cyclohexane	µg/L	56 U	50 U	40 U	--	--
Methyl tert butyl ether (MTBE)	µg/L	--	--	--	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	56 U	50 U	40 U	--	--
Methylene chloride	µg/L	--	--	--	5.0 U	5.0 U
Methylene chloride	µg/L	280 U	250 U	200 U	--	--
Styrene	µg/L	--	--	--	1.0 U	1.0 U
Styrene	µg/L	56 U	50 U	40 U	--	--
Tetrachloroethene	µg/L	--	--	--	1.0 U	1.0 U
Tetrachloroethene	µg/L	56 U	50 U	40 U	--	--
Toluene	µg/L	--	--	--	1.0 U	1.0 U
Toluene	µg/L	56 U	50 U	40 U	--	--
trans-1,2-Dichloroethene	µg/L	--	--	--	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	52 J	53	57	--	--
trans-1,3-Dichloropropene	µg/L	--	--	--	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	56 U	50 U	40 U	--	--
Trichloroethene	µg/L	--	--	--	0.43 J	3.9
Trichloroethene	µg/L	56 U	50 U	40 U	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-56	MW19-56	MW19-57	OutFall #11	OutFall #13
Sample Name:		GW-17303-022416-CB-042	GW-17303-022416-CB-043	GW-17303-022416-CB-044	SW-17303-021016-CB-012	SW-17303-021016-CB-013
Sample Date:		02/24/2016	02/24/2016	02/24/2016	02/10/2016	02/10/2016
Depth:		--	--	--	--	--
			Duplicate			
Parameters	**Unit**					
Volatile Organic Compounds						
Trichlorofluoromethane (CFC-11)	µg/L	--	--	--	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	56 U	50 U	40 U	--	--
Trifluorotrichloroethane (CFC-113)	µg/L	--	--	--	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	56 U	50 U	40 U	--	--
Vinyl chloride	µg/L	--	--	--	0.65 J	1.1
Vinyl chloride	µg/L	1000	1000	1300	--	--
Xylenes (total)	µg/L	--	--	--	2.0 U	2.0 U
Xylenes (total)	µg/L	110 U	100 U	80 U	--	--
Metals						
Iron	µg/L	--	--	--	--	--
Iron (dissolved)	µg/L	--	--	--	--	--
Manganese	µg/L	--	--	--	--	--
Manganese (dissolved)	µg/L	--	--	--	--	--
Dissolved Gases						
Ethane	µg/L	--	--	--	--	--
Ethene	µg/L	--	--	--	--	--
Methane	µg/L	--	--	--	--	--
Wet Chemistry						
Alkalinity, total (as CaCO3)	mg/L	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--
Nitrate (as N)	mg/L	--	--	--	--	--
Sulfate	mg/L	--	--	--	--	--
Total organic carbon (TOC)	mg/L	--	--	--	--	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		OutFall #14
Sample Name:		SW-17303-021016-CB-014
Sample Date:		02/10/2016
Depth:		--
Parameters	Unit	
Volatile Organic Compounds		
1,1,1-Trichloroethane	µg/L	1.0 U
1,1,1-Trichloroethane	µg/L	--
1,1,2,2-Tetrachloroethane	µg/L	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	--
1,1,2-Trichloroethane	µg/L	1.0 U
1,1,2-Trichloroethane	µg/L	--
1,1-Dichloroethane	µg/L	1.0 U
1,1-Dichloroethane	µg/L	--
1,1-Dichloroethene	µg/L	1.0 U
1,1-Dichloroethene	µg/L	--
1,2,4-Trichlorobenzene	µg/L	1.0 U
1,2,4-Trichlorobenzene	µg/L	--
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	--
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	--
1,2-Dichlorobenzene	µg/L	1.0 U
1,2-Dichlorobenzene	µg/L	--
1,2-Dichloroethane	µg/L	1.0 U
1,2-Dichloroethane	µg/L	--
1,2-Dichloropropane	µg/L	1.0 U
1,2-Dichloropropane	µg/L	--
1,3-Dichlorobenzene	µg/L	1.0 U
1,3-Dichlorobenzene	µg/L	--
1,4-Dichlorobenzene	µg/L	1.0 U
1,4-Dichlorobenzene	µg/L	--
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	--
2-Hexanone	µg/L	10 U
2-Hexanone	µg/L	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	--
Acetone	µg/L	10 U
Acetone	µg/L	--
Benzene	µg/L	1.0 U
Benzene	µg/L	--
Bromodichloromethane	µg/L	1.0 U
Bromodichloromethane	µg/L	--
Bromoform	µg/L	1.0 U
Bromoform	µg/L	--
Bromomethane (Methyl bromide)	µg/L	1.0 U
Bromomethane (Methyl bromide)	µg/L	--
Carbon disulfide	µg/L	5.0 U
Carbon disulfide	µg/L	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		OutFall #14
Sample Name:		SW-17303-021016-CB-014
Sample Date:		02/10/2016
Depth:		--
Parameters	Unit	
Volatile Organic Compounds		
Carbon tetrachloride	µg/L	1.0 U
Carbon tetrachloride	µg/L	--
Chlorobenzene	µg/L	1.0 U
Chlorobenzene	µg/L	--
Chloroethane	µg/L	1.0 U
Chloroethane	µg/L	--
Chloroform (Trichloromethane)	µg/L	1.0 U
Chloroform (Trichloromethane)	µg/L	--
Chloromethane (Methyl chloride)	µg/L	1.0 U
Chloromethane (Methyl chloride)	µg/L	--
cis-1,2-Dichloroethene	µg/L	0.82 J
cis-1,2-Dichloroethene	µg/L	--
cis-1,3-Dichloropropene	µg/L	1.0 U
cis-1,3-Dichloropropene	µg/L	--
Cyclohexane	µg/L	1.0 U
Cyclohexane	µg/L	--
Dibromochloromethane	µg/L	1.0 U
Dibromochloromethane	µg/L	--
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	--
Ethylbenzene	µg/L	1.0 U
Ethylbenzene	µg/L	--
Isopropyl benzene	µg/L	1.0 U
Isopropyl benzene	µg/L	--
Methyl acetate	µg/L	10 U
Methyl acetate	µg/L	--
Methyl cyclohexane	µg/L	1.0 U
Methyl cyclohexane	µg/L	--
Methyl tert butyl ether (MTBE)	µg/L	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	--
Methylene chloride	µg/L	5.0 U
Methylene chloride	µg/L	--
Styrene	µg/L	1.0 U
Styrene	µg/L	--
Tetrachloroethene	µg/L	1.0 U
Tetrachloroethene	µg/L	--
Toluene	µg/L	1.0 U
Toluene	µg/L	--
trans-1,2-Dichloroethene	µg/L	1.0 U
trans-1,2-Dichloroethene	µg/L	--
trans-1,3-Dichloropropene	µg/L	1.0 U
trans-1,3-Dichloropropene	µg/L	--
Trichloroethene	µg/L	0.38 J
Trichloroethene	µg/L	--

Table 2A

Validated Analytical Results Summary - Groundwater
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		OutFall #14
Sample Name:		SW-17303-021016-CB-014
Sample Date:		02/10/2016
Depth:		--
Parameters	**Unit**	
Volatile Organic Compounds		
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	--
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	--
Vinyl chloride	µg/L	1.0 U
Vinyl chloride	µg/L	--
Xylenes (total)	µg/L	2.0 U
Xylenes (total)	µg/L	--
Metals		
Iron	µg/L	--
Iron (dissolved)	µg/L	--
Manganese	µg/L	--
Manganese (dissolved)	µg/L	--
Dissolved Gases		
Ethane	µg/L	--
Ethene	µg/L	--
Methane	µg/L	--
Wet Chemistry		
Alkalinity, total (as CaCO3)	mg/L	--
Chloride	mg/L	--
Nitrate (as N)	mg/L	--
Sulfate	mg/L	--
Total organic carbon (TOC)	mg/L	--

Notes:

J - Estimated Concentration
U - Not detected at the associated reporting limit

Table 2B

Validated Analytical Results Summary - Borehole Water
Additional Investigation Sampling
Willow Run company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		SB19-114	SB19-115	SB19-116	SB19-117	SB19-117
Sample Name:		GW-17303-020316-CB-010	GW-17303-020316-CB-009	GW-17303-020116-CB-007	GW-17303-020116-CB-005	GW-17303-020116-CB-006
Sample Date:		02/03/2016	02/03/2016	02/01/2016	02/01/2016	02/01/2016
Depth:		--	--	--	--	--
						Duplicate
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,1,2-Trichloroethane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,1-Dichloroethane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,1-Dichloroethene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,2-Dichlorobenzene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,2-Dichloroethane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,2-Dichloropropane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,3-Dichlorobenzene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
1,4-Dichlorobenzene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	670 U	2500 U	10 U	25 U	20 U
2-Hexanone	µg/L	670 U	2500 U	10 U	25 U	20 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	670 U	2500 U	10 U	25 U	20 U
Acetone	µg/L	670 U	2500 U	10 U	25 U	20 U
Benzene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Bromodichloromethane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Bromoform	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Carbon disulfide	µg/L	330 U	1300 U	5.0 U	13 U	10 U
Carbon tetrachloride	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Chlorobenzene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Chloroethane	µg/L	67 U	250 U	0.43 J	2.5 U	2.0 U
Chloroform (Trichloromethane)	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
cis-1,2-Dichloroethene	µg/L	1200	2400	2.8	70	75
cis-1,3-Dichloropropene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Cyclohexane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Dibromochloromethane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Ethylbenzene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Isopropyl benzene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Methyl acetate	µg/L	670 U	2500 U	10 U	25 U	20 U
Methyl cyclohexane	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Methyl tert butyl ether (MTBE)	µg/L	32 J	250 U	1.3	2.5 U	2.0 U
Methylene chloride	µg/L	330 U	1300 U	5.0 U	13 U	10 U
Styrene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Tetrachloroethene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Toluene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
trans-1,2-Dichloroethene	µg/L	60 J	250 U	1.0 U	4.6	4.9
trans-1,3-Dichloropropene	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Trichloroethene	µg/L	140	250 U	1.0 U	0.85 J	0.90 J
Trichlorofluoromethane (CFC-11)	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	67 U	250 U	1.0 U	2.5 U	2.0 U

Table 2B

Validated Analytical Results Summary - Borehole Water
Additional Investigation Sampling
Willow Run company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		SB19-114	SB19-115	SB19-116	SB19-117	SB19-117
Sample Name:		GW-17303-020316-CB-010	GW-17303-020316-CB-009	GW-17303-020116-CB-007	GW-17303-020116-CB-005	GW-17303-020116-CB-006
Sample Date:		02/03/2016	02/03/2016	02/01/2016	02/01/2016	02/01/2016
Depth:		--	--	--	--	--
						Duplicate
Parameters	Unit					
Volatile Organic Compounds						
Vinyl chloride	µg/L	1800	7100	35	35	38
Xylenes (total)	µg/L	130 U	500 U	2.0 U	5.0 U	4.0 U

Table 2B

Validated Analytical Results Summary - Borehole Water
Additional Investigation Sampling
Willow Run company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		SB19-118	SB19-119	SB19-120	SB19-121
Sample Name:		GW-17303-020116-CB-004	GW-17303-020116-CB-003	GW-17303-020116-CB-002	GW-17303-020116-CB-001
Sample Date:		02/01/2016	02/01/2016	02/01/2016	02/01/2016
Depth:		--	--	--	--
Parameters	**Unit**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	83 U	50 U	10 U	10 U
2-Hexanone	µg/L	83 U	50 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	83 U	50 U	10 U	10 U
Acetone	µg/L	83 U	50 U	10 U	10 U
Benzene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Bromoform	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	42 U	25 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Chloroethane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	230	150	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	83 U	50 U	10 U	10 U
Methyl cyclohexane	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	42 U	25 U	5.0 U	5.0 U
Styrene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Toluene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	14	9.8	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	8.3 U	5.0 U	1.0 U	1.0 U

Table 2B

Validated Analytical Results Summary - Borehole Water
Additional Investigation Sampling
Willow Run company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		SB19-118	SB19-119	SB19-120	SB19-121
Sample Name:		GW-17303-020116-CB-004	GW-17303-020116-CB-003	GW-17303-020116-CB-002	GW-17303-020116-CB-001
Sample Date:		02/01/2016	02/01/2016	02/01/2016	02/01/2016
Depth:		--	--	--	--
Parameters	**Unit**				
Volatile Organic Compounds					
Vinyl chloride	µg/L	67	140	1.0 U	1.0 U
Xylenes (total)	µg/L	17 U	10 U	2.0 U	2.0 U

Notes:

J - Estimated Concentration
U - Not detected at the associated reporting limit

Table 2C

Validated Analytical Results Summary - Surface Water
Additional Investigation Sampling
Willow Run company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		OutFall #11	OutFall #13	OutFall #14
Sample Name:		SW-17303-021016-CB-012	SW-17303-021016-CB-013	SW-17303-021016-CB-014
Sample Date:		02/10/2016	02/10/2016	02/10/2016
Depth:		--	--	--
Parameters	**Unit**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.5	11	0.82 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	0.43 J	3.9	0.38 J
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U

Table 2C

Validated Analytical Results Summary - Surface Water
Additional Investigation Sampling
Willow Run company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		OutFall #11	OutFall #13	OutFall #14
Sample Name:		SW-17303-021016-CB-012	SW-17303-021016-CB-013	SW-17303-021016-CB-014
Sample Date:		02/10/2016	02/10/2016	02/10/2016
Depth:		--	--	--
Parameters	**Unit**			
Volatile Organic Compounds				
Vinyl chloride	µg/L	0.65 J	1.1	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U

Notes:

J - Estimated Concentration
U - Not detected at the associated reporting limit

Table 2D

Validated Analytical Results Summary - Soil
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-16	MW19-45	MW19-45	MW19-47	MW19-50
Sample Name:		SO-17303-020816-CB-010	SO-17303-020816-CB-011	SO-17303-020816-CB-012	SO-17303-020816-CB-009	SO-17303-020416-CB-007
Sample Date:		02/08/2016	02/08/2016	02/08/2016	02/08/2016	02/04/2016
Depth:		7.5-9.5 ft BGS	2-4 ft BGS	2-4 ft BGS Duplicate	7.5-9.5 ft BGS	1-3 ft BGS
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/kg	42 U	45 U	44 U	88 U	49 U
1,1,2,2-Tetrachloroethane	µg/kg	42 U	45 U	44 U	88 U	49 U
1,1,2-Trichloroethane	µg/kg	42 U	45 U	44 U	88 U	49 U
1,1-Dichloroethane	µg/kg	42 U	45 U	44 U	88 U	49 U
1,1-Dichloroethene	µg/kg	42 U	45 U	44 U	88 U	49 U
1,2,4-Trichlorobenzene	µg/kg	42 J	220 U	220 U	410 J	240 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	210 U	220 U	220 U	440 U	240 U
1,2-Dibromoethane (Ethylene dibromide)	µg/kg	210 U	220 U	220 U	440 U	240 U
1,2-Dichlorobenzene	µg/kg	83 U	90 U	88 U	180 U	98 U
1,2-Dichloroethane	µg/kg	42 U	45 U	44 U	88 U	49 U
1,2-Dichloropropane	µg/kg	42 U	45 U	44 U	88 U	49 U
1,3-Dichlorobenzene	µg/kg	83 U	90 U	88 U	180 U	98 U
1,4-Dichlorobenzene	µg/kg	83 U	90 U	88 U	180 U	98 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/kg	620 U	670 U	660 U	1300 U	730 U
2-Hexanone	µg/kg	2100 U	2200 U	2200 U	4400 U	2400 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/kg	2100 U	2200 U	2200 U	4400 U	2400 U
Acetone	µg/kg	620 U	670 U	660 U	1300 U	730 U
Benzene	µg/kg	42 U	45 U	44 U	88 U	49 U
Bromodichloromethane	µg/kg	83 U	90 U	88 U	180 U	98 U
Bromoform	µg/kg	83 U	90 U	88 U	180 U	98 U
Bromomethane (Methyl bromide)	µg/kg	210 U	220 U	220 U	440 U	240 U
Carbon disulfide	µg/kg	210 U	220 U	220 U	440 U	240 U
Carbon tetrachloride	µg/kg	42 U	45 U	44 U	88 U	49 U
Chlorobenzene	µg/kg	42 U	45 U	44 U	88 U	49 U
Chloroethane	µg/kg	210 U	220 U	220 U	440 U	240 U
Chloroform (Trichloromethane)	µg/kg	42 U	45 U	44 U	88 U	49 U
Chloromethane (Methyl chloride)	µg/kg	210 U	220 U	220 U	440 U	240 U
cis-1,2-Dichloroethene	µg/kg	42 U	45 U	44 U	150	49 U
cis-1,3-Dichloropropene	µg/kg	42 U	45 U	44 U	88 U	49 U
Cyclohexane	µg/kg	1000 U	1100 U	1100 U	2100 U	1200 U
Dibromochloromethane	µg/kg	42 U	45 U	44 U	88 U	49 U
Dichlorodifluoromethane (CFC-12)	µg/kg	83 U	90 U	88 U	180 U	98 U
Ethylbenzene	µg/kg	74	45 U	44 U	88 U	49 U
Isopropyl benzene	µg/kg	32 J	220 U	220 U	440 U	240 U
Methyl acetate	µg/kg	1000 U	1100 U	1100 U	2100 U	240 J
Methyl cyclohexane	µg/kg	1000 U	1100 U	1100 U	2100 U	1200 U
Methyl tert butyl ether (MTBE)	µg/kg	210 U	220 U	220 U	440 U	240 U
Methylene chloride	µg/kg	210 U	220 U	220 U	440 U	240 U
Styrene	µg/kg	42 U	45 U	44 U	88 U	49 U
Tetrachloroethene	µg/kg	42 U	45 U	44 U	88 U	49 U
Toluene	µg/kg	34 J	90 U	88 U	180 U	98 U
trans-1,2-Dichloroethene	µg/kg	42 U	45 U	44 U	88 U	49 U
trans-1,3-Dichloropropene	µg/kg	42 U	45 U	44 U	88 U	49 U
Trichloroethene	µg/kg	42 U	110	94	4900	49 U
Trichlorofluoromethane (CFC-11)	µg/kg	83 U	90 U	88 U	180 U	98 U
Trifluorotrichloroethane (CFC-113)	µg/kg	210 U	220 U	220 U	440 U	240 U

Table 2D

Validated Analytical Results Summary - Soil
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-16	MW19-45	MW19-45	MW19-47	MW19-50
Sample Name:		SO-17303-020816-CB-010	SO-17303-020816-CB-011	SO-17303-020816-CB-012	SO-17303-020816-CB-009	SO-17303-020416-CB-007
Sample Date:		02/08/2016	02/08/2016	02/08/2016	02/08/2016	02/04/2016
Depth:		7.5-9.5 ft BGS	2-4 ft BGS	2-4 ft BGS Duplicate	7.5-9.5 ft BGS	1-3 ft BGS
Parameters	**Unit**					
Volatile Organic Compounds						
Vinyl chloride	µg/kg	33 U	36 U	35 U	70 U	39 U
Xylenes (total)	µg/kg	280	130 U	130 U	150 J	150 U
Semivolatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2,4,5-Trichlorophenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2,4,6-Trichlorophenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2,4-Dichlorophenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2,4-Dimethylphenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2,4-Dinitrophenol	µg/kg	16000 U	840 U	170 U	860 U	37000 U
2,4-Dinitrotoluene	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2,6-Dinitrotoluene	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2-Chloronaphthalene	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2-Chlorophenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2-Methylnaphthalene	µg/kg	24000 J	31 J	20 J	27 J	5600 J
2-Methylphenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
2-Nitroaniline	µg/kg	22000 U	1100 U	220 U	1100 U	49000 U
2-Nitrophenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
3&4-Methylphenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
3,3'-Dichlorobenzidine	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
3-Nitroaniline	µg/kg	22000 U	1100 U	220 U	1100 U	49000 U
4,6-Dinitro-2-methylphenol	µg/kg	22000 U	1100 U	220 U	1100 U	49000 U
4-Bromophenyl phenyl ether	µg/kg	16000 U	840 U	170 U	860 U	37000 U
4-Chloro-3-methylphenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
4-Chloroaniline	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
4-Chlorophenyl phenyl ether	µg/kg	22000 U	1100 U	220 U	1100 U	49000 U
4-Nitroaniline	µg/kg	22000 U	1100 U	220 U	1100 U	49000 U
4-Nitrophenol	µg/kg	36000 U	1900 U	370 U	1900 U	80000 U
Acenaphthene	µg/kg	25000 J	220 J	100 J	1500 U	29000 J
Acenaphthylene	µg/kg	4700 J	1500 U	5.9 J	1500 U	1100 J
Acetophenone	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Anthracene	µg/kg	28000 J	350 J	200 J	45 J	52000 J
Atrazine	µg/kg	4400 U	220 U	44 U	230 U	9800 U
Benzaldehyde	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Benzo(a)anthracene	µg/kg	42000	1100 J	700	530 J	84000
Benzo(a)pyrene	µg/kg	29000	1000 J	660	770 J	71000
Benzo(b)fluoranthene	µg/kg	38000	1500	960	1100 J	97000
Benzo(g,h,i)perylene	µg/kg	11000 J	770 J	570	790 J	32000 J
Benzo(k)fluoranthene	µg/kg	16000 J	590 J	400	400 J	35000 J
Biphenyl (1,1-Biphenyl)	µg/kg	4300 J	1500 U	8.2 J	1500 U	2400 J
bis(2-Chloroethoxy)methane	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
bis(2-Chloroethyl)ether	µg/kg	8700 U	450 U	89 U	460 U	20000 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Butyl benzylphthalate (BBP)	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Caprolactam	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Carbazole	µg/kg	4700 J	250 J	100 J	1500 U	34000 J

Table 2D

Validated Analytical Results Summary - Soil
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-16	MW19-45	MW19-45	MW19-47	MW19-50
Sample Name:		SO-17303-020816-CB-010	SO-17303-020816-CB-011	SO-17303-020816-CB-012	SO-17303-020816-CB-009	SO-17303-020416-CB-007
Sample Date:		02/08/2016	02/08/2016	02/08/2016	02/08/2016	02/04/2016
Depth:		7.5-9.5 ft BGS	2-4 ft BGS	2-4 ft BGS Duplicate	7.5-9.5 ft BGS	1-3 ft BGS
Parameters	**Unit**					
Semivolatile Organic Compounds						
Chrysene	µg/kg	37000	1300 J	840	730 J	87000
Di-n-butylphthalate (DBP)	µg/kg	29000 U	310 J	72 J	430 J	64000 U
Di-n-octyl phthalate (DnOP)	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Dibenz(a,h)anthracene	µg/kg	2900 J	200 J	130 J	170 J	10000 J
Dibenzofuran	µg/kg	13000 J	91 J	50 J	1500 U	21000 J
Diethyl phthalate	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Dimethyl phthalate	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Fluoranthene	µg/kg	90000	2000	1200	860 J	190000
Fluorene	µg/kg	24000 J	150 J	74 J	1500 U	37000 J
Hexachlorobenzene	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Hexachlorobutadiene	µg/kg	4400 U	220 U	44 U	230 U	9800 U
Hexachlorocyclopentadiene	µg/kg	29000 U	1500 U	290 U	R	64000 U
Hexachloroethane	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Indeno(1,2,3-cd)pyrene	µg/kg	11000 J	630 J	470	640 J	30000 J
Isophorone	µg/kg	29000 U	1500 U	16 J	1500 U	64000 U
N-Nitrosodi-n-propylamine	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
N-Nitrosodiphenylamine	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Naphthalene	µg/kg	110000	77 J	37 J	41 J	15000 J
Nitrobenzene	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Pentachlorophenol	µg/kg	16000 U	840 U	170 U	860 U	37000 U
Phenanthrene	µg/kg	110000	1500	870	330 J	180000
Phenol	µg/kg	29000 U	1500 U	290 U	1500 U	64000 U
Pyrene	µg/kg	110000	2300	1400	760 J	160000
Metals						
Antimony	mg/kg	0.31 U	7.3 J	9.8 J	8.8 J	2.4 J
Arsenic	mg/kg	2.4	44	69	3.3	2.8
Barium	mg/kg	5.9	280	210	60	72
Beryllium	mg/kg	0.096 J	0.28	0.35	0.17	0.27
Cadmium	mg/kg	0.10	4.6	5.0	24	3.8
Chromium	mg/kg	5.7	16	16	13	20
Cobalt	mg/kg	1.2	3.6	3.4	3.0	2.0
Copper	mg/kg	4.8	130	160	28	11
Lead	mg/kg	2.3	--	--	--	--
Lead - coarse fraction	mg/kg	--	100	100	420	140
Lead - fine fraction	mg/kg	--	120	160	160	140
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	100	110	360	140
Manganese	mg/kg	240	330	350	310	260
Mercury	mg/kg	0.049 U	0.048 U	0.045 U	0.048 U	0.050 J
Nickel	mg/kg	3.9	8.3	8.2	12	5.6
Selenium	mg/kg	0.97	1.6	1.7	1.2	1.4
Silver	mg/kg	0.0075 J	0.39	0.45	0.19	0.10 J
Thallium	mg/kg	0.060 J	0.24	0.34	0.075 J	0.088 J
Vanadium	mg/kg	7.6	9.9	9.1	9.2	8.5
Zinc	mg/kg	16 J	550 J	820 J	180 J	130

Table 2D

Validated Analytical Results Summary - Soil
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-16	MW19-45	MW19-45	MW19-47	MW19-50
Sample Name:		SO-17303-020816-CB-010	SO-17303-020816-CB-011	SO-17303-020816-CB-012	SO-17303-020816-CB-009	SO-17303-020416-CB-007
Sample Date:		02/08/2016	02/08/2016	02/08/2016	02/08/2016	02/04/2016
Depth:		7.5-9.5 ft BGS	2-4 ft BGS	2-4 ft BGS Duplicate	7.5-9.5 ft BGS	1-3 ft BGS
Parameters	**Unit**					
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/kg	2900 U	290 U	290 U	15000 U	330 U
Aroclor-1221 (PCB-1221)	µg/kg	2900 U	290 U	290 U	15000 U	330 U
Aroclor-1232 (PCB-1232)	µg/kg	2900 U	290 U	290 U	15000 U	330 U
Aroclor-1242 (PCB-1242)	µg/kg	2900 U	290 U	290 U	15000 U	330 U
Aroclor-1248 (PCB-1248)	µg/kg	2900 U	290 U	290 U	15000 U	330 U
Aroclor-1254 (PCB-1254)	µg/kg	2900 U	290 U	290 U	15000 U	330 U
Aroclor-1260 (PCB-1260)	µg/kg	1600 J	25 J	34 J	3400 J	71 J

Table 2D

Validated Analytical Results Summary - Soil
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-50	MW19-50	MW19-50	MW19-52	SB19-115
Sample Name:		SO-17303-020416-CB-004	SO-17303-020416-CB-005	SO-17303-020416-CB-006	SO-17303-020416-CB-003	SO-17303-020316-CB-002
Sample Date:		02/04/2016	02/04/2016	02/04/2016	02/04/2016	02/03/2016
Depth:		3-5 ft BGS	3-5 ft BGS Duplicate	10-12 ft BGS	4-6 ft BGS	13-15 ft BGS
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/kg	45 U	45 U	46 U	41 U	480 U
1,1,2,2-Tetrachloroethane	µg/kg	45 U	45 U	46 U	41 U	480 U
1,1,2-Trichloroethane	µg/kg	45 U	45 U	46 U	41 U	480 U
1,1-Dichloroethane	µg/kg	45 U	45 U	46 U	41 U	480 U
1,1-Dichloroethene	µg/kg	45 U	45 U	46 U	41 U	480 U
1,2,4-Trichlorobenzene	µg/kg	230 U	230 U	230 U	200 U	2400 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	230 U	230 U	230 U	200 U	2400 U
1,2-Dibromoethane (Ethylene dibromide)	µg/kg	230 U	230 U	230 U	200 U	2400 U
1,2-Dichlorobenzene	µg/kg	91 U	90 U	91 U	82 U	960 U
1,2-Dichloroethane	µg/kg	45 U	45 U	46 U	41 U	480 U
1,2-Dichloropropane	µg/kg	45 U	45 U	46 U	41 U	480 U
1,3-Dichlorobenzene	µg/kg	91 U	90 U	91 U	82 U	960 U
1,4-Dichlorobenzene	µg/kg	91 U	90 U	91 U	82 U	960 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/kg	680 U	680 U	690 U	610 U	7200 U
2-Hexanone	µg/kg	2300 U	2300 U	2300 U	2000 U	24000 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/kg	2300 U	2300 U	2300 U	2000 U	24000 U
Acetone	µg/kg	680 U	680 U	690 U	610 U	7200 U
Benzene	µg/kg	45 U	45 U	46 U	41 U	480 U
Bromodichloromethane	µg/kg	91 U	90 U	91 U	82 U	960 U
Bromoform	µg/kg	91 U	90 U	91 U	82 U	960 U
Bromomethane (Methyl bromide)	µg/kg	230 U	230 U	230 U	200 U	2400 U
Carbon disulfide	µg/kg	230 U	230 U	230 U	200 U	2400 U
Carbon tetrachloride	µg/kg	45 U	44 J	46 U	41 U	480 U
Chlorobenzene	µg/kg	45 U	45 U	46 U	41 U	480 U
Chloroethane	µg/kg	230 U	230 U	230 U	200 U	2400 U
Chloroform (Trichloromethane)	µg/kg	45 U	45 U	46 U	41 U	480 U
Chloromethane (Methyl chloride)	µg/kg	230 U	230 U	230 U	200 U	2400 U
cis-1,2-Dichloroethene	µg/kg	45 U	45 U	89	79	9600
cis-1,3-Dichloropropene	µg/kg	45 U	45 U	46 U	41 U	480 U
Cyclohexane	µg/kg	1100 U	1100 U	1100 U	980 U	12000 U
Dibromochloromethane	µg/kg	45 U	45 U	46 U	41 U	480 U
Dichlorodifluoromethane (CFC-12)	µg/kg	91 U	90 U	91 U	82 U	960 U
Ethylbenzene	µg/kg	45 U	45 U	46 U	41 U	480 U
Isopropyl benzene	µg/kg	16 J	230 U	230 U	150 J	2400 U
Methyl acetate	µg/kg	210 J	280 J	1100 U	140 J	12000 U
Methyl cyclohexane	µg/kg	1100 U	1100 U	1100 U	79 J	12000 U
Methyl tert butyl ether (MTBE)	µg/kg	230 U	230 U	230 U	200 U	2400 U
Methylene chloride	µg/kg	230 U	150 J	230 U	200 U	2400 U
Styrene	µg/kg	45 U	45 U	46 U	41 U	480 U
Tetrachloroethene	µg/kg	45 U	45 U	46 U	60	480 U
Toluene	µg/kg	12 J	30 J	91 U	34 J	960 U
trans-1,2-Dichloroethene	µg/kg	45 U	45 U	46 U	41 U	450 J
trans-1,3-Dichloropropene	µg/kg	45 U	45 U	46 U	41 U	480 U
Trichloroethene	µg/kg	45 U	45 U	340	41 U	780
Trichlorofluoromethane (CFC-11)	µg/kg	91 U	90 U	91 U	82 U	960 U
Trifluorotrichloroethane (CFC-113)	µg/kg	230 U	230 U	230 U	200 U	2400 U

Table 2D

Validated Analytical Results Summary - Soil
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-50	MW19-50	MW19-50	MW19-52	SB19-115
Sample Name:		SO-17303-020416-CB-004	SO-17303-020416-CB-005	SO-17303-020416-CB-006	SO-17303-020416-CB-003	SO-17303-020316-CB-002
Sample Date:		02/04/2016	02/04/2016	02/04/2016	02/04/2016	02/03/2016
Depth:		3-5 ft BGS	3-5 ft BGS Duplicate	10-12 ft BGS	4-6 ft BGS	13-15 ft BGS
Parameters	**Unit**					
Volatile Organic Compounds						
Vinyl chloride	µg/kg	36 U	36 U	37 U	45	17000
Xylenes (total)	µg/kg	120 J	120 J	140 U	420	1400 U
Semivolatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	300 U	300 U	320 U	5800 U	320 U
2,4,5-Trichlorophenol	µg/kg	300 U	300 U	320 U	R	320 U
2,4,6-Trichlorophenol	µg/kg	300 U	300 U	320 U	5800 U	320 U
2,4-Dichlorophenol	µg/kg	300 U	300 U	320 U	5800 U	320 U
2,4-Dimethylphenol	µg/kg	300 U	300 U	320 U	5800 U	320 U
2,4-Dinitrophenol	µg/kg	170 U	170 U	180 U	R	180 U
2,4-Dinitrotoluene	µg/kg	300 U	300 U	320 U	5800 U	320 U
2,6-Dinitrotoluene	µg/kg	300 U	300 U	320 U	5800 U	320 U
2-Chloronaphthalene	µg/kg	300 U	300 U	320 U	5800 U	320 U
2-Chlorophenol	µg/kg	300 U	300 U	320 U	5800 U	320 U
2-Methylnaphthalene	µg/kg	110 J	84 J	16 J	1800 J	320 U
2-Methylphenol	µg/kg	300 U	300 U	320 U	5800 U	320 U
2-Nitroaniline	µg/kg	230 U	230 U	240 U	4400 U	240 U
2-Nitrophenol	µg/kg	300 U	300 U	320 U	5800 U	320 U
3&4-Methylphenol	µg/kg	300 U	300 U	320 U	5800 U	320 U
3,3'-Dichlorobenzidine	µg/kg	300 U	300 U	320 U	5800 U	320 U
3-Nitroaniline	µg/kg	230 U	230 U	240 U	4400 U	240 U
4,6-Dinitro-2-methylphenol	µg/kg	230 U	230 U	240 U	4400 U	240 U
4-Bromophenyl phenyl ether	µg/kg	170 U	170 U	180 U	3300 U	180 U
4-Chloro-3-methylphenol	µg/kg	300 U	300 U	320 U	R	320 U
4-Chloroaniline	µg/kg	300 U	300 U	320 U	R	320 U
4-Chlorophenyl phenyl ether	µg/kg	230 U	230 U	240 U	4400 U	240 U
4-Nitroaniline	µg/kg	230 U	230 U	240 U	4400 U	240 U
4-Nitrophenol	µg/kg	370 U	380 U	400 U	R	400 U
Acenaphthene	µg/kg	570	460	77 J	3500 J	320 U
Acenaphthylene	µg/kg	18 J	11 J	4.5 J	220 J	320 U
Acetophenone	µg/kg	300 U	300 U	320 U	5800 U	320 U
Anthracene	µg/kg	660	310	150 J	3200 J	320 U
Atrazine	µg/kg	45 U	46 U	49 U	880 U	48 U
Benzaldehyde	µg/kg	300 U	120 J	320 U	5800 U	320 U
Benzo(a)anthracene	µg/kg	1000	490	240 J	5800	320 U
Benzo(a)pyrene	µg/kg	840	420	210 J	5500 J	320 U
Benzo(b)fluoranthene	µg/kg	1100	540	280 J	7500	320 U
Benzo(g,h,i)perylene	µg/kg	380	260 J	100 J	3300 J	320 U
Benzo(k)fluoranthene	µg/kg	500	270 J	110 J	2600 J	320 U
Biphenyl (1,1-Biphenyl)	µg/kg	77 J	77 J	320 U	420 J	320 U
bis(2-Chloroethoxy)methane	µg/kg	300 U	300 U	320 U	5800 U	320 U
bis(2-Chloroethyl)ether	µg/kg	90 U	91 U	97 U	1800 U	96 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	45 J	63 J	28 J	5800 U	320 U
Butyl benzylphthalate (BBP)	µg/kg	300 U	300 U	320 U	5800 U	320 U
Caprolactam	µg/kg	300 U	300 U	320 U	5800 U	320 U
Carbazole	µg/kg	580	310	98 J	3200 J	320 U

Table 2D

Validated Analytical Results Summary - Soil
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-50	MW19-50	MW19-50	MW19-52	SB19-115
Sample Name:		SO-17303-020416-CB-004	SO-17303-020416-CB-005	SO-17303-020416-CB-006	SO-17303-020416-CB-003	SO-17303-020316-CB-002
Sample Date:		02/04/2016	02/04/2016	02/04/2016	02/04/2016	02/03/2016
Depth:		3-5 ft BGS	3-5 ft BGS Duplicate	10-12 ft BGS	4-6 ft BGS	13-15 ft BGS
Parameters	**Unit**					
Semivolatile Organic Compounds						
Chrysene	µg/kg	1100	550	270 J	6200	320 U
Di-n-butylphthalate (DBP)	µg/kg	200 J	210 J	320 U	5800 U	320 U
Di-n-octyl phthalate (DnOP)	µg/kg	300 U	300 U	320 U	5800 U	320 U
Dibenz(a,h)anthracene	µg/kg	120 J	72 J	29 J	740 J	320 U
Dibenzofuran	µg/kg	400	270 J	59 J	2700 J	320 U
Diethyl phthalate	µg/kg	300 U	300 U	320 U	5800 U	320 U
Dimethyl phthalate	µg/kg	300 U	300 U	320 U	5800 U	320 U
Fluoranthene	µg/kg	2300	1100	580	16000	320 U
Fluorene	µg/kg	590	350	110 J	4100 J	320 U
Hexachlorobenzene	µg/kg	300 U	300 U	320 U	5800 U	320 U
Hexachlorobutadiene	µg/kg	45 U	46 U	49 U	880 U	48 U
Hexachlorocyclopentadiene	µg/kg	300 U	300 U	320 U	R	320 U
Hexachloroethane	µg/kg	300 U	300 U	320 U	5800 U	320 U
Indeno(1,2,3-cd)pyrene	µg/kg	360	220 J	90 J	2900 J	320 U
Isophorone	µg/kg	300 U	300 U	320 U	5800 U	320 U
N-Nitrosodi-n-propylamine	µg/kg	300 U	300 U	320 U	5800 U	320 U
N-Nitrosodiphenylamine	µg/kg	300 U	300 U	320 U	5800 U	320 U
Naphthalene	µg/kg	690	890	38 J	6000	320 U
Nitrobenzene	µg/kg	300 U	300 U	320 U	5800 U	320 U
Pentachlorophenol	µg/kg	170 U	170 U	180 U	R	180 U
Phenanthrene	µg/kg	2400 J	1100 J	550	16000	320 U
Phenol	µg/kg	300 U	300 U	320 U	5800 U	320 U
Pyrene	µg/kg	2000	930	460	14000	5.2 J
Metals						
Antimony	mg/kg	0.41 J	0.61 J	0.098 J	1.3 J	0.056 J
Arsenic	mg/kg	2.8	2.1	9.0	4.1	1.7
Barium	mg/kg	41	32	6.8	76	9.1
Beryllium	mg/kg	0.19	0.16	0.10 J	0.29	0.087 J
Cadmium	mg/kg	0.38	0.39	0.12	1.8	0.11
Chromium	mg/kg	7.8	7.8	3.8	17	3.6
Cobalt	mg/kg	2.2	1.7	1.5	3.2	1.4
Copper	mg/kg	5.7	4.7	5.7	10	5.3
Lead	mg/kg	15	14	2.5	68	2.4
Lead - coarse fraction	mg/kg	--	--	--	--	--
Lead - fine fraction	mg/kg	--	--	--	--	--
Lead - total (calculated by fine/coarse fraction)	mg/kg	--	--	--	--	--
Manganese	mg/kg	230	190	130	280	110
Mercury	mg/kg	0.048 U	0.048 U	0.044 U	0.039 J	0.055 U
Nickel	mg/kg	5.5	4.5	5.4	7.9	4.5
Selenium	mg/kg	0.48	0.44	0.77	1.4	1.0
Silver	mg/kg	0.037 J	0.048 J	0.0080 J	0.057 J	0.0058 J
Thallium	mg/kg	0.050 J	0.050 J	0.089 J	0.074 J	0.037 J
Vanadium	mg/kg	9.9	8.2	7.3	11	6.7
Zinc	mg/kg	46	40	14	100	19

Table 2D

Validated Analytical Results Summary - Soil
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Location ID:		MW19-50	MW19-50	MW19-50	MW19-52	SB19-115
Sample Name:		SO-17303-020416-CB-004	SO-17303-020416-CB-005	SO-17303-020416-CB-006	SO-17303-020416-CB-003	SO-17303-020316-CB-002
Sample Date:		02/04/2016	02/04/2016	02/04/2016	02/04/2016	02/03/2016
Depth:		3-5 ft BGS	3-5 ft BGS Duplicate	10-12 ft BGS	4-6 ft BGS	13-15 ft BGS
Parameters	Unit					
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/kg	300 U	300 U	310 U	290 U	320 U
Aroclor-1221 (PCB-1221)	µg/kg	300 U	300 U	310 U	290 U	320 U
Aroclor-1232 (PCB-1232)	µg/kg	300 U	300 U	310 U	290 U	320 U
Aroclor-1242 (PCB-1242)	µg/kg	300 U	300 U	310 U	290 U	320 U
Aroclor-1248 (PCB-1248)	µg/kg	300 U	300 U	310 U	290 U	320 U
Aroclor-1254 (PCB-1254)	µg/kg	300 U	300 U	310 U	290 U	320 U
Aroclor-1260 (PCB-1260)	µg/kg	34 J	25 J	310 U	250 J	320 U

Notes:

J - Estimated Concentration
U - Not detected at the associated reporting limit
R - Rejected

Table 3

Analytical Methods
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Parameter	Method	Matrix	Holding Time: Collection to Extraction (Days)	Holding Time: Collection or Extraction to Analysis (Days)
TCL VOC	SW-846 8260B	Water/Solid	-	14
TCL SVOC	SW-846 8270C	Water	7	40
	SW-846 8270C	Solid	14	40
PCB	SW-846 8082	Water	7	40
	SW-846 8082	Solid	14	40
Site List Metals (except Mercury)	SW-846 6010B/6020	Water/Solid	-	180
Total & Dissolved Iron & Manganese	SW-846 6010B	Water	-	180
Mercury	SW-846 7470A/7471A	Water/Solid	-	28
Dissolved Gases	EPA RSK-175	Water	-	14
Anions	MCAWW 300.0	Water	-	28
TOC	SW-846 9060	Water	-	28
Total Alkalinity	SM 2320B	Water	-	14

Method References:
SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions
MCAWW - "Methods for Chemical Analysis of Water and Waste," EPA-600/4-79-020, revised March 1983, with subsequent revisions
SM - "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992, with subsequent revisions
EPA RSK - EPA Internal Standard Operating Procedure #175 dated 8/11/94 by Bryan Newell at the USEPA R.S. Kerr Laboratory

PCB - Polychlorinated biphenyl
TCL - Target Compound List
TOC - Total Organic Carbon
SVOC - Semivolatile Organic Compound
VOC - Volatile Organic Compound

Table 4

Qualified Sample Results Due to Analyte Concentrations in the Method Blanks
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Parameter	Analyte	Analysis Date	Blank Result *	Sample ID	Original Result	Qualified Result	Units
Metals	Antimony	02/15/2016	0.0570 J	SO-17303-020816-CB-010	0.15 JB	0.31 U	mg/kg
Metals	Mercury	02/13/2016	0.0176 J	SO-17303-020816-CB-009	0.026 JB	0.048 U	mg/kg
				SO-17303-020816-CB-012	0.028 JB	0.045 U	mg/kg
TCL VOC	Acetone	02/25/2016	1.56 J	GW-17303-021716-CB-023	68 JB	400 U	ug/L
				GW-17303-021716-CB-024	300 JB	2000 U	ug/L
				GW-17303-021816-CB-026	73 JB	500 U	ug/L
				GW-17303-021816-CB-027	69 JB	670 U	ug/L
TCL VOC	Acetone	02/25/2016	1.53 J	GW-17303-021816-CB-028	720 JB	5000 U	ug/L
				GW-17303-021816-CB-029	310 JB	2000 U	ug/L
TCL VOC	Acetone	03/03/2016	1.14 J	GW-17303-022516-CB-048	15 JB	100 U	ug/L
TCL VOC	Acetone	03/04/2016	1.48 J	GW-17303-022616-CB-050	15 JB	100 U	ug/L
				GW-17303-022616-CB-051	99 JB	830 U	ug/L

Table 4

Qualified Sample Results Due to Analyte Concentrations in the Method Blanks
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Parameter	Analyte	Analysis Date	Blank Result *	Sample ID	Original Result	Qualified Result	Units
TCL VOC	Methylene Chloride	02/26/16	0.334 J	GW-17303-021816-CB-029	67 JB	1000 U	ug/L
TCL VOC	Methylene Chloride	03/07/16	0.512 J	GW-17303-022916-CB-054	900 JB	8300 U	ug/L
TCL SVOC	Isophorone	03/04/2016	17.3 J	SO-17303-020316-CB-002	20 JB	320 U	ug/kg
				SO-17303-020416-CB-004	21 JB	300 U	ug/kg
				SO-17303-020416-CB-005	25 JB	300 U	ug/kg
				SO-17303-020416-CB-006	17 JB	320 U	ug/kg

Notes:

* - Blank result adjusted for sample factors where applicable
TCL - Target Compound List
SVOC - Semi-Volatile Organic Compounds
VOC - Volatile Organic Compounds
B - Laboratory qualifier - result detected in associated method blank
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 5

Qualified Sample Data Due to Outlying of Surrogate Recoveries
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Parameter	Sample ID	Surrogate	Surrogate % Recovery	Control Limits % Recovery	Analyte	Qualified Result	Units
PCB	SO-17303-020416-CB-007	(PCB 209) Decachlorobiphenyl	488	10 - 155	Aroclor-1260 (PCB-1260)	71 J	ug/kg
PCB	SO-17303-020816-CB-011	(PCB 209) Decachlorobiphenyl	356	10 - 155	Aroclor-1260 (PCB-1260)	25 J	ug/kg
PCB	SO-17303-020816-CB-012	(PCB 209) Decachlorobiphenyl	163	10 - 155	Aroclor-1260 (PCB-1260)	34 J	ug/kg

Notes:

PCB - Polychlorinated biphenyl
J - Estimated concentration

Table 6

Qualified Sample Results Due to Outlying MS/MSD Results
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Assoc Sample ID	Qualified Result	Units
Metals	SO-17303-020816-CB-009	Zinc	31	0	12	75-125	20	SO-17303-020816-CB-009	180 J	mg/kg
								SO-17303-020816-CB-010	16 J	mg/kg
								SO-17303-020816-CB-011	550 J	mg/kg
								SO-17303-020816-CB-012	820 J	mg/kg
Metals	SO-17303-020416-CB-003	Antimony	57	62	7	75-125	20	SO-17303-020316-CB-002	0.056 J	mg/kg
								SO-17303-020416-CB-003	1.3 J	mg/kg
								SO-17303-020416-CB-004	0.41 J	mg/kg
								SO-17303-020416-CB-005	0.61 J	mg/kg
								SO-17303-020416-CB-006	0.098 J	mg/kg
								SO-17303-020416-CB-007	2.4 J	mg/kg
Metals	SO-17303-020816-CB-009	Antimony	40	56	13	75-125	20	SO-17303-020816-CB-009	8.8 J	mg/kg
								SO-17303-020816-CB-011	7.3 J	mg/kg
								SO-17303-020816-CB-012	9.8 J	mg/kg
General Chemistry	GW-17303-021816-CB-026	Chloride	132	135	1	80-120	15	GW-17303-021816-CB-026	100 J	mg/L
								GW-17303-021816-CB-028	160 J	mg/L
General Chemistry	GW-17303-021816-CB-026	Sulfate	137	139	0	80-120	15	GW-17303-021816-CB-026	56 J	mg/L
								GW-17303-021816-CB-028	16 J	mg/L
TCL SVOC	SO-17303-020416-CB-003	2,4,5-Trichlorophenol	0	0	0	10-117	99	SO-17303-020416-CB-003	R	ug/kg
		2,4-Dinitrophenol	0	0	0	10-110	99	SO-17303-020416-CB-003	R	ug/kg
		4-Chloro-3-methylphenol	0	0	0	25-110	54	SO-17303-020416-CB-003	R	ug/kg
		4-Chloroaniline	0	0	0	10-110	36	SO-17303-020416-CB-003	R	ug/kg
		4-Nitrophenol	0	0	0	10-113	49	SO-17303-020416-CB-003	R	ug/kg
		Hexachlorocyclopentadiene	0	0	0	10-110	79	SO-17303-020416-CB-003	R	ug/kg
		Pentachlotopnenol	0	0	0	10-110	50	SO-17303-020416-CB-003	R	ug/kg
TCL SVOC	SO-17303-020816-CB-009	Benzo(a)pyrene	23	0	28	10-110	99	SO-17303-020816-CB-009	770 J	ug/kg
		Benzo(b)fluoranthene	5	0	35	12-118	99	SO-17303-020816-CB-009	1100 J	ug/kg
		Benzo(g,h,i)perylene	27	1	22	10-117	99	SO-17303-020816-CB-009	790 J	ug/kg
		Di-n-butylphthalate (DBP)	40	36	5	43-110	30	SO-17303-020816-CB-009	430 J	ug/kg
		Fluoranthene	11	0	19	10-110	99	SO-17303-020816-CB-009	860 J	ug/kg
		Hexachlorocyclopentadiene	0	0	0	10-110	79	SO-17303-020816-CB-009	R	ug/kg
TCL VOC	GW-17303-022616-CB-052	cis-1,2-Dichloroethene	35	47	3	66-124	22	GW-17303-022616-CB-052	790 J	ug/L

Notes:

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
TCL - Target Compound List
SVOC - Semivolatile Organic Compound
VOC - Volatile Organic Compound
J - Estimated concentration
R - Rejected

Table 7

Qualified Sample Data Due to Analyte Concentrations in the Trip Blanks
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Parameter	Blank Date	Analyte	Blank Result *	Associated Sample ID	Original Result	Qualified Result	Units
TCL VOC	02/03/16	Acetone	1.1 J	GW-17303-020316-CB-009	390 J	2500 U	µg/L
				GW-17303-020316-CB-010	78 J	670 U	µg/L
TCL VOC	2/29/2016	Acetone	1.9 J	GW-17303-022916-CB-056	490 J	5000 U	µg/L
TCL VOC	2/23/2016	Carbon disulfide	1.9 J	GW-17303-022316-CB-035	8500	8500 U	µg/L
				GW-17303-022316-CB-036	140	140 U	µg/L
				GW-17303-022316-CB-037	2700	2700 U	µg/L
				GW-17303-022316-CB-038	9.3	9.3 U	µg/L

Notes:

* - Blank result adjusted for sample factors where applicable
TCL - Target Compound List
VOC - Volatile Organic Compounds
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 8

Qualified Sample Data Due to Variability in Field Duplicate Results
Additional Investigation Sampling
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
February 2016

Parameter	Analyte	RPD/Diff	Sample ID	Qualified Result	Field Duplicate Sample ID	Qualified Result	Units
TCL SVOC	Phenanthrene	1300 = Diff	GW-17303-020116-CB-004	2400 J	GW-17303-020116-CB-005	1100 J	ug/Kg

Notes:

TCL - Target Compound List
SVOC - Semivolatile Organic Compound
J - Estimated concentration

Memorandum

To:	Beth Landale	Ref. No.:	017303-T05-02Y16
From:	Nancy Bergstrom/tl/178/D	Date:	June 12, 2016
cc:	Tom Kinney; Rawa Fleisher		

Re: Analytical Results and Reduced Validation Investigation at the Bank and PAOC 18 Willow Run Company Vehicle Operations Ypsilanti, Michigan June 2016

1. Introduction

This document details a reduced validation of analytical results for soil and groundwater samples collected in support of the Investigation at the Bank and PAOC 18 at the Willow Run Company Vehicle Operations Site during June 2016. Samples were submitted to TestAmerica Laboratories, Inc., located in North Canton, Ohio. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2A, 2B and 2C. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes/laboratory control samples (LCS)/matrix spikes (MS) and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

i) "Quality Assurance Project Plan (QAPP) for the RCRA Facility Investigation (RFI) Work Plan, Company Vehicle Operations", Revision 1, February 2, 2012

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

iii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

Items ii) and iii) will subsequently be referred to as the "Guidelines" in this Memorandum.

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REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (4 +/- 2°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Table 4 presents the VOC sample results qualified due to analyte concentrations in the method blanks. All remaining method blank results were non-detect, or method blank detections were associated with investigative samples that reported either non-detect concentrations or concentrations significantly greater than the associated method blank concentrations for the analytes of interest. These sample results were not impacted by the contamination detected.

4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC), semi-volatile organic compound (SVOC) and polychlorinated biphenyl (PCB) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the above criteria with the exception of the surrogates for one PCB sample. The recoveries of these surrogates were not assessed as the PCB sample was run at a dilution.

5. Laboratory Control Sample (LCS) Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

5.1 Organic Analyses

The LCS contained all compounds of interest (VOC and SVOC) or the compounds specified in the method (PCB). The LCS recovery of one VOC exceeded the percent recovery criteria for one LCS. This analyte was not detected in the associated investigative samples and qualification was not required. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy.

5.2 Inorganic Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the distillation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed.

MS/MSD analyses were performed as specified in Table 1.

6.1 Organic Analyses

The MS/MSD samples were spiked with all compounds of interest (VOC and SVOC) or the compounds specified in the method (PCB). Table 5 presents the SVOC sample data qualified due to outlying MS/MSD results. All remaining percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

6.2 Inorganic Analyses

The MS/MSD samples were spiked with the analytes of interest, and the results were evaluated using the "Guidelines". Table 5 presents the metals sample data qualified due to outlying MS/MSD results. All remaining percent recoveries and RPD values were within the control limits, demonstrating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of two trip blank samples and one field duplicate sample set.

7.1 Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, two trip blanks were submitted to the laboratory for VOC analysis. Table 6 presents the sample data qualified due to analyte concentrations in the trip blanks. All remaining results were non-detect for the compounds of interest.

7.2 Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one times the RL value for water samples.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2A, 2B and 2C.

All soil results were reported on a dry weight basis.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2A, 2B and 2C are acceptable with the specific exceptions and qualifications noted herein.

Table 1

Sample Collection and Analysis Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs.)	Final Sample Depth (ft. bgs.)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters								Comments
							TCL VOC	TCL SVOC	PCB	SS TAL Metals	TCLP VOC	TCLP SVOC	TCLP Metals	Ignitability	
TA SDG No.: 240-66136-1															
SO-17303-061516-DR-001	MW19-59	Soil	2	4	06/15/2016	11:30	X	X	X	X	--	--	--	--	MS/MSD-P
SO-17303-061516-DR-002	GS-4A	Soil	2	4	06/15/2016	13:30	X	X	X	X	--	--	--	--	MS/MSD-P
TB-17303-061516	--	Soil	--	--	06/15/2016	--	X	--	--	--	--	--	--	--	TB
TA SDG No.: 240-66137-1															
SO-17303-061616-DR-003	DRUM	Soil	--	--	06/16/2016	10:00	--	--	X	--	X	X	X	X	
TA SDG No.: 240-66346-1															
TB-17303-062116	--	Water	--	--	06/21/2016	--	X	--	--	--	--	--	--	--	TB
GW-17303-062116-JY-004	GS-17	Water	--	--	06/21/2016	12:45	X	--	--	--	--	--	--	--	
SW-17303-062116-JY-005	GS-18	Water	--	--	06/21/2016	13:15	X	--	--	--	--	--	--	--	
GW-17303-062116-JY-006	GS-18	Water	--	--	06/21/2016	14:00	X	--	--	--	--	--	--	--	
GW-17303-062216-JY-007	MW19-58	Water	--	--	06/22/2016	09:50	X	--	--	--	--	--	--	--	
GW-17303-062216-JY-008	MW19-58	Water	--	--	06/22/2016	09:55	X	--	--	--	--	--	--	--	FD (MW19-58)
GW-17303-062216-JY-009	GS-3	Water	--	--	06/22/2016	10:15	X	--	--	--	--	--	--	--	
GW-17303-062216-JY-010	GS-19	Water	--	--	06/22/2016	11:00	X	--	--	--	--	--	--	--	
GW-17303-062216-JY-011	GS-4	Water	--	--	06/22/2016	11:45	X	--	--	--	--	--	--	--	
GW-17303-062216-JY-012	MW19-59	Water	--	--	06/22/2016	12:15	X	--	--	--	--	--	--	--	
GW-17303-062216-JY-013	GS-20	Water	--	--	06/22/2016	14:15	X	--	--	--	--	--	--	--	MS/MSD
GW-17303-062216-JY-014	GS-21	Water	--	--	06/22/2016	13:20	X	--	--	--	--	--	--	--	

Notes:

ft. bgs.	- Feet below ground surface
FD	- Field Duplicate Sample of sample in parenthesis
TB	- Trip Blank
MS/MSD	- Matrix Spike/Matrix Spike Duplicate
MS/MSD-P	- Matrix Spike/Matrix Spike Duplicate (Partial parameters)
TCL	- Target Compound List
TCLP	- Toxicity Characteristic Leaching Procedure
VOC	- Volatile Organic Compounds
SVOC	- Semi-volatile Organic Compounds
PCB	- Polychlorinated biphenyls
SS TAL	- Site Specific Target Analyte List

Table 2A

Validated Analytical Result Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-3	GS-4	GS-17
Sample Name:		GW-17303-062216-JY-009	GW-17303-062216-JY-011	GW-17303-062116-JY-004
Sample Date:		06/22/2016	06/22/2016	06/21/2016
Depth:		--	--	--
Parameters	**Unit**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U
Benzene	µg/L	1.0 U	1.4	1.8
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	0.42 J	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.3
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	10 U	10 U	10 U

Table 2A

Validated Analytical Result Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-3	GS-4	GS-17
Sample Name:		GW-17303-062216-JY-009	GW-17303-062216-JY-011	GW-17303-062116-JY-004
Sample Date:		06/22/2016	06/22/2016	06/21/2016
Depth:		--	--	--
Parameters	**Unit**			
Volatile Organic Compounds				
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.1	2.6	2.5
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U

Table 2A

Validated Analytical Result Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-18	GS-18	GS-19
Sample Name:		GW-17303-062116-JY-006	SW-17303-062116-JY-005	GW-17303-062216-JY-010
Sample Date:		06/21/2016	06/21/2016	06/22/2016
Depth:		--	--	--
Parameters	**Unit**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	2.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	2.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	2.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	2.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	2.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	0.34 J	1.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	0.66 J	1.0 U	2.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	20 U
2-Hexanone	µg/L	10 U	10 U	20 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	20 U
Acetone	µg/L	10 U	10 U	20 U
Benzene	µg/L	1.0 U	1.0 U	1.0 J
Bromodichloromethane	µg/L	1.0 U	1.0 U	2.0 U
Bromoform	µg/L	1.0 U	1.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	2.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	10 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	2.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	2.0 U
Chloroethane	µg/L	1.0 U	1.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	22	0.45 J	17
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	2.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	2.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	2.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	2.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	2.0 U
Methyl acetate	µg/L	10 U	10 U	20 U

Table 2A

Validated Analytical Result Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-18	GS-18	GS-19
Sample Name:		GW-17303-062116-JY-006	SW-17303-062116-JY-005	GW-17303-062216-JY-010
Sample Date:		06/21/2016	06/21/2016	06/22/2016
Depth:		--	--	--
Parameters	**Unit**			
Volatile Organic Compounds				
Methyl cyclohexane	µg/L	1.0 U	1.0 U	2.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	2.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	10 U
Styrene	µg/L	1.0 U	1.0 U	2.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	2.0 U
Toluene	µg/L	1.0 U	1.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	0.40 J	1.0 U	0.66 J
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	2.0 U
Trichloroethene	µg/L	12	0.57 J	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	2.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	2.0 U
Vinyl chloride	µg/L	19	1.0 U	99
Xylenes (total)	µg/L	2.0 U	2.0 U	1.0 J

Table 2A

Validated Analytical Result Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-20	GS-21	MW19-58
Sample Name:		GW-17303-062216-JY-013	GW-17303-062216-JY-014	GW-17303-062216-JY-007
Sample Date:		06/22/2016	06/22/2016	06/22/2016
Depth:		--	--	--
Parameters	**Unit**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	10 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	10 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	10 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	10 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	10 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	10 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	10 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	10 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	10 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	10 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	10 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	100 U	10 U	2.0 J
2-Hexanone	µg/L	100 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	100 U	10 U	10 U
Acetone	µg/L	100 U	11 U	10 U
Benzene	µg/L	10 U	1.0 U	7.7
Bromodichloromethane	µg/L	10 U	1.0 U	1.0 U
Bromoform	µg/L	10 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	10 U	1.0 U	1.0 U
Carbon disulfide	µg/L	50 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	10 U	1.0 U	1.0 U
Chlorobenzene	µg/L	10 U	1.0 U	1.0 U
Chloroethane	µg/L	10 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	10 U	1.0 U	0.51 J
Chloromethane (Methyl chloride)	µg/L	10 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	200	11	7.5
cis-1,3-Dichloropropene	µg/L	10 U	1.0 U	1.0 U
Cyclohexane	µg/L	10 U	1.0 U	0.58 J
Dibromochloromethane	µg/L	10 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	1.0 U	1.0 U
Ethylbenzene	µg/L	10 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	10 U	1.0 U	1.0 U
Methyl acetate	µg/L	100 U	10 U	10 U

Table 2A

Validated Analytical Result Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-20	GS-21	MW19-58
Sample Name:		GW-17303-062216-JY-013	GW-17303-062216-JY-014	GW-17303-062216-JY-007
Sample Date:		06/22/2016	06/22/2016	06/22/2016
Depth:		--	--	--
Parameters	**Unit**			
Volatile Organic Compounds				
Methyl cyclohexane	µg/L	10 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	10 U	1.0 U	1.0 U
Methylene chloride	µg/L	50 U	5.0 U	5.0 U
Styrene	µg/L	10 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	10 U	1.0 U	1.0 U
Toluene	µg/L	10 U	1.0 U	0.28 J
trans-1,2-Dichloroethene	µg/L	27	0.64 J	0.46 J
trans-1,3-Dichloropropene	µg/L	10 U	1.0 U	1.0 U
Trichloroethene	µg/L	5.6 J	0.81 J	0.39 J
Trichlorofluoromethane (CFC-11)	µg/L	10 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	10 U	1.0 U	1.0 U
Vinyl chloride	µg/L	82	5.0	1.8
Xylenes (total)	µg/L	20 U	2.0 U	2.0 U

Table 2A

Validated Analytical Result Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		MW19-58	MW19-59
Sample Name:		GW-17303-062216-JY-008	GW-17303-062216-JY-012
Sample Date:		06/22/2016	06/22/2016
Depth:		--	--
		Duplicate	
Parameters	**Unit**		
Volatile Organic Compounds			
1,1,1-Trichloroethane	µg/L	1.0 U	130 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	130 U
1,1,2-Trichloroethane	µg/L	1.0 U	130 U
1,1-Dichloroethane	µg/L	1.0 U	130 U
1,1-Dichloroethene	µg/L	1.0 U	130 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	130 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	130 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	130 U
1,2-Dichlorobenzene	µg/L	1.0 U	130 U
1,2-Dichloroethane	µg/L	1.0 U	130 U
1,2-Dichloropropane	µg/L	1.0 U	130 U
1,3-Dichlorobenzene	µg/L	1.0 U	130 U
1,4-Dichlorobenzene	µg/L	1.0 U	130 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	2.3 J	1300 U
2-Hexanone	µg/L	10 U	1300 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	1300 U
Acetone	µg/L	10 U	1300 U
Benzene	µg/L	7.6	130 U
Bromodichloromethane	µg/L	1.0 U	130 U
Bromoform	µg/L	1.0 U	130 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	130 U
Carbon disulfide	µg/L	5.0 U	630 U
Carbon tetrachloride	µg/L	1.0 U	130 U
Chlorobenzene	µg/L	1.0 U	130 U
Chloroethane	µg/L	1.0 U	130 U
Chloroform (Trichloromethane)	µg/L	0.53 J	130 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	130 U
cis-1,2-Dichloroethene	µg/L	7.5	820
cis-1,3-Dichloropropene	µg/L	1.0 U	130 U
Cyclohexane	µg/L	1.0 U	130 U
Dibromochloromethane	µg/L	1.0 U	130 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	130 U
Ethylbenzene	µg/L	1.0 U	130 U
Isopropyl benzene	µg/L	1.0 U	130 U
Methyl acetate	µg/L	10 U	1300 U

Table 2A

Validated Analytical Result Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		MW19-58	MW19-59
Sample Name:		GW-17303-062216-JY-008	GW-17303-062216-JY-012
Sample Date:		06/22/2016	06/22/2016
Depth:		--	--
		Duplicate	
Parameters	**Unit**		
Volatile Organic Compounds			
Methyl cyclohexane	µg/L	1.0 U	130 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	130 U
Methylene chloride	µg/L	5.0 U	630 U
Styrene	µg/L	1.0 U	130 U
Tetrachloroethene	µg/L	1.0 U	130 U
Toluene	µg/L	1.0 U	130 U
trans-1,2-Dichloroethene	µg/L	0.42 J	130 U
trans-1,3-Dichloropropene	µg/L	1.0 U	130 U
Trichloroethene	µg/L	0.27 J	130 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	130 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	130 U
Vinyl chloride	µg/L	2.2	7600
Xylenes (total)	µg/L	2.0 U	250 U

Notes:

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

Table 2B

Validated Analytical Results Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:	GS-4A	MW19-59
Sample Name:	SO-17303-061516-DR-002	SO-17303-061516-DR-001
Sample Date:	06/15/2016	06/15/2016
Depth:	2-4 ft BGS	2-4 ft BGS
Parameters	**Unit**	
Volatile Organic Compounds		
1,1,1-Trichloroethane	µg/kg	53 U	53 U
1,1,2,2-Tetrachloroethane	µg/kg	53 U	53 U
1,1,2-Trichloroethane	µg/kg	53 U	53 U
1,1-Dichloroethane	µg/kg	53 U	53 U
1,1-Dichloroethene	µg/kg	53 U	53 U
1,2,4-Trichlorobenzene	µg/kg	260 U	130 J
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	260 U	260 U
1,2-Dibromoethane (Ethylene dibromide)	µg/kg	260 U	260 U
1,2-Dichlorobenzene	µg/kg	110 U	110 U
1,2-Dichloroethane	µg/kg	53 U	53 U
1,2-Dichloropropane	µg/kg	53 U	53 U
1,3-Dichlorobenzene	µg/kg	110 U	110 U
1,4-Dichlorobenzene	µg/kg	110 U	110 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/kg	790 U	790 U
2-Hexanone	µg/kg	2600 U	2600 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/kg	2600 U	2600 U
Acetone	µg/kg	790 U	790 U
Benzene	µg/kg	53 U	290
Bromodichloromethane	µg/kg	110 U	110 U
Bromoform	µg/kg	110 U	110 U
Bromomethane (Methyl bromide)	µg/kg	260 U	260 U
Carbon disulfide	µg/kg	260 U	260 U
Carbon tetrachloride	µg/kg	53 U	53 U
Chlorobenzene	µg/kg	53 U	53 U
Chloroethane	µg/kg	260 U	260 U
Chloroform (Trichloromethane)	µg/kg	53 U	53 U
Chloromethane (Methyl chloride)	µg/kg	260 U	260 U
cis-1,2-Dichloroethene	µg/kg	53 U	53 U
cis-1,3-Dichloropropene	µg/kg	53 U	53 U
Cyclohexane	µg/kg	1300 U	1300 U
Dibromochloromethane	µg/kg	53 U	53 U
Dichlorodifluoromethane (CFC-12)	µg/kg	110 U	110 U
Ethylbenzene	µg/kg	53 U	53 U

Table 2B

Validated Analytical Results Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-4A	MW19-59
Sample Name:		SO-17303-061516-DR-002	SO-17303-061516-DR-001
Sample Date:		06/15/2016	06/15/2016
Depth:		2-4 ft BGS	2-4 ft BGS
Parameters	**Unit**		
Volatile Organic Compounds			
Isopropyl benzene	µg/kg	260 U	27 J
Methyl acetate	µg/kg	130 J	150 J
Methyl cyclohexane	µg/kg	110 J	160 J
Methyl tert butyl ether (MTBE)	µg/kg	260 U	260 U
Methylene chloride	µg/kg	260 U	260 U
Styrene	µg/kg	53 U	53 U
Tetrachloroethene	µg/kg	53 U	53 U
Toluene	µg/kg	110 U	110 U
trans-1,2-Dichloroethene	µg/kg	53 U	53 U
trans-1,3-Dichloropropene	µg/kg	53 U	53 U
Trichloroethene	µg/kg	53 U	53 U
Trichlorofluoromethane (CFC-11)	µg/kg	110 U	110 U
Trifluorotrichloroethane (CFC-113)	µg/kg	260 U	260 U
Vinyl chloride	µg/kg	71	280
Xylenes (total)	µg/kg	160 U	63 J
Semivolatile Organic Compounds			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	750 U	1200 U
2,4,5-Trichlorophenol	µg/kg	750 U	1200 U
2,4,6-Trichlorophenol	µg/kg	750 U	1200 U
2,4-Dichlorophenol	µg/kg	750 U	1200 U
2,4-Dimethylphenol	µg/kg	750 U	1200 U
2,4-Dinitrophenol	µg/kg	430 U	700 U
2,4-Dinitrotoluene	µg/kg	750 U	1200 U
2,6-Dinitrotoluene	µg/kg	750 U	1200 U
2-Chloronaphthalene	µg/kg	750 U	1200 U
2-Chlorophenol	µg/kg	750 U	1200 U
2-Methylnaphthalene	µg/kg	82 J	76 J
2-Methylphenol	µg/kg	750 U	1200 U
2-Nitroaniline	µg/kg	570 U	930 U
2-Nitrophenol	µg/kg	750 U	1200 U
3&4-Methylphenol	µg/kg	750 U	1200 U
3,3'-Dichlorobenzidine	µg/kg	750 U	1200 U

Table 2B

Validated Analytical Results Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-4A	MW19-59
Sample Name:		SO-17303-061516-DR-002	SO-17303-061516-DR-001
Sample Date:		06/15/2016	06/15/2016
Depth:		2-4 ft BGS	2-4 ft BGS
Parameters	**Unit**		
Semivolatile Organic Compounds			
3-Nitroaniline	µg/kg	570 U	930 U
4,6-Dinitro-2-methylphenol	µg/kg	570 U	930 U
4-Bromophenyl phenyl ether	µg/kg	430 U	700 U
4-Chloro-3-methylphenol	µg/kg	750 U	1200 U
4-Chloroaniline	µg/kg	750 U	1200 U
4-Chlorophenyl phenyl ether	µg/kg	570 U	930 U
4-Nitroaniline	µg/kg	570 U	930 U
4-Nitrophenol	µg/kg	940 U	1500 U
Acenaphthene	µg/kg	750 U	1200 U
Acenaphthylene	µg/kg	750 U	1200 U
Acetophenone	µg/kg	750 U	1200 U
Anthracene	µg/kg	750 U	30 J
Atrazine	µg/kg	110 U	190 U
Benzaldehyde	µg/kg	750 U	1200 U
Benzo(a)anthracene	µg/kg	24 J	48 J
Benzo(a)pyrene	µg/kg	27 J	62 J
Benzo(b)fluoranthene	µg/kg	42 J	91 J
Benzo(g,h,i)perylene	µg/kg	31 J	1200 U
Benzo(k)fluoranthene	µg/kg	750 U	32 J
Biphenyl (1,1-Biphenyl)	µg/kg	750 U	1200 U
bis(2-Chloroethoxy)methane	µg/kg	750 U	1200 U
bis(2-Chloroethyl)ether	µg/kg	230 U	370 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	750 U	1200 U
Butyl benzylphthalate (BBP)	µg/kg	750 U	1200 U
Caprolactam	µg/kg	750 U	1200 U
Carbazole	µg/kg	750 U	1200 U
Chrysene	µg/kg	34 J	80 J
Di-n-butylphthalate (DBP)	µg/kg	750 U	1200 U
Di-n-octyl phthalate (DnOP)	µg/kg	750 U	1200 U
Dibenz(a,h)anthracene	µg/kg	750 U	1200 U
Dibenzofuran	µg/kg	750 U	1200 U
Diethyl phthalate	µg/kg	750 U	1200 U
Dimethyl phthalate	µg/kg	750 U	1200 U

Table 2B

Validated Analytical Results Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-4A	MW19-59
Sample Name:		SO-17303-061516-DR-002	SO-17303-061516-DR-001
Sample Date:		06/15/2016	06/15/2016
Depth:		2-4 ft BGS	2-4 ft BGS
Parameters	**Unit**		
Semivolatile Organic Compounds			
Fluoranthene	µg/kg	57 J	130 J
Fluorene	µg/kg	750 U	1200 U
Hexachlorobenzene	µg/kg	750 U	1200 U
Hexachlorobutadiene	µg/kg	110 U	190 U
Hexachlorocyclopentadiene	µg/kg	750 U	R
Hexachloroethane	µg/kg	750 U	1200 U
Indeno(1,2,3-cd)pyrene	µg/kg	750 U	56 J
Isophorone	µg/kg	750 U	1200 U
N-Nitrosodi-n-propylamine	µg/kg	750 U	1200 U
N-Nitrosodiphenylamine	µg/kg	750 U	1200 U
Naphthalene	µg/kg	750 U	1200 U
Nitrobenzene	µg/kg	750 U	1200 U
Pentachlorophenol	µg/kg	430 U	700 U
Phenanthrene	µg/kg	110 J	160 J
Phenol	µg/kg	750 U	1200 U
Pyrene	µg/kg	58 J	100 J
Metals			
Antimony	mg/kg	0.18 J	0.49 J
Arsenic	mg/kg	7.8	6.5
Barium	mg/kg	63	66
Beryllium	mg/kg	0.40	0.40
Cadmium	mg/kg	0.31	0.62
Chromium	mg/kg	13	15
Cobalt	mg/kg	9.2	7.7
Copper	mg/kg	18	19
Lead	mg/kg	10 J	31 J
Manganese	mg/kg	360	300
Mercury	mg/kg	0.051 U	0.046 U
Nickel	mg/kg	26	23
Selenium	mg/kg	1.4	1.3
Silver	mg/kg	0.045 J	0.11 J
Thallium	mg/kg	0.35	0.34

Table 2B

Validated Analytical Results Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Location ID:		GS-4A	MW19-59
Sample Name:		SO-17303-061516-DR-002	SO-17303-061516-DR-001
Sample Date:		06/15/2016	06/15/2016
Depth:		2-4 ft BGS	2-4 ft BGS
Parameters	**Unit**		
Metals			
Vanadium	mg/kg	17	19
Zinc	mg/kg	55	61
Pesticides/PCBs			
Aroclor-1016 (PCB-1016)	µg/kg	38 U	38 U
Aroclor-1221 (PCB-1221)	µg/kg	38 U	38 U
Aroclor-1232 (PCB-1232)	µg/kg	38 U	38 U
Aroclor-1242 (PCB-1242)	µg/kg	38 U	61
Aroclor-1248 (PCB-1248)	µg/kg	38 U	38 U
Aroclor-1254 (PCB-1254)	µg/kg	38 U	66
Aroclor-1260 (PCB-1260)	µg/kg	38 U	38 U
Total PCBs	µg/kg	38 U	127

Notes:

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

Table 2C

Validated Analytical Results Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Sample Location:		**DRUM**
Sample Depth:		-
Sample ID:		**SO-17303-061616-DR-003**
Sample Date:		**06/16/2016**
Sample Type:		
Parameters	**Units**	
TCLP Metals		
Arsenic	mg/L	0.011 J
Barium	mg/L	1.3
Cadmium	mg/L	0.083
Chromium	mg/L	0.0040 J
Lead	mg/L	11
Mercury	mg/L	0.0020 U
Selenium	mg/L	0.050 U
Silver	mg/L	0.050 U
PCBs		
Aroclor-1016 (PCB-1016)	ug/kg	240 U
Aroclor-1016 (PCB-1016)	ug/L	--
Aroclor-1221 (PCB-1221)	ug/kg	240 U
Aroclor-1221 (PCB-1221)	ug/L	--
Aroclor-1232 (PCB-1232)	ug/kg	240 U
Aroclor-1232 (PCB-1232)	ug/L	--
Aroclor-1242 (PCB-1242)	ug/kg	240 U
Aroclor-1242 (PCB-1242)	ug/L	--
Aroclor-1248 (PCB-1248)	ug/kg	950
Aroclor-1248 (PCB-1248)	ug/L	--
Aroclor-1254 (PCB-1254)	ug/kg	240 U
Aroclor-1254 (PCB-1254)	ug/L	--
Aroclor-1260 (PCB-1260)	ug/kg	1200
Aroclor-1260 (PCB-1260)	ug/L	--
Total PCBs	ug/kg	2150
TCLP SVOC		
1,4-Dichlorobenzene	mg/L	0.0040 U
2,4,5-Trichlorophenol	mg/L	0.0040 U
2,4,6-Trichlorophenol	mg/L	0.0040 U
2,4-Dinitrotoluene	mg/L	0.0040 U
2-Methylphenol	mg/L	0.0040 U
3&4-Methylphenol	mg/L	0.0040 U

Table 2C

Validated Analytical Results Summary
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Sample Location:		**DRUM**
Sample Depth:		**-**
Sample ID:		**SO-17303-061616-DR-003**
Sample Date:		**06/16/2016**
Sample Type:		
Parameters	**Units**	
TCLP SVOC		
Hexachlorobenzene	mg/L	0.00080 U
Hexachlorobutadiene	mg/L	0.0040 U
Hexachloroethane	mg/L	0.0040 U
Nitrobenzene	mg/L	0.0040 U
Pentachlorophenol	mg/L	0.016 U
Pyridine	mg/L	0.0040 U
TCLP VOC		
1,1-Dichloroethene	mg/L	0.025 U
1,2-Dichloroethane	mg/L	0.025 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.25 U
Benzene	mg/L	0.025 U
Carbon tetrachloride	mg/L	0.025 U
Chlorobenzene	mg/L	0.025 U
Chloroform (Trichloromethane)	mg/L	0.025 U
Tetrachloroethene	mg/L	0.025 U
Trichloroethene	mg/L	0.026
Vinyl chloride	mg/L	0.025 U
Wet		
Flash point (closed cup)	Deg F	200 >

Notes

> - Reported value greater than noted value
U - Not detected at the associated reporting limit
J - Estimated concentration

Table 3

Analytical Methods
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Parameter	Method	Matrix	Holding Time	
			Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
TCL VOC	SW-846 8260B	Water	-	14
		Soil	-	14
TCL SVOC	SW-846 8270C	Soil	14	40
PCB	SW-846 8082	Soil	14	40
SS TAL Metals (except Mercury)	SW-846 6020/6010B	Soil	-	180
Mercury	SW-846 7471A	Soil	-	28
TCLP VOC	SW-846 1311/8260B	Soil	14	14
TCLP SVOC	SW-846 1311/8270C	Soil	14/7	40
TCLP Metals (except Mercury)	SW-846 1311/6010B	Soil	180	180
TCLP Mercury	SW-846 1311/7470A	Soil	28	28
Ignitability	SW-846 1010	Soil	-	28

Notes:

Method References:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

TCL - Target Compound List
TCLP - Toxicity Characteristic Leaching Procedure
VOC - Volatile Organic Compounds
SVOC - Semi-volatile Organic Compounds
PCB - Polychlorinated biphenyls
SS TAL - Site Specific Target Analyte List

Table 4

Qualified Sample Results Due to Analyte Concentrations in the Method Blanks
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Parameter	Analyte	Analysis Date (mm/dd/yyyy)	Blank Result *	Sample ID	Original Result	Qualified Result	Units
TCL VOC	Toluene	06/27/2016	10.3 J	SO-17303-061516-DR-001	27 JB	110 U	µg/kg
				SO-17303-061516-DR-002	18 JB	110 U	µg/kg

Notes:

* - Blank result adjusted for sample factors where applicable
U - Not detected at the associated reporting limit
J - Estimated concentration
B - Laboratory qualifier - result detected in associated method blank
TCL - Target Compound List
VOC - Volatile Organic Compounds

Table 5

Qualified Sample Results Due to Outlying MS/MSD Results
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Qualified Result	Units
TCL SVOC	SO-17303-061516-DR-001	Hexachlorocyclopentadiene	0	0	0	10-120	40	R	µg/kg
SS TAL Metals	SO-17303-061516-DR-001	Antimony	32	31	3	75-125	20	0.49 J	mg/kg
	SO-17303-061516-DR-002							0.18 J	mg/kg
SS TAL Metals	SO-17303-061516-DR-001	Lead	62	62	0	75-125	20	31 J	mg/kg
	SO-17303-061516-DR-002							10 J	mg/kg

Notes:

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
J - Estimated concentration
R - Rejected
TCL - Target Compound List
SVOC - Semi-volatile Organic Compounds
SS TAL - Site Specific Target Analyte List

Table 6

Qualified Sample Data Due to Analyte Concentrations in the Trip Blanks
Investigation at the Bank and PAOC 18
Willow Run Company Vehicle Operations
Ypsilanti, Michigan
June 2016

Parameter	Blank Date (mm/dd/yyyy)	Analyte	Blank Result	Associated Sample ID	Original Result	Qualified Result	Units
TCL VOC	06/21/2016	Acetone	1.8 J	GW-17303-062116-JY-004	0.95 J	10 U	µg/L
				GW-17303-062216-JY-007	8.1 J	10 U	µg/L
				GW-17303-062216-JY-008	9.1 J	10 U	µg/L
				GW-17303-062216-JY-014	11	11 U	µg/L

Notes:

U - Not detected at the associated reporting limit
J - Estimated concentration
TCL - Target Compound List
VOC - Volatile Organic Compounds

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: 240-60481-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
2/17/2016 2:08:08 PM

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

LINKS

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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: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

Job ID: 240-60481-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-60481-1

Comments
No additional comments.

Receipt
The samples were received on 2/3/2016 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

GC/MS VOA
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-60481-1	GW-17303-020116-CB-001	Water	02/01/16 10:15	02/03/16 09:45
240-60481-2	GW-17303-020116-CB-002	Water	02/01/16 11:25	02/03/16 09:45
240-60481-3	GW-17303-020116-CB-003	Water	02/01/16 12:30	02/03/16 09:45
240-60481-4	GW-17303-020116-CB-004	Water	02/01/16 14:10	02/03/16 09:45
240-60481-5	GW-17303-020116-CB-005	Water	02/01/16 15:15	02/03/16 09:45
240-60481-6	GW-17303-020116-CB-006	Water	02/01/16 15:30	02/03/16 09:45
240-60481-7	GW-17303-020116-CB-007	Water	02/01/16 16:25	02/03/16 09:45
240-60481-8	TB-17303-020116-CB-008	Water	02/01/16 00:00	02/03/16 09:45

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

Client Sample ID: GW-17303-020116-CB-001 — Lab Sample ID: 240-60481-1

No Detections.

Client Sample ID: GW-17303-020116-CB-002 — Lab Sample ID: 240-60481-2

No Detections.

Client Sample ID: GW-17303-020116-CB-003 — Lab Sample ID: 240-60481-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	140		5.0	1.5	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	150		5.0	1.3	ug/L	5		8260B	Total/NA
trans-1,2-Dichloroethene	9.8		5.0	1.5	ug/L	5		8260B	Total/NA

Client Sample ID: GW-17303-020116-CB-004 — Lab Sample ID: 240-60481-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	67		8.3	2.4	ug/L	8.33		8260B	Total/NA
cis-1,2-Dichloroethene	230		8.3	2.2	ug/L	8.33		8260B	Total/NA
trans-1,2-Dichloroethene	14		8.3	2.5	ug/L	8.33		8260B	Total/NA

Client Sample ID: GW-17303-020116-CB-005 — Lab Sample ID: 240-60481-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.85	J	2.5	0.55	ug/L	2.5		8260B	Total/NA
Vinyl chloride	35		2.5	0.73	ug/L	2.5		8260B	Total/NA
cis-1,2-Dichloroethene	70		2.5	0.65	ug/L	2.5		8260B	Total/NA
trans-1,2-Dichloroethene	4.6		2.5	0.75	ug/L	2.5		8260B	Total/NA

Client Sample ID: GW-17303-020116-CB-006 — Lab Sample ID: 240-60481-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.90	J	2.0	0.44	ug/L	2		8260B	Total/NA
Vinyl chloride	38		2.0	0.58	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	75		2.0	0.52	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	4.9		2.0	0.60	ug/L	2		8260B	Total/NA

Client Sample ID: GW-17303-020116-CB-007 — Lab Sample ID: 240-60481-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	0.43	J	1.0	0.32	ug/L	1		8260B	Total/NA
Vinyl chloride	35		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.26	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	1.3		1.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: TB-17303-020116-CB-008 — Lab Sample ID: 240-60481-8

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: GW-17303-020116-CB-001
Date Collected: 02/01/16 10:15
Date Received: 02/03/16 09:45

Lab Sample ID: 240-60481-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/15/16 17:36	1
Benzene	1.0	U	1.0	0.35	ug/L			02/15/16 17:36	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/15/16 17:36	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/15/16 17:36	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/15/16 17:36	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/15/16 17:36	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/15/16 17:36	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/15/16 17:36	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 17:36	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/15/16 17:36	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/15/16 17:36	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/15/16 17:36	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/15/16 17:36	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/15/16 17:36	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/15/16 17:36	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/15/16 17:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/15/16 17:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/15/16 17:36	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/15/16 17:36	1
2-Hexanone	10	U	10	0.48	ug/L			02/15/16 17:36	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/15/16 17:36	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/15/16 17:36	1
Styrene	1.0	U	1.0	0.45	ug/L			02/15/16 17:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/15/16 17:36	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/15/16 17:36	1
Toluene	1.0	U	1.0	0.23	ug/L			02/15/16 17:36	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/15/16 17:36	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/15/16 17:36	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/15/16 17:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/15/16 17:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/15/16 17:36	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/15/16 17:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/15/16 17:36	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/15/16 17:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/15/16 17:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/15/16 17:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/15/16 17:36	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/15/16 17:36	1
Methyl acetate	10	U	10	2.3	ug/L			02/15/16 17:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/15/16 17:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/15/16 17:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/15/16 17:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 17:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/15/16 17:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/15/16 17:36	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/15/16 17:36	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/15/16 17:36	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/15/16 17:36	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		78 - 125		02/15/16 17:36	1
4-Bromofluorobenzene (Surr)	95		61 - 120		02/15/16 17:36	1
Toluene-d8 (Surr)	92		80 - 120		02/15/16 17:36	1
Dibromofluoromethane (Surr)	106		79 - 120		02/15/16 17:36	1

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

Client Sample ID: GW-17303-020116-CB-002
Date Collected: 02/01/16 11:25
Date Received: 02/03/16 09:45

Lab Sample ID: 240-60481-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/15/16 17:57	1
Benzene	1.0	U	1.0	0.35	ug/L			02/15/16 17:57	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/15/16 17:57	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/15/16 17:57	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/15/16 17:57	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/15/16 17:57	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/15/16 17:57	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/15/16 17:57	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 17:57	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/15/16 17:57	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/15/16 17:57	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/15/16 17:57	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/15/16 17:57	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/15/16 17:57	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/15/16 17:57	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/15/16 17:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/15/16 17:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/15/16 17:57	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/15/16 17:57	1
2-Hexanone	10	U	10	0.48	ug/L			02/15/16 17:57	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/15/16 17:57	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/15/16 17:57	1
Styrene	1.0	U	1.0	0.45	ug/L			02/15/16 17:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/15/16 17:57	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/15/16 17:57	1
Toluene	1.0	U	1.0	0.23	ug/L			02/15/16 17:57	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/15/16 17:57	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/15/16 17:57	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/15/16 17:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/15/16 17:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/15/16 17:57	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/15/16 17:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/15/16 17:57	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/15/16 17:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/15/16 17:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/15/16 17:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/15/16 17:57	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/15/16 17:57	1
Methyl acetate	10	U	10	2.3	ug/L			02/15/16 17:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/15/16 17:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/15/16 17:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/15/16 17:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 17:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/15/16 17:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/15/16 17:57	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/15/16 17:57	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/15/16 17:57	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/15/16 17:57	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		78 - 125		02/15/16 17:57	1
4-Bromofluorobenzene (Surr)	95		61 - 120		02/15/16 17:57	1
Toluene-d8 (Surr)	92		80 - 120		02/15/16 17:57	1
Dibromofluoromethane (Surr)	106		79 - 120		02/15/16 17:57	1

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

Client Sample ID: GW-17303-020116-CB-003
Date Collected: 02/01/16 12:30
Date Received: 02/03/16 09:45

Lab Sample ID: 240-60481-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	50	U	50	4.7	ug/L			02/15/16 18:19	5
Benzene	5.0	U	5.0	1.8	ug/L			02/15/16 18:19	5
Bromodichloromethane	5.0	U	5.0	1.5	ug/L			02/15/16 18:19	5
Bromoform	5.0	U	5.0	2.8	ug/L			02/15/16 18:19	5
Bromomethane	5.0	U	5.0	2.2	ug/L			02/15/16 18:19	5
2-Butanone (MEK)	50	U	50	2.7	ug/L			02/15/16 18:19	5
Carbon disulfide	25	U	25	1.9	ug/L			02/15/16 18:19	5
Carbon tetrachloride	5.0	U	5.0	2.2	ug/L			02/15/16 18:19	5
Chlorobenzene	5.0	U	5.0	1.3	ug/L			02/15/16 18:19	5
Chloroethane	5.0	U	5.0	1.6	ug/L			02/15/16 18:19	5
Chloroform	5.0	U	5.0	1.3	ug/L			02/15/16 18:19	5
Chloromethane	5.0	U	5.0	2.2	ug/L			02/15/16 18:19	5
1,1-Dichloroethane	5.0	U	5.0	1.5	ug/L			02/15/16 18:19	5
1,2-Dichloroethane	5.0	U	5.0	1.2	ug/L			02/15/16 18:19	5
1,1-Dichloroethene	5.0	U	5.0	2.3	ug/L			02/15/16 18:19	5
1,2-Dichloropropane	5.0	U	5.0	1.3	ug/L			02/15/16 18:19	5
cis-1,3-Dichloropropene	5.0	U	5.0	2.3	ug/L			02/15/16 18:19	5
trans-1,3-Dichloropropene	5.0	U	5.0	2.8	ug/L			02/15/16 18:19	5
Ethylbenzene	5.0	U	5.0	1.3	ug/L			02/15/16 18:19	5
2-Hexanone	50	U	50	2.4	ug/L			02/15/16 18:19	5
Methylene Chloride	25	U	25	1.7	ug/L			02/15/16 18:19	5
4-Methyl-2-pentanone (MIBK)	50	U	50	5.0	ug/L			02/15/16 18:19	5
Styrene	5.0	U	5.0	2.3	ug/L			02/15/16 18:19	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.1	ug/L			02/15/16 18:19	5
Tetrachloroethene	5.0	U	5.0	1.6	ug/L			02/15/16 18:19	5
Toluene	5.0	U	5.0	1.2	ug/L			02/15/16 18:19	5
Trichloroethene	5.0	U	5.0	1.1	ug/L			02/15/16 18:19	5
Vinyl chloride	**140**		5.0	1.5	ug/L			02/15/16 18:19	5
Xylenes, Total	10	U	10	2.6	ug/L			02/15/16 18:19	5
1,1,1-Trichloroethane	5.0	U	5.0	2.2	ug/L			02/15/16 18:19	5
1,1,2-Trichloroethane	5.0	U	5.0	1.2	ug/L			02/15/16 18:19	5
Cyclohexane	5.0	U	5.0	2.3	ug/L			02/15/16 18:19	5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	4.1	ug/L			02/15/16 18:19	5
1,2-Dibromoethane	5.0	U	5.0	1.6	ug/L			02/15/16 18:19	5
Dichlorodifluoromethane	5.0	U	5.0	1.6	ug/L			02/15/16 18:19	5
cis-1,2-Dichloroethene	**150**		5.0	1.3	ug/L			02/15/16 18:19	5
trans-1,2-Dichloroethene	**9.8**		5.0	1.5	ug/L			02/15/16 18:19	5
Isopropylbenzene	5.0	U	5.0	1.8	ug/L			02/15/16 18:19	5
Methyl acetate	50	U	50	11	ug/L			02/15/16 18:19	5
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			02/15/16 18:19	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	2.3	ug/L			02/15/16 18:19	5
1,2,4-Trichlorobenzene	5.0	U	5.0	1.6	ug/L			02/15/16 18:19	5
1,2-Dichlorobenzene	5.0	U	5.0	1.3	ug/L			02/15/16 18:19	5
1,3-Dichlorobenzene	5.0	U	5.0	0.95	ug/L			02/15/16 18:19	5
1,4-Dichlorobenzene	5.0	U	5.0	1.4	ug/L			02/15/16 18:19	5
Trichlorofluoromethane	5.0	U	5.0	2.5	ug/L			02/15/16 18:19	5
Dibromochloromethane	5.0	U	5.0	2.2	ug/L			02/15/16 18:19	5
Methylcyclohexane	5.0	U	5.0	2.2	ug/L			02/15/16 18:19	5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		78 - 125		02/15/16 18:19	5
4-Bromofluorobenzene (Surr)	96		61 - 120		02/15/16 18:19	5
Toluene-d8 (Surr)	92		80 - 120		02/15/16 18:19	5
Dibromofluoromethane (Surr)	104		79 - 120		02/15/16 18:19	5

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

Client Sample ID: GW-17303-020116-CB-004
Date Collected: 02/01/16 14:10
Date Received: 02/03/16 09:45

Lab Sample ID: 240-60481-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	83	U	83	7.8	ug/L			02/15/16 18:41	8.33
Benzene	8.3	U	8.3	2.9	ug/L			02/15/16 18:41	8.33
Bromodichloromethane	8.3	U	8.3	2.4	ug/L			02/15/16 18:41	8.33
Bromoform	8.3	U	8.3	4.7	ug/L			02/15/16 18:41	8.33
Bromomethane	8.3	U	8.3	3.7	ug/L			02/15/16 18:41	8.33
2-Butanone (MEK)	83	U	83	4.4	ug/L			02/15/16 18:41	8.33
Carbon disulfide	42	U	42	3.2	ug/L			02/15/16 18:41	8.33
Carbon tetrachloride	8.3	U	8.3	3.6	ug/L			02/15/16 18:41	8.33
Chlorobenzene	8.3	U	8.3	2.1	ug/L			02/15/16 18:41	8.33
Chloroethane	8.3	U	8.3	2.7	ug/L			02/15/16 18:41	8.33
Chloroform	8.3	U	8.3	2.1	ug/L			02/15/16 18:41	8.33
Chloromethane	8.3	U	8.3	3.7	ug/L			02/15/16 18:41	8.33
1,1-Dichloroethane	8.3	U	8.3	2.5	ug/L			02/15/16 18:41	8.33
1,2-Dichloroethane	8.3	U	8.3	1.9	ug/L			02/15/16 18:41	8.33
1,1-Dichloroethene	8.3	U	8.3	3.7	ug/L			02/15/16 18:41	8.33
1,2-Dichloropropane	8.3	U	8.3	2.1	ug/L			02/15/16 18:41	8.33
cis-1,3-Dichloropropene	8.3	U	8.3	3.8	ug/L			02/15/16 18:41	8.33
trans-1,3-Dichloropropene	8.3	U	8.3	4.7	ug/L			02/15/16 18:41	8.33
Ethylbenzene	8.3	U	8.3	2.1	ug/L			02/15/16 18:41	8.33
2-Hexanone	83	U	83	4.0	ug/L			02/15/16 18:41	8.33
Methylene Chloride	42	U	42	2.7	ug/L			02/15/16 18:41	8.33
4-Methyl-2-pentanone (MIBK)	83	U	83	8.2	ug/L			02/15/16 18:41	8.33
Styrene	8.3	U	8.3	3.7	ug/L			02/15/16 18:41	8.33
1,1,2,2-Tetrachloroethane	8.3	U	8.3	1.8	ug/L			02/15/16 18:41	8.33
Tetrachloroethene	8.3	U	8.3	2.6	ug/L			02/15/16 18:41	8.33
Toluene	8.3	U	8.3	1.9	ug/L			02/15/16 18:41	8.33
Trichloroethene	8.3	U	8.3	1.8	ug/L			02/15/16 18:41	8.33
Vinyl chloride	**67**		8.3	2.4	ug/L			02/15/16 18:41	8.33
Xylenes, Total	17	U	17	4.3	ug/L			02/15/16 18:41	8.33
1,1,1-Trichloroethane	8.3	U	8.3	3.7	ug/L			02/15/16 18:41	8.33
1,1,2-Trichloroethane	8.3	U	8.3	2.0	ug/L			02/15/16 18:41	8.33
Cyclohexane	8.3	U	8.3	3.7	ug/L			02/15/16 18:41	8.33
1,2-Dibromo-3-Chloropropane	8.3	U	8.3	6.8	ug/L			02/15/16 18:41	8.33
1,2-Dibromoethane	8.3	U	8.3	2.7	ug/L			02/15/16 18:41	8.33
Dichlorodifluoromethane	8.3	U	8.3	2.7	ug/L			02/15/16 18:41	8.33
cis-1,2-Dichloroethene	**230**		8.3	2.2	ug/L			02/15/16 18:41	8.33
trans-1,2-Dichloroethene	**14**		8.3	2.5	ug/L			02/15/16 18:41	8.33
Isopropylbenzene	8.3	U	8.3	2.9	ug/L			02/15/16 18:41	8.33
Methyl acetate	83	U	83	19	ug/L			02/15/16 18:41	8.33
Methyl tert-butyl ether	8.3	U	8.3	1.7	ug/L			02/15/16 18:41	8.33
1,1,2-Trichloro-1,2,2-trifluoroethane	8.3	U	8.3	3.7	ug/L			02/15/16 18:41	8.33
1,2,4-Trichlorobenzene	8.3	U	8.3	2.7	ug/L			02/15/16 18:41	8.33
1,2-Dichlorobenzene	8.3	U	8.3	2.1	ug/L			02/15/16 18:41	8.33
1,3-Dichlorobenzene	8.3	U	8.3	1.6	ug/L			02/15/16 18:41	8.33
1,4-Dichlorobenzene	8.3	U	8.3	2.2	ug/L			02/15/16 18:41	8.33
Trichlorofluoromethane	8.3	U	8.3	4.1	ug/L			02/15/16 18:41	8.33
Dibromochloromethane	8.3	U	8.3	3.6	ug/L			02/15/16 18:41	8.33
Methylcyclohexane	8.3	U	8.3	3.6	ug/L			02/15/16 18:41	8.33

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		78 - 125		02/15/16 18:41	8.33
4-Bromofluorobenzene (Surr)	95		61 - 120		02/15/16 18:41	8.33
Toluene-d8 (Surr)	92		80 - 120		02/15/16 18:41	8.33
Dibromofluoromethane (Surr)	105		79 - 120		02/15/16 18:41	8.33

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

Client Sample ID: GW-17303-020116-CB-005
Date Collected: 02/01/16 15:15
Date Received: 02/03/16 09:45

Lab Sample ID: 240-60481-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	2.4	ug/L			02/15/16 19:03	2.5
Benzene	2.5	U	2.5	0.88	ug/L			02/15/16 19:03	2.5
Bromodichloromethane	2.5	U	2.5	0.73	ug/L			02/15/16 19:03	2.5
Bromoform	2.5	U	2.5	1.4	ug/L			02/15/16 19:03	2.5
Bromomethane	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
2-Butanone (MEK)	25	U	25	1.3	ug/L			02/15/16 19:03	2.5
Carbon disulfide	13	U	13	0.95	ug/L			02/15/16 19:03	2.5
Carbon tetrachloride	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
Chlorobenzene	2.5	U	2.5	0.63	ug/L			02/15/16 19:03	2.5
Chloroethane	2.5	U	2.5	0.80	ug/L			02/15/16 19:03	2.5
Chloroform	2.5	U	2.5	0.63	ug/L			02/15/16 19:03	2.5
Chloromethane	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
1,1-Dichloroethane	2.5	U	2.5	0.75	ug/L			02/15/16 19:03	2.5
1,2-Dichloroethane	2.5	U	2.5	0.58	ug/L			02/15/16 19:03	2.5
1,1-Dichloroethene	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
1,2-Dichloropropane	2.5	U	2.5	0.63	ug/L			02/15/16 19:03	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	1.2	ug/L			02/15/16 19:03	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	1.4	ug/L			02/15/16 19:03	2.5
Ethylbenzene	2.5	U	2.5	0.63	ug/L			02/15/16 19:03	2.5
2-Hexanone	25	U	25	1.2	ug/L			02/15/16 19:03	2.5
Methylene Chloride	13	U	13	0.83	ug/L			02/15/16 19:03	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.5	ug/L			02/15/16 19:03	2.5
Styrene	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.55	ug/L			02/15/16 19:03	2.5
Tetrachloroethene	2.5	U	2.5	0.78	ug/L			02/15/16 19:03	2.5
Toluene	2.5	U	2.5	0.58	ug/L			02/15/16 19:03	2.5
Trichloroethene	**0.85**	**J**	2.5	0.55	ug/L			02/15/16 19:03	2.5
Vinyl chloride	**35**		2.5	0.73	ug/L			02/15/16 19:03	2.5
Xylenes, Total	5.0	U	5.0	1.3	ug/L			02/15/16 19:03	2.5
1,1,1-Trichloroethane	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.60	ug/L			02/15/16 19:03	2.5
Cyclohexane	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
1,2-Dibromo-3-Chloropropane	2.5	U	2.5	2.1	ug/L			02/15/16 19:03	2.5
1,2-Dibromoethane	2.5	U	2.5	0.80	ug/L			02/15/16 19:03	2.5
Dichlorodifluoromethane	2.5	U	2.5	0.80	ug/L			02/15/16 19:03	2.5
cis-1,2-Dichloroethene	**70**		2.5	0.65	ug/L			02/15/16 19:03	2.5
trans-1,2-Dichloroethene	**4.6**		2.5	0.75	ug/L			02/15/16 19:03	2.5
Isopropylbenzene	2.5	U	2.5	0.88	ug/L			02/15/16 19:03	2.5
Methyl acetate	25	U	25	5.7	ug/L			02/15/16 19:03	2.5
Methyl tert-butyl ether	2.5	U	2.5	0.50	ug/L			02/15/16 19:03	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
1,2,4-Trichlorobenzene	2.5	U	2.5	0.80	ug/L			02/15/16 19:03	2.5
1,2-Dichlorobenzene	2.5	U	2.5	0.63	ug/L			02/15/16 19:03	2.5
1,3-Dichlorobenzene	2.5	U	2.5	0.48	ug/L			02/15/16 19:03	2.5
1,4-Dichlorobenzene	2.5	U	2.5	0.68	ug/L			02/15/16 19:03	2.5
Trichlorofluoromethane	2.5	U	2.5	1.2	ug/L			02/15/16 19:03	2.5
Dibromochloromethane	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5
Methylcyclohexane	2.5	U	2.5	1.1	ug/L			02/15/16 19:03	2.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		78 - 125		02/15/16 19:03	2.5
4-Bromofluorobenzene (Surr)	93		61 - 120		02/15/16 19:03	2.5
Toluene-d8 (Surr)	94		80 - 120		02/15/16 19:03	2.5
Dibromofluoromethane (Surr)	104		79 - 120		02/15/16 19:03	2.5

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

Client Sample ID: GW-17303-020116-CB-006
Date Collected: 02/01/16 15:30
Date Received: 02/03/16 09:45

Lab Sample ID: 240-60481-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U	20	1.9	ug/L			02/15/16 19:25	2
Benzene	2.0	U	2.0	0.70	ug/L			02/15/16 19:25	2
Bromodichloromethane	2.0	U	2.0	0.58	ug/L			02/15/16 19:25	2
Bromoform	2.0	U	2.0	1.1	ug/L			02/15/16 19:25	2
Bromomethane	2.0	U	2.0	0.88	ug/L			02/15/16 19:25	2
2-Butanone (MEK)	20	U	20	1.1	ug/L			02/15/16 19:25	2
Carbon disulfide	10	U	10	0.76	ug/L			02/15/16 19:25	2
Carbon tetrachloride	2.0	U	2.0	0.86	ug/L			02/15/16 19:25	2
Chlorobenzene	2.0	U	2.0	0.50	ug/L			02/15/16 19:25	2
Chloroethane	2.0	U	2.0	0.64	ug/L			02/15/16 19:25	2
Chloroform	2.0	U	2.0	0.50	ug/L			02/15/16 19:25	2
Chloromethane	2.0	U	2.0	0.88	ug/L			02/15/16 19:25	2
1,1-Dichloroethane	2.0	U	2.0	0.60	ug/L			02/15/16 19:25	2
1,2-Dichloroethane	2.0	U	2.0	0.46	ug/L			02/15/16 19:25	2
1,1-Dichloroethene	2.0	U	2.0	0.90	ug/L			02/15/16 19:25	2
1,2-Dichloropropane	2.0	U	2.0	0.50	ug/L			02/15/16 19:25	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.92	ug/L			02/15/16 19:25	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.1	ug/L			02/15/16 19:25	2
Ethylbenzene	2.0	U	2.0	0.50	ug/L			02/15/16 19:25	2
2-Hexanone	20	U	20	0.96	ug/L			02/15/16 19:25	2
Methylene Chloride	10	U	10	0.66	ug/L			02/15/16 19:25	2
4-Methyl-2-pentanone (MIBK)	20	U	20	2.0	ug/L			02/15/16 19:25	2
Styrene	2.0	U	2.0	0.90	ug/L			02/15/16 19:25	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.44	ug/L			02/15/16 19:25	2
Tetrachloroethene	2.0	U	2.0	0.62	ug/L			02/15/16 19:25	2
Toluene	2.0	U	2.0	0.46	ug/L			02/15/16 19:25	2
Trichloroethene	**0.90**	**J**	2.0	0.44	ug/L			02/15/16 19:25	2
Vinyl chloride	**38**		2.0	0.58	ug/L			02/15/16 19:25	2
Xylenes, Total	4.0	U	4.0	1.0	ug/L			02/15/16 19:25	2
1,1,1-Trichloroethane	2.0	U	2.0	0.88	ug/L			02/15/16 19:25	2
1,1,2-Trichloroethane	2.0	U	2.0	0.48	ug/L			02/15/16 19:25	2
Cyclohexane	2.0	U	2.0	0.90	ug/L			02/15/16 19:25	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	1.6	ug/L			02/15/16 19:25	2
1,2-Dibromoethane	2.0	U	2.0	0.64	ug/L			02/15/16 19:25	2
Dichlorodifluoromethane	2.0	U	2.0	0.64	ug/L			02/15/16 19:25	2
cis-1,2-Dichloroethene	**75**		2.0	0.52	ug/L			02/15/16 19:25	2
trans-1,2-Dichloroethene	**4.9**		2.0	0.60	ug/L			02/15/16 19:25	2
Isopropylbenzene	2.0	U	2.0	0.70	ug/L			02/15/16 19:25	2
Methyl acetate	20	U	20	4.5	ug/L			02/15/16 19:25	2
Methyl tert-butyl ether	2.0	U	2.0	0.40	ug/L			02/15/16 19:25	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.90	ug/L			02/15/16 19:25	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.64	ug/L			02/15/16 19:25	2
1,2-Dichlorobenzene	2.0	U	2.0	0.50	ug/L			02/15/16 19:25	2
1,3-Dichlorobenzene	2.0	U	2.0	0.38	ug/L			02/15/16 19:25	2
1,4-Dichlorobenzene	2.0	U	2.0	0.54	ug/L			02/15/16 19:25	2
Trichlorofluoromethane	2.0	U	2.0	0.98	ug/L			02/15/16 19:25	2
Dibromochloromethane	2.0	U	2.0	0.86	ug/L			02/15/16 19:25	2
Methylcyclohexane	2.0	U	2.0	0.86	ug/L			02/15/16 19:25	2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		78 - 125		02/15/16 19:25	2
4-Bromofluorobenzene (Surr)	95		61 - 120		02/15/16 19:25	2
Toluene-d8 (Surr)	93		80 - 120		02/15/16 19:25	2
Dibromofluoromethane (Surr)	106		79 - 120		02/15/16 19:25	2

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

Client Sample ID: GW-17303-020116-CB-007
Date Collected: 02/01/16 16:25
Date Received: 02/03/16 09:45

Lab Sample ID: 240-60481-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/15/16 19:47	1
Benzene	1.0	U	1.0	0.35	ug/L			02/15/16 19:47	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/15/16 19:47	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/15/16 19:47	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/15/16 19:47	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/15/16 19:47	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/15/16 19:47	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/15/16 19:47	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 19:47	1
Chloroethane	**0.43**	**J**	1.0	0.32	ug/L			02/15/16 19:47	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/15/16 19:47	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/15/16 19:47	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/15/16 19:47	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/15/16 19:47	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/15/16 19:47	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/15/16 19:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/15/16 19:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/15/16 19:47	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/15/16 19:47	1
2-Hexanone	10	U	10	0.48	ug/L			02/15/16 19:47	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/15/16 19:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/15/16 19:47	1
Styrene	1.0	U	1.0	0.45	ug/L			02/15/16 19:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/15/16 19:47	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/15/16 19:47	1
Toluene	1.0	U	1.0	0.23	ug/L			02/15/16 19:47	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/15/16 19:47	1
Vinyl chloride	**35**		1.0	0.29	ug/L			02/15/16 19:47	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/15/16 19:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/15/16 19:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/15/16 19:47	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/15/16 19:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/15/16 19:47	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/15/16 19:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/15/16 19:47	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.26	ug/L			02/15/16 19:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/15/16 19:47	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/15/16 19:47	1
Methyl acetate	10	U	10	2.3	ug/L			02/15/16 19:47	1
Methyl tert-butyl ether	**1.3**		1.0	0.20	ug/L			02/15/16 19:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/15/16 19:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/15/16 19:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 19:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/15/16 19:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/15/16 19:47	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/15/16 19:47	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/15/16 19:47	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/15/16 19:47	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		78 - 125		02/15/16 19:47	1
4-Bromofluorobenzene (Surr)	94		61 - 120		02/15/16 19:47	1
Toluene-d8 (Surr)	91		80 - 120		02/15/16 19:47	1
Dibromofluoromethane (Surr)	106		79 - 120		02/15/16 19:47	1

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

Client Sample ID: TB-17303-020116-CB-008
Date Collected: 02/01/16 00:00
Date Received: 02/03/16 09:45

Lab Sample ID: 240-60481-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/15/16 16:08	1
Benzene	1.0	U	1.0	0.35	ug/L			02/15/16 16:08	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/15/16 16:08	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/15/16 16:08	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/15/16 16:08	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/15/16 16:08	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/15/16 16:08	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/15/16 16:08	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 16:08	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/15/16 16:08	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/15/16 16:08	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/15/16 16:08	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/15/16 16:08	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/15/16 16:08	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/15/16 16:08	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/15/16 16:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/15/16 16:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/15/16 16:08	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/15/16 16:08	1
2-Hexanone	10	U	10	0.48	ug/L			02/15/16 16:08	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/15/16 16:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/15/16 16:08	1
Styrene	1.0	U	1.0	0.45	ug/L			02/15/16 16:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/15/16 16:08	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/15/16 16:08	1
Toluene	1.0	U	1.0	0.23	ug/L			02/15/16 16:08	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/15/16 16:08	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/15/16 16:08	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/15/16 16:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/15/16 16:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/15/16 16:08	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/15/16 16:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/15/16 16:08	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/15/16 16:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/15/16 16:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/15/16 16:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/15/16 16:08	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/15/16 16:08	1
Methyl acetate	10	U	10	2.3	ug/L			02/15/16 16:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/15/16 16:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/15/16 16:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/15/16 16:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 16:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/15/16 16:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/15/16 16:08	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/15/16 16:08	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/15/16 16:08	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/15/16 16:08	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		78 - 125		02/15/16 16:08	1
4-Bromofluorobenzene (Surr)	92		61 - 120		02/15/16 16:08	1
Toluene-d8 (Surr)	92		80 - 120		02/15/16 16:08	1
Dibromofluoromethane (Surr)	107		79 - 120		02/15/16 16:08	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

GC/MS VOA

Analysis Batch: 217483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60481-1	GW-17303-020116-CB-001	Total/NA	Water	8260B	
240-60481-2	GW-17303-020116-CB-002	Total/NA	Water	8260B	
240-60481-3	GW-17303-020116-CB-003	Total/NA	Water	8260B	
240-60481-4	GW-17303-020116-CB-004	Total/NA	Water	8260B	
240-60481-5	GW-17303-020116-CB-005	Total/NA	Water	8260B	
240-60481-6	GW-17303-020116-CB-006	Total/NA	Water	8260B	
240-60481-7	GW-17303-020116-CB-007	Total/NA	Water	8260B	
240-60481-8	TB-17303-020116-CB-008	Total/NA	Water	8260B	
LCS 240-217483/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-217483/6	Method Blank	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-217483/6
Matrix: Water
Analysis Batch: 217483

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	0.94	ug/L			02/15/16 13:33	1
Benzene	1.0	U	1.0	0.35	ug/L			02/15/16 13:33	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/15/16 13:33	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/15/16 13:33	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/15/16 13:33	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/15/16 13:33	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/15/16 13:33	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/15/16 13:33	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 13:33	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/15/16 13:33	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/15/16 13:33	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/15/16 13:33	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/15/16 13:33	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/15/16 13:33	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/15/16 13:33	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/15/16 13:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/15/16 13:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/15/16 13:33	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/15/16 13:33	1
2-Hexanone	10	U	10	0.48	ug/L			02/15/16 13:33	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/15/16 13:33	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/15/16 13:33	1
Styrene	1.0	U	1.0	0.45	ug/L			02/15/16 13:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/15/16 13:33	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/15/16 13:33	1
Toluene	1.0	U	1.0	0.23	ug/L			02/15/16 13:33	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/15/16 13:33	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/15/16 13:33	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/15/16 13:33	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/15/16 13:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/15/16 13:33	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/15/16 13:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/15/16 13:33	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/15/16 13:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/15/16 13:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/15/16 13:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/15/16 13:33	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/15/16 13:33	1
Methyl acetate	10	U	10	2.3	ug/L			02/15/16 13:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/15/16 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/15/16 13:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/15/16 13:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/15/16 13:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/15/16 13:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/15/16 13:33	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/15/16 13:33	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/15/16 13:33	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/15/16 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		78 - 125		02/15/16 13:33	1
4-Bromofluorobenzene (Surr)	91		61 - 120		02/15/16 13:33	1
Toluene-d8 (Surr)	95		80 - 120		02/15/16 13:33	1
Dibromofluoromethane (Surr)	104		79 - 120		02/15/16 13:33	1

Lab Sample ID: LCS 240-217483/4
Matrix: Water
Analysis Batch: 217483

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	34 - 148
Benzene	10.0	9.95		ug/L		100	80 - 120
Bromodichloromethane	10.0	10.4		ug/L		104	80 - 120
Bromoform	10.0	9.01		ug/L		90	56 - 122
Bromomethane	10.0	6.04		ug/L		60	38 - 132
2-Butanone (MEK)	20.0	16.7		ug/L		84	56 - 138
Carbon disulfide	10.0	11.4		ug/L		114	65 - 144
Carbon tetrachloride	10.0	12.4		ug/L		124	77 - 131
Chlorobenzene	10.0	9.42		ug/L		94	80 - 120
Chloroethane	10.0	4.50		ug/L		45	36 - 126
Chloroform	10.0	10.1		ug/L		101	80 - 120
Chloromethane	10.0	9.64		ug/L		96	48 - 133
1,1-Dichloroethane	10.0	9.74		ug/L		97	79 - 125
1,2-Dichloroethane	10.0	9.88		ug/L		99	80 - 120
1,1-Dichloroethene	10.0	10.5		ug/L		105	76 - 124
1,2-Dichloropropane	10.0	10.2		ug/L		102	78 - 124
cis-1,3-Dichloropropene	10.0	11.2		ug/L		112	74 - 126
trans-1,3-Dichloropropene	10.0	9.57		ug/L		96	75 - 131
Ethylbenzene	10.0	9.92		ug/L		99	80 - 120
2-Hexanone	20.0	18.1		ug/L		91	55 - 141
Methylene Chloride	10.0	10.1		ug/L		101	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	20.5		ug/L		102	64 - 135
Styrene	10.0	9.64		ug/L		96	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.38		ug/L		94	71 - 123
Tetrachloroethene	10.0	9.93		ug/L		99	78 - 121
Toluene	10.0	9.75		ug/L		98	80 - 120
Trichloroethene	10.0	10.3		ug/L		103	80 - 121
Vinyl chloride	10.0	10.9		ug/L		109	52 - 121
Xylenes, Total	20.0	19.6		ug/L		98	80 - 120
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	77 - 123
1,1,2-Trichloroethane	10.0	9.54		ug/L		95	80 - 120
Cyclohexane	10.0	11.7		ug/L		117	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.31		ug/L		83	50 - 132
1,2-Dibromoethane	10.0	9.77		ug/L		98	80 - 120
Dichlorodifluoromethane	10.0	11.7		ug/L		117	23 - 136
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	79 - 120
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	80 - 124
Isopropylbenzene	10.0	9.90		ug/L		99	77 - 120
Methyl acetate	50.0	46.9		ug/L		94	67 - 131
Methyl tert-butyl ether	10.0	9.99		ug/L		100	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.7		ug/L		117	67 - 138
1,2,4-Trichlorobenzene	10.0	6.44		ug/L		64	61 - 120
1,2-Dichlorobenzene	10.0	8.85		ug/L		88	79 - 120

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

Lab Sample ID: LCS 240-217483/4
Matrix: Water
Analysis Batch: 217483

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	9.01		ug/L		90	79 - 120
1,4-Dichlorobenzene	10.0	9.06		ug/L		91	79 - 120
Trichlorofluoromethane	10.0	12.1		ug/L		121	61 - 133
Dibromochloromethane	10.0	10.5		ug/L		105	74 - 120
Methylcyclohexane	10.0	12.4		ug/L		124	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*78 - 125*
4-Bromofluorobenzene (Surr)	*100*		*61 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*79 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-60481-1	GW-17303-020116-CB-001	106	95	92	106
240-60481-2	GW-17303-020116-CB-002	108	95	92	106
240-60481-3	GW-17303-020116-CB-003	107	96	92	104
240-60481-4	GW-17303-020116-CB-004	105	95	92	105
240-60481-5	GW-17303-020116-CB-005	107	93	94	104
240-60481-6	GW-17303-020116-CB-006	109	95	93	106
240-60481-7	GW-17303-020116-CB-007	107	94	91	106
240-60481-8	TB-17303-020116-CB-008	108	92	92	107
LCS 240-217483/4	Lab Control Sample	100	100	100	102
MB 240-217483/6	Method Blank	108	91	95	104

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

Client Sample ID: GW-17303-020116-CB-001 — Lab Sample ID: 240-60481-1

Date Collected: 02/01/16 10:15 — **Matrix: Water**
Date Received: 02/03/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	217483	02/15/16 17:36	RJQ	TAL CAN

Client Sample ID: GW-17303-020116-CB-002 — Lab Sample ID: 240-60481-2

Date Collected: 02/01/16 11:25 — **Matrix: Water**
Date Received: 02/03/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	217483	02/15/16 17:57	RJQ	TAL CAN

Client Sample ID: GW-17303-020116-CB-003 — Lab Sample ID: 240-60481-3

Date Collected: 02/01/16 12:30 — **Matrix: Water**
Date Received: 02/03/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	217483	02/15/16 18:19	RJQ	TAL CAN

Client Sample ID: GW-17303-020116-CB-004 — Lab Sample ID: 240-60481-4

Date Collected: 02/01/16 14:10 — **Matrix: Water**
Date Received: 02/03/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8.33	217483	02/15/16 18:41	RJQ	TAL CAN

Client Sample ID: GW-17303-020116-CB-005 — Lab Sample ID: 240-60481-5

Date Collected: 02/01/16 15:15 — **Matrix: Water**
Date Received: 02/03/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	217483	02/15/16 19:03	RJQ	TAL CAN

Client Sample ID: GW-17303-020116-CB-006 — Lab Sample ID: 240-60481-6

Date Collected: 02/01/16 15:30 — **Matrix: Water**
Date Received: 02/03/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	217483	02/15/16 19:25	RJQ	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

Client Sample ID: GW-17303-020116-CB-007

Lab Sample ID: 240-60481-7

Date Collected: 02/01/16 16:25
Matrix: Water
Date Received: 02/03/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	217483	02/15/16 19:47	RJQ	TAL CAN

Client Sample ID: TB-17303-020116-CB-008

Lab Sample ID: 240-60481-8

Date Collected: 02/01/16 00:00
Matrix: Water
Date Received: 02/03/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	217483	02/15/16 16:08	RJQ	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60481-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

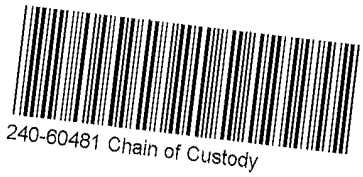
Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16 *
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-16 *
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16 *
West Virginia DEP	State Program	3	210	12-31-15 *
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1-6/C1-1

Chain of Custody Record

122751

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/1/2016	COC No: 001
Company Name: GHD	Tel/Fax: (734) 453-5123	Lab Contact: D. Hurkett	Carrier: FedEX	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: (734) 453-5123	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: 017303	☐ 2 days			Job / SDG No.: 240006020
PO# SSOW #17303-033	☐ 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 VOCs	Sample Specific Notes:
GW-17303-020116-CB-001	02/01/16	1015	G	WG	3	N	N	X	
-002		1125			3			X	
-003		1230			3			X	
-004		1410			3			X	
-005		1515			3			X	
-006		1530			3			X	
-007		1625			3			X	
TB-008		—	—	WQ	1	—	—	X	

Page 33 of 34

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:
C. Bondy	GHD	2/2/16 1630		TA	2/3/16 945
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAT/2016

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 60481

Client GHD Site Name

Cooler Received on 2-3-16 Opened on 2-3-16

Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS Stetson 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# 48 (CF -1.9 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# I8 (CF -0.5 °C) Observed Cooler Temp. 1.6 °C Corrected Cooler Temp. 1.1 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
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 sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC559158
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials?	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

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):

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: 240-60612-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Authorized for release by:
3/2/2016 10:59:51 AM
Nathan Pietras, Project Manager II
(330)966-8296
nathan.pietras@testamericainc.com

Designee for

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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Lab Chronicle 106
Certification Summary 111
Chain of Custody 112

Job ID: 240-60612-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-60612-1

Comments
Per GHD email on Feb 9, 2017, cancel Trip -012.
At the request of GHD, fractionated lead was added on February 23, 2016. This extended the TAT.

Receipt
The samples were received on 2/5/2016 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3º C.

Receipt Exceptions
A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

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) 8082: 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-17303-020416-CB-007 (240-60612-9). These results have been reported and qualified.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-020416-CB-004 (240-60612-6), SO-17303-020416-CB-005 (240-60612-7), SO-17303-020416-CB-006 (240-60612-8), SO-17303-020416-CB-007 (240-60612-9), (240-60613-B-1-A), (240-60613-B-1-B MS) and (240-60613-A-1-A MSD).2391675
2103098
2333858

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-020316-CB-002 (240-60612-4), SO-17303-020416-CB-003 (240-60612-5), SO-17303-020416-CB-003 (240-60612-5[MS]) and SO-17303-020416-CB-003 (240-60612-5[MSD]).2391675
2103098
2333858

Method(s) 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: SO-17303-020416-CB-003 (240-60612-5). The sample has been quantified and reported as a mixture of Aroclors 1254 and 1260. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

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-17303-020316-CB-002 (240-60612-4), SO-17303-020416-CB-003 (240-60612-5), SO-17303-020416-CB-004 (240-60612-6), SO-17303-020416-CB-005 (240-60612-7), SO-17303-020416-CB-006 (240-60612-8) and SO-17303-020416-CB-007 (240-60612-9). The continuing calibration blanks and method blanks may not support the lower PQL.

Method(s) 6020, 6020A: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: SO-17303-020316-CB-002 (240-60612-4), SO-17303-020416-CB-003 (240-60612-5), SO-17303-020416-CB-004 (240-60612-6), SO-17303-020416-CB-005 (240-60612-7), SO-17303-020416-CB-006 (240-60612-8) and SO-17303-020416-CB-007 (240-60612-9). The continuing calibration blanks and method blanks may not support the lower PQL.

Job ID: 240-60612-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

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

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.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA

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.
X	Surrogate is outside control 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

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.
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.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative error ratio
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-60612-1	GW-17303-020316-CB-009	Water	02/03/16 12:25	02/05/16 09:30
240-60612-2	GW-17303-020316-CB-010	Water	02/03/16 13:55	02/05/16 09:30
240-60612-3	TB-17303-020316-CB-011	Water	02/03/16 00:00	02/05/16 09:30
240-60612-4	SO-17303-020316-CB-002	Solid	02/03/16 12:00	02/05/16 09:30
240-60612-5	SO-17303-020416-CB-003	Solid	02/04/16 10:30	02/05/16 09:30
240-60612-6	SO-17303-020416-CB-004	Solid	02/04/16 12:50	02/05/16 09:30
240-60612-7	SO-17303-020416-CB-005	Solid	02/04/16 13:00	02/05/16 09:30
240-60612-8	SO-17303-020416-CB-006	Solid	02/04/16 13:10	02/05/16 09:30
240-60612-9	SO-17303-020416-CB-007	Solid	02/04/16 13:20	02/05/16 09:30
240-60612-10	TB-17303-020416-CB-008	Solid	02/04/16 00:00	02/05/16 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Client Sample ID: GW-17303-020316-CB-009 — Lab Sample ID: 240-60612-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	390	J	2500	240	ug/L	250		8260B	Total/NA
Vinyl chloride	7100		250	73	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	2400		250	65	ug/L	250		8260B	Total/NA

Client Sample ID: GW-17303-020316-CB-010 — Lab Sample ID: 240-60612-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	78	J	670	63	ug/L	66.67		8260B	Total/NA
Trichloroethene	140		67	15	ug/L	66.67		8260B	Total/NA
Vinyl chloride	1800		67	19	ug/L	66.67		8260B	Total/NA
cis-1,2-Dichloroethene	1200		67	17	ug/L	66.67		8260B	Total/NA
trans-1,2-Dichloroethene	60	J	67	20	ug/L	66.67		8260B	Total/NA
Methyl tert-butyl ether	32	J	67	13	ug/L	66.67		8260B	Total/NA

Client Sample ID: TB-17303-020316-CB-011 — Lab Sample ID: 240-60612-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.1	J	10	0.94	ug/L	1		8260B	Total/NA

Client Sample ID: SO-17303-020316-CB-002 — Lab Sample ID: 240-60612-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	780		480	470	ug/Kg	10	☼	8260B	Total/NA
Vinyl chloride	17000		380	200	ug/Kg	10	☼	8260B	Total/NA
cis-1,2-Dichloroethene	9600		480	460	ug/Kg	10	☼	8260B	Total/NA
trans-1,2-Dichloroethene	450	J	480	310	ug/Kg	10	☼	8260B	Total/NA
Isophorone	20	J B	320	16	ug/Kg	1	☼	8270C	Total/NA
Pyrene	5.2	J	320	0.53	ug/Kg	1	☼	8270C	Total/NA
Barium	9.1		0.93	0.48	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.087	J	0.19	0.030	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11		0.093	0.024	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.4		0.47	0.055	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.6		0.93	0.087	mg/Kg	1	☼	6010B	Total/NA
Copper	5.3		0.93	0.27	mg/Kg	1	☼	6010B	Total/NA
Manganese	110	B	0.93	0.098	mg/Kg	1	☼	6010B	Total/NA
Nickel	4.5		0.93	0.093	mg/Kg	1	☼	6010B	Total/NA
Vanadium	6.7		0.93	0.23	mg/Kg	1	☼	6010B	Total/NA
Zinc	19	B	2.3	0.65	mg/Kg	1	☼	6010B	Total/NA
Lead	2.4		0.28	0.23	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.056	J	0.37	0.016	mg/Kg	2	☼	6020	Total/NA
Arsenic	1.7		0.19	0.030	mg/Kg	2	☼	6020	Total/NA
Selenium	1.0		0.37	0.047	mg/Kg	2	☼	6020	Total/NA
Thallium	0.037	J	0.19	0.022	mg/Kg	2	☼	6020	Total/NA
Silver	0.0058	J	0.19	0.0016	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-020416-CB-003 — Lab Sample ID: 240-60612-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	60		41	28	ug/Kg	1	☼	8260B	Total/NA
Toluene	34	J	82	10	ug/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-020416-CB-003 (Continued) — Lab Sample ID: 240-60612-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	45		33	17	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	420		120	33	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	79		41	39	ug/Kg	1	☼	8260B	Total/NA
Isopropylbenzene	150	J	200	13	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	140	J	980	56	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	79	J	980	39	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	420	J	5800	77	ug/Kg	20	☼	8270C	Total/NA
2-Methylnaphthalene	1800	J	5800	11	ug/Kg	20	☼	8270C	Total/NA
Acenaphthene	3500	J	5800	17	ug/Kg	20	☼	8270C	Total/NA
Acenaphthylene	220	J	5800	7.7	ug/Kg	20	☼	8270C	Total/NA
Anthracene	3200	J	5800	17	ug/Kg	20	☼	8270C	Total/NA
Benzo[a]anthracene	5800		5800	14	ug/Kg	20	☼	8270C	Total/NA
Benzo[a]pyrene	5500	J	5800	14	ug/Kg	20	☼	8270C	Total/NA
Benzo[b]fluoranthene	7500		5800	13	ug/Kg	20	☼	8270C	Total/NA
Benzo[g,h,i]perylene	3300	J	5800	7.7	ug/Kg	20	☼	8270C	Total/NA
Benzo[k]fluoranthene	2600	J	5800	15	ug/Kg	20	☼	8270C	Total/NA
Carbazole	3200	J	5800	590	ug/Kg	20	☼	8270C	Total/NA
Chrysene	6200		5800	24	ug/Kg	20	☼	8270C	Total/NA
Dibenz(a,h)anthracene	740	J	5800	14	ug/Kg	20	☼	8270C	Total/NA
Dibenzofuran	2700	J F1	5800	14	ug/Kg	20	☼	8270C	Total/NA
Fluoranthene	16000		5800	12	ug/Kg	20	☼	8270C	Total/NA
Fluorene	4100	J	5800	12	ug/Kg	20	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	2900	J F1	5800	7.7	ug/Kg	20	☼	8270C	Total/NA
Naphthalene	6000		5800	18	ug/Kg	20	☼	8270C	Total/NA
Phenanthrene	16000		5800	16	ug/Kg	20	☼	8270C	Total/NA
Pyrene	14000		5800	9.6	ug/Kg	20	☼	8270C	Total/NA
Aroclor-1260	250	J	290	9.8	ug/Kg	1	☼	8082	Total/NA
Barium	76		0.84	0.43	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.29		0.17	0.027	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.8		0.084	0.022	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.2		0.42	0.049	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.84	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.84	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	280	B	0.84	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.9		0.84	0.084	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.84	0.21	mg/Kg	1	☼	6010B	Total/NA
Zinc	100	B F1	2.1	0.59	mg/Kg	1	☼	6010B	Total/NA
Lead	68	F1	0.25	0.21	mg/Kg	1	☼	6010B	Total/NA
Antimony	1.3	F1	0.34	0.015	mg/Kg	2	☼	6020	Total/NA
Arsenic	4.1		0.17	0.027	mg/Kg	2	☼	6020	Total/NA
Selenium	1.4		0.34	0.042	mg/Kg	2	☼	6020	Total/NA
Thallium	0.074	J	0.17	0.020	mg/Kg	2	☼	6020	Total/NA
Silver	0.057	J	0.17	0.0015	mg/Kg	2	☼	6020	Total/NA
Mercury	0.039	J F1	0.042	0.015	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-020416-CB-004 — Lab Sample ID: 240-60612-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	12	J	91	11	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	120	J	140	36	ug/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-020416-CB-004 (Continued) — Lab Sample ID: 240-60612-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	16	J	230	15	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	210	J	1100	62	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	77	J	300	4.0	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	110	J	300	0.57	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	570		300	0.86	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	18	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Anthracene	660		300	0.88	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	1000		300	0.71	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	840		300	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	1100		300	0.67	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	380		300	0.40	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	500		300	0.77	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	45	J	300	21	ug/Kg	1	☼	8270C	Total/NA
Carbazole	580		300	31	ug/Kg	1	☼	8270C	Total/NA
Chrysene	1100		300	1.2	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	120	J	300	0.75	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	400		300	0.75	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	200	J	300	17	ug/Kg	1	☼	8270C	Total/NA
Fluorene	590		300	0.60	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	360		300	0.40	ug/Kg	1	☼	8270C	Total/NA
Isophorone	21	J B	300	15	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	690		300	0.93	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene - RA	2300		600	1.2	ug/Kg	2	☼	8270C	Total/NA
Phenanthrene - RA	2400		600	1.7	ug/Kg	2	☼	8270C	Total/NA
Pyrene - RA	2000		600	0.99	ug/Kg	2	☼	8270C	Total/NA
Aroclor-1260	34	J	300	10	ug/Kg	1	☼	8082	Total/NA
Barium	41		0.78	0.40	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.19		0.16	0.025	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.38		0.078	0.021	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.2		0.39	0.046	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.8		0.78	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	5.7		0.78	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	230	B	0.78	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	5.5		0.78	0.078	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.9		0.78	0.20	mg/Kg	1	☼	6010B	Total/NA
Zinc	46	B	2.0	0.55	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.23	0.20	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.41		0.31	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	2.8		0.16	0.025	mg/Kg	2	☼	6020	Total/NA
Selenium	0.48		0.31	0.039	mg/Kg	2	☼	6020	Total/NA
Thallium	0.050	J	0.16	0.019	mg/Kg	2	☼	6020	Total/NA
Silver	0.037	J	0.16	0.0014	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-020416-CB-005 — Lab Sample ID: 240-60612-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	44	J	45	20	ug/Kg	1	☼	8260B	Total/NA
Methylene Chloride	150	J	230	96	ug/Kg	1	☼	8260B	Total/NA
Toluene	30	J	90	11	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	120	J	140	36	ug/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-020416-CB-005 (Continued) — Lab Sample ID: 240-60612-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	280	J	1100	62	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	77	J	300	4.0	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	84	J	300	0.57	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	460		300	0.87	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	11	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Anthracene	310		300	0.89	ug/Kg	1	☼	8270C	Total/NA
Benzaldehyde	120	J	300	14	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	490		300	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	420		300	0.73	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	540		300	0.67	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	260	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	270	J	300	0.78	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	63	J	300	22	ug/Kg	1	☼	8270C	Total/NA
Carbazole	310		300	31	ug/Kg	1	☼	8270C	Total/NA
Chrysene	550		300	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	72	J	300	0.75	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	270	J	300	0.75	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	210	J	300	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	1100		300	0.63	ug/Kg	1	☼	8270C	Total/NA
Fluorene	350		300	0.61	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	220	J	300	0.40	ug/Kg	1	☼	8270C	Total/NA
Isophorone	25	J B	300	15	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	890		300	0.94	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	1100		300	0.83	ug/Kg	1	☼	8270C	Total/NA
Pyrene	930		300	0.50	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1260	25	J	300	10	ug/Kg	1	☼	8082	Total/NA
Barium	32		0.73	0.37	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.16		0.15	0.024	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.39		0.073	0.019	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.7		0.36	0.043	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.8		0.73	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	4.7		0.73	0.21	mg/Kg	1	☼	6010B	Total/NA
Manganese	190	B	0.73	0.076	mg/Kg	1	☼	6010B	Total/NA
Nickel	4.5		0.73	0.073	mg/Kg	1	☼	6010B	Total/NA
Vanadium	8.2		0.73	0.18	mg/Kg	1	☼	6010B	Total/NA
Zinc	40	B	1.8	0.51	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.22	0.18	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.61		0.29	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	2.1		0.15	0.024	mg/Kg	2	☼	6020	Total/NA
Selenium	0.44		0.29	0.036	mg/Kg	2	☼	6020	Total/NA
Thallium	0.050	J	0.15	0.017	mg/Kg	2	☼	6020	Total/NA
Silver	0.048	J	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-020416-CB-006 — Lab Sample ID: 240-60612-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	340		46	45	ug/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	89		46	43	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	16	J	320	0.61	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	77	J	320	0.92	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-020416-CB-006 (Continued) — Lab Sample ID: 240-60612-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	4.5	J	320	0.43	ug/Kg	1	☼	8270C	Total/NA
Anthracene	150	J	320	0.95	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	240	J	320	0.77	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	210	J	320	0.78	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	280	J	320	0.72	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	100	J	320	0.43	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	110	J	320	0.83	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	28	J	320	23	ug/Kg	1	☼	8270C	Total/NA
Carbazole	98	J	320	33	ug/Kg	1	☼	8270C	Total/NA
Chrysene	270	J	320	1.3	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	29	J	320	0.80	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	59	J	320	0.80	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	580		320	0.67	ug/Kg	1	☼	8270C	Total/NA
Fluorene	110	J	320	0.64	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	90	J	320	0.43	ug/Kg	1	☼	8270C	Total/NA
Isophorone	17	J B	320	16	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	38	J	320	1.0	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	550		320	0.89	ug/Kg	1	☼	8270C	Total/NA
Pyrene	460		320	0.54	ug/Kg	1	☼	8270C	Total/NA
Barium	6.8		0.75	0.38	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.10	J	0.15	0.024	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12		0.075	0.020	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.5		0.37	0.044	mg/Kg	1	☼	6010B	Total/NA
Chromium	3.8		0.75	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	5.7		0.75	0.21	mg/Kg	1	☼	6010B	Total/NA
Manganese	130	B	0.75	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	5.4		0.75	0.075	mg/Kg	1	☼	6010B	Total/NA
Vanadium	7.3		0.75	0.19	mg/Kg	1	☼	6010B	Total/NA
Zinc	14	B	1.9	0.52	mg/Kg	1	☼	6010B	Total/NA
Lead	2.5		0.22	0.19	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.098	J	0.30	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	9.0		0.15	0.024	mg/Kg	2	☼	6020	Total/NA
Selenium	0.77		0.30	0.037	mg/Kg	2	☼	6020	Total/NA
Thallium	0.089	J	0.15	0.018	mg/Kg	2	☼	6020	Total/NA
Silver	0.0080	J	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-020416-CB-007 — Lab Sample ID: 240-60612-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	240	J	1200	67	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	2400	J	64000	850	ug/Kg	200	☼	8270C	Total/NA
2-Methylnaphthalene	5600	J	64000	120	ug/Kg	200	☼	8270C	Total/NA
Acenaphthene	29000	J	64000	190	ug/Kg	200	☼	8270C	Total/NA
Acenaphthylene	1100	J	64000	85	ug/Kg	200	☼	8270C	Total/NA
Anthracene	52000	J	64000	190	ug/Kg	200	☼	8270C	Total/NA
Benzo[a]anthracene	84000		64000	150	ug/Kg	200	☼	8270C	Total/NA
Benzo[a]pyrene	71000		64000	160	ug/Kg	200	☼	8270C	Total/NA
Benzo[b]fluoranthene	97000		64000	140	ug/Kg	200	☼	8270C	Total/NA
Benzo[g,h,i]perylene	32000	J	64000	85	ug/Kg	200	☼	8270C	Total/NA
Benzo[k]fluoranthene	35000	J	64000	170	ug/Kg	200	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-020416-CB-007 (Continued) — Lab Sample ID: 240-60612-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbazole	34000	J	64000	6600	ug/Kg	200	☼	8270C	Total/NA
Chrysene	87000		64000	270	ug/Kg	200	☼	8270C	Total/NA
Dibenz(a,h)anthracene	10000	J	64000	160	ug/Kg	200	☼	8270C	Total/NA
Dibenzofuran	21000	J	64000	160	ug/Kg	200	☼	8270C	Total/NA
Fluoranthene	190000		64000	130	ug/Kg	200	☼	8270C	Total/NA
Fluorene	37000	J	64000	130	ug/Kg	200	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	30000	J	64000	85	ug/Kg	200	☼	8270C	Total/NA
Naphthalene	15000	J	64000	200	ug/Kg	200	☼	8270C	Total/NA
Phenanthrene	180000		64000	180	ug/Kg	200	☼	8270C	Total/NA
Pyrene	160000		64000	110	ug/Kg	200	☼	8270C	Total/NA
Aroclor-1260	71	J	330	11	ug/Kg	1	☼	8082	Total/NA
Barium	72		0.74	0.38	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.27		0.15	0.024	mg/Kg	1	☼	6010B	Total/NA
Cadmium	3.8		0.074	0.020	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.0		0.37	0.044	mg/Kg	1	☼	6010B	Total/NA
Chromium	20		0.74	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.74	0.21	mg/Kg	1	☼	6010B	Total/NA
Manganese	260	B	0.74	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	5.6		0.74	0.074	mg/Kg	1	☼	6010B	Total/NA
Vanadium	8.5		0.74	0.19	mg/Kg	1	☼	6010B	Total/NA
Zinc	130	B	1.9	0.52	mg/Kg	1	☼	6010B	Total/NA
Lead	140		0.30	0.20	mg/Kg	1		6010B	Fractionated
Lead (coarse particulate matter)	140		0.30	0.20	mg/Kg	1	☼	6010B	Fractionated
Lead (fine particulate matter)	140		0.30	0.20	mg/Kg	1	☼	6010B	Fractionated
Antimony	2.4		0.30	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	2.8		0.15	0.024	mg/Kg	2	☼	6020	Total/NA
Selenium	1.4		0.30	0.037	mg/Kg	2	☼	6020	Total/NA
Thallium	0.088	J	0.15	0.018	mg/Kg	2	☼	6020	Total/NA
Silver	0.10	J	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA
Mercury	0.050	J	0.054	0.019	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: TB-17303-020416-CB-008 — Lab Sample ID: 240-60612-10

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082	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
Moisture	Coarse Moisture	EPA	TAL CAN
Moisture	Fine 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: GW-17303-020316-CB-009
Date Collected: 02/03/16 12:25
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**390**	**J**	2500	240	ug/L			02/17/16 17:33	250
Benzene	250	U	250	88	ug/L			02/17/16 17:33	250
Bromodichloromethane	250	U	250	73	ug/L			02/17/16 17:33	250
Bromoform	250	U	250	140	ug/L			02/17/16 17:33	250
Bromomethane	250	U	250	110	ug/L			02/17/16 17:33	250
2-Butanone (MEK)	2500	U	2500	130	ug/L			02/17/16 17:33	250
Carbon disulfide	1300	U	1300	95	ug/L			02/17/16 17:33	250
Carbon tetrachloride	250	U	250	110	ug/L			02/17/16 17:33	250
Chlorobenzene	250	U	250	63	ug/L			02/17/16 17:33	250
Chloroethane	250	U	250	80	ug/L			02/17/16 17:33	250
Chloroform	250	U	250	63	ug/L			02/17/16 17:33	250
Chloromethane	250	U	250	110	ug/L			02/17/16 17:33	250
1,1-Dichloroethane	250	U	250	75	ug/L			02/17/16 17:33	250
1,2-Dichloroethane	250	U	250	58	ug/L			02/17/16 17:33	250
1,1-Dichloroethene	250	U	250	110	ug/L			02/17/16 17:33	250
1,2-Dichloropropane	250	U	250	63	ug/L			02/17/16 17:33	250
cis-1,3-Dichloropropene	250	U	250	120	ug/L			02/17/16 17:33	250
trans-1,3-Dichloropropene	250	U	250	140	ug/L			02/17/16 17:33	250
Ethylbenzene	250	U	250	63	ug/L			02/17/16 17:33	250
2-Hexanone	2500	U	2500	120	ug/L			02/17/16 17:33	250
Methylene Chloride	1300	U	1300	83	ug/L			02/17/16 17:33	250
4-Methyl-2-pentanone (MIBK)	2500	U	2500	250	ug/L			02/17/16 17:33	250
Styrene	250	U	250	110	ug/L			02/17/16 17:33	250
1,1,2,2-Tetrachloroethane	250	U	250	55	ug/L			02/17/16 17:33	250
Tetrachloroethene	250	U	250	78	ug/L			02/17/16 17:33	250
Toluene	250	U	250	58	ug/L			02/17/16 17:33	250
Trichloroethene	250	U	250	55	ug/L			02/17/16 17:33	250
Vinyl chloride	**7100**		250	73	ug/L			02/17/16 17:33	250
Xylenes, Total	500	U	500	130	ug/L			02/17/16 17:33	250
1,1,1-Trichloroethane	250	U	250	110	ug/L			02/17/16 17:33	250
1,1,2-Trichloroethane	250	U	250	60	ug/L			02/17/16 17:33	250
Cyclohexane	250	U	250	110	ug/L			02/17/16 17:33	250
1,2-Dibromo-3-Chloropropane	250	U	250	210	ug/L			02/17/16 17:33	250
1,2-Dibromoethane	250	U	250	80	ug/L			02/17/16 17:33	250
Dichlorodifluoromethane	250	U	250	80	ug/L			02/17/16 17:33	250
cis-1,2-Dichloroethene	**2400**		250	65	ug/L			02/17/16 17:33	250
trans-1,2-Dichloroethene	250	U	250	75	ug/L			02/17/16 17:33	250
Isopropylbenzene	250	U	250	88	ug/L			02/17/16 17:33	250
Methyl acetate	2500	U	2500	570	ug/L			02/17/16 17:33	250
Methyl tert-butyl ether	250	U	250	50	ug/L			02/17/16 17:33	250
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	110	ug/L			02/17/16 17:33	250
1,2,4-Trichlorobenzene	250	U	250	80	ug/L			02/17/16 17:33	250
1,2-Dichlorobenzene	250	U	250	63	ug/L			02/17/16 17:33	250
1,3-Dichlorobenzene	250	U	250	48	ug/L			02/17/16 17:33	250
1,4-Dichlorobenzene	250	U	250	68	ug/L			02/17/16 17:33	250
Trichlorofluoromethane	250	U	250	120	ug/L			02/17/16 17:33	250
Dibromochloromethane	250	U	250	110	ug/L			02/17/16 17:33	250
Methylcyclohexane	250	U	250	110	ug/L			02/17/16 17:33	250

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		78 - 125		02/17/16 17:33	250
4-Bromofluorobenzene (Surr)	90		61 - 120		02/17/16 17:33	250
Toluene-d8 (Surr)	96		80 - 120		02/17/16 17:33	250
Dibromofluoromethane (Surr)	90		79 - 120		02/17/16 17:33	250

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

Client Sample ID: GW-17303-020316-CB-010
Date Collected: 02/03/16 13:55
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**78**	**J**	670	63	ug/L			02/17/16 17:56	66.67
Benzene	67	U	67	23	ug/L			02/17/16 17:56	66.67
Bromodichloromethane	67	U	67	19	ug/L			02/17/16 17:56	66.67
Bromoform	67	U	67	37	ug/L			02/17/16 17:56	66.67
Bromomethane	67	U	67	29	ug/L			02/17/16 17:56	66.67
2-Butanone (MEK)	670	U	670	35	ug/L			02/17/16 17:56	66.67
Carbon disulfide	330	U	330	25	ug/L			02/17/16 17:56	66.67
Carbon tetrachloride	67	U	67	29	ug/L			02/17/16 17:56	66.67
Chlorobenzene	67	U	67	17	ug/L			02/17/16 17:56	66.67
Chloroethane	67	U	67	21	ug/L			02/17/16 17:56	66.67
Chloroform	67	U	67	17	ug/L			02/17/16 17:56	66.67
Chloromethane	67	U	67	29	ug/L			02/17/16 17:56	66.67
1,1-Dichloroethane	67	U	67	20	ug/L			02/17/16 17:56	66.67
1,2-Dichloroethane	67	U	67	15	ug/L			02/17/16 17:56	66.67
1,1-Dichloroethene	67	U	67	30	ug/L			02/17/16 17:56	66.67
1,2-Dichloropropane	67	U	67	17	ug/L			02/17/16 17:56	66.67
cis-1,3-Dichloropropene	67	U	67	31	ug/L			02/17/16 17:56	66.67
trans-1,3-Dichloropropene	67	U	67	37	ug/L			02/17/16 17:56	66.67
Ethylbenzene	67	U	67	17	ug/L			02/17/16 17:56	66.67
2-Hexanone	670	U	670	32	ug/L			02/17/16 17:56	66.67
Methylene Chloride	330	U	330	22	ug/L			02/17/16 17:56	66.67
4-Methyl-2-pentanone (MIBK)	670	U	670	66	ug/L			02/17/16 17:56	66.67
Styrene	67	U	67	30	ug/L			02/17/16 17:56	66.67
1,1,2,2-Tetrachloroethane	67	U	67	15	ug/L			02/17/16 17:56	66.67
Tetrachloroethene	67	U	67	21	ug/L			02/17/16 17:56	66.67
Toluene	67	U	67	15	ug/L			02/17/16 17:56	66.67
Trichloroethene	**140**		67	15	ug/L			02/17/16 17:56	66.67
Vinyl chloride	**1800**		67	19	ug/L			02/17/16 17:56	66.67
Xylenes, Total	130	U	130	35	ug/L			02/17/16 17:56	66.67
1,1,1-Trichloroethane	67	U	67	29	ug/L			02/17/16 17:56	66.67
1,1,2-Trichloroethane	67	U	67	16	ug/L			02/17/16 17:56	66.67
Cyclohexane	67	U	67	30	ug/L			02/17/16 17:56	66.67
1,2-Dibromo-3-Chloropropane	67	U	67	55	ug/L			02/17/16 17:56	66.67
1,2-Dibromoethane	67	U	67	21	ug/L			02/17/16 17:56	66.67
Dichlorodifluoromethane	67	U	67	21	ug/L			02/17/16 17:56	66.67
cis-1,2-Dichloroethene	**1200**		67	17	ug/L			02/17/16 17:56	66.67
trans-1,2-Dichloroethene	**60**	**J**	67	20	ug/L			02/17/16 17:56	66.67
Isopropylbenzene	67	U	67	23	ug/L			02/17/16 17:56	66.67
Methyl acetate	670	U	670	150	ug/L			02/17/16 17:56	66.67
Methyl tert-butyl ether	**32**	**J**	67	13	ug/L			02/17/16 17:56	66.67
1,1,2-Trichloro-1,2,2-trifluoroethane	67	U	67	30	ug/L			02/17/16 17:56	66.67
1,2,4-Trichlorobenzene	67	U	67	21	ug/L			02/17/16 17:56	66.67
1,2-Dichlorobenzene	67	U	67	17	ug/L			02/17/16 17:56	66.67
1,3-Dichlorobenzene	67	U	67	13	ug/L			02/17/16 17:56	66.67
1,4-Dichlorobenzene	67	U	67	18	ug/L			02/17/16 17:56	66.67
Trichlorofluoromethane	67	U	67	33	ug/L			02/17/16 17:56	66.67
Dibromochloromethane	67	U	67	29	ug/L			02/17/16 17:56	66.67
Methylcyclohexane	67	U	67	29	ug/L			02/17/16 17:56	66.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		78 - 125		02/17/16 17:56	66.67
4-Bromofluorobenzene (Surr)	96		61 - 120		02/17/16 17:56	66.67
Toluene-d8 (Surr)	101		80 - 120		02/17/16 17:56	66.67
Dibromofluoromethane (Surr)	98		79 - 120		02/17/16 17:56	66.67

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

Client Sample ID: TB-17303-020316-CB-011
Date Collected: 02/03/16 00:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.1**	**J**	10	0.94	ug/L			02/17/16 18:18	1
Benzene	1.0	U	1.0	0.35	ug/L			02/17/16 18:18	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/17/16 18:18	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/17/16 18:18	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/17/16 18:18	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/17/16 18:18	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/17/16 18:18	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/17/16 18:18	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/17/16 18:18	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/17/16 18:18	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/17/16 18:18	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/17/16 18:18	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/17/16 18:18	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/17/16 18:18	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/17/16 18:18	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/17/16 18:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/17/16 18:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/17/16 18:18	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/17/16 18:18	1
2-Hexanone	10	U	10	0.48	ug/L			02/17/16 18:18	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/17/16 18:18	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/17/16 18:18	1
Styrene	1.0	U	1.0	0.45	ug/L			02/17/16 18:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/17/16 18:18	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/17/16 18:18	1
Toluene	1.0	U	1.0	0.23	ug/L			02/17/16 18:18	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/17/16 18:18	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/17/16 18:18	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/17/16 18:18	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/17/16 18:18	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/17/16 18:18	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/17/16 18:18	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/17/16 18:18	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/17/16 18:18	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/17/16 18:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/17/16 18:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/17/16 18:18	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/17/16 18:18	1
Methyl acetate	10	U	10	2.3	ug/L			02/17/16 18:18	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/17/16 18:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/17/16 18:18	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/17/16 18:18	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/17/16 18:18	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/17/16 18:18	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/17/16 18:18	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/17/16 18:18	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/17/16 18:18	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/17/16 18:18	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		78 - 125		02/17/16 18:18	1
4-Bromofluorobenzene (Surr)	95		61 - 120		02/17/16 18:18	1
Toluene-d8 (Surr)	100		80 - 120		02/17/16 18:18	1
Dibromofluoromethane (Surr)	98		79 - 120		02/17/16 18:18	1

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

Client Sample ID: SO-17303-020316-CB-002
Date Collected: 02/03/16 12:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-4
Matrix: Solid
Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	7200	U	7200	2700	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Benzene	480	U	480	110	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Bromodichloromethane	960	U	960	460	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Bromoform	960	U	960	730	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Bromomethane	2400	U	2400	610	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
2-Butanone (MEK)	7200	U	7200	880	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Carbon disulfide	2400	U	2400	670	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Carbon tetrachloride	480	U	480	220	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Chlorobenzene	480	U	480	160	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Chloroethane	2400	U	2400	610	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Chloroform	480	U	480	430	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Chloromethane	2400	U	2400	580	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,1-Dichloroethane	480	U	480	420	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,2-Dichloroethane	480	U	480	120	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,1-Dichloroethene	480	U	480	360	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,2-Dichloropropane	480	U	480	380	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
cis-1,3-Dichloropropene	480	U	480	260	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
trans-1,3-Dichloropropene	480	U	480	310	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Ethylbenzene	480	U	480	420	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
2-Hexanone	24000	U	24000	1000	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Methylene Chloride	2400	U	2400	1000	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
4-Methyl-2-pentanone (MIBK)	24000	U	24000	670	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Styrene	480	U	480	320	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,1,2,2-Tetrachloroethane	480	U	480	300	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Tetrachloroethene	480	U	480	320	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Toluene	960	U	960	120	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Trichloroethene	**780**		480	470	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Vinyl chloride	**17000**		380	200	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Xylenes, Total	1400	U	1400	380	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,1,1-Trichloroethane	480	U	480	320	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,1,2-Trichloroethane	480	U	480	230	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Cyclohexane	12000	U	12000	360	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,2-Dibromo-3-Chloropropane	2400	U	2400	850	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,2-Dibromoethane	2400	U	2400	380	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Dichlorodifluoromethane	960	U	960	730	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
cis-1,2-Dichloroethene	**9600**		480	460	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
trans-1,2-Dichloroethene	**450**	**J**	480	310	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Isopropylbenzene	2400	U	2400	160	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Methyl acetate	12000	U	12000	660	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Methyl tert-butyl ether	2400	U	2400	360	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,1,2-Trichloro-1,2,2-trifluoroethane	2400	U	2400	500	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,2,4-Trichlorobenzene	2400	U	2400	360	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,2-Dichlorobenzene	960	U	960	230	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,3-Dichlorobenzene	960	U	960	360	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
1,4-Dichlorobenzene	960	U	960	490	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Trichlorofluoromethane	960	U	960	420	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Dibromochloromethane	480	U	480	240	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10
Methylcyclohexane	12000	U	12000	460	ug/Kg	☼	02/12/16 18:03	02/17/16 21:59	10

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	64		39 - 128	02/12/16 18:03	02/17/16 21:59	10
4-Bromofluorobenzene (Surr)	74		26 - 141	02/12/16 18:03	02/17/16 21:59	10
Toluene-d8 (Surr)	81		33 - 134	02/12/16 18:03	02/17/16 21:59	10
Dibromofluoromethane (Surr)	74		30 - 122	02/12/16 18:03	02/17/16 21:59	10

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

Client Sample ID: SO-17303-020416-CB-003
Date Collected: 02/04/16 10:30
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-5
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	610	U	610	230	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Benzene	41	U	41	9.2	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Bromodichloromethane	82	U	82	39	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Bromoform	82	U	82	62	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Bromomethane	200	U	200	52	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
2-Butanone (MEK)	610	U	610	74	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Carbon disulfide	200	U F2	200	57	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Carbon tetrachloride	41	U	41	18	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Chlorobenzene	41	U	41	13	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Chloroethane	200	U	200	52	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Chloroform	41	U	41	37	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Chloromethane	200	U	200	49	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,1-Dichloroethane	41	U	41	36	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,2-Dichloroethane	41	U	41	10	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,1-Dichloroethene	41	U	41	31	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,2-Dichloropropane	41	U	41	33	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
cis-1,3-Dichloropropene	41	U	41	22	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
trans-1,3-Dichloropropene	41	U	41	27	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Ethylbenzene	41	U	41	36	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
2-Hexanone	2000	U	2000	86	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Methylene Chloride	200	U	200	87	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	57	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Styrene	41	U	41	28	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,1,2,2-Tetrachloroethane	41	U	41	26	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Tetrachloroethene	**60**		41	28	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Toluene	**34**	**J**	82	10	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Trichloroethene	41	U	41	40	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Vinyl chloride	**45**		33	17	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Xylenes, Total	**420**		120	33	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,1,1-Trichloroethane	41	U	41	28	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,1,2-Trichloroethane	41	U	41	19	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Cyclohexane	980	U	980	31	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,2-Dibromo-3-Chloropropane	200	U	200	72	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,2-Dibromoethane	200	U	200	33	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Dichlorodifluoromethane	82	U	82	62	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
cis-1,2-Dichloroethene	**79**		41	39	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
trans-1,2-Dichloroethene	41	U	41	27	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Isopropylbenzene	**150**	**J**	200	13	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Methyl acetate	**140**	**J**	980	56	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Methyl tert-butyl ether	200	U	200	31	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	43	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,2,4-Trichlorobenzene	200	U	200	31	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,2-Dichlorobenzene	82	U	82	19	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,3-Dichlorobenzene	82	U	82	31	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
1,4-Dichlorobenzene	82	U	82	42	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Trichlorofluoromethane	82	U	82	36	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Dibromochloromethane	41	U	41	20	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1
Methylcyclohexane	**79**	**J**	980	39	ug/Kg	☼	02/12/16 18:03	02/18/16 01:43	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		39 - 128	02/12/16 18:03	02/18/16 01:43	1
4-Bromofluorobenzene (Surr)	91		26 - 141	02/12/16 18:03	02/18/16 01:43	1
Toluene-d8 (Surr)	93		33 - 134	02/12/16 18:03	02/18/16 01:43	1
Dibromofluoromethane (Surr)	85		30 - 122	02/12/16 18:03	02/18/16 01:43	1

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

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	680	U	680	260	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Benzene	45	U	45	10	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Bromodichloromethane	91	U	91	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Bromoform	91	U	91	69	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Bromomethane	230	U	230	58	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
2-Butanone (MEK)	680	U	680	83	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Carbon disulfide	230	U	230	64	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Carbon tetrachloride	45	U	45	20	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Chlorobenzene	45	U	45	15	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Chloroethane	230	U	230	58	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Chloroform	45	U	45	41	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Chloromethane	230	U	230	54	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,1-Dichloroethane	45	U	45	40	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,2-Dichloroethane	45	U	45	11	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,1-Dichloroethene	45	U	45	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,2-Dichloropropane	45	U	45	36	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
cis-1,3-Dichloropropene	45	U	45	25	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
trans-1,3-Dichloropropene	45	U	45	29	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Ethylbenzene	45	U	45	40	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
2-Hexanone	2300	U	2300	95	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Methylene Chloride	230	U	230	96	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
4-Methyl-2-pentanone (MIBK)	2300	U	2300	64	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Styrene	45	U	45	31	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,1,2,2-Tetrachloroethane	45	U	45	28	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Tetrachloroethene	45	U	45	31	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Toluene	**12**	**J**	91	11	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Trichloroethene	45	U	45	44	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Vinyl chloride	36	U	36	19	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Xylenes, Total	**120**	**J**	140	36	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,1,1-Trichloroethane	45	U	45	31	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,1,2-Trichloroethane	45	U	45	22	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Cyclohexane	1100	U	1100	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,2-Dibromo-3-Chloropropane	230	U	230	81	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,2-Dibromoethane	230	U	230	36	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Dichlorodifluoromethane	91	U	91	69	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
cis-1,2-Dichloroethene	45	U	45	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
trans-1,2-Dichloroethene	45	U	45	29	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Isopropylbenzene	**16**	**J**	230	15	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Methyl acetate	**210**	**J**	1100	62	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Methyl tert-butyl ether	230	U	230	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	230	U	230	48	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,2,4-Trichlorobenzene	230	U	230	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,2-Dichlorobenzene	91	U	91	22	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,3-Dichlorobenzene	91	U	91	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
1,4-Dichlorobenzene	91	U	91	47	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Trichlorofluoromethane	91	U	91	40	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Dibromochloromethane	45	U	45	23	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1
Methylcyclohexane	1100	U	1100	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:05	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		39 - 128	02/12/16 18:03	02/18/16 02:05	1
4-Bromofluorobenzene (Surr)	80		26 - 141	02/12/16 18:03	02/18/16 02:05	1
Toluene-d8 (Surr)	86		33 - 134	02/12/16 18:03	02/18/16 02:05	1
Dibromofluoromethane (Surr)	83		30 - 122	02/12/16 18:03	02/18/16 02:05	1

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

Client Sample ID: SO-17303-020416-CB-005
Date Collected: 02/04/16 13:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-7
Matrix: Solid
Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	680	U	680	250	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Benzene	45	U	45	10	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Bromodichloromethane	90	U	90	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Bromoform	90	U	90	69	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Bromomethane	230	U	230	57	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
2-Butanone (MEK)	680	U	680	82	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Carbon disulfide	230	U	230	63	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Carbon tetrachloride	**44**	**J**	45	20	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Chlorobenzene	45	U	45	15	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Chloroethane	230	U	230	57	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Chloroform	45	U	45	41	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Chloromethane	230	U	230	54	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,1-Dichloroethane	45	U	45	39	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,2-Dichloroethane	45	U	45	11	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,1-Dichloroethene	45	U	45	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,2-Dichloropropane	45	U	45	36	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
cis-1,3-Dichloropropene	45	U	45	25	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
trans-1,3-Dichloropropene	45	U	45	29	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Ethylbenzene	45	U	45	39	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
2-Hexanone	2300	U	2300	95	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Methylene Chloride	**150**	**J**	230	96	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
4-Methyl-2-pentanone (MIBK)	2300	U	2300	63	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Styrene	45	U	45	30	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,1,2,2-Tetrachloroethane	45	U	45	28	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Tetrachloroethene	45	U	45	30	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Toluene	**30**	**J**	90	11	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Trichloroethene	45	U	45	44	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Vinyl chloride	36	U	36	19	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Xylenes, Total	**120**	**J**	140	36	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,1,1-Trichloroethane	45	U	45	30	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,1,2-Trichloroethane	45	U	45	21	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Cyclohexane	1100	U	1100	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,2-Dibromo-3-Chloropropane	230	U	230	80	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,2-Dibromoethane	230	U	230	36	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Dichlorodifluoromethane	90	U	90	69	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
cis-1,2-Dichloroethene	45	U	45	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
trans-1,2-Dichloroethene	45	U	45	29	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Isopropylbenzene	230	U	230	15	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Methyl acetate	**280**	**J**	1100	62	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Methyl tert-butyl ether	230	U	230	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	230	U	230	47	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,2,4-Trichlorobenzene	230	U	230	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,2-Dichlorobenzene	90	U	90	21	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,3-Dichlorobenzene	90	U	90	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
1,4-Dichlorobenzene	90	U	90	46	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Trichlorofluoromethane	90	U	90	39	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Dibromochloromethane	45	U	45	23	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1
Methylcyclohexane	1100	U	1100	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:28	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		39 - 128	02/12/16 18:03	02/18/16 02:28	1
4-Bromofluorobenzene (Surr)	92		26 - 141	02/12/16 18:03	02/18/16 02:28	1
Toluene-d8 (Surr)	94		33 - 134	02/12/16 18:03	02/18/16 02:28	1
Dibromofluoromethane (Surr)	89		30 - 122	02/12/16 18:03	02/18/16 02:28	1

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

Client Sample ID: SO-17303-020416-CB-006
Date Collected: 02/04/16 13:10
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-8
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	690	U	690	260	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Benzene	46	U	46	10	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Bromodichloromethane	91	U	91	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Bromoform	91	U	91	70	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Bromomethane	230	U	230	58	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
2-Butanone (MEK)	690	U	690	83	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Carbon disulfide	230	U	230	64	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Carbon tetrachloride	46	U	46	21	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Chlorobenzene	46	U	46	15	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Chloroethane	230	U	230	58	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Chloroform	46	U	46	41	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Chloromethane	230	U	230	55	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,1-Dichloroethane	46	U	46	40	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,2-Dichloroethane	46	U	46	11	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,1-Dichloroethene	46	U	46	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,2-Dichloropropane	46	U	46	37	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
cis-1,3-Dichloropropene	46	U	46	25	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
trans-1,3-Dichloropropene	46	U	46	30	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Ethylbenzene	46	U	46	40	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
2-Hexanone	2300	U	2300	96	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Methylene Chloride	230	U	230	97	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
4-Methyl-2-pentanone (MIBK)	2300	U	2300	64	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Styrene	46	U	46	31	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,1,2,2-Tetrachloroethane	46	U	46	29	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Tetrachloroethene	46	U	46	31	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Toluene	91	U	91	11	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Trichloroethene	**340**		46	45	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Vinyl chloride	37	U	37	19	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Xylenes, Total	140	U	140	37	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,1,1-Trichloroethane	46	U	46	31	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,1,2-Trichloroethane	46	U	46	22	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Cyclohexane	1100	U	1100	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,2-Dibromo-3-Chloropropane	230	U	230	81	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,2-Dibromoethane	230	U	230	37	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Dichlorodifluoromethane	91	U	91	70	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
cis-1,2-Dichloroethene	**89**		46	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
trans-1,2-Dichloroethene	46	U	46	30	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Isopropylbenzene	230	U	230	15	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Methyl acetate	1100	U	1100	63	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Methyl tert-butyl ether	230	U	230	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	230	U	230	48	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,2,4-Trichlorobenzene	230	U	230	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,2-Dichlorobenzene	91	U	91	22	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,3-Dichlorobenzene	91	U	91	34	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
1,4-Dichlorobenzene	91	U	91	47	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Trichlorofluoromethane	91	U	91	40	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Dibromochloromethane	46	U	46	23	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1
Methylcyclohexane	1100	U	1100	43	ug/Kg	☼	02/12/16 18:03	02/18/16 02:51	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		39 - 128	02/12/16 18:03	02/18/16 02:51	1
4-Bromofluorobenzene (Surr)	79		26 - 141	02/12/16 18:03	02/18/16 02:51	1
Toluene-d8 (Surr)	87		33 - 134	02/12/16 18:03	02/18/16 02:51	1
Dibromofluoromethane (Surr)	87		30 - 122	02/12/16 18:03	02/18/16 02:51	1

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

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	730	U	730	280	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Benzene	49	U	49	11	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Bromodichloromethane	98	U	98	46	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Bromoform	98	U	98	75	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Bromomethane	240	U	240	62	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
2-Butanone (MEK)	730	U	730	89	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Carbon disulfide	240	U	240	68	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Carbon tetrachloride	49	U	49	22	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Chlorobenzene	49	U	49	16	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Chloroethane	240	U	240	62	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Chloroform	49	U	49	44	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Chloromethane	240	U	240	59	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,1-Dichloroethane	49	U	49	43	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,2-Dichloroethane	49	U	49	12	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,1-Dichloroethene	49	U	49	37	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,2-Dichloropropane	49	U	49	39	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
cis-1,3-Dichloropropene	49	U	49	27	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
trans-1,3-Dichloropropene	49	U	49	32	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Ethylbenzene	49	U	49	43	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
2-Hexanone	2400	U	2400	100	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Methylene Chloride	240	U	240	100	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	68	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Styrene	49	U	49	33	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,1,2,2-Tetrachloroethane	49	U	49	31	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Tetrachloroethene	49	U	49	33	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Toluene	98	U	98	12	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Trichloroethene	49	U	49	48	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Vinyl chloride	39	U	39	21	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Xylenes, Total	150	U	150	39	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,1,1-Trichloroethane	49	U	49	33	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,1,2-Trichloroethane	49	U	49	23	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Cyclohexane	1200	U	1200	37	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,2-Dibromo-3-Chloropropane	240	U	240	87	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,2-Dibromoethane	240	U	240	39	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Dichlorodifluoromethane	98	U	98	75	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
cis-1,2-Dichloroethene	49	U	49	46	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
trans-1,2-Dichloroethene	49	U	49	32	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Isopropylbenzene	240	U	240	16	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Methyl acetate	**240**	**J**	1200	67	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Methyl tert-butyl ether	240	U	240	37	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	51	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,2,4-Trichlorobenzene	240	U	240	37	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,2-Dichlorobenzene	98	U	98	23	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,3-Dichlorobenzene	98	U	98	37	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
1,4-Dichlorobenzene	98	U	98	50	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Trichlorofluoromethane	98	U	98	43	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Dibromochloromethane	49	U	49	24	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1
Methylcyclohexane	1200	U	1200	46	ug/Kg	☼	02/12/16 18:03	02/17/16 22:41	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		39 - 128	02/12/16 18:03	02/17/16 22:41	1
4-Bromofluorobenzene (Surr)	85		26 - 141	02/12/16 18:03	02/17/16 22:41	1
Toluene-d8 (Surr)	90		33 - 134	02/12/16 18:03	02/17/16 22:41	1
Dibromofluoromethane (Surr)	90		30 - 122	02/12/16 18:03	02/17/16 22:41	1

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

Client Sample ID: TB-17303-020416-CB-008
Date Collected: 02/04/16 00:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	230	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Benzene	40	U	40	9.0	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Bromodichloromethane	80	U	80	38	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Bromoform	80	U	80	61	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Bromomethane	200	U	200	51	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
2-Butanone (MEK)	600	U	600	73	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Carbon disulfide	200	U	200	56	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Carbon tetrachloride	40	U	40	18	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Chlorobenzene	40	U	40	13	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Chloroethane	200	U	200	51	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Chloroform	40	U	40	36	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Chloromethane	200	U	200	48	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,1-Dichloroethane	40	U	40	35	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,1-Dichloroethene	40	U	40	30	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,2-Dichloropropane	40	U	40	32	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
cis-1,3-Dichloropropene	40	U	40	22	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
trans-1,3-Dichloropropene	40	U	40	26	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Ethylbenzene	40	U	40	35	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
2-Hexanone	2000	U	2000	84	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Methylene Chloride	200	U	200	85	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	56	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Styrene	40	U	40	27	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,1,2,2-Tetrachloroethane	40	U	40	25	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Tetrachloroethene	40	U	40	27	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Toluene	80	U	80	10	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Trichloroethene	40	U	40	39	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Vinyl chloride	32	U	32	17	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Xylenes, Total	120	U	120	32	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,1,1-Trichloroethane	40	U	40	27	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,1,2-Trichloroethane	40	U	40	19	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Cyclohexane	960	U	960	30	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,2-Dibromo-3-Chloropropane	200	U	200	71	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,2-Dibromoethane	200	U	200	32	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Dichlorodifluoromethane	80	U	80	61	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
cis-1,2-Dichloroethene	40	U	40	38	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
trans-1,2-Dichloroethene	40	U	40	26	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Isopropylbenzene	200	U	200	13	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Methyl acetate	960	U	960	55	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Methyl tert-butyl ether	200	U	200	30	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	42	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,2,4-Trichlorobenzene	200	U	200	30	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,2-Dichlorobenzene	80	U	80	19	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,3-Dichlorobenzene	80	U	80	30	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
1,4-Dichlorobenzene	80	U	80	41	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Trichlorofluoromethane	80	U	80	35	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Dibromochloromethane	40	U	40	20	ug/Kg		02/12/16 18:03	02/17/16 23:04	1
Methylcyclohexane	960	U	960	38	ug/Kg		02/12/16 18:03	02/17/16 23:04	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		39 - 128	02/12/16 18:03	02/17/16 23:04	1
4-Bromofluorobenzene (Surr)	96		26 - 141	02/12/16 18:03	02/17/16 23:04	1
Toluene-d8 (Surr)	101		33 - 134	02/12/16 18:03	02/17/16 23:04	1
Dibromofluoromethane (Surr)	100		30 - 122	02/12/16 18:03	02/17/16 23:04	1

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

Client Sample ID: SO-17303-020316-CB-002
Date Collected: 02/03/16 12:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-4
Matrix: Solid
Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	320	U	320	4.2	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2,2'-oxybis[1-chloropropane]	320	U	320	11	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2,4,5-Trichlorophenol	320	U	320	30	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2,4,6-Trichlorophenol	320	U	320	11	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2,4-Dichlorophenol	320	U	320	24	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2,4-Dimethylphenol	320	U	320	24	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2,4-Dinitrophenol	180	U	180	25	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2,4-Dinitrotoluene	320	U	320	20	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2,6-Dinitrotoluene	320	U	320	25	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2-Chloronaphthalene	320	U	320	0.54	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2-Chlorophenol	320	U	320	9.8	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2-Methylnaphthalene	320	U	320	0.60	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2-Methylphenol	320	U	320	13	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
2-Nitrophenol	320	U	320	9.9	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
3,3'-Dichlorobenzidine	320	U	320	22	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
4,6-Dinitro-2-methylphenol	240	U	240	11	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
4-Bromophenyl phenyl ether	180	U	180	16	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
4-Chloro-3-methylphenol	320	U	320	25	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
4-Chloroaniline	320	U	320	20	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
4-Chlorophenyl phenyl ether	240	U	240	16	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
4-Nitrophenol	400	U	400	20	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Acenaphthene	320	U	320	0.91	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Acenaphthylene	320	U	320	0.42	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Acetophenone	320	U	320	11	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Anthracene	320	U	320	0.93	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Atrazine	48	U	48	11	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Benzaldehyde	320	U	320	14	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Benzo[a]anthracene	320	U	320	0.75	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Benzo[a]pyrene	320	U	320	0.77	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Benzo[b]fluoranthene	320	U	320	0.71	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Benzo[g,h,i]perylene	320	U	320	0.42	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Benzo[k]fluoranthene	320	U	320	0.81	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Bis(2-chloroethoxy)methane	320	U	320	26	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Bis(2-chloroethyl)ether	96	U	96	2.4	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Bis(2-ethylhexyl) phthalate	320	U	320	23	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Butyl benzyl phthalate	320	U	320	12	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Caprolactam	320	U	320	44	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Carbazole	320	U	320	32	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Chrysene	320	U	320	1.3	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Dibenz(a,h)anthracene	320	U	320	0.79	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Dibenzofuran	320	U	320	0.79	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Diethyl phthalate	320	U	320	19	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Dimethyl phthalate	320	U	320	20	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Di-n-butyl phthalate	320	U	320	18	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Di-n-octyl phthalate	320	U	320	9.5	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Fluoranthene	320	U	320	0.66	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1

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

Client Sample ID: SO-17303-020316-CB-002
Date Collected: 02/03/16 12:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-4
Matrix: Solid
Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	320	U	320	0.63	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Hexachlorobenzene	320	U	320	2.5	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Hexachlorobutadiene	48	U	48	6.7	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Hexachlorocyclopentadiene	320	U	320	9.7	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Hexachloroethane	320	U	320	11	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Indeno[1,2,3-cd]pyrene	320	U	320	0.42	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Isophorone	**20**	**J B**	320	16	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Naphthalene	320	U	320	0.98	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Nitrobenzene	320	U	320	2.6	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
N-Nitrosodi-n-propylamine	320	U	320	7.5	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
N-Nitrosodiphenylamine	320	U	320	25	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Phenol	320	U	320	8.7	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Phenanthrene	320	U	320	0.87	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
Pyrene	**5.2**	**J**	320	0.53	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1
3 & 4 Methylphenol	320	U	320	24	ug/Kg	☼	02/10/16 08:09	02/22/16 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*24 - 110*	*02/10/16 08:09*	*02/22/16 17:59*	*1*
2-Fluorophenol (Surr)	*58*		*24 - 110*	*02/10/16 08:09*	*02/22/16 17:59*	*1*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 110*	*02/10/16 08:09*	*02/22/16 17:59*	*1*
Nitrobenzene-d5 (Surr)	*49*		*20 - 110*	*02/10/16 08:09*	*02/22/16 17:59*	*1*
Phenol-d5 (Surr)	*60*		*26 - 110*	*02/10/16 08:09*	*02/22/16 17:59*	*1*
Terphenyl-d14 (Surr)	*72*		*36 - 110*	*02/10/16 08:09*	*02/22/16 17:59*	*1*

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

Client Sample ID: SO-17303-020416-CB-003
Date Collected: 02/04/16 10:30
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-5
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**420**	**J**	5800	77	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2,2'-oxybis[1-chloropropane]	5800	U	5800	210	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2,4,5-Trichlorophenol	5800	U F1	5800	550	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2,4,6-Trichlorophenol	5800	U	5800	190	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2,4-Dichlorophenol	5800	U	5800	440	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2,4-Dimethylphenol	5800	U	5800	440	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2,4-Dinitrophenol	3300	U F1	3300	460	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2,4-Dinitrotoluene	5800	U	5800	370	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2,6-Dinitrotoluene	5800	U	5800	460	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2-Chloronaphthalene	5800	U	5800	9.8	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2-Chlorophenol	5800	U	5800	180	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2-Methylnaphthalene	**1800**	**J**	5800	11	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2-Methylphenol	5800	U	5800	240	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2-Nitroaniline	4400	U	4400	200	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
2-Nitrophenol	5800	U	5800	180	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
3,3'-Dichlorobenzidine	5800	U	5800	390	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
3-Nitroaniline	4400	U	4400	350	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
4,6-Dinitro-2-methylphenol	4400	U	4400	200	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
4-Bromophenyl phenyl ether	3300	U	3300	280	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
4-Chloro-3-methylphenol	5800	U F1	5800	460	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
4-Chloroaniline	5800	U F1	5800	370	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
4-Chlorophenyl phenyl ether	4400	U	4400	280	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
4-Nitroaniline	4400	U F1	4400	570	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
4-Nitrophenol	7200	U F1	7200	370	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Acenaphthene	**3500**	**J**	5800	17	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Acenaphthylene	**220**	**J**	5800	7.7	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Acetophenone	5800	U	5800	200	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Anthracene	**3200**	**J**	5800	17	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Atrazine	880	U	880	200	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Benzaldehyde	5800	U	5800	260	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Benzo[a]anthracene	**5800**		5800	14	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Benzo[a]pyrene	**5500**	**J**	5800	14	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Benzo[b]fluoranthene	**7500**		5800	13	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Benzo[g,h,i]perylene	**3300**	**J**	5800	7.7	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Benzo[k]fluoranthene	**2600**	**J**	5800	15	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Bis(2-chloroethoxy)methane	5800	U	5800	480	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Bis(2-chloroethyl)ether	1800	U	1800	44	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Bis(2-ethylhexyl) phthalate	5800	U F1 F2	5800	420	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Butyl benzyl phthalate	5800	U	5800	220	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Caprolactam	5800	U	5800	810	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Carbazole	**3200**	**J**	5800	590	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Chrysene	**6200**		5800	24	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Dibenz(a,h)anthracene	**740**	**J**	5800	14	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Dibenzofuran	**2700**	**J F1**	5800	14	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Diethyl phthalate	5800	U	5800	350	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Dimethyl phthalate	5800	U	5800	370	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Di-n-butyl phthalate	5800	U	5800	330	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Di-n-octyl phthalate	5800	U	5800	170	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Fluoranthene	**16000**		5800	12	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20

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

Client Sample ID: SO-17303-020416-CB-003
Date Collected: 02/04/16 10:30
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-5
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**4100**	**J**	5800	12	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Hexachlorobenzene	5800	U	5800	46	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Hexachlorobutadiene	880	U	880	120	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Hexachlorocyclopentadiene	5800	U F1	5800	180	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Hexachloroethane	5800	U	5800	200	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Indeno[1,2,3-cd]pyrene	**2900**	**J F1**	5800	7.7	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Isophorone	5800	U	5800	280	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Naphthalene	**6000**		5800	18	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Nitrobenzene	5800	U	5800	48	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
N-Nitrosodi-n-propylamine	5800	U	5800	140	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
N-Nitrosodiphenylamine	5800	U	5800	460	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Pentachlorophenol	3300	U F1	3300	200	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Phenol	5800	U	5800	160	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Phenanthrene	**16000**		5800	16	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
Pyrene	**14000**		5800	9.6	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20
3 & 4 Methylphenol	5800	U	5800	440	ug/Kg	☼	02/10/16 08:09	02/22/16 16:18	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*24 - 110*	*02/10/16 08:09*	*02/22/16 16:18*	*20*
2-Fluorophenol (Surr)	*70*		*24 - 110*	*02/10/16 08:09*	*02/22/16 16:18*	*20*
2,4,6-Tribromophenol (Surr)	*52*		*10 - 110*	*02/10/16 08:09*	*02/22/16 16:18*	*20*
Nitrobenzene-d5 (Surr)	*64*		*20 - 110*	*02/10/16 08:09*	*02/22/16 16:18*	*20*
Phenol-d5 (Surr)	*67*		*26 - 110*	*02/10/16 08:09*	*02/22/16 16:18*	*20*
Terphenyl-d14 (Surr)	*82*		*36 - 110*	*02/10/16 08:09*	*02/22/16 16:18*	*20*

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

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**77**	**J**	300	4.0	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2,4-Dinitrotoluene	300	U	300	19	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2-Chloronaphthalene	300	U	300	0.51	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2-Chlorophenol	300	U	300	9.3	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2-Methylnaphthalene	**110**	**J**	300	0.57	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2-Methylphenol	300	U	300	12	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
2-Nitrophenol	300	U	300	9.4	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
3,3'-Dichlorobenzidine	300	U	300	20	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
4,6-Dinitro-2-methylphenol	230	U	230	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
4-Bromophenyl phenyl ether	170	U	170	15	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
4-Chloroaniline	300	U	300	19	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
4-Chlorophenyl phenyl ether	230	U	230	15	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
4-Nitroaniline	230	U	230	29	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
4-Nitrophenol	370	U	370	19	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Acenaphthene	**570**		300	0.86	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Acenaphthylene	**18**	**J**	300	0.40	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Acetophenone	300	U	300	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Anthracene	**660**		300	0.88	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Atrazine	45	U	45	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Benzo[a]anthracene	**1000**		300	0.71	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Benzo[a]pyrene	**840**		300	0.72	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Benzo[b]fluoranthene	**1100**		300	0.67	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Benzo[g,h,i]perylene	**380**		300	0.40	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Benzo[k]fluoranthene	**500**		300	0.77	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Bis(2-chloroethyl)ether	90	U	90	2.3	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Bis(2-ethylhexyl) phthalate	**45**	**J**	300	21	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Caprolactam	300	U	300	42	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Carbazole	**580**		300	31	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Chrysene	**1100**		300	1.2	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Dibenz(a,h)anthracene	**120**	**J**	300	0.75	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Dibenzofuran	**400**		300	0.75	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Di-n-butyl phthalate	**200**	**J**	300	17	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Di-n-octyl phthalate	300	U	300	8.9	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Fluorene	**590**		300	0.60	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1

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

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Hexachlorobutadiene	45	U	45	6.3	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Hexachlorocyclopentadiene	300	U	300	9.2	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Indeno[1,2,3-cd]pyrene	**360**		300	0.40	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Isophorone	**21**	**J B**	300	15	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Naphthalene	**690**		300	0.93	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
N-Nitrosodi-n-propylamine	300	U	300	7.1	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
Phenol	300	U	300	8.3	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	02/10/16 08:09	02/22/16 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*24 - 110*	*02/10/16 08:09*	*02/22/16 18:50*	*1*
2-Fluorophenol (Surr)	*52*		*24 - 110*	*02/10/16 08:09*	*02/22/16 18:50*	*1*
2,4,6-Tribromophenol (Surr)	*51*		*10 - 110*	*02/10/16 08:09*	*02/22/16 18:50*	*1*
Nitrobenzene-d5 (Surr)	*44*		*20 - 110*	*02/10/16 08:09*	*02/22/16 18:50*	*1*
Phenol-d5 (Surr)	*59*		*26 - 110*	*02/10/16 08:09*	*02/22/16 18:50*	*1*
Terphenyl-d14 (Surr)	*79*		*36 - 110*	*02/10/16 08:09*	*02/22/16 18:50*	*1*

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

Client Sample ID: SO-17303-020416-CB-005
Date Collected: 02/04/16 13:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-7
Matrix: Solid
Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**77**	**J**	300	4.0	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2,4,5-Trichlorophenol	300	U	300	29	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2,4,6-Trichlorophenol	300	U	300	10	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2,4-Dinitrophenol	170	U	170	24	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2,4-Dinitrotoluene	300	U	300	19	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2-Chloronaphthalene	300	U	300	0.51	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2-Chlorophenol	300	U	300	9.4	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2-Methylnaphthalene	**84**	**J**	300	0.57	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2-Methylphenol	300	U	300	13	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
2-Nitrophenol	300	U	300	9.5	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
3,3'-Dichlorobenzidine	300	U	300	21	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
4,6-Dinitro-2-methylphenol	230	U	230	11	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
4-Bromophenyl phenyl ether	170	U	170	15	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
4-Chloroaniline	300	U	300	19	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
4-Chlorophenyl phenyl ether	230	U	230	15	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
4-Nitrophenol	380	U	380	19	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Acenaphthene	**460**		300	0.87	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Acenaphthylene	**11**	**J**	300	0.40	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Acetophenone	300	U	300	11	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Anthracene	**310**		300	0.89	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Atrazine	46	U	46	10	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Benzaldehyde	**120**	**J**	300	14	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Benzo[a]anthracene	**490**		300	0.72	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Benzo[a]pyrene	**420**		300	0.73	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Benzo[b]fluoranthene	**540**		300	0.67	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Benzo[g,h,i]perylene	**260**	**J**	300	0.40	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Benzo[k]fluoranthene	**270**	**J**	300	0.78	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Bis(2-chloroethyl)ether	91	U	91	2.3	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Bis(2-ethylhexyl) phthalate	**63**	**J**	300	22	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Caprolactam	300	U	300	42	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Carbazole	**310**		300	31	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Chrysene	**550**		300	1.3	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Dibenz(a,h)anthracene	**72**	**J**	300	0.75	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Dibenzofuran	**270**	**J**	300	0.75	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Di-n-butyl phthalate	**210**	**J**	300	17	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Di-n-octyl phthalate	300	U	300	9.0	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Fluoranthene	**1100**		300	0.63	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1

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

Client Sample ID: SO-17303-020416-CB-005
Date Collected: 02/04/16 13:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-7
Matrix: Solid
Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**350**		300	0.61	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Hexachlorobutadiene	46	U	46	6.4	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Hexachlorocyclopentadiene	300	U	300	9.3	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Indeno[1,2,3-cd]pyrene	**220**	**J**	300	0.40	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Isophorone	**25**	**J B**	300	15	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Naphthalene	**890**		300	0.94	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
N-Nitrosodi-n-propylamine	300	U	300	7.2	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Phenol	300	U	300	8.3	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Phenanthrene	**1100**		300	0.83	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
Pyrene	**930**		300	0.50	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	02/10/16 08:09	02/23/16 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*24 - 110*	*02/10/16 08:09*	*02/23/16 14:24*	*1*
2-Fluorophenol (Surr)	*72*		*24 - 110*	*02/10/16 08:09*	*02/23/16 14:24*	*1*
2,4,6-Tribromophenol (Surr)	*54*		*10 - 110*	*02/10/16 08:09*	*02/23/16 14:24*	*1*
Nitrobenzene-d5 (Surr)	*58*		*20 - 110*	*02/10/16 08:09*	*02/23/16 14:24*	*1*
Phenol-d5 (Surr)	*76*		*26 - 110*	*02/10/16 08:09*	*02/23/16 14:24*	*1*
Terphenyl-d14 (Surr)	*75*		*36 - 110*	*02/10/16 08:09*	*02/23/16 14:24*	*1*

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

Client Sample ID: SO-17303-020416-CB-006
Date Collected: 02/04/16 13:10
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-8
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	320	U	320	4.3	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2,2'-oxybis[1-chloropropane]	320	U	320	12	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2,4,5-Trichlorophenol	320	U	320	30	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2,4,6-Trichlorophenol	320	U	320	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2,4-Dichlorophenol	320	U	320	24	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2,4-Dimethylphenol	320	U	320	24	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2,4-Dinitrophenol	180	U	180	26	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2,4-Dinitrotoluene	320	U	320	21	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2,6-Dinitrotoluene	320	U	320	26	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2-Chloronaphthalene	320	U	320	0.55	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2-Chlorophenol	320	U	320	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2-Methylnaphthalene	**16**	**J**	320	0.61	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2-Methylphenol	320	U	320	13	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
2-Nitrophenol	320	U	320	10	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
3,3'-Dichlorobenzidine	320	U	320	22	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
4,6-Dinitro-2-methylphenol	240	U	240	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
4-Bromophenyl phenyl ether	180	U	180	16	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
4-Chloro-3-methylphenol	320	U	320	26	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
4-Chloroaniline	320	U	320	21	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
4-Chlorophenyl phenyl ether	240	U	240	16	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
4-Nitroaniline	240	U	240	32	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
4-Nitrophenol	400	U	400	21	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Acenaphthene	**77**	**J**	320	0.92	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Acenaphthylene	**4.5**	**J**	320	0.43	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Acetophenone	320	U	320	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Anthracene	**150**	**J**	320	0.95	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Atrazine	49	U	49	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Benzaldehyde	320	U	320	15	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Benzo[a]anthracene	**240**	**J**	320	0.77	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Benzo[a]pyrene	**210**	**J**	320	0.78	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Benzo[b]fluoranthene	**280**	**J**	320	0.72	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Benzo[g,h,i]perylene	**100**	**J**	320	0.43	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Benzo[k]fluoranthene	**110**	**J**	320	0.83	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Bis(2-chloroethoxy)methane	320	U	320	27	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Bis(2-chloroethyl)ether	97	U	97	2.4	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Bis(2-ethylhexyl) phthalate	**28**	**J**	320	23	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Butyl benzyl phthalate	320	U	320	12	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Caprolactam	320	U	320	45	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Carbazole	**98**	**J**	320	33	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Chrysene	**270**	**J**	320	1.3	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Dibenz(a,h)anthracene	**29**	**J**	320	0.80	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Dibenzofuran	**59**	**J**	320	0.80	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Diethyl phthalate	320	U	320	19	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Dimethyl phthalate	320	U	320	21	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Di-n-butyl phthalate	320	U	320	18	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Di-n-octyl phthalate	320	U	320	9.6	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Fluoranthene	**580**		320	0.67	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1

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

Client Sample ID: SO-17303-020416-CB-006
Date Collected: 02/04/16 13:10
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-8
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**110**	**J**	320	0.64	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Hexachlorobenzene	320	U	320	2.6	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Hexachlorobutadiene	49	U	49	6.8	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Hexachlorocyclopentadiene	320	U	320	9.9	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Hexachloroethane	320	U	320	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Indeno[1,2,3-cd]pyrene	**90**	**J**	320	0.43	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Isophorone	**17**	**J B**	320	16	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Naphthalene	**38**	**J**	320	1.0	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Nitrobenzene	320	U	320	2.7	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
N-Nitrosodi-n-propylamine	320	U	320	7.7	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
N-Nitrosodiphenylamine	320	U	320	26	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Phenol	320	U	320	8.9	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Phenanthrene	**550**		320	0.89	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
Pyrene	**460**		320	0.54	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1
3 & 4 Methylphenol	320	U	320	24	ug/Kg	☼	02/10/16 08:09	02/22/16 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*24 - 110*	*02/10/16 08:09*	*02/22/16 18:25*	*1*
2-Fluorophenol (Surr)	*60*		*24 - 110*	*02/10/16 08:09*	*02/22/16 18:25*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*10 - 110*	*02/10/16 08:09*	*02/22/16 18:25*	*1*
Nitrobenzene-d5 (Surr)	*51*		*20 - 110*	*02/10/16 08:09*	*02/22/16 18:25*	*1*
Phenol-d5 (Surr)	*60*		*26 - 110*	*02/10/16 08:09*	*02/22/16 18:25*	*1*
Terphenyl-d14 (Surr)	*74*		*36 - 110*	*02/10/16 08:09*	*02/22/16 18:25*	*1*

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

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**2400**	**J**	64000	850	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2,2'-oxybis[1-chloropropane]	64000	U	64000	2300	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2,4,5-Trichlorophenol	64000	U	64000	6100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2,4,6-Trichlorophenol	64000	U	64000	2200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2,4-Dichlorophenol	64000	U	64000	4900	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2,4-Dimethylphenol	64000	U	64000	4900	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2,4-Dinitrophenol	37000	U	37000	5100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2,4-Dinitrotoluene	64000	U	64000	4100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2,6-Dinitrotoluene	64000	U	64000	5100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2-Chloronaphthalene	64000	U	64000	110	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2-Chlorophenol	64000	U	64000	2000	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2-Methylnaphthalene	**5600**	**J**	64000	120	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2-Methylphenol	64000	U	64000	2700	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2-Nitroaniline	49000	U	49000	2200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
2-Nitrophenol	64000	U	64000	2000	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
3,3'-Dichlorobenzidine	64000	U	64000	4400	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
3-Nitroaniline	49000	U	49000	3900	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
4,6-Dinitro-2-methylphenol	49000	U	49000	2200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
4-Bromophenyl phenyl ether	37000	U	37000	3200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
4-Chloro-3-methylphenol	64000	U	64000	5100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
4-Chloroaniline	64000	U	64000	4100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
4-Chlorophenyl phenyl ether	49000	U	49000	3200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
4-Nitroaniline	49000	U	49000	6300	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
4-Nitrophenol	80000	U	80000	4100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Acenaphthene	**29000**	**J**	64000	190	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Acenaphthylene	**1100**	**J**	64000	85	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Acetophenone	64000	U	64000	2200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Anthracene	**52000**	**J**	64000	190	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Atrazine	9800	U	9800	2200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Benzaldehyde	64000	U	64000	2900	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Benzo[a]anthracene	**84000**		64000	150	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Benzo[a]pyrene	**71000**		64000	160	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Benzo[b]fluoranthene	**97000**		64000	140	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Benzo[g,h,i]perylene	**32000**	**J**	64000	85	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Benzo[k]fluoranthene	**35000**	**J**	64000	170	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Bis(2-chloroethoxy)methane	64000	U	64000	5400	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Bis(2-chloroethyl)ether	20000	U	20000	490	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Bis(2-ethylhexyl) phthalate	64000	U	64000	4600	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Butyl benzyl phthalate	64000	U	64000	2400	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Caprolactam	64000	U	64000	9000	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Carbazole	**34000**	**J**	64000	6600	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Chrysene	**87000**		64000	270	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Dibenz(a,h)anthracene	**10000**	**J**	64000	160	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Dibenzofuran	**21000**	**J**	64000	160	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Diethyl phthalate	64000	U	64000	3900	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Dimethyl phthalate	64000	U	64000	4100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Di-n-butyl phthalate	64000	U	64000	3700	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Di-n-octyl phthalate	64000	U	64000	1900	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Fluoranthene	**190000**		64000	130	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200

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

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**37000**	**J**	64000	130	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Hexachlorobenzene	64000	U	64000	510	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Hexachlorobutadiene	9800	U	9800	1400	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Hexachlorocyclopentadiene	64000	U	64000	2000	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Hexachloroethane	64000	U	64000	2200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Indeno[1,2,3-cd]pyrene	**30000**	**J**	64000	85	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Isophorone	64000	U	64000	3200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Naphthalene	**15000**	**J**	64000	200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Nitrobenzene	64000	U	64000	540	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
N-Nitrosodi-n-propylamine	64000	U	64000	1500	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
N-Nitrosodiphenylamine	64000	U	64000	5100	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Pentachlorophenol	37000	U	37000	2200	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Phenol	64000	U	64000	1800	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Phenanthrene	**180000**		64000	180	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
Pyrene	**160000**		64000	110	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200
3 & 4 Methylphenol	64000	U	64000	4900	ug/Kg	☼	02/10/16 08:09	02/22/16 17:34	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*0*	*X*	*24 - 110*	*02/10/16 08:09*	*02/22/16 17:34*	*200*
2-Fluorophenol (Surr)	*0*	*X*	*24 - 110*	*02/10/16 08:09*	*02/22/16 17:34*	*200*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*10 - 110*	*02/10/16 08:09*	*02/22/16 17:34*	*200*
Nitrobenzene-d5 (Surr)	*0*	*X*	*20 - 110*	*02/10/16 08:09*	*02/22/16 17:34*	*200*
Phenol-d5 (Surr)	*0*	*X*	*26 - 110*	*02/10/16 08:09*	*02/22/16 17:34*	*200*
Terphenyl-d14 (Surr)	*114*	*X*	*36 - 110*	*02/10/16 08:09*	*02/22/16 17:34*	*200*

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

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	2300		600	1.2	ug/Kg	☼	02/10/16 08:09	02/23/16 14:49	2
Phenanthrene	2400		600	1.7	ug/Kg	☼	02/10/16 08:09	02/23/16 14:49	2
Pyrene	2000		600	0.99	ug/Kg	☼	02/10/16 08:09	02/23/16 14:49	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*24 - 110*	*02/10/16 08:09*	*02/23/16 14:49*	*2*
2-Fluorophenol (Surr)	*53*		*24 - 110*	*02/10/16 08:09*	*02/23/16 14:49*	*2*
2,4,6-Tribromophenol (Surr)	*51*		*10 - 110*	*02/10/16 08:09*	*02/23/16 14:49*	*2*
Nitrobenzene-d5 (Surr)	*42*		*20 - 110*	*02/10/16 08:09*	*02/23/16 14:49*	*2*
Phenol-d5 (Surr)	*53*		*26 - 110*	*02/10/16 08:09*	*02/23/16 14:49*	*2*
Terphenyl-d14 (Surr)	*79*		*36 - 110*	*02/10/16 08:09*	*02/23/16 14:49*	*2*

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

Client Sample ID: SO-17303-020316-CB-002
Date Collected: 02/03/16 12:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-4
Matrix: Solid
Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	320	U	320	15	ug/Kg	☼	02/09/16 06:39	02/22/16 17:53	1
Aroclor-1221	320	U	320	19	ug/Kg	☼	02/09/16 06:39	02/22/16 17:53	1
Aroclor-1232	320	U	320	24	ug/Kg	☼	02/09/16 06:39	02/22/16 17:53	1
Aroclor-1242	320	U	320	13	ug/Kg	☼	02/09/16 06:39	02/22/16 17:53	1
Aroclor-1248	320	U	320	9.7	ug/Kg	☼	02/09/16 06:39	02/22/16 17:53	1
Aroclor-1254	320	U	320	17	ug/Kg	☼	02/09/16 06:39	02/22/16 17:53	1
Aroclor-1260	320	U	320	11	ug/Kg	☼	02/09/16 06:39	02/22/16 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*13 - 134*	*02/09/16 06:39*	*02/22/16 17:53*	*1*
DCB Decachlorobiphenyl	*59*		*10 - 155*	*02/09/16 06:39*	*02/22/16 17:53*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

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

Client Sample ID: SO-17303-020416-CB-003
Date Collected: 02/04/16 10:30
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-5
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	290	U	290	13	ug/Kg	☼	02/09/16 06:39	02/22/16 18:12	1
Aroclor-1221	290	U	290	17	ug/Kg	☼	02/09/16 06:39	02/22/16 18:12	1
Aroclor-1232	290	U	290	22	ug/Kg	☼	02/09/16 06:39	02/22/16 18:12	1
Aroclor-1242	290	U	290	12	ug/Kg	☼	02/09/16 06:39	02/22/16 18:12	1
Aroclor-1248	290	U	290	8.7	ug/Kg	☼	02/09/16 06:39	02/22/16 18:12	1
Aroclor-1254	290	U	290	15	ug/Kg	☼	02/09/16 06:39	02/22/16 18:12	1
Aroclor-1260	**250**	**J**	290	9.8	ug/Kg	☼	02/09/16 06:39	02/22/16 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*13 - 134*	*02/09/16 06:39*	*02/22/16 18:12*	*1*
DCB Decachlorobiphenyl	*99*		*10 - 155*	*02/09/16 06:39*	*02/22/16 18:12*	*1*

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

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	300	U	300	14	ug/Kg	☼	02/09/16 06:59	02/18/16 21:22	1
Aroclor-1221	300	U	300	18	ug/Kg	☼	02/09/16 06:59	02/18/16 21:22	1
Aroclor-1232	300	U	300	23	ug/Kg	☼	02/09/16 06:59	02/18/16 21:22	1
Aroclor-1242	300	U	300	13	ug/Kg	☼	02/09/16 06:59	02/18/16 21:22	1
Aroclor-1248	300	U	300	9.2	ug/Kg	☼	02/09/16 06:59	02/18/16 21:22	1
Aroclor-1254	300	U	300	16	ug/Kg	☼	02/09/16 06:59	02/18/16 21:22	1
Aroclor-1260	**34**	**J**	300	10	ug/Kg	☼	02/09/16 06:59	02/18/16 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*50*		*13 - 134*	*02/09/16 06:59*	*02/18/16 21:22*	*1*
DCB Decachlorobiphenyl	*71*		*10 - 155*	*02/09/16 06:59*	*02/18/16 21:22*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

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

Client Sample ID: SO-17303-020416-CB-005
Date Collected: 02/04/16 13:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-7
Matrix: Solid
Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	300	U	300	14	ug/Kg	☼	02/09/16 06:59	02/18/16 21:41	1
Aroclor-1221	300	U	300	18	ug/Kg	☼	02/09/16 06:59	02/18/16 21:41	1
Aroclor-1232	300	U	300	23	ug/Kg	☼	02/09/16 06:59	02/18/16 21:41	1
Aroclor-1242	300	U	300	13	ug/Kg	☼	02/09/16 06:59	02/18/16 21:41	1
Aroclor-1248	300	U	300	9.1	ug/Kg	☼	02/09/16 06:59	02/18/16 21:41	1
Aroclor-1254	300	U	300	16	ug/Kg	☼	02/09/16 06:59	02/18/16 21:41	1
Aroclor-1260	**25**	**J**	300	10	ug/Kg	☼	02/09/16 06:59	02/18/16 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*48*		*13 - 134*	*02/09/16 06:59*	*02/18/16 21:41*	*1*
DCB Decachlorobiphenyl	*110*		*10 - 155*	*02/09/16 06:59*	*02/18/16 21:41*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

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

Client Sample ID: SO-17303-020416-CB-006
Date Collected: 02/04/16 13:10
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-8
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	310	U	310	14	ug/Kg	☼	02/09/16 06:59	02/18/16 22:00	1
Aroclor-1221	310	U	310	19	ug/Kg	☼	02/09/16 06:59	02/18/16 22:00	1
Aroclor-1232	310	U	310	24	ug/Kg	☼	02/09/16 06:59	02/18/16 22:00	1
Aroclor-1242	310	U	310	13	ug/Kg	☼	02/09/16 06:59	02/18/16 22:00	1
Aroclor-1248	310	U	310	9.5	ug/Kg	☼	02/09/16 06:59	02/18/16 22:00	1
Aroclor-1254	310	U	310	17	ug/Kg	☼	02/09/16 06:59	02/18/16 22:00	1
Aroclor-1260	310	U	310	11	ug/Kg	☼	02/09/16 06:59	02/18/16 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*13 - 134*	*02/09/16 06:59*	*02/18/16 22:00*	*1*
DCB Decachlorobiphenyl	*72*		*10 - 155*	*02/09/16 06:59*	*02/18/16 22:00*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

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

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	330	U	330	15	ug/Kg	☼	02/09/16 06:59	02/18/16 22:19	1
Aroclor-1221	330	U	330	20	ug/Kg	☼	02/09/16 06:59	02/18/16 22:19	1
Aroclor-1232	330	U	330	25	ug/Kg	☼	02/09/16 06:59	02/18/16 22:19	1
Aroclor-1242	330	U	330	14	ug/Kg	☼	02/09/16 06:59	02/18/16 22:19	1
Aroclor-1248	330	U	330	9.9	ug/Kg	☼	02/09/16 06:59	02/18/16 22:19	1
Aroclor-1254	330	U	330	17	ug/Kg	☼	02/09/16 06:59	02/18/16 22:19	1
Aroclor-1260	**71**	**J**	330	11	ug/Kg	☼	02/09/16 06:59	02/18/16 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*44*		*13 - 134*	*02/09/16 06:59*	*02/18/16 22:19*	*1*
DCB Decachlorobiphenyl	*488*	*X*	*10 - 155*	*02/09/16 06:59*	*02/18/16 22:19*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020316-CB-002
Date Collected: 02/03/16 12:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-4
Matrix: Solid
Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	9.1		0.93	0.48	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Beryllium	0.087	J	0.19	0.030	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Cadmium	0.11		0.093	0.024	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Cobalt	1.4		0.47	0.055	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Chromium	3.6		0.93	0.087	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Copper	5.3		0.93	0.27	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Manganese	110	B	0.93	0.098	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Nickel	4.5		0.93	0.093	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Vanadium	6.7		0.93	0.23	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Zinc	19	B	2.3	0.65	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1
Lead	2.4		0.28	0.23	mg/Kg	☼	02/10/16 09:59	02/20/16 01:01	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020416-CB-003
Date Collected: 02/04/16 10:30
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-5
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	76		0.84	0.43	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Beryllium	0.29		0.17	0.027	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Cadmium	1.8		0.084	0.022	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Cobalt	3.2		0.42	0.049	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Chromium	17		0.84	0.079	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Copper	10		0.84	0.24	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Manganese	280	B	0.84	0.088	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Nickel	7.9		0.84	0.084	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Vanadium	11		0.84	0.21	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Zinc	100	B F1	2.1	0.59	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1
Lead	68	F1	0.25	0.21	mg/Kg	☼	02/10/16 09:59	02/19/16 10:30	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	41		0.78	0.40	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Beryllium	0.19		0.16	0.025	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Cadmium	0.38		0.078	0.021	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Cobalt	2.2		0.39	0.046	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Chromium	7.8		0.78	0.073	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Copper	5.7		0.78	0.23	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Manganese	230	B	0.78	0.082	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Nickel	5.5		0.78	0.078	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Vanadium	9.9		0.78	0.20	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Zinc	46	B	2.0	0.55	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1
Lead	15		0.23	0.20	mg/Kg	☼	02/10/16 09:59	02/20/16 01:05	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020416-CB-005
Date Collected: 02/04/16 13:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-7
Matrix: Solid
Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	32		0.73	0.37	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Beryllium	0.16		0.15	0.024	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Cadmium	0.39		0.073	0.019	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Cobalt	1.7		0.36	0.043	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Chromium	7.8		0.73	0.068	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Copper	4.7		0.73	0.21	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Manganese	190	B	0.73	0.076	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Nickel	4.5		0.73	0.073	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Vanadium	8.2		0.73	0.18	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Zinc	40	B	1.8	0.51	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1
Lead	14		0.22	0.18	mg/Kg	☼	02/10/16 09:59	02/20/16 01:09	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020416-CB-006
Date Collected: 02/04/16 13:10
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-8
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	6.8		0.75	0.38	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Beryllium	0.10	J	0.15	0.024	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Cadmium	0.12		0.075	0.020	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Cobalt	1.5		0.37	0.044	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Chromium	3.8		0.75	0.070	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Copper	5.7		0.75	0.21	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Manganese	130	B	0.75	0.078	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Nickel	5.4		0.75	0.075	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Vanadium	7.3		0.75	0.19	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Zinc	14	B	1.9	0.52	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1
Lead	2.5		0.22	0.19	mg/Kg	☼	02/10/16 09:59	02/20/16 01:13	1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	72		0.74	0.38	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Beryllium	0.27		0.15	0.024	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Cadmium	3.8		0.074	0.020	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Cobalt	2.0		0.37	0.044	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Chromium	20		0.74	0.070	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Copper	11		0.74	0.21	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Manganese	260	B	0.74	0.078	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Nickel	5.6		0.74	0.074	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Vanadium	8.5		0.74	0.19	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1
Zinc	130	B	1.9	0.52	mg/Kg	☼	02/10/16 09:59	02/20/16 01:17	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6010B - Metals (ICP) - Fractionated

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	140		0.30	0.20	mg/Kg			03/01/16 17:32	1
Lead (coarse particulate matter)	140		0.30	0.20	mg/Kg	☼	02/29/16 11:13	03/01/16 14:28	1
Lead (fine particulate matter)	140		0.30	0.20	mg/Kg	☼	02/29/16 11:13	03/01/16 14:32	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020316-CB-002
Date Collected: 02/03/16 12:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-4
Matrix: Solid
Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.056	J	0.37	0.016	mg/Kg	☼	02/10/16 09:59	02/11/16 21:17	2
Arsenic	1.7		0.19	0.030	mg/Kg	☼	02/10/16 09:59	02/11/16 21:17	2
Selenium	1.0		0.37	0.047	mg/Kg	☼	02/10/16 09:59	02/11/16 21:17	2
Thallium	0.037	J	0.19	0.022	mg/Kg	☼	02/10/16 09:59	02/11/16 21:17	2
Silver	0.0058	J	0.19	0.0016	mg/Kg	☼	02/10/16 09:59	02/11/16 21:17	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020416-CB-003
Date Collected: 02/04/16 10:30
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-5
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	F1	0.34	0.015	mg/Kg	☼	02/10/16 09:59	02/11/16 20:13	2
Arsenic	4.1		0.17	0.027	mg/Kg	☼	02/10/16 09:59	02/11/16 20:13	2
Selenium	1.4		0.34	0.042	mg/Kg	☼	02/10/16 09:59	02/11/16 20:13	2
Thallium	0.074	J	0.17	0.020	mg/Kg	☼	02/10/16 09:59	02/11/16 20:13	2
Silver	0.057	J	0.17	0.0015	mg/Kg	☼	02/10/16 09:59	02/11/16 20:13	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41		0.31	0.014	mg/Kg	☼	02/10/16 09:59	02/11/16 21:21	2
Arsenic	2.8		0.16	0.025	mg/Kg	☼	02/10/16 09:59	02/11/16 21:21	2
Selenium	0.48		0.31	0.039	mg/Kg	☼	02/10/16 09:59	02/11/16 21:21	2
Thallium	0.050	J	0.16	0.019	mg/Kg	☼	02/10/16 09:59	02/11/16 21:21	2
Silver	0.037	J	0.16	0.0014	mg/Kg	☼	02/10/16 09:59	02/11/16 21:21	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020416-CB-005
Date Collected: 02/04/16 13:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-7
Matrix: Solid
Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61		0.29	0.013	mg/Kg	☼	02/10/16 09:59	02/11/16 21:26	2
Arsenic	2.1		0.15	0.024	mg/Kg	☼	02/10/16 09:59	02/11/16 21:26	2
Selenium	0.44		0.29	0.036	mg/Kg	☼	02/10/16 09:59	02/11/16 21:26	2
Thallium	0.050	J	0.15	0.017	mg/Kg	☼	02/10/16 09:59	02/11/16 21:26	2
Silver	0.048	J	0.15	0.0013	mg/Kg	☼	02/10/16 09:59	02/11/16 21:26	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020416-CB-006
Date Collected: 02/04/16 13:10
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-8
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.098	J	0.30	0.013	mg/Kg	☼	02/10/16 09:59	02/11/16 21:30	2
Arsenic	9.0		0.15	0.024	mg/Kg	☼	02/10/16 09:59	02/11/16 21:30	2
Selenium	0.77		0.30	0.037	mg/Kg	☼	02/10/16 09:59	02/11/16 21:30	2
Thallium	0.089	J	0.15	0.018	mg/Kg	☼	02/10/16 09:59	02/11/16 21:30	2
Silver	0.0080	J	0.15	0.0013	mg/Kg	☼	02/10/16 09:59	02/11/16 21:30	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.4		0.30	0.013	mg/Kg	☼	02/10/16 09:59	02/11/16 21:34	2
Arsenic	2.8		0.15	0.024	mg/Kg	☼	02/10/16 09:59	02/11/16 21:34	2
Selenium	1.4		0.30	0.037	mg/Kg	☼	02/10/16 09:59	02/11/16 21:34	2
Thallium	0.088	J	0.15	0.018	mg/Kg	☼	02/10/16 09:59	02/11/16 21:34	2
Silver	0.10	J	0.15	0.0013	mg/Kg	☼	02/10/16 09:59	02/11/16 21:34	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020316-CB-002
Date Collected: 02/03/16 12:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-4
Matrix: Solid
Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055	U	0.055	0.019	mg/Kg	☼	02/10/16 10:08	02/11/16 12:41	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020416-CB-003
Date Collected: 02/04/16 10:30
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-5
Matrix: Solid
Percent Solids: 90.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039	J F1	0.042	0.015	mg/Kg	☼	02/10/16 10:08	02/11/16 11:47	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
Matrix: Solid
Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048	U	0.048	0.017	mg/Kg	☼	02/10/16 10:08	02/11/16 12:23	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020416-CB-005
Date Collected: 02/04/16 13:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-7
Matrix: Solid
Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048	U	0.048	0.017	mg/Kg	☼	02/10/16 10:08	02/11/16 12:08	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020416-CB-006
Date Collected: 02/04/16 13:10
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-8
Matrix: Solid
Percent Solids: 83.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	U	0.044	0.015	mg/Kg	☼	02/10/16 10:08	02/11/16 11:53	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050	J	0.054	0.019	mg/Kg	☼	02/10/16 10:08	02/11/16 11:55	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

General Chemistry

Client Sample ID: SO-17303-020316-CB-002
Date Collected: 02/03/16 12:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-4
Matrix: Solid
Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.4		0.1	0.1	%			02/08/16 15:04	1
Percent Moisture	16.6		0.1	0.1	%			02/08/16 15:04	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

General Chemistry

Client Sample ID: SO-17303-020416-CB-003
Date Collected: 02/04/16 10:30
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-5
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	%			02/08/16 15:04	1
Percent Moisture	9.6		0.1	0.1	%			02/08/16 15:04	1

General Chemistry

Client Sample ID: SO-17303-020416-CB-004
Date Collected: 02/04/16 12:50
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-6
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	%			02/08/16 15:04	1
Percent Moisture	11.9		0.1	0.1	%			02/08/16 15:04	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

General Chemistry

Client Sample ID: SO-17303-020416-CB-005
Date Collected: 02/04/16 13:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-7
Matrix: Solid
Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.2		0.1	0.1	%			02/08/16 15:04	1
Percent Moisture	11.8		0.1	0.1	%			02/08/16 15:04	1

General Chemistry

Client Sample ID: SO-17303-020416-CB-006
Date Collected: 02/04/16 13:10
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-8
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	%			02/08/16 15:04	1
Percent Moisture	**17.0**		0.1	0.1	%			02/08/16 15:04	1

General Chemistry

Client Sample ID: SO-17303-020416-CB-007
Date Collected: 02/04/16 13:20
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-9
Matrix: Solid
Percent Solids: 82.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.1		0.1	0.1	%			02/08/16 15:04	1
Percent Solids Coarse	98.9		0.1	0.1	%			02/26/16 11:37	1
Percent Solids Fine	98.6		0.1	0.1	%			02/26/16 11:37	1
Coarse Moisture	1.1		0.1	0.1	%			02/26/16 11:37	1
Fine Moisture	1.4		0.1	0.1	%			02/26/16 11:37	1
Percent Moisture	17.9		0.1	0.1	%			02/08/16 15:04	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

GC/MS VOA

Prep Batch: 217366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	5035	
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	5035	
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	5035	
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	5035	
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	5035	
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	5035	
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	5035	
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	5035	
240-60612-10	TB-17303-020416-CB-008	Total/NA	Solid	5035	
LCS 240-217366/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 240-217366/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 217748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-1	GW-17303-020316-CB-009	Total/NA	Water	8260B	
240-60612-2	GW-17303-020316-CB-010	Total/NA	Water	8260B	
240-60612-3	TB-17303-020316-CB-011	Total/NA	Water	8260B	
LCS 240-217748/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-217748/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 217895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	8260B	217366
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	8260B	217366
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	8260B	217366
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	8260B	217366
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	8260B	217366
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	8260B	217366
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	8260B	217366
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	8260B	217366
240-60612-10	TB-17303-020416-CB-008	Total/NA	Solid	8260B	217366
LCS 240-217366/2-A	Lab Control Sample	Total/NA	Solid	8260B	217366
MB 240-217366/1-A	Method Blank	Total/NA	Solid	8260B	217366

GC/MS Semi VOA

Prep Batch: 217042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	3540C	
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	3540C	
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	3540C	
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	3540C	
240-60612-6 - RA	SO-17303-020416-CB-004	Total/NA	Solid	3540C	
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	3540C	
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	3540C	
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	3540C	
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	3540C	
LCS 240-217042/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-217042/23-A	Method Blank	Total/NA	Solid	3540C	

GC/MS Semi VOA (Continued)

Analysis Batch: 218381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	8270C	217042
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	8270C	217042
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	8270C	217042
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	8270C	217042
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	8270C	217042
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	8270C	217042
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	8270C	217042
LCS 240-217042/24-A	Lab Control Sample	Total/NA	Solid	8270C	217042
MB 240-217042/23-A	Method Blank	Total/NA	Solid	8270C	217042

Analysis Batch: 218593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-6 - RA	SO-17303-020416-CB-004	Total/NA	Solid	8270C	217042
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	8270C	217042

GC Semi VOA

Prep Batch: 216950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	3540C	
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	3540C	
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	3540C	
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	3540C	
LCS 240-216950/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-216950/23-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 216954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	3540C	
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	3540C	
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	3540C	
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	3540C	
LCS 240-216954/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-216954/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 217985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	8082	216954
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	8082	216954
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	8082	216954
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	8082	216954
LCS 240-216954/24-A	Lab Control Sample	Total/NA	Solid	8082	216954
MB 240-216954/23-A	Method Blank	Total/NA	Solid	8082	216954

Analysis Batch: 218299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-216950/24-A	Lab Control Sample	Total/NA	Solid	8082	216950
MB 240-216950/23-A	Method Blank	Total/NA	Solid	8082	216950

GC Semi VOA (Continued)

Analysis Batch: 218386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	8082	216950
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	8082	216950
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	8082	216950
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	8082	216950

Metals

Prep Batch: 217055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	3050B	
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	3050B	
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	3050B	
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	3050B	
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	3050B	
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	3050B	
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	3050B	
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	3050B	
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	3050B	
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	3050B	
LCS 240-217055/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-217055/3-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-217055/1-A	Method Blank	Total/NA	Solid	3050B	
MB 240-217055/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 217057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	7471A	
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	7471A	
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	7471A	
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	7471A	
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	7471A	
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	7471A	
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	7471A	
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	7471A	
LCS 240-217057/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-217057/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 217218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	6020	217055
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	6020	217055
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	6020	217055
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	6020	217055
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	6020	217055
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	6020	217055
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	6020	217055
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	6020	217055
LCS 240-217055/3-A ^2	Lab Control Sample	Total/NA	Solid	6020	217055
MB 240-217055/1-A ^2	Method Blank	Total/NA	Solid	6020	217055

Metals (Continued)

Analysis Batch: 217566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	7471A	217057
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	7471A	217057
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	7471A	217057
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	7471A	217057
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	7471A	217057
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	7471A	217057
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	7471A	217057
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	7471A	217057
LCS 240-217057/2-A	Lab Control Sample	Total/NA	Solid	7471A	217057
MB 240-217057/1-A	Method Blank	Total/NA	Solid	7471A	217057

Analysis Batch: 218157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	6010B	217055
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	6010B	217055
240-60612-5 MS	SO-17303-020416-CB-003	Total/NA	Solid	6010B	217055
240-60612-5 MSD	SO-17303-020416-CB-003	Total/NA	Solid	6010B	217055
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	6010B	217055
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	6010B	217055
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	6010B	217055
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	6010B	217055
LCS 240-217055/2-A	Lab Control Sample	Total/NA	Solid	6010B	217055
MB 240-217055/1-A	Method Blank	Total/NA	Solid	6010B	217055

Cleanup Batch: 219288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-9	SO-17303-020416-CB-007	Fractionated	Solid	Fractionation	

Cleanup Batch: 219290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-9	SO-17303-020416-CB-007	Fractionated	Solid	Fractionation	

Prep Batch: 219499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-9	SO-17303-020416-CB-007	Fractionated	Solid	3050B	219288
240-60612-9	SO-17303-020416-CB-007	Fractionated	Solid	3050B	219290
LCS 240-219499/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-219499/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 219736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-9	SO-17303-020416-CB-007	Fractionated	Solid	6010B	219499
240-60612-9	SO-17303-020416-CB-007	Fractionated	Solid	6010B	219499
LCS 240-219499/2-A	Lab Control Sample	Total/NA	Solid	6010B	219499
MB 240-219499/1-A	Method Blank	Total/NA	Solid	6010B	219499

Analysis Batch: 219748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-9	SO-17303-020416-CB-007	Fractionated	Solid	6010B	

General Chemistry

Analysis Batch: 216933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-4	SO-17303-020316-CB-002	Total/NA	Solid	Moisture	
240-60612-5	SO-17303-020416-CB-003	Total/NA	Solid	Moisture	
240-60612-5 DU	SO-17303-020416-CB-003	Total/NA	Solid	Moisture	
240-60612-6	SO-17303-020416-CB-004	Total/NA	Solid	Moisture	
240-60612-7	SO-17303-020416-CB-005	Total/NA	Solid	Moisture	
240-60612-8	SO-17303-020416-CB-006	Total/NA	Solid	Moisture	
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	Moisture	

Analysis Batch: 219233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	Moisture	
240-60612-9	SO-17303-020416-CB-007	Total/NA	Solid	Moisture	
240-60612-9 DU	SO-17303-020416-CB-007	Total/NA	Solid	Moisture	

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

Lab Sample ID: MB 240-217366/1-A
Matrix: Solid
Analysis Batch: 217895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	230	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Benzene	40	U	40	9.0	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Bromodichloromethane	80	U	80	38	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Bromoform	80	U	80	61	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Bromomethane	200	U	200	51	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
2-Butanone (MEK)	600	U	600	73	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Carbon disulfide	200	U	200	56	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Carbon tetrachloride	40	U	40	18	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Chlorobenzene	40	U	40	13	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Chloroethane	200	U	200	51	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Chloroform	40	U	40	36	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Chloromethane	200	U	200	48	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,1-Dichloroethane	40	U	40	35	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,1-Dichloroethene	40	U	40	30	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,2-Dichloropropane	40	U	40	32	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
cis-1,3-Dichloropropene	40	U	40	22	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
trans-1,3-Dichloropropene	40	U	40	26	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Ethylbenzene	40	U	40	35	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
2-Hexanone	2000	U	2000	84	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Methylene Chloride	200	U	200	85	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	56	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Styrene	40	U	40	27	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,1,2,2-Tetrachloroethane	40	U	40	25	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Tetrachloroethene	40	U	40	27	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Toluene	80	U	80	10	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Trichloroethene	40	U	40	39	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Vinyl chloride	32	U	32	17	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Xylenes, Total	120	U	120	32	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,1,1-Trichloroethane	40	U	40	27	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,1,2-Trichloroethane	40	U	40	19	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Cyclohexane	960	U	960	30	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,2-Dibromo-3-Chloropropane	200	U	200	71	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,2-Dibromoethane	200	U	200	32	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Dichlorodifluoromethane	80	U	80	61	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
cis-1,2-Dichloroethene	40	U	40	38	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
trans-1,2-Dichloroethene	40	U	40	26	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Isopropylbenzene	200	U	200	13	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Methyl acetate	960	U	960	55	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Methyl tert-butyl ether	200	U	200	30	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	42	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,2,4-Trichlorobenzene	200	U	200	30	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,2-Dichlorobenzene	80	U	80	19	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,3-Dichlorobenzene	80	U	80	30	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
1,4-Dichlorobenzene	80	U	80	41	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Trichlorofluoromethane	80	U	80	35	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Dibromochloromethane	40	U	40	20	ug/Kg		02/12/16 18:03	02/17/16 18:58	1
Methylcyclohexane	960	U	960	38	ug/Kg		02/12/16 18:03	02/17/16 18:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		39 - 128	02/12/16 18:03	02/17/16 18:58	1
4-Bromofluorobenzene (Surr)	85		26 - 141	02/12/16 18:03	02/17/16 18:58	1
Toluene-d8 (Surr)	89		33 - 134	02/12/16 18:03	02/17/16 18:58	1
Dibromofluoromethane (Surr)	88		30 - 122	02/12/16 18:03	02/17/16 18:58	1

Lab Sample ID: LCS 240-217366/2-A
Matrix: Solid
Analysis Batch: 217895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	1690		ug/Kg		85	16 - 156
Benzene	1000	1080		ug/Kg		108	70 - 120
Bromodichloromethane	1000	943		ug/Kg		94	28 - 123
Bromoform	1000	739		ug/Kg		74	10 - 120
Bromomethane	1000	1120		ug/Kg		112	10 - 120
2-Butanone (MEK)	2000	2130		ug/Kg		107	10 - 199
Carbon disulfide	1000	932		ug/Kg		93	10 - 132
Carbon tetrachloride	1000	1160		ug/Kg		116	29 - 120
Chlorobenzene	1000	986		ug/Kg		99	71 - 120
Chloroethane	1000	1010		ug/Kg		101	10 - 120
Chloroform	1000	1010		ug/Kg		101	63 - 120
Chloromethane	1000	1020		ug/Kg		102	25 - 120
1,1-Dichloroethane	1000	990		ug/Kg		99	63 - 120
1,2-Dichloroethane	1000	886		ug/Kg		89	68 - 120
1,1-Dichloroethene	1000	937		ug/Kg		94	44 - 143
1,2-Dichloropropane	1000	1070		ug/Kg		107	73 - 120
cis-1,3-Dichloropropene	1000	995		ug/Kg		100	25 - 120
trans-1,3-Dichloropropene	1000	937		ug/Kg		94	22 - 122
Ethylbenzene	1000	1010		ug/Kg		101	66 - 120
2-Hexanone	2000	1950	J	ug/Kg		97	43 - 130
Methylene Chloride	1000	1050		ug/Kg		105	27 - 172
4-Methyl-2-pentanone (MIBK)	2000	2050		ug/Kg		102	49 - 121
Styrene	1000	1040		ug/Kg		104	60 - 120
1,1,2,2-Tetrachloroethane	1000	1010		ug/Kg		101	54 - 121
Tetrachloroethene	1000	975		ug/Kg		97	58 - 131
Toluene	1000	1020		ug/Kg		102	66 - 123
Trichloroethene	1000	1030		ug/Kg		103	59 - 124
Vinyl chloride	1000	1060		ug/Kg		106	33 - 120
Xylenes, Total	2000	1960		ug/Kg		98	68 - 120
1,1,1-Trichloroethane	1000	1030		ug/Kg		103	38 - 122
1,1,2-Trichloroethane	1000	1040		ug/Kg		104	74 - 120
Cyclohexane	1000	1060		ug/Kg		106	40 - 120
1,2-Dibromo-3-Chloropropane	1000	888		ug/Kg		89	10 - 129
1,2-Dibromoethane	1000	1010		ug/Kg		101	47 - 123
Dichlorodifluoromethane	1000	826		ug/Kg		83	10 - 120
cis-1,2-Dichloroethene	1000	1000		ug/Kg		100	60 - 125
trans-1,2-Dichloroethene	1000	1080		ug/Kg		108	58 - 121
Isopropylbenzene	1000	1000		ug/Kg		100	61 - 123
Methyl acetate	5000	5220		ug/Kg		104	44 - 173
Methyl tert-butyl ether	1000	1060		ug/Kg		106	34 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	1050		ug/Kg		105	48 - 151
1,2,4-Trichlorobenzene	1000	935		ug/Kg		93	41 - 135
1,2-Dichlorobenzene	1000	992		ug/Kg		99	68 - 120

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

Lab Sample ID: LCS 240-217366/2-A
Matrix: Solid
Analysis Batch: 217895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	1000	954		ug/Kg		95	66 - 121
1,4-Dichlorobenzene	1000	942		ug/Kg		94	65 - 120
Trichlorofluoromethane	1000	936		ug/Kg		94	17 - 145
Dibromochloromethane	1000	853		ug/Kg		85	22 - 120
Methylcyclohexane	1000	936	J	ug/Kg		94	41 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*39 - 128*
4-Bromofluorobenzene (Surr)	*89*		*26 - 141*
Toluene-d8 (Surr)	*87*		*33 - 134*
Dibromofluoromethane (Surr)	*92*		*30 - 122*

Lab Sample ID: 240-60612-5 MS
Matrix: Solid
Analysis Batch: 217895

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	610	U	1930	1550		ug/Kg	☼	80	10 - 142
Benzene	41	U	965	1050		ug/Kg	☼	109	10 - 199
Bromodichloromethane	82	U	965	849		ug/Kg	☼	88	18 - 133
Bromoform	82	U	965	650		ug/Kg	☼	67	10 - 147
Bromomethane	200	U	965	957		ug/Kg	☼	99	10 - 151
2-Butanone (MEK)	610	U	1930	2060		ug/Kg	☼	107	10 - 172
Carbon disulfide	200	U F2	965	828		ug/Kg	☼	86	10 - 155
Carbon tetrachloride	41	U	965	1060		ug/Kg	☼	110	12 - 135
Chlorobenzene	41	U	965	956		ug/Kg	☼	99	47 - 120
Chloroethane	200	U	965	928		ug/Kg	☼	96	10 - 168
Chloroform	41	U	965	948		ug/Kg	☼	98	51 - 120
Chloromethane	200	U	965	916		ug/Kg	☼	95	16 - 120
1,1-Dichloroethane	41	U	965	923		ug/Kg	☼	96	18 - 160
1,2-Dichloroethane	41	U	965	799		ug/Kg	☼	83	25 - 150
1,1-Dichloroethene	41	U	965	855		ug/Kg	☼	89	10 - 179
1,2-Dichloropropane	41	U	965	1010		ug/Kg	☼	104	58 - 120
cis-1,3-Dichloropropene	41	U	965	949		ug/Kg	☼	98	19 - 121
trans-1,3-Dichloropropene	41	U	965	864		ug/Kg	☼	90	10 - 136
Ethylbenzene	41	U	965	1030		ug/Kg	☼	107	27 - 143
2-Hexanone	2000	U	1930	2030	J	ug/Kg	☼	105	21 - 141
Methylene Chloride	200	U	965	910		ug/Kg	☼	94	10 - 148
4-Methyl-2-pentanone (MIBK)	2000	U	1930	2030	J	ug/Kg	☼	105	19 - 151
Styrene	41	U	965	985		ug/Kg	☼	102	31 - 137
1,1,2,2-Tetrachloroethane	41	U	965	860		ug/Kg	☼	89	16 - 158
Tetrachloroethene	60		965	1100		ug/Kg	☼	108	19 - 153
Toluene	34	J	965	1050		ug/Kg	☼	106	10 - 168
Trichloroethene	41	U	965	1020		ug/Kg	☼	106	10 - 193
Vinyl chloride	45		965	1090		ug/Kg	☼	109	15 - 123
Xylenes, Total	420		1930	2470		ug/Kg	☼	106	16 - 150
1,1,1-Trichloroethane	41	U	965	967		ug/Kg	☼	100	10 - 159
1,1,2-Trichloroethane	41	U	965	1000		ug/Kg	☼	104	34 - 152

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

Lab Sample ID: 240-60612-5 MS
Matrix: Solid
Analysis Batch: 217895

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	980	U	965	1080	J	ug/Kg	☼	112	10 - 154
1,2-Dibromo-3-Chloropropane	200	U	965	799		ug/Kg	☼	83	10 - 137
1,2-Dibromoethane	200	U	965	947		ug/Kg	☼	98	32 - 127
Dichlorodifluoromethane	82	U	965	670		ug/Kg	☼	69	10 - 120
cis-1,2-Dichloroethene	79		965	1090		ug/Kg	☼	105	34 - 137
trans-1,2-Dichloroethene	41	U	965	1040		ug/Kg	☼	108	40 - 126
Isopropylbenzene	150	J	965	1000		ug/Kg	☼	88	39 - 126
Methyl acetate	140	J	4820	5470		ug/Kg	☼	110	10 - 175
Methyl tert-butyl ether	200	U	965	978		ug/Kg	☼	101	26 - 159
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	965	841		ug/Kg	☼	87	23 - 168
1,2,4-Trichlorobenzene	200	U	965	872		ug/Kg	☼	90	10 - 136
1,2-Dichlorobenzene	82	U	965	843		ug/Kg	☼	87	27 - 126
1,3-Dichlorobenzene	82	U	965	831		ug/Kg	☼	86	29 - 124
1,4-Dichlorobenzene	82	U	965	819		ug/Kg	☼	85	30 - 123
Trichlorofluoromethane	82	U	965	884		ug/Kg	☼	92	10 - 157
Dibromochloromethane	41	U	965	789		ug/Kg	☼	82	10 - 128
Methylcyclohexane	79	J	965	1090	J	ug/Kg	☼	104	11 - 156

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*39 - 128*
4-Bromofluorobenzene (Surr)	*86*		*26 - 141*
Toluene-d8 (Surr)	*90*		*33 - 134*
Dibromofluoromethane (Surr)	*90*		*30 - 122*

Lab Sample ID: 240-60612-5 MSD
Matrix: Solid
Analysis Batch: 217895

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217366

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	610	U	1970	1630		ug/Kg	☼	83	10 - 142	5	30
Benzene	41	U	983	1020		ug/Kg	☼	104	10 - 199	3	30
Bromodichloromethane	82	U	983	862		ug/Kg	☼	88	18 - 133	1	30
Bromoform	82	U	983	730		ug/Kg	☼	74	10 - 147	12	30
Bromomethane	200	U	983	1070		ug/Kg	☼	108	10 - 151	11	30
2-Butanone (MEK)	610	U	1970	2120		ug/Kg	☼	108	10 - 172	3	30
Carbon disulfide	200	U F2	983	478	F2	ug/Kg	☼	49	10 - 155	54	30
Carbon tetrachloride	41	U	983	1020		ug/Kg	☼	104	12 - 135	4	30
Chlorobenzene	41	U	983	974		ug/Kg	☼	99	47 - 120	2	30
Chloroethane	200	U	983	936		ug/Kg	☼	95	10 - 168	1	30
Chloroform	41	U	983	924		ug/Kg	☼	94	51 - 120	3	30
Chloromethane	200	U	983	952		ug/Kg	☼	97	16 - 120	4	30
1,1-Dichloroethane	41	U	983	946		ug/Kg	☼	96	18 - 160	2	30
1,2-Dichloroethane	41	U	983	810		ug/Kg	☼	82	25 - 150	1	30
1,1-Dichloroethene	41	U	983	812		ug/Kg	☼	83	10 - 179	5	30
1,2-Dichloropropane	41	U	983	1010		ug/Kg	☼	102	58 - 120	0	30
cis-1,3-Dichloropropene	41	U	983	920		ug/Kg	☼	94	19 - 121	3	30
trans-1,3-Dichloropropene	41	U	983	915		ug/Kg	☼	93	10 - 136	6	30

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

Lab Sample ID: 240-60612-5 MSD
Matrix: Solid
Analysis Batch: 217895

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217366

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	41	U	983	1010		ug/Kg	☼	103	27 - 143	2	30
2-Hexanone	2000	U	1970	2020	J	ug/Kg	☼	103	21 - 141	1	30
Methylene Chloride	200	U	983	900		ug/Kg	☼	92	10 - 148	1	30
4-Methyl-2-pentanone (MIBK)	2000	U	1970	2050	J	ug/Kg	☼	104	19 - 151	1	30
Styrene	41	U	983	989		ug/Kg	☼	101	31 - 137	0	30
1,1,2,2-Tetrachloroethane	41	U	983	970		ug/Kg	☼	99	16 - 158	12	30
Tetrachloroethene	60		983	975		ug/Kg	☼	93	19 - 153	12	30
Toluene	34	J	983	1010		ug/Kg	☼	99	10 - 168	4	30
Trichloroethene	41	U	983	964		ug/Kg	☼	98	10 - 193	5	30
Vinyl chloride	45		983	1030		ug/Kg	☼	100	15 - 123	6	30
Xylenes, Total	420		1970	2460		ug/Kg	☼	104	16 - 150	0	30
1,1,1-Trichloroethane	41	U	983	915		ug/Kg	☼	93	10 - 159	6	30
1,1,2-Trichloroethane	41	U	983	1070		ug/Kg	☼	109	34 - 152	6	30
Cyclohexane	980	U	983	948	J	ug/Kg	☼	96	10 - 154	13	30
1,2-Dibromo-3-Chloropropane	200	U	983	929		ug/Kg	☼	95	10 - 137	15	30
1,2-Dibromoethane	200	U	983	978		ug/Kg	☼	99	32 - 127	3	30
Dichlorodifluoromethane	82	U	983	673		ug/Kg	☼	68	10 - 120	0	30
cis-1,2-Dichloroethene	79		983	985		ug/Kg	☼	92	34 - 137	10	30
trans-1,2-Dichloroethene	41	U	983	1000		ug/Kg	☼	102	40 - 126	4	30
Isopropylbenzene	150	J	983	1040		ug/Kg	☼	90	39 - 126	3	30
Methyl acetate	140	J	4910	5460		ug/Kg	☼	108	10 - 175	0	30
Methyl tert-butyl ether	200	U	983	989		ug/Kg	☼	101	26 - 159	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	983	829		ug/Kg	☼	84	23 - 168	1	30
1,2,4-Trichlorobenzene	200	U	983	938		ug/Kg	☼	95	10 - 136	7	30
1,2-Dichlorobenzene	82	U	983	882		ug/Kg	☼	90	27 - 126	5	30
1,3-Dichlorobenzene	82	U	983	893		ug/Kg	☼	91	29 - 124	7	30
1,4-Dichlorobenzene	82	U	983	858		ug/Kg	☼	87	30 - 123	5	30
Trichlorofluoromethane	82	U	983	812		ug/Kg	☼	83	10 - 157	9	30
Dibromochloromethane	41	U	983	842		ug/Kg	☼	86	10 - 128	6	30
Methylcyclohexane	79	J	983	931	J	ug/Kg	☼	87	11 - 156	15	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*39 - 128*
4-Bromofluorobenzene (Surr)	*89*		*26 - 141*
Toluene-d8 (Surr)	*94*		*33 - 134*
Dibromofluoromethane (Surr)	*92*		*30 - 122*

Lab Sample ID: MB 240-217748/6
Matrix: Water
Analysis Batch: 217748

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	0.94	ug/L			02/17/16 11:10	1
Benzene	1.0	U	1.0	0.35	ug/L			02/17/16 11:10	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/17/16 11:10	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/17/16 11:10	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/17/16 11:10	1

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

Lab Sample ID: MB 240-217748/6
Matrix: Water
Analysis Batch: 217748

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/17/16 11:10	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/17/16 11:10	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/17/16 11:10	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/17/16 11:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/17/16 11:10	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/17/16 11:10	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/17/16 11:10	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/17/16 11:10	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/17/16 11:10	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/17/16 11:10	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/17/16 11:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/17/16 11:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/17/16 11:10	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/17/16 11:10	1
2-Hexanone	10	U	10	0.48	ug/L			02/17/16 11:10	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/17/16 11:10	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/17/16 11:10	1
Styrene	1.0	U	1.0	0.45	ug/L			02/17/16 11:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/17/16 11:10	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/17/16 11:10	1
Toluene	1.0	U	1.0	0.23	ug/L			02/17/16 11:10	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/17/16 11:10	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/17/16 11:10	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/17/16 11:10	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/17/16 11:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/17/16 11:10	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/17/16 11:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/17/16 11:10	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/17/16 11:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/17/16 11:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/17/16 11:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/17/16 11:10	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/17/16 11:10	1
Methyl acetate	10	U	10	2.3	ug/L			02/17/16 11:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/17/16 11:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/17/16 11:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/17/16 11:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/17/16 11:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/17/16 11:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/17/16 11:10	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/17/16 11:10	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/17/16 11:10	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/17/16 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*78 - 125*		*02/17/16 11:10*	*1*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*		*02/17/16 11:10*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*02/17/16 11:10*	*1*

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

Lab Sample ID: MB 240-217748/6
Matrix: Water
Analysis Batch: 217748

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	92		79 - 120		02/17/16 11:10	1

Lab Sample ID: LCS 240-217748/4
Matrix: Water
Analysis Batch: 217748

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	13.2		ug/L		66	34 - 148
Benzene	10.0	9.05		ug/L		90	80 - 120
Bromodichloromethane	10.0	9.30		ug/L		93	80 - 120
Bromoform	10.0	11.5		ug/L		115	56 - 122
Bromomethane	10.0	8.71		ug/L		87	38 - 132
2-Butanone (MEK)	20.0	15.7		ug/L		78	56 - 138
Carbon disulfide	10.0	8.40		ug/L		84	65 - 144
Carbon tetrachloride	10.0	9.73		ug/L		97	77 - 131
Chlorobenzene	10.0	9.61		ug/L		96	80 - 120
Chloroethane	10.0	8.67		ug/L		87	36 - 126
Chloroform	10.0	9.35		ug/L		94	80 - 120
Chloromethane	10.0	8.78		ug/L		88	48 - 133
1,1-Dichloroethane	10.0	8.73		ug/L		87	79 - 125
1,2-Dichloroethane	10.0	9.27		ug/L		93	80 - 120
1,1-Dichloroethene	10.0	8.91		ug/L		89	76 - 124
1,2-Dichloropropane	10.0	9.44		ug/L		94	78 - 124
cis-1,3-Dichloropropene	10.0	9.83		ug/L		98	74 - 126
trans-1,3-Dichloropropene	10.0	10.0		ug/L		100	75 - 131
Ethylbenzene	10.0	9.45		ug/L		95	80 - 120
2-Hexanone	20.0	18.8		ug/L		94	55 - 141
Methylene Chloride	10.0	8.71		ug/L		87	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	18.2		ug/L		91	64 - 135
Styrene	10.0	9.47		ug/L		95	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.13		ug/L		91	71 - 123
Tetrachloroethene	10.0	9.97		ug/L		100	78 - 121
Toluene	10.0	9.69		ug/L		97	80 - 120
Trichloroethene	10.0	9.71		ug/L		97	80 - 121
Vinyl chloride	10.0	8.54		ug/L		85	52 - 121
Xylenes, Total	20.0	19.0		ug/L		95	80 - 120
1,1,1-Trichloroethane	10.0	9.27		ug/L		93	77 - 123
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	80 - 120
Cyclohexane	10.0	9.68		ug/L		97	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	10.7		ug/L		107	50 - 132
1,2-Dibromoethane	10.0	9.69		ug/L		97	80 - 120
Dichlorodifluoromethane	10.0	9.75		ug/L		98	23 - 136
cis-1,2-Dichloroethene	10.0	9.23		ug/L		92	79 - 120
trans-1,2-Dichloroethene	10.0	8.93		ug/L		89	80 - 124
Isopropylbenzene	10.0	9.55		ug/L		95	77 - 120
Methyl acetate	50.0	43.4		ug/L		87	67 - 131
Methyl tert-butyl ether	10.0	8.81		ug/L		88	69 - 121

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

Lab Sample ID: LCS 240-217748/4
Matrix: Water
Analysis Batch: 217748

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.44		ug/L		94	67 - 138
1,2,4-Trichlorobenzene	10.0	8.36		ug/L		84	61 - 120
1,2-Dichlorobenzene	10.0	9.63		ug/L		96	79 - 120
1,3-Dichlorobenzene	10.0	9.48		ug/L		95	79 - 120
1,4-Dichlorobenzene	10.0	9.41		ug/L		94	79 - 120
Trichlorofluoromethane	10.0	8.83		ug/L		88	61 - 133
Dibromochloromethane	10.0	10.7		ug/L		107	74 - 120
Methylcyclohexane	10.0	10.7		ug/L		107	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*
4-Bromofluorobenzene (Surr)	*101*		*61 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*79 - 120*

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

Lab Sample ID: MB 240-217042/23-A
Matrix: Solid
Analysis Batch: 218381

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217042

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	3.5	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2,4,6-Trichlorophenol	260	U	260	8.9	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2,4-Dichlorophenol	260	U	260	20	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2,4-Dinitrophenol	150	U	150	21	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2,4-Dinitrotoluene	260	U	260	17	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2-Chloronaphthalene	260	U	260	0.45	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2-Chlorophenol	260	U	260	8.2	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2-Methylnaphthalene	260	U	260	0.50	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2-Methylphenol	260	U	260	11	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
2-Nitrophenol	260	U	260	8.3	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
3,3'-Dichlorobenzidine	260	U	260	18	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
3-Nitroaniline	200	U	200	16	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
4,6-Dinitro-2-methylphenol	200	U	200	9.2	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
4-Bromophenyl phenyl ether	150	U	150	13	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
4-Chloroaniline	260	U	260	17	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
4-Chlorophenyl phenyl ether	200	U	200	13	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
4-Nitroaniline	200	U	200	26	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
4-Nitrophenol	330	U	330	17	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Acenaphthene	260	U	260	0.76	ug/Kg		02/10/16 08:09	02/22/16 09:07	1

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

Lab Sample ID: MB 240-217042/23-A
Matrix: Solid
Analysis Batch: 218381

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217042

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	260	U	260	0.35	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Acetophenone	260	U	260	9.2	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Anthracene	260	U	260	0.78	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Atrazine	40	U	40	9.1	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Benzaldehyde	260	U	260	12	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Benzo[a]anthracene	260	U	260	0.63	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Benzo[a]pyrene	260	U	260	0.64	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Benzo[b]fluoranthene	260	U	260	0.59	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Benzo[g,h,i]perylene	260	U	260	0.35	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Benzo[k]fluoranthene	260	U	260	0.68	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Bis(2-ethylhexyl) phthalate	260	U	260	19	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Caprolactam	260	U	260	37	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Carbazole	260	U	260	27	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Chrysene	260	U	260	1.1	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Dibenz(a,h)anthracene	260	U	260	0.66	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Dibenzofuran	260	U	260	0.66	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Diethyl phthalate	260	U	260	16	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Dimethyl phthalate	260	U	260	17	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Di-n-butyl phthalate	260	U	260	15	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Di-n-octyl phthalate	260	U	260	7.9	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Fluoranthene	260	U	260	0.55	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Fluorene	260	U	260	0.53	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Hexachlorobutadiene	40	U	40	5.6	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Hexachlorocyclopentadiene	260	U	260	8.1	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Hexachloroethane	260	U	260	9.0	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Indeno[1,2,3-cd]pyrene	260	U	260	0.35	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Isophorone	17.3	J	260	13	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Naphthalene	260	U	260	0.82	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Nitrobenzene	260	U	260	2.2	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
N-Nitrosodi-n-propylamine	260	U	260	6.3	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Phenol	260	U	260	7.3	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Phenanthrene	260	U	260	0.73	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
Pyrene	260	U	260	0.44	ug/Kg		02/10/16 08:09	02/22/16 09:07	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		02/10/16 08:09	02/22/16 09:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*24 - 110*	*02/10/16 08:09*	*02/22/16 09:07*	*1*
2-Fluorophenol (Surr)	*65*		*24 - 110*	*02/10/16 08:09*	*02/22/16 09:07*	*1*
2,4,6-Tribromophenol (Surr)	*32*		*10 - 110*	*02/10/16 08:09*	*02/22/16 09:07*	*1*
Nitrobenzene-d5 (Surr)	*70*		*20 - 110*	*02/10/16 08:09*	*02/22/16 09:07*	*1*
Phenol-d5 (Surr)	*77*		*26 - 110*	*02/10/16 08:09*	*02/22/16 09:07*	*1*
Terphenyl-d14 (Surr)	*78*		*36 - 110*	*02/10/16 08:09*	*02/22/16 09:07*	*1*

Lab Sample ID: LCS 240-217042/24-A
Matrix: Solid
Analysis Batch: 218381

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217042

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	487		ug/Kg		73	35 - 110
2,2'-oxybis[1-chloropropane]	667	546		ug/Kg		82	29 - 110
2,4,5-Trichlorophenol	667	387		ug/Kg		58	25 - 110
2,4,6-Trichlorophenol	667	322		ug/Kg		48	12 - 110
2,4-Dichlorophenol	667	472		ug/Kg		71	39 - 110
2,4-Dimethylphenol	667	399		ug/Kg		60	29 - 110
2,4-Dinitrophenol	1330	349		ug/Kg		26	10 - 110
2,4-Dinitrotoluene	667	553		ug/Kg		83	48 - 110
2,6-Dinitrotoluene	667	538		ug/Kg		81	45 - 110
2-Chloronaphthalene	667	477		ug/Kg		72	32 - 110
2-Chlorophenol	667	488		ug/Kg		73	37 - 110
2-Methylnaphthalene	667	479		ug/Kg		72	36 - 110
2-Methylphenol	667	485		ug/Kg		73	41 - 110
2-Nitroaniline	667	521		ug/Kg		78	45 - 110
2-Nitrophenol	667	475		ug/Kg		71	34 - 110
3,3'-Dichlorobenzidine	1330	1140		ug/Kg		86	28 - 110
3-Nitroaniline	667	606		ug/Kg		91	44 - 110
4,6-Dinitro-2-methylphenol	1330	703		ug/Kg		53	10 - 110
4-Bromophenyl phenyl ether	667	521		ug/Kg		78	39 - 110
4-Chloro-3-methylphenol	667	433		ug/Kg		65	48 - 110
4-Chloroaniline	667	410		ug/Kg		61	30 - 110
4-Chlorophenyl phenyl ether	667	503		ug/Kg		75	40 - 110
4-Nitroaniline	667	653		ug/Kg		98	48 - 110
4-Nitrophenol	1330	812		ug/Kg		61	28 - 110
Acenaphthene	667	473		ug/Kg		71	38 - 110
Acenaphthylene	667	474		ug/Kg		71	40 - 110
Acetophenone	667	450		ug/Kg		68	40 - 110
Anthracene	667	528		ug/Kg		79	48 - 110
Atrazine	1330	1110		ug/Kg		83	54 - 120
Benzaldehyde	1330	984		ug/Kg		74	32 - 110
Benzo[a]anthracene	667	525		ug/Kg		79	50 - 110
Benzo[a]pyrene	667	536		ug/Kg		80	44 - 110
Benzo[b]fluoranthene	667	540		ug/Kg		81	43 - 110
Benzo[g,h,i]perylene	667	597		ug/Kg		90	51 - 110
Benzo[k]fluoranthene	667	568		ug/Kg		85	38 - 105
Bis(2-chloroethoxy)methane	667	495		ug/Kg		74	32 - 110
Bis(2-chloroethyl)ether	667	499		ug/Kg		75	34 - 110
Bis(2-ethylhexyl) phthalate	667	523		ug/Kg		78	50 - 110
Butyl benzyl phthalate	667	512		ug/Kg		77	51 - 110
Caprolactam	1330	1230		ug/Kg		92	44 - 114
Carbazole	667	645		ug/Kg		97	50 - 110
Chrysene	667	558		ug/Kg		84	50 - 110
Dibenz(a,h)anthracene	667	572		ug/Kg		86	51 - 110
Dibenzofuran	667	487		ug/Kg		73	43 - 110
Diethyl phthalate	667	475		ug/Kg		71	52 - 110
Dimethyl phthalate	667	524		ug/Kg		79	50 - 110
Di-n-butyl phthalate	667	547		ug/Kg		82	51 - 110
Di-n-octyl phthalate	667	514		ug/Kg		77	48 - 110
Fluoranthene	667	579		ug/Kg		87	51 - 110
Fluorene	667	486		ug/Kg		73	46 - 110

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

Lab Sample ID: LCS 240-217042/24-A
Matrix: Solid
Analysis Batch: 218381

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217042

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	667	434		ug/Kg		65	43 - 110
Hexachlorobutadiene	667	421		ug/Kg		63	29 - 110
Hexachlorocyclopentadiene	667	257	J	ug/Kg		39	12 - 110
Hexachloroethane	667	403		ug/Kg		61	30 - 110
Indeno[1,2,3-cd]pyrene	667	576		ug/Kg		86	50 - 110
Isophorone	667	485		ug/Kg		73	36 - 110
Naphthalene	667	464		ug/Kg		70	36 - 110
Nitrobenzene	667	462		ug/Kg		69	32 - 110
N-Nitrosodi-n-propylamine	667	481		ug/Kg		72	38 - 110
N-Nitrosodiphenylamine	1330	983		ug/Kg		74	46 - 110
Pentachlorophenol	1330	600		ug/Kg		45	10 - 110
Phenol	667	492		ug/Kg		74	38 - 110
Phenanthrene	667	522		ug/Kg		78	49 - 110
Pyrene	667	563		ug/Kg		84	49 - 110
3 & 4 Methylphenol	667	479		ug/Kg		72	40 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*24 - 110*
2-Fluorophenol (Surr)	*75*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*44*		*10 - 110*
Nitrobenzene-d5 (Surr)	*68*		*20 - 110*
Phenol-d5 (Surr)	*78*		*26 - 110*
Terphenyl-d14 (Surr)	*79*		*36 - 110*

Lab Sample ID: 240-60612-5 MS
Matrix: Solid
Analysis Batch: 218381

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217042

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	420	J	738	988	J	ug/Kg	☼	77	32 - 110
2,2'-oxybis[1-chloropropane]	5800	U	738	580	J	ug/Kg	☼	79	11 - 110
2,4,5-Trichlorophenol	5800	U F1	738	5800	U F1	ug/Kg	☼	0	10 - 117
2,4,6-Trichlorophenol	5800	U	738	412	J	ug/Kg	☼	56	10 - 110
2,4-Dichlorophenol	5800	U	738	487	J	ug/Kg	☼	66	10 - 110
2,4-Dimethylphenol	5800	U	738	476	J	ug/Kg	☼	64	10 - 110
2,4-Dinitrophenol	3300	U F1	1480	3300	U F1	ug/Kg	☼	0	10 - 110
2,4-Dinitrotoluene	5800	U	738	595	J	ug/Kg	☼	81	32 - 110
2,6-Dinitrotoluene	5800	U	738	561	J	ug/Kg	☼	76	35 - 110
2-Chloronaphthalene	5800	U	738	555	J	ug/Kg	☼	75	28 - 110
2-Chlorophenol	5800	U	738	484	J	ug/Kg	☼	66	10 - 110
2-Methylnaphthalene	1800	J	738	2090	J	ug/Kg	☼	40	10 - 133
2-Methylphenol	5800	U	738	525	J	ug/Kg	☼	71	24 - 110
2-Nitroaniline	4400	U	738	525	J	ug/Kg	☼	71	39 - 110
2-Nitrophenol	5800	U	738	436	J	ug/Kg	☼	59	10 - 110
3,3'-Dichlorobenzidine	5800	U	1480	1150	J	ug/Kg	☼	78	10 - 110
3-Nitroaniline	4400	U	738	511	J	ug/Kg	☼	69	10 - 110
4,6-Dinitro-2-methylphenol	4400	U	1480	776	J	ug/Kg	☼	53	10 - 110
4-Bromophenyl phenyl ether	3300	U	738	607	J	ug/Kg	☼	82	33 - 110

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

Lab Sample ID: 240-60612-5 MS | **Client Sample ID: SO-17303-020416-CB-003**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 218381 | **Prep Batch: 217042**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	5800	U F1	738	5800	U F1	ug/Kg	☼	0	25 - 110
4-Chloroaniline	5800	U F1	738	415	J	ug/Kg	☼	56	10 - 110
4-Chlorophenyl phenyl ether	4400	U	738	599	J	ug/Kg	☼	81	32 - 110
4-Nitroaniline	4400	U F1	738	595	J	ug/Kg	☼	81	10 - 110
4-Nitrophenol	7200	U F1	1480	425	J	ug/Kg	☼	29	10 - 113
Acenaphthene	3500	J	738	3700	J 4	ug/Kg	☼	25	22 - 110
Acenaphthylene	220	J	738	726	J	ug/Kg	☼	68	24 - 110
Acetophenone	5800	U	738	611	J	ug/Kg	☼	83	31 - 110
Anthracene	3200	J	738	3410	J 4	ug/Kg	☼	23	20 - 110
Atrazine	880	U	1480	1340		ug/Kg	☼	91	45 - 118
Benzaldehyde	5800	U	1480	989	J	ug/Kg	☼	67	23 - 110
Benzo[a]anthracene	5800		738	5270	J 4	ug/Kg	☼	-68	10 - 122
Benzo[a]pyrene	5500	J	738	5140	J 4	ug/Kg	☼	-47	10 - 110
Benzo[b]fluoranthene	7500		738	6940	4	ug/Kg	☼	-71	12 - 118
Benzo[g,h,i]perylene	3300	J	738	3300	J 4	ug/Kg	☼	5	10 - 117
Benzo[k]fluoranthene	2600	J	738	2910	J	ug/Kg	☼	45	10 - 121
Bis(2-chloroethoxy)methane	5800	U	738	555	J	ug/Kg	☼	75	26 - 110
Bis(2-chloroethyl)ether	1800	U	738	591	J	ug/Kg	☼	80	21 - 110
Bis(2-ethylhexyl) phthalate	5800	U F1 F2	738	969	J F1	ug/Kg	☼	131	40 - 110
Butyl benzyl phthalate	5800	U	738	584	J	ug/Kg	☼	79	44 - 110
Caprolactam	5800	U	1480	1400	J	ug/Kg	☼	95	10 - 134
Carbazole	3200	J	738	3560	J 4	ug/Kg	☼	50	34 - 110
Chrysene	6200		738	6210	4	ug/Kg	☼	-5	10 - 125
Dibenz(a,h)anthracene	740	J	738	1090	J	ug/Kg	☼	48	14 - 113
Dibenzofuran	2700	J F1	738	2900	J	ug/Kg	☼	34	29 - 110
Diethyl phthalate	5800	U	738	560	J	ug/Kg	☼	76	42 - 110
Dimethyl phthalate	5800	U	738	585	J	ug/Kg	☼	79	41 - 110
Di-n-butyl phthalate	5800	U	738	621	J	ug/Kg	☼	84	43 - 110
Di-n-octyl phthalate	5800	U	738	524	J	ug/Kg	☼	71	24 - 119
Fluoranthene	16000		738	15100	4	ug/Kg	☼	-172	10 - 110
Fluorene	4100	J	738	4180	J 4	ug/Kg	☼	17	23 - 110
Hexachlorobenzene	5800	U	738	526	J	ug/Kg	☼	71	34 - 110
Hexachlorobutadiene	880	U	738	493	J	ug/Kg	☼	67	25 - 110
Hexachlorocyclopentadiene	5800	U F1	738	5800	U F1	ug/Kg	☼	0	10 - 110
Hexachloroethane	5800	U	738	507	J	ug/Kg	☼	69	12 - 110
Indeno[1,2,3-cd]pyrene	2900	J F1	738	2890	J F1	ug/Kg	☼	-6	10 - 114
Isophorone	5800	U	738	558	J	ug/Kg	☼	76	29 - 110
Naphthalene	6000		738	5980	4	ug/Kg	☼	2	10 - 111
Nitrobenzene	5800	U	738	472	J	ug/Kg	☼	64	23 - 110
N-Nitrosodi-n-propylamine	5800	U	738	563	J	ug/Kg	☼	76	26 - 110
N-Nitrosodiphenylamine	5800	U	1480	1280	J	ug/Kg	☼	87	22 - 110
Pentachlorophenol	3300	U F1	1480	3300	U F1	ug/Kg	☼	0	10 - 110
Phenol	5800	U	738	496	J	ug/Kg	☼	67	17 - 110
Phenanthrene	16000		738	15400	4	ug/Kg	☼	-147	10 - 166
Pyrene	14000		738	12600	4	ug/Kg	☼	-133	10 - 147
3 & 4 Methylphenol	5800	U	738	579	J	ug/Kg	☼	78	25 - 110

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

Lab Sample ID: 240-60612-5 MS
Matrix: Solid
Analysis Batch: 218381

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217042

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*82*		*24 - 110*
2-Fluorophenol (Surr)	*72*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 110*
Nitrobenzene-d5 (Surr)	*71*		*20 - 110*
Phenol-d5 (Surr)	*73*		*26 - 110*
Terphenyl-d14 (Surr)	*85*		*36 - 110*

Lab Sample ID: 240-60612-5 MSD
Matrix: Solid
Analysis Batch: 218381

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217042

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	420	J	734	1010	J	ug/Kg	☼	80	32 - 110	2	32
2,2'-oxybis[1-chloropropane]	5800	U	734	719	J	ug/Kg	☼	98	11 - 110	21	42
2,4,5-Trichlorophenol	5800	U F1	734	5800	U F1	ug/Kg	☼	0	10 - 117	NC	99
2,4,6-Trichlorophenol	5800	U	734	421	J	ug/Kg	☼	57	10 - 110	2	38
2,4-Dichlorophenol	5800	U	734	473	J	ug/Kg	☼	64	10 - 110	3	34
2,4-Dimethylphenol	5800	U	734	522	J	ug/Kg	☼	71	10 - 110	9	31
2,4-Dinitrophenol	3300	U F1	1470	3300	U F1	ug/Kg	☼	0	10 - 110	NC	99
2,4-Dinitrotoluene	5800	U	734	584	J	ug/Kg	☼	80	32 - 110	2	30
2,6-Dinitrotoluene	5800	U	734	543	J	ug/Kg	☼	74	35 - 110	3	30
2-Chloronaphthalene	5800	U	734	607	J	ug/Kg	☼	83	28 - 110	9	30
2-Chlorophenol	5800	U	734	555	J	ug/Kg	☼	76	10 - 110	14	47
2-Methylnaphthalene	1800	J	734	2250	J	ug/Kg	☼	61	10 - 133	7	42
2-Methylphenol	5800	U	734	564	J	ug/Kg	☼	77	24 - 110	7	51
2-Nitroaniline	4400	U	734	480	J	ug/Kg	☼	65	39 - 110	9	31
2-Nitrophenol	5800	U	734	531	J	ug/Kg	☼	72	10 - 110	20	49
3,3'-Dichlorobenzidine	5800	U	1470	1280	J	ug/Kg	☼	87	10 - 110	11	56
3-Nitroaniline	4400	U	734	652	J	ug/Kg	☼	89	10 - 110	24	30
4,6-Dinitro-2-methylphenol	4400	U	1470	756	J	ug/Kg	☼	52	10 - 110	3	55
4-Bromophenyl phenyl ether	3300	U	734	628	J	ug/Kg	☼	86	33 - 110	3	30
4-Chloro-3-methylphenol	5800	U F1	734	5800	U F1	ug/Kg	☼	0	25 - 110	NC	54
4-Chloroaniline	5800	U F1	734	5800	U F1	ug/Kg	☼	0	10 - 110	NC	36
4-Chlorophenyl phenyl ether	4400	U	734	635	J	ug/Kg	☼	86	32 - 110	6	30
4-Nitroaniline	4400	U F1	734	953	J F1	ug/Kg	☼	130	10 - 110	46	48
4-Nitrophenol	7200	U F1	1470	7300	U F1	ug/Kg	☼	0	10 - 113	NC	49
Acenaphthene	3500	J	734	3660	J 4	ug/Kg	☼	20	22 - 110	1	99
Acenaphthylene	220	J	734	778	J	ug/Kg	☼	76	24 - 110	7	99
Acetophenone	5800	U	734	752	J	ug/Kg	☼	102	31 - 110	21	43
Anthracene	3200	J	734	3510	J 4	ug/Kg	☼	37	20 - 110	3	99
Atrazine	880	U	1470	1380		ug/Kg	☼	94	45 - 118	3	30
Benzaldehyde	5800	U	1470	1240	J	ug/Kg	☼	85	23 - 110	23	42
Benzo[a]anthracene	5800		734	5240	J 4	ug/Kg	☼	-73	10 - 122	1	99
Benzo[a]pyrene	5500	J	734	4850	J 4	ug/Kg	☼	-87	10 - 110	6	99
Benzo[b]fluoranthene	7500		734	6400	4	ug/Kg	☼	-145	12 - 118	8	99
Benzo[g,h,i]perylene	3300	J	734	2880	J 4	ug/Kg	☼	-52	10 - 117	13	99
Benzo[k]fluoranthene	2600	J	734	2930	J	ug/Kg	☼	48	10 - 121	1	99
Bis(2-chloroethoxy)methane	5800	U	734	660	J	ug/Kg	☼	90	26 - 110	17	37

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

Lab Sample ID: 240-60612-5 MSD
Matrix: Solid
Analysis Batch: 218381

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217042

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	1800	U	734	660	J	ug/Kg	☼	90	21 - 110	11	55
Bis(2-ethylhexyl) phthalate	5800	U F1 F2	734	696	J F2	ug/Kg	☼	95	40 - 110	33	30
Butyl benzyl phthalate	5800	U	734	616	J	ug/Kg	☼	84	44 - 110	5	30
Caprolactam	5800	U	1470	1390	J	ug/Kg	☼	94	10 - 134	1	32
Carbazole	3200	J	734	3270	J 4	ug/Kg	☼	11	34 - 110	8	30
Chrysene	6200		734	5790	J 4	ug/Kg	☼	-62	10 - 125	7	99
Dibenz(a,h)anthracene	740	J	734	1100	J	ug/Kg	☼	50	14 - 113	1	99
Dibenzofuran	2700	J F1	734	2830	J F1	ug/Kg	☼	25	29 - 110	2	30
Diethyl phthalate	5800	U	734	595	J	ug/Kg	☼	81	42 - 110	6	30
Dimethyl phthalate	5800	U	734	606	J	ug/Kg	☼	83	41 - 110	3	30
Di-n-butyl phthalate	5800	U	734	628	J	ug/Kg	☼	86	43 - 110	1	30
Di-n-octyl phthalate	5800	U	734	547	J	ug/Kg	☼	74	24 - 119	4	30
Fluoranthene	16000		734	14700	4	ug/Kg	☼	-233	10 - 110	3	99
Fluorene	4100	J	734	4040	J 4	ug/Kg	☼	-2	23 - 110	3	99
Hexachlorobenzene	5800	U	734	508	J	ug/Kg	☼	69	34 - 110	4	30
Hexachlorobutadiene	880	U	734	534	J	ug/Kg	☼	73	25 - 110	8	34
Hexachlorocyclopentadiene	5800	U F1	734	5800	U F1	ug/Kg	☼	0	10 - 110	NC	79
Hexachloroethane	5800	U	734	577	J	ug/Kg	☼	79	12 - 110	13	50
Indeno[1,2,3-cd]pyrene	2900	J F1	734	2620	J 4	ug/Kg	☼	-43	10 - 114	10	99
Isophorone	5800	U	734	616	J	ug/Kg	☼	84	29 - 110	10	38
Naphthalene	6000		734	6710	4	ug/Kg	☼	102	10 - 111	12	99
Nitrobenzene	5800	U	734	580	J	ug/Kg	☼	79	23 - 110	20	41
N-Nitrosodi-n-propylamine	5800	U	734	697	J	ug/Kg	☼	95	26 - 110	21	42
N-Nitrosodiphenylamine	5800	U	1470	1410	J	ug/Kg	☼	96	22 - 110	10	30
Pentachlorophenol	3300	U F1	1470	3300	U F1	ug/Kg	☼	0	10 - 110	NC	50
Phenol	5800	U	734	536	J	ug/Kg	☼	73	17 - 110	8	53
Phenanthrene	16000		734	14600	4	ug/Kg	☼	-256	10 - 166	5	99
Pyrene	14000		734	12300	4	ug/Kg	☼	-170	10 - 147	2	99
3 & 4 Methylphenol	5800	U	734	618	J	ug/Kg	☼	84	25 - 110	7	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*88*		*24 - 110*
2-Fluorophenol (Surr)	*85*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*26*		*10 - 110*
Nitrobenzene-d5 (Surr)	*82*		*20 - 110*
Phenol-d5 (Surr)	*78*		*26 - 110*
Terphenyl-d14 (Surr)	*84*		*36 - 110*

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

Lab Sample ID: MB 240-216950/23-A
Matrix: Solid
Analysis Batch: 218299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 216950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	260	U	260	12	ug/Kg		02/09/16 06:39	02/21/16 01:53	1
Aroclor-1221	260	U	260	16	ug/Kg		02/09/16 06:39	02/21/16 01:53	1
Aroclor-1232	260	U	260	20	ug/Kg		02/09/16 06:39	02/21/16 01:53	1

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

Lab Sample ID: MB 240-216950/23-A
Matrix: Solid
Analysis Batch: 218299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 216950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1242	260	U	260	11	ug/Kg		02/09/16 06:39	02/21/16 01:53	1
Aroclor-1248	260	U	260	8.0	ug/Kg		02/09/16 06:39	02/21/16 01:53	1
Aroclor-1254	260	U	260	14	ug/Kg		02/09/16 06:39	02/21/16 01:53	1
Aroclor-1260	260	U	260	9.0	ug/Kg		02/09/16 06:39	02/21/16 01:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*13 - 134*	*02/09/16 06:39*	*02/21/16 01:53*	*1*
DCB Decachlorobiphenyl	*49*		*10 - 155*	*02/09/16 06:39*	*02/21/16 01:53*	*1*

Lab Sample ID: LCS 240-216950/24-A
Matrix: Solid
Analysis Batch: 218299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 216950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	279		ug/Kg		84	51 - 120
Aroclor-1260	333	270		ug/Kg		81	48 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*13 - 134*
DCB Decachlorobiphenyl	*64*		*10 - 155*

Lab Sample ID: 240-60612-5 MS
Matrix: Solid
Analysis Batch: 218386

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 216950

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	290	U	374	260	J	ug/Kg	☼	70	17 - 141
Aroclor-1260	250	J	374	502		ug/Kg	☼	66	19 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*13 - 134*
DCB Decachlorobiphenyl	*99*		*10 - 155*

Lab Sample ID: 240-60612-5 MSD
Matrix: Solid
Analysis Batch: 218386

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 216950

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	290	U	373	248	J	ug/Kg	☼	66	17 - 141	5	56
Aroclor-1260	250	J	373	495		ug/Kg	☼	64	19 - 137	1	55

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*80*		*13 - 134*
DCB Decachlorobiphenyl	*105*		*10 - 155*

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

Lab Sample ID: MB 240-216954/23-A
Matrix: Solid
Analysis Batch: 217985

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 216954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	260	U	260	12	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1221	260	U	260	16	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1232	260	U	260	20	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1242	260	U	260	11	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1248	260	U	260	8.0	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1254	260	U	260	14	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1260	260	U	260	9.0	ug/Kg		02/09/16 06:59	02/19/16 01:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*13 - 134*	*02/09/16 06:59*	*02/19/16 01:46*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 155*	*02/09/16 06:59*	*02/19/16 01:46*	*1*

Lab Sample ID: LCS 240-216954/24-A
Matrix: Solid
Analysis Batch: 217985

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 216954

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			333	231	J	ug/Kg		69	51 - 120		
Aroclor-1260			333	261		ug/Kg		78	48 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*13 - 134*
DCB Decachlorobiphenyl	*82*		*10 - 155*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-217055/1-A
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217055

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80	U	0.80	0.41	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Beryllium	0.16	U	0.16	0.026	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Cadmium	0.080	U	0.080	0.021	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Cobalt	0.40	U	0.40	0.047	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Chromium	0.80	U	0.80	0.075	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Copper	0.80	U	0.80	0.23	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Manganese	0.109	J	0.80	0.084	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Nickel	0.80	U	0.80	0.080	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Vanadium	0.80	U	0.80	0.20	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Zinc	0.603	J	2.0	0.56	mg/Kg		02/10/16 09:59	02/19/16 09:59	1
Lead	0.24	U	0.24	0.20	mg/Kg		02/10/16 09:59	02/19/16 09:59	1

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

Lab Sample ID: LCS 240-217055/2-A
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217055

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	194		mg/Kg		97	80 - 120
Beryllium	5.00	4.93		mg/Kg		99	80 - 120
Cadmium	5.00	4.79		mg/Kg		96	80 - 120
Cobalt	50.0	46.5		mg/Kg		93	80 - 120
Chromium	20.0	18.8		mg/Kg		94	80 - 120
Copper	25.0	24.4		mg/Kg		98	80 - 120
Manganese	50.0	48.0		mg/Kg		96	80 - 120
Nickel	50.0	47.3		mg/Kg		95	80 - 120
Vanadium	50.0	48.5		mg/Kg		97	80 - 120
Zinc	50.0	48.2		mg/Kg		96	80 - 120
Lead	50.0	46.2		mg/Kg		92	80 - 120

Lab Sample ID: 240-60612-5 MS
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217055

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	76		203	301		mg/Kg	☼	111	75 - 125
Beryllium	0.29		5.07	4.96		mg/Kg	☼	92	75 - 125
Cadmium	1.8		5.07	6.40		mg/Kg	☼	92	75 - 125
Cobalt	3.2		50.7	50.5		mg/Kg	☼	93	75 - 125
Chromium	17		20.3	33.7		mg/Kg	☼	80	75 - 125
Copper	10		25.4	34.3		mg/Kg	☼	94	75 - 125
Manganese	280	B	50.7	311	4	mg/Kg	☼	65	75 - 125
Nickel	7.9		50.7	56.6		mg/Kg	☼	96	75 - 125
Vanadium	11		50.7	58.3		mg/Kg	☼	93	75 - 125
Zinc	100	B F1	50.7	135	F1	mg/Kg	☼	69	75 - 125
Lead	68	F1	50.7	122		mg/Kg	☼	106	75 - 125

Lab Sample ID: 240-60612-5 MSD
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217055

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	76		203	302		mg/Kg	☼	111	75 - 125	0	20
Beryllium	0.29		5.07	5.02		mg/Kg	☼	93	75 - 125	1	20
Cadmium	1.8		5.07	7.15		mg/Kg	☼	106	75 - 125	11	20
Cobalt	3.2		50.7	51.9		mg/Kg	☼	96	75 - 125	3	20
Chromium	17		20.3	38.6		mg/Kg	☼	104	75 - 125	14	20
Copper	10		25.4	40.0		mg/Kg	☼	117	75 - 125	16	20
Manganese	280	B	50.7	324	4	mg/Kg	☼	91	75 - 125	4	20
Nickel	7.9		50.7	57.9		mg/Kg	☼	99	75 - 125	2	20
Vanadium	11		50.7	58.5		mg/Kg	☼	93	75 - 125	0	20
Zinc	100	B F1	50.7	160		mg/Kg	☼	119	75 - 125	17	20
Lead	68	F1	50.7	139	F1	mg/Kg	☼	139	75 - 125	13	20

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

Lab Sample ID: MB 240-219499/1-A
Matrix: Solid
Analysis Batch: 219736

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 219499

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (coarse particulate matter)	0.30	U	0.30	0.20	mg/Kg		02/29/16 11:13	03/01/16 11:33	1
Lead (fine particulate matter)	0.30	U	0.30	0.20	mg/Kg		02/29/16 11:13	03/01/16 11:33	1

Lab Sample ID: LCS 240-219499/2-A
Matrix: Solid
Analysis Batch: 219736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 219499

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead (coarse particulate matter)	50.0	45.1		mg/Kg		90	80 - 120
Lead (fine particulate matter)	50.0	45.1		mg/Kg		90	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-217055/1-A ^2
Matrix: Solid
Analysis Batch: 217218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217055

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	U	0.32	0.014	mg/Kg		02/10/16 09:59	02/11/16 19:56	2
Arsenic	0.16	U	0.16	0.026	mg/Kg		02/10/16 09:59	02/11/16 19:56	2
Selenium	0.32	U	0.32	0.040	mg/Kg		02/10/16 09:59	02/11/16 19:56	2
Thallium	0.16	U	0.16	0.019	mg/Kg		02/10/16 09:59	02/11/16 19:56	2
Silver	0.16	U	0.16	0.0014	mg/Kg		02/10/16 09:59	02/11/16 19:56	2

Lab Sample ID: LCS 240-217055/3-A ^2
Matrix: Solid
Analysis Batch: 217218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217055

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	9.28		mg/Kg		93	68 - 113
Arsenic	100	95.6		mg/Kg		96	73 - 110
Selenium	100	91.1		mg/Kg		91	65 - 110
Thallium	25.0	25.9		mg/Kg		104	71 - 110
Silver	10.0	9.51		mg/Kg		95	60 - 114

Lab Sample ID: 240-60612-5 MS
Matrix: Solid
Analysis Batch: 217218

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA
Prep Batch: 217055

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.3	F1	10.1	7.03	F1	mg/Kg	☼	57	75 - 125
Arsenic	4.1		101	93.2		mg/Kg	☼	89	75 - 125
Selenium	1.4		101	85.7		mg/Kg	☼	84	75 - 125
Thallium	0.074	J	25.1	22.3		mg/Kg	☼	89	75 - 125
Silver	0.057	J	10.1	8.51		mg/Kg	☼	84	75 - 125

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

Lab Sample ID: 240-60612-5 MSD — **Client Sample ID: SO-17303-020416-CB-003**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217218 — **Prep Batch: 217055**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.3	F1	10.1	7.50	F1	mg/Kg	☼	62	75 - 125	7	20
Arsenic	4.1		101	98.2		mg/Kg	☼	94	75 - 125	5	20
Selenium	1.4		101	90.4		mg/Kg	☼	88	75 - 125	5	20
Thallium	0.074	J	25.1	23.8		mg/Kg	☼	94	75 - 125	6	20
Silver	0.057	J	10.1	9.10		mg/Kg	☼	90	75 - 125	7	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-217057/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217566 — **Prep Batch: 217057**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.014	mg/Kg		02/10/16 10:08	02/11/16 11:43	1

Lab Sample ID: LCS 240-217057/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217566 — **Prep Batch: 217057**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.860		mg/Kg		103	80 - 120

Lab Sample ID: 240-60612-5 MS — **Client Sample ID: SO-17303-020416-CB-003**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217566 — **Prep Batch: 217057**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.039	J F1	0.173	0.290	F1	mg/Kg	☼	145	80 - 120

Lab Sample ID: 240-60612-5 MSD — **Client Sample ID: SO-17303-020416-CB-003**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217566 — **Prep Batch: 217057**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.039	J F1	0.173	0.243		mg/Kg	☼	118	80 - 120	18	20

Method: Moisture - Coarse Moisture

Lab Sample ID: 240-60612-9 DU — **Client Sample ID: SO-17303-020416-CB-007**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 219233

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids Coarse	98.6		99.1		%		0.5	20
Percent Solids Fine	98.6		99.1		%		0.5	20
Coarse Moisture	1.4		0.9	F3	%		42	20
Fine Moisture	1.4		0.9	F3	%		42	20

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Method: Moisture - Percent Moisture

Lab Sample ID: 240-60612-5 DU
Matrix: Solid
Analysis Batch: 216933

Client Sample ID: SO-17303-020416-CB-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	90.4			91.4		%				1	20
Percent Moisture	9.6			8.6		%				11	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(39-128)	(26-141)	(33-134)	(30-122)
240-60612-4	SO-17303-020316-CB-002	64	74	81	74
240-60612-5	SO-17303-020416-CB-003	78	91	93	85
240-60612-5 MS	SO-17303-020416-CB-003	82	86	90	90
240-60612-5 MSD	SO-17303-020416-CB-003	80	89	94	92
240-60612-6	SO-17303-020416-CB-004	74	80	86	83
240-60612-7	SO-17303-020416-CB-005	80	92	94	89
240-60612-8	SO-17303-020416-CB-006	74	79	87	87
240-60612-9	SO-17303-020416-CB-007	79	85	90	90
240-60612-10	TB-17303-020416-CB-008	87	96	101	100
LCS 240-217366/2-A	Lab Control Sample	82	89	87	92
MB 240-217366/1-A	Method Blank	76	85	89	88

Surrogate Legend

12DCE = 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)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-60612-1	GW-17303-020316-CB-009	90	90	96	90
240-60612-2	GW-17303-020316-CB-010	97	96	101	98
240-60612-3	TB-17303-020316-CB-011	97	95	100	98
LCS 240-217748/4	Lab Control Sample	101	101	104	96
MB 240-217748/6	Method Blank	91	98	94	92

Surrogate Legend

12DCE = 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	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-60612-4	SO-17303-020316-CB-002	59	58	49	49	60	72
240-60612-5	SO-17303-020416-CB-003	79	70	52	64	67	82
240-60612-5 MS	SO-17303-020416-CB-003	82	72	49	71	73	85
240-60612-5 MSD	SO-17303-020416-CB-003	88	85	26	82	78	84
240-60612-6	SO-17303-020416-CB-004	57	52	51	44	59	79
240-60612-6 - RA	SO-17303-020416-CB-004	60	53	51	42	53	79
240-60612-7	SO-17303-020416-CB-005	73	72	54	58	76	75
240-60612-8	SO-17303-020416-CB-006	60	60	39	51	60	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	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-60612-9	SO-17303-020416-CB-007	0 X	0 X	0 X	0 X	0 X	114 X
LCS 240-217042/24-A	Lab Control Sample	74	75	44	68	78	79
MB 240-217042/23-A	Method Blank	81	65	32	70	77	78

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCB2
Lab Sample ID	Client Sample ID	(13-134)	(10-155)
240-60612-4	SO-17303-020316-CB-002	70	59
240-60612-5	SO-17303-020416-CB-003	84	99
240-60612-5 MS	SO-17303-020416-CB-003	77	99
240-60612-5 MSD	SO-17303-020416-CB-003	80	105
LCS 240-216950/24-A	Lab Control Sample	83	64
MB 240-216950/23-A	Method Blank	67	49

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(13-134)	(10-155)
240-60612-6	SO-17303-020416-CB-004	50	71
240-60612-7	SO-17303-020416-CB-005	48	110
240-60612-8	SO-17303-020416-CB-006	66	72
240-60612-9	SO-17303-020416-CB-007	44	488 X
LCS 240-216954/24-A	Lab Control Sample	78	82
MB 240-216954/23-A	Method Blank	77	85

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Client Sample ID: GW-17303-020316-CB-009

Lab Sample ID: 240-60612-1
Date Collected: 02/03/16 12:25
Matrix: Water
Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	217748	02/17/16 17:33	LEE	TAL CAN

Client Sample ID: GW-17303-020316-CB-010

Lab Sample ID: 240-60612-2
Date Collected: 02/03/16 13:55
Matrix: Water
Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		66.67	217748	02/17/16 17:56	LEE	TAL CAN

Client Sample ID: TB-17303-020316-CB-011

Lab Sample ID: 240-60612-3
Date Collected: 02/03/16 00:00
Matrix: Water
Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	217748	02/17/16 18:18	LEE	TAL CAN

Client Sample ID: SO-17303-020316-CB-002

Lab Sample ID: 240-60612-4
Date Collected: 02/03/16 12:00
Matrix: Solid
Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	216933	02/08/16 15:04	GNR	TAL CAN

Client Sample ID: SO-17303-020316-CB-002

Lab Sample ID: 240-60612-4
Date Collected: 02/03/16 12:00
Matrix: Solid
Date Received: 02/05/16 09:30
Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217366	02/12/16 18:03	LAM	TAL CAN
Total/NA	Analysis	8260B		10	217895	02/17/16 21:59	TJL1	TAL CAN
Total/NA	Prep	3540C			217042	02/10/16 08:09	YDN	TAL CAN
Total/NA	Analysis	8270C		1	218381	02/22/16 17:59	MRU	TAL CAN
Total/NA	Prep	3540C			216950	02/09/16 06:39	YDN	TAL CAN
Total/NA	Analysis	8082		1	218386	02/22/16 17:53	LSH	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/20/16 01:01	KLC	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6020		2	217218	02/11/16 21:17	AS1	TAL CAN
Total/NA	Prep	7471A			217057	02/10/16 10:08	WKD	TAL CAN
Total/NA	Analysis	7471A		1	217566	02/11/16 12:41	WKD	TAL CAN

Client Sample ID: SO-17303-020416-CB-003 — Lab Sample ID: 240-60612-5

Date Collected: 02/04/16 10:30 — **Matrix: Solid**
Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	216933	02/08/16 15:04	GNR	TAL CAN

Client Sample ID: SO-17303-020416-CB-003 — Lab Sample ID: 240-60612-5

Date Collected: 02/04/16 10:30 — **Matrix: Solid**
Date Received: 02/05/16 09:30 — **Percent Solids: 90.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217366	02/12/16 18:03	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217895	02/18/16 01:43	TJL1	TAL CAN
Total/NA	Prep	3540C			217042	02/10/16 08:09	YDN	TAL CAN
Total/NA	Analysis	8270C		20	218381	02/22/16 16:18	MRU	TAL CAN
Total/NA	Prep	3540C			216950	02/09/16 06:39	YDN	TAL CAN
Total/NA	Analysis	8082		1	218386	02/22/16 18:12	LSH	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/19/16 10:30	KLC	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6020		2	217218	02/11/16 20:13	AS1	TAL CAN
Total/NA	Prep	7471A			217057	02/10/16 10:08	WKD	TAL CAN
Total/NA	Analysis	7471A		1	217566	02/11/16 11:47	WKD	TAL CAN

Client Sample ID: SO-17303-020416-CB-004 — Lab Sample ID: 240-60612-6

Date Collected: 02/04/16 12:50 — **Matrix: Solid**
Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	216933	02/08/16 15:04	GNR	TAL CAN

Client Sample ID: SO-17303-020416-CB-004 — Lab Sample ID: 240-60612-6

Date Collected: 02/04/16 12:50 — **Matrix: Solid**
Date Received: 02/05/16 09:30 — **Percent Solids: 88.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217366	02/12/16 18:03	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217895	02/18/16 02:05	TJL1	TAL CAN
Total/NA	Prep	3540C			217042	02/10/16 08:09	YDN	TAL CAN
Total/NA	Analysis	8270C		1	218381	02/22/16 18:50	MRU	TAL CAN
Total/NA	Prep	3540C	RA		217042	02/10/16 08:09	YDN	TAL CAN
Total/NA	Analysis	8270C	RA	2	218593	02/23/16 14:49	MRU	TAL CAN
Total/NA	Prep	3540C			216954	02/09/16 06:59	YDN	TAL CAN
Total/NA	Analysis	8082		1	217985	02/18/16 21:22	LSH	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/20/16 01:05	KLC	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN

Client Sample ID: SO-17303-020416-CB-004

Lab Sample ID: 240-60612-6
Date Collected: 02/04/16 12:50
Matrix: Solid
Date Received: 02/05/16 09:30
Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		2	217218	02/11/16 21:21	AS1	TAL CAN
Total/NA	Prep	7471A			217057	02/10/16 10:08	WKD	TAL CAN
Total/NA	Analysis	7471A		1	217566	02/11/16 12:23	WKD	TAL CAN

Client Sample ID: SO-17303-020416-CB-005

Lab Sample ID: 240-60612-7
Date Collected: 02/04/16 13:00
Matrix: Solid
Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	216933	02/08/16 15:04	GNR	TAL CAN

Client Sample ID: SO-17303-020416-CB-005

Lab Sample ID: 240-60612-7
Date Collected: 02/04/16 13:00
Matrix: Solid
Date Received: 02/05/16 09:30
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217366	02/12/16 18:03	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217895	02/18/16 02:28	TJL1	TAL CAN
Total/NA	Prep	3540C			217042	02/10/16 08:09	YDN	TAL CAN
Total/NA	Analysis	8270C		1	218593	02/23/16 14:24	MRU	TAL CAN
Total/NA	Prep	3540C			216954	02/09/16 06:59	YDN	TAL CAN
Total/NA	Analysis	8082		1	217985	02/18/16 21:41	LSH	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/20/16 01:09	KLC	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6020		2	217218	02/11/16 21:26	AS1	TAL CAN
Total/NA	Prep	7471A			217057	02/10/16 10:08	WKD	TAL CAN
Total/NA	Analysis	7471A		1	217566	02/11/16 12:08	WKD	TAL CAN

Client Sample ID: SO-17303-020416-CB-006

Lab Sample ID: 240-60612-8
Date Collected: 02/04/16 13:10
Matrix: Solid
Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	216933	02/08/16 15:04	GNR	TAL CAN

Client Sample ID: SO-17303-020416-CB-006

Lab Sample ID: 240-60612-8
Date Collected: 02/04/16 13:10
Matrix: Solid
Date Received: 02/05/16 09:30
Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217366	02/12/16 18:03	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217895	02/18/16 02:51	TJL1	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			217042	02/10/16 08:09	YDN	TAL CAN
Total/NA	Analysis	8270C		1	218381	02/22/16 18:25	MRU	TAL CAN
Total/NA	Prep	3540C			216954	02/09/16 06:59	YDN	TAL CAN
Total/NA	Analysis	8082		1	217985	02/18/16 22:00	LSH	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/20/16 01:13	KLC	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6020		2	217218	02/11/16 21:30	AS1	TAL CAN
Total/NA	Prep	7471A			217057	02/10/16 10:08	WKD	TAL CAN
Total/NA	Analysis	7471A		1	217566	02/11/16 11:53	WKD	TAL CAN

Client Sample ID: SO-17303-020416-CB-007

Lab Sample ID: 240-60612-9

Date Collected: 02/04/16 13:20

Matrix: Solid

Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Analysis	6010B		1	219748	03/01/16 17:32	KLC	TAL CAN
Total/NA	Analysis	Moisture		1	216933	02/08/16 15:04	GNR	TAL CAN
Total/NA	Analysis	Moisture		1	219233	02/26/16 11:37	TPH	TAL CAN
Total/NA	Analysis	Moisture		1	219233	02/26/16 11:37	TPH	TAL CAN

Client Sample ID: SO-17303-020416-CB-007

Lab Sample ID: 240-60612-9

Date Collected: 02/04/16 13:20

Matrix: Solid

Date Received: 02/05/16 09:30

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217366	02/12/16 18:03	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217895	02/17/16 22:41	TJL1	TAL CAN
Total/NA	Prep	3540C			217042	02/10/16 08:09	YDN	TAL CAN
Total/NA	Analysis	8270C		200	218381	02/22/16 17:34	MRU	TAL CAN
Total/NA	Prep	3540C			216954	02/09/16 06:59	YDN	TAL CAN
Total/NA	Analysis	8082		1	217985	02/18/16 22:19	LSH	TAL CAN
Fractionated	Cleanup	Fractionation			219288	02/23/16 17:00	SMH	TAL CAN
Fractionated	Prep	3050B			219499	02/29/16 11:13	DEE	TAL CAN
Fractionated	Analysis	6010B		1	219736	03/01/16 14:28	KLC	TAL CAN
Fractionated	Cleanup	Fractionation			219290	02/23/16 17:00	DRJ	TAL CAN
Fractionated	Prep	3050B			219499	02/29/16 11:13	DEE	TAL CAN
Fractionated	Analysis	6010B		1	219736	03/01/16 14:32	KLC	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/20/16 01:17	KLC	TAL CAN
Total/NA	Prep	3050B			217055	02/10/16 09:59	WKD	TAL CAN
Total/NA	Analysis	6020		2	217218	02/11/16 21:34	AS1	TAL CAN
Total/NA	Prep	7471A			217057	02/10/16 10:08	WKD	TAL CAN
Total/NA	Analysis	7471A		1	217566	02/11/16 11:55	WKD	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Client Sample ID: TB-17303-020416-CB-008
Date Collected: 02/04/16 00:00
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60612-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217366	02/12/16 18:03	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217895	02/17/16 23:04	TJL1	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60612-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica
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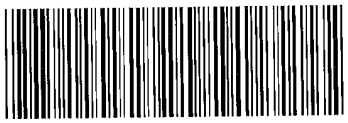
TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



240-60612 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

Chain of Custody Record

122760

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

L-8/C13

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/3/16	COC No: 003
Company Name: GHD	Tel/Fax: (734) 453-5123	Lab Contact: D. Heckler	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: (734) 453-5123	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name:	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.: 24006020
PO# SSOW# 17303-033	☐ 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 VOCs	TCL SVOCs	25 TAL Metals	Total PCBs	Sample Specific Notes:
GW-17303-020316-CB-009	02/03/16	1225	G	WG	3	N	N	X				
-010		1355			3			X				
TB- -011		—	—	WGQ	1	-	-	X				
SD- -002		1200			2	-		X	X	X	X	
-020416- -003	02/04/16	1030			5	-	Y	X	X	X	X	
-004		1250			2	-	N	X	X	X	X	
-005		1300			2	-		X	X	X	X	
-006		1310			2	-		X	X	X	X	
-007		1320			2			X	X	X	X	
TB- -008		—	—	SOQ	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:
Tracking # 6209 0763 2801

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:
C. Bondy	GHD	2/4/16 1615			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA NC	Date/Time: 2/5/16 0930

TestAmerica Canton Sample Receipt Form/Narrative Login # : 600611
Canton Facility

Client GHD Site Name CVO
Cooler Received on 2/5/16 Opened on 2/5/16
Cooler unpacked by:
FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA no # 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# 48 (CF -1.9 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN# 18 (CF -0.5 °C) Observed Cooler Temp. 1.8 °C Corrected Cooler Temp. 1.3 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____ Yes (No)
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No (NA)
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
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 sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC559158
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B53150IVB (Yes) No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Received 1x40 Torva Cord Trip Blank w/ ID TB-17303-020316-CB-012 collected on 2/3/16 that is not on the COC.

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): _____

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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: 240-60613-1
Client Project/Site: 17303-034, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
2/23/2016 4:31:58 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: 240-60613-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-60613-1

Comments
No additional comments.

Receipt
The sample was received on 2/5/2016 9:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3º 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) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-020316-CB-001 (240-60613-1), (240-60613-B-1-B MS) and (240-60613-A-1-A MSD). 2391675, 2103098, 2333858.

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.
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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-60613-1	SO-17303-020316-CB-001	Solid	02/03/16 08:45	02/05/16 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

Client Sample ID: SO-17303-020316-CB-001 — Lab Sample ID: 240-60613-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0052	J B	0.50	0.0029	mg/L	1		6010B	TCLP
Barium	0.36	J	10	0.0010	mg/L	1		6010B	TCLP
Cadmium	0.0023	J B	0.10	0.00014	mg/L	1		6010B	TCLP
Lead	0.0028	J B	0.50	0.0019	mg/L	1		6010B	TCLP
Selenium	0.0044	J	0.25	0.0040	mg/L	1		6010B	TCLP
Flashpoint	>200		1.00	1.00	Degrees F	1		1010	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1010	Ignitability, Pensky-Martens Closed-Cup Method	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: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

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

Client Sample ID: SO-17303-020316-CB-001
Date Collected: 02/03/16 08:45
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60613-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			02/19/16 02:14	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			02/19/16 02:14	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			02/19/16 02:14	1
Benzene	0.025	U	0.025	0.0065	mg/L			02/19/16 02:14	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			02/19/16 02:14	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			02/19/16 02:14	1
Chloroform	0.025	U	0.025	0.0080	mg/L			02/19/16 02:14	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			02/19/16 02:14	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			02/19/16 02:14	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			02/19/16 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*80 - 121*		*02/19/16 02:14*	*1*
4-Bromofluorobenzene (Surr)	*81*		*70 - 124*		*02/19/16 02:14*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*02/19/16 02:14*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*02/19/16 02:14*	*1*

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

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

Client Sample ID: SO-17303-020316-CB-001
Date Collected: 02/03/16 08:45
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60613-1
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		02/17/16 09:56	02/20/16 18:44	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		02/17/16 09:56	02/20/16 18:44	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		02/17/16 09:56	02/20/16 18:44	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		02/17/16 09:56	02/20/16 18:44	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		02/17/16 09:56	02/20/16 18:44	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		02/17/16 09:56	02/20/16 18:44	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		02/17/16 09:56	02/20/16 18:44	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		02/17/16 09:56	02/20/16 18:44	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		02/17/16 09:56	02/20/16 18:44	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		02/17/16 09:56	02/20/16 18:44	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		02/17/16 09:56	02/20/16 18:44	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		02/17/16 09:56	02/20/16 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*30 - 110*	*02/17/16 09:56*	*02/20/16 18:44*	*1*
2-Fluorophenol (Surr)	*61*		*20 - 110*	*02/17/16 09:56*	*02/20/16 18:44*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*23 - 110*	*02/17/16 09:56*	*02/20/16 18:44*	*1*
Nitrobenzene-d5 (Surr)	*69*		*28 - 110*	*02/17/16 09:56*	*02/20/16 18:44*	*1*
Phenol-d5 (Surr)	*44*		*21 - 110*	*02/17/16 09:56*	*02/20/16 18:44*	*1*
Terphenyl-d14 (Surr)	*90*		*48 - 110*	*02/17/16 09:56*	*02/20/16 18:44*	*1*

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

Client Sample ID: SO-17303-020316-CB-001
Date Collected: 02/03/16 08:45
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60613-1
Matrix: Solid
Percent Solids: 87.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	38	U	38	14	ug/Kg	☼	02/09/16 06:59	02/18/16 22:37	1
Aroclor-1221	38	U	38	18	ug/Kg	☼	02/09/16 06:59	02/18/16 22:37	1
Aroclor-1232	38	U	38	23	ug/Kg	☼	02/09/16 06:59	02/18/16 22:37	1
Aroclor-1242	38	U	38	13	ug/Kg	☼	02/09/16 06:59	02/18/16 22:37	1
Aroclor-1248	38	U	38	9.2	ug/Kg	☼	02/09/16 06:59	02/18/16 22:37	1
Aroclor-1254	38	U	38	16	ug/Kg	☼	02/09/16 06:59	02/18/16 22:37	1
Aroclor-1260	38	U	38	10	ug/Kg	☼	02/09/16 06:59	02/18/16 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*13 - 134*	*02/09/16 06:59*	*02/18/16 22:37*	*1*
DCB Decachlorobiphenyl	*78*		*10 - 155*	*02/09/16 06:59*	*02/18/16 22:37*	*1*

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

Method: 6010B - Metals (ICP) - TCLP

Client Sample ID: SO-17303-020316-CB-001
Date Collected: 02/03/16 08:45
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60613-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0052**	**J B**	0.50	0.0029	mg/L		02/17/16 13:46	02/23/16 07:14	1
Barium	**0.36**	**J**	10	0.0010	mg/L		02/17/16 13:46	02/23/16 07:14	1
Cadmium	**0.0023**	**J B**	0.10	0.00014	mg/L		02/17/16 13:46	02/23/16 07:14	1
Chromium	0.50	U	0.50	0.00055	mg/L		02/17/16 13:46	02/23/16 07:14	1
Lead	**0.0028**	**J B**	0.50	0.0019	mg/L		02/17/16 13:46	02/23/16 07:14	1
Selenium	**0.0044**	**J**	0.25	0.0040	mg/L		02/17/16 13:46	02/23/16 07:14	1
Silver	0.50	U	0.50	0.00092	mg/L		02/17/16 13:46	02/23/16 07:14	1

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

Method: 7470A - Mercury (CVAA) - TCLP

Client Sample ID: SO-17303-020316-CB-001
Date Collected: 02/03/16 08:45
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60613-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		02/17/16 13:51	02/18/16 15:12	1

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

General Chemistry

Client Sample ID: SO-17303-020316-CB-001
Date Collected: 02/03/16 08:45
Date Received: 02/05/16 09:30

Lab Sample ID: 240-60613-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>200		1.00	1.00	Degrees F			02/15/16 09:38	1
Percent Solids	87.0		0.1	0.1	%			02/08/16 15:04	1
Percent Moisture	13.0		0.1	0.1	%			02/08/16 15:04	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

GC/MS VOA

Leach Batch: 217791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	1311	
LB 240-217791/1-A MB	Method Blank	TCLP	Solid	1311	

Analysis Batch: 217891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	8260B	217791
LB 240-217791/1-A MB	Method Blank	TCLP	Solid	8260B	217791
LCS 240-217891/27	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 217708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	1311	
240-60613-1 MS	SO-17303-020316-CB-001	TCLP	Solid	1311	

Prep Batch: 217787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	3510C	217708
240-60613-1 MS	SO-17303-020316-CB-001	TCLP	Solid	3510C	217708
LCS 240-217787/6-A	Lab Control Sample	Total/NA	Solid	3510C	
MB 240-217787/5-A	Method Blank	Total/NA	Solid	3510C	

Analysis Batch: 218338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	8270C	217787
240-60613-1 MS	SO-17303-020316-CB-001	TCLP	Solid	8270C	217787
LCS 240-217787/6-A	Lab Control Sample	Total/NA	Solid	8270C	217787
MB 240-217787/5-A	Method Blank	Total/NA	Solid	8270C	217787

GC Semi VOA

Prep Batch: 216954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	Total/NA	Solid	3540C	
240-60613-1 MS	SO-17303-020316-CB-001	Total/NA	Solid	3540C	
240-60613-1 MSD	SO-17303-020316-CB-001	Total/NA	Solid	3540C	
LCS 240-216954/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-216954/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 217985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	Total/NA	Solid	8082	216954
240-60613-1 MS	SO-17303-020316-CB-001	Total/NA	Solid	8082	216954
240-60613-1 MSD	SO-17303-020316-CB-001	Total/NA	Solid	8082	216954
LCS 240-216954/24-A	Lab Control Sample	Total/NA	Solid	8082	216954
MB 240-216954/23-A	Method Blank	Total/NA	Solid	8082	216954

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

Metals

Leach Batch: 217708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	1311	
LB 240-217708/1-B	Method Blank	TCLP	Solid	1311	
LB 240-217708/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 217846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	3010A	217708
LB 240-217708/1-B	Method Blank	TCLP	Solid	3010A	217708
LCS 240-217846/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 240-217846/2-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 217848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	7470A	217708
LB 240-217708/1-C	Method Blank	TCLP	Solid	7470A	217708
LCS 240-217848/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 240-217848/2-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 218242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	7470A	217848
LB 240-217708/1-C	Method Blank	TCLP	Solid	7470A	217848
LCS 240-217848/3-A	Lab Control Sample	Total/NA	Solid	7470A	217848
MB 240-217848/2-A	Method Blank	Total/NA	Solid	7470A	217848

Analysis Batch: 218611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	TCLP	Solid	6010B	217846
LB 240-217708/1-B	Method Blank	TCLP	Solid	6010B	217846
LCS 240-217846/3-A	Lab Control Sample	Total/NA	Solid	6010B	217846
MB 240-217846/2-A	Method Blank	Total/NA	Solid	6010B	217846

General Chemistry

Analysis Batch: 216933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	Total/NA	Solid	Moisture	

Analysis Batch: 217501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60613-1	SO-17303-020316-CB-001	Total/NA	Solid	1010	
LCS 240-217501/1	Lab Control Sample	Total/NA	Solid	1010	

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

Lab Sample ID: LCS 240-217891/27
Matrix: Solid
Analysis Batch: 217891

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	0.993		mg/L		99	71 - 133
1,2-Dichloroethane	1.00	1.06		mg/L		106	80 - 120
2-Butanone (MEK)	2.00	1.87		mg/L		93	49 - 120
Benzene	1.00	1.09		mg/L		109	80 - 120
Carbon tetrachloride	1.00	0.635		mg/L		64	54 - 122
Chlorobenzene	1.00	1.10		mg/L		110	80 - 120
Chloroform	1.00	1.08		mg/L		108	80 - 123
Tetrachloroethene	1.00	1.01		mg/L		101	79 - 134
Trichloroethene	1.00	1.14		mg/L		114	78 - 130
Vinyl chloride	1.00	1.01		mg/L		101	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 121*
4-Bromofluorobenzene (Surr)	*86*		*70 - 124*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 128*

Lab Sample ID: LB 240-217791/1-A MB
Matrix: Solid
Analysis Batch: 217891

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	0.0095	mg/L			02/19/16 01:03	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			02/19/16 01:03	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			02/19/16 01:03	1
Benzene	0.025	U	0.025	0.0065	mg/L			02/19/16 01:03	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			02/19/16 01:03	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			02/19/16 01:03	1
Chloroform	0.025	U	0.025	0.0080	mg/L			02/19/16 01:03	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			02/19/16 01:03	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			02/19/16 01:03	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			02/19/16 01:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 121*		*02/19/16 01:03*	*1*
4-Bromofluorobenzene (Surr)	*82*		*70 - 124*		*02/19/16 01:03*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*02/19/16 01:03*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 128*		*02/19/16 01:03*	*1*

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

Lab Sample ID: MB 240-217787/5-A
Matrix: Solid
Analysis Batch: 218338

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217787

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		02/17/16 09:56	02/20/16 15:35	1

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

Lab Sample ID: MB 240-217787/5-A
Matrix: Solid
Analysis Batch: 218338

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217787

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		02/17/16 09:56	02/20/16 15:35	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		02/17/16 09:56	02/20/16 15:35	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		02/17/16 09:56	02/20/16 15:35	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		02/17/16 09:56	02/20/16 15:35	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		02/17/16 09:56	02/20/16 15:35	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		02/17/16 09:56	02/20/16 15:35	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		02/17/16 09:56	02/20/16 15:35	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		02/17/16 09:56	02/20/16 15:35	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		02/17/16 09:56	02/20/16 15:35	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		02/17/16 09:56	02/20/16 15:35	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		02/17/16 09:56	02/20/16 15:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*30 - 110*	*02/17/16 09:56*	*02/20/16 15:35*	*1*
2-Fluorophenol (Surr)	*61*		*20 - 110*	*02/17/16 09:56*	*02/20/16 15:35*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*23 - 110*	*02/17/16 09:56*	*02/20/16 15:35*	*1*
Nitrobenzene-d5 (Surr)	*75*		*28 - 110*	*02/17/16 09:56*	*02/20/16 15:35*	*1*
Phenol-d5 (Surr)	*42*		*21 - 110*	*02/17/16 09:56*	*02/20/16 15:35*	*1*
Terphenyl-d14 (Surr)	*95*		*48 - 110*	*02/17/16 09:56*	*02/20/16 15:35*	*1*

Lab Sample ID: LCS 240-217787/6-A
Matrix: Solid
Analysis Batch: 218338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217787

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0674		mg/L		84	52 - 110
2,4,5-Trichlorophenol	0.0800	0.0672		mg/L		84	51 - 110
2,4,6-Trichlorophenol	0.0800	0.0685		mg/L		86	46 - 110
2,4-Dinitrotoluene	0.0800	0.0769		mg/L		96	54 - 110
Hexachlorobenzene	0.0800	0.0783		mg/L		98	50 - 110
Hexachlorobutadiene	0.0800	0.0626		mg/L		78	34 - 110
Hexachloroethane	0.0800	0.0630		mg/L		79	41 - 110
3 & 4 Methylphenol	0.0800	0.0639		mg/L		80	48 - 110
2-Methylphenol	0.0800	0.0637		mg/L		80	44 - 111
Nitrobenzene	0.0800	0.0601		mg/L		75	40 - 110
Pentachlorophenol	0.160	0.127		mg/L		79	12 - 110
Pyridine	0.0800	0.0401		mg/L		50	30 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*75*		*30 - 110*
2-Fluorophenol (Surr)	*70*		*20 - 110*
2,4,6-Tribromophenol (Surr)	*87*		*23 - 110*
Nitrobenzene-d5 (Surr)	*76*		*28 - 110*
Phenol-d5 (Surr)	*51*		*21 - 110*
Terphenyl-d14 (Surr)	*93*		*48 - 110*

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

Lab Sample ID: 240-60613-1 MS
Matrix: Solid
Analysis Batch: 218338

Client Sample ID: SO-17303-020316-CB-001
Prep Type: TCLP
Prep Batch: 217787

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0040	U	0.0800	0.0640		mg/L		80	31 - 110
2,4,5-Trichlorophenol	0.0040	U	0.0800	0.0594		mg/L		74	41 - 110
2,4,6-Trichlorophenol	0.0040	U	0.0800	0.0628		mg/L		79	35 - 110
2,4-Dinitrotoluene	0.0040	U	0.0800	0.0683		mg/L		85	42 - 110
Hexachlorobenzene	0.00080	U	0.0800	0.0722		mg/L		90	42 - 110
Hexachlorobutadiene	0.0040	U	0.0800	0.0577		mg/L		72	28 - 110
Hexachloroethane	0.0040	U	0.0800	0.0597		mg/L		75	26 - 110
3 & 4 Methylphenol	0.0040	U	0.0800	0.0638		mg/L		80	29 - 110
2-Methylphenol	0.0040	U	0.0800	0.0604		mg/L		75	33 - 112
Nitrobenzene	0.0040	U	0.0800	0.0581		mg/L		73	32 - 110
Pentachlorophenol	0.016	U	0.160	0.116		mg/L		73	10 - 124
Pyridine	0.0040	U	0.0800	0.0425		mg/L		53	21 - 110

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*68*		*30 - 110*
2-Fluorophenol (Surr)	*66*		*20 - 110*
2,4,6-Tribromophenol (Surr)	*74*		*23 - 110*
Nitrobenzene-d5 (Surr)	*68*		*28 - 110*
Phenol-d5 (Surr)	*53*		*21 - 110*
Terphenyl-d14 (Surr)	*85*		*48 - 110*

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

Lab Sample ID: MB 240-216954/23-A
Matrix: Solid
Analysis Batch: 217985

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 216954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	33	U	33	12	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1221	33	U	33	16	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1232	33	U	33	20	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1242	33	U	33	11	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1248	33	U	33	8.0	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1254	33	U	33	14	ug/Kg		02/09/16 06:59	02/19/16 01:46	1
Aroclor-1260	33	U	33	9.0	ug/Kg		02/09/16 06:59	02/19/16 01:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*13 - 134*	*02/09/16 06:59*	*02/19/16 01:46*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 155*	*02/09/16 06:59*	*02/19/16 01:46*	*1*

Lab Sample ID: LCS 240-216954/24-A
Matrix: Solid
Analysis Batch: 217985

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 216954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	231		ug/Kg		69	51 - 120
Aroclor-1260	333	261		ug/Kg		78	48 - 120

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

Lab Sample ID: LCS 240-216954/24-A
Matrix: Solid
Analysis Batch: 217985

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 216954

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*13 - 134*
DCB Decachlorobiphenyl	*82*		*10 - 155*

Lab Sample ID: 240-60613-1 MS
Matrix: Solid
Analysis Batch: 217985

Client Sample ID: SO-17303-020316-CB-001
Prep Type: Total/NA
Prep Batch: 216954

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	38	U	388	247		ug/Kg	☼	64	17 - 141
Aroclor-1260	38	U	388	251		ug/Kg	☼	65	19 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*76*		*13 - 134*
DCB Decachlorobiphenyl	*68*		*10 - 155*

Lab Sample ID: 240-60613-1 MSD
Matrix: Solid
Analysis Batch: 217985

Client Sample ID: SO-17303-020316-CB-001
Prep Type: Total/NA
Prep Batch: 216954

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	38	U	383	246		ug/Kg	☼	64	17 - 141	0	56
Aroclor-1260	38	U	383	266		ug/Kg	☼	69	19 - 137	5	55

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*13 - 134*
DCB Decachlorobiphenyl	*70*		*10 - 155*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-217846/2-A
Matrix: Solid
Analysis Batch: 218611

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.50	U	0.50	0.0029	mg/L		02/17/16 13:46	02/23/16 04:43	1
Barium	10	U	10	0.0010	mg/L		02/17/16 13:46	02/23/16 04:43	1
Cadmium	0.000184	J	0.10	0.00014	mg/L		02/17/16 13:46	02/23/16 04:43	1
Chromium	0.50	U	0.50	0.00055	mg/L		02/17/16 13:46	02/23/16 04:43	1
Lead	0.50	U	0.50	0.0019	mg/L		02/17/16 13:46	02/23/16 04:43	1
Selenium	0.25	U	0.25	0.0040	mg/L		02/17/16 13:46	02/23/16 04:43	1
Silver	0.50	U	0.50	0.00092	mg/L		02/17/16 13:46	02/23/16 04:43	1

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

Lab Sample ID: LCS 240-217846/3-A
Matrix: Solid
Analysis Batch: 218611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.17		mg/L		108	50 - 150
Barium	2.00	1.96	J	mg/L		98	50 - 150
Cadmium	0.0500	0.0542	J	mg/L		108	50 - 150
Chromium	0.200	0.201	J	mg/L		100	50 - 150
Lead	0.500	0.461	J	mg/L		92	50 - 150
Selenium	2.00	2.22		mg/L		111	50 - 150
Silver	0.0500	0.0563	J	mg/L		113	50 - 150

Lab Sample ID: LB 240-217708/1-B
Matrix: Solid
Analysis Batch: 218611

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 217846

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00350	J	0.50	0.0029	mg/L		02/17/16 13:46	02/23/16 04:38	1
Barium	10	U	10	0.0010	mg/L		02/17/16 13:46	02/23/16 04:38	1
Cadmium	0.10	U	0.10	0.00014	mg/L		02/17/16 13:46	02/23/16 04:38	1
Chromium	0.00148	J	0.50	0.00055	mg/L		02/17/16 13:46	02/23/16 04:38	1
Lead	0.00190	J	0.50	0.0019	mg/L		02/17/16 13:46	02/23/16 04:38	1
Selenium	0.25	U	0.25	0.0040	mg/L		02/17/16 13:46	02/23/16 04:38	1
Silver	0.50	U	0.50	0.00092	mg/L		02/17/16 13:46	02/23/16 04:38	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-217848/2-A
Matrix: Solid
Analysis Batch: 218242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		02/17/16 13:51	02/18/16 15:02	1

Lab Sample ID: LCS 240-217848/3-A
Matrix: Solid
Analysis Batch: 218242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00541		mg/L		108	80 - 120

Lab Sample ID: LB 240-217708/1-C
Matrix: Solid
Analysis Batch: 218242

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 217848

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		02/17/16 13:51	02/18/16 14:55	1

Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 240-217501/1
Matrix: Solid
Analysis Batch: 217501

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	81.00		Degrees F		100	97 - 103

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(80-121)	(70-124)	(80-120)	(80-128)
LCS 240-217891/27	Lab Control Sample	91	86	101	102

Surrogate Legend

12DCE = 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)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(80-121)	(70-124)	(80-120)	(80-128)
240-60613-1	SO-17303-020316-CB-001	90	81	95	96
LB 240-217791/1-A MB	Method Blank	92	82	94	101

Surrogate Legend

12DCE = 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	TPH
Lab Sample ID	Client Sample ID	(30-110)	(20-110)	(23-110)	(28-110)	(21-110)	(48-110)
LCS 240-217787/6-A	Lab Control Sample	75	70	87	76	51	93
MB 240-217787/5-A	Method Blank	74	61	86	75	42	95

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = 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	TPH
Lab Sample ID	Client Sample ID	(30-110)	(20-110)	(23-110)	(28-110)	(21-110)	(48-110)
240-60613-1	SO-17303-020316-CB-001	72	61	76	69	44	90
240-60613-1 MS	SO-17303-020316-CB-001	68	66	74	68	53	85

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(13-134)	(10-155)
240-60613-1	SO-17303-020316-CB-001	87	78
240-60613-1 MS	SO-17303-020316-CB-001	76	68
240-60613-1 MSD	SO-17303-020316-CB-001	81	70
LCS 240-216954/24-A	Lab Control Sample	78	82
MB 240-216954/23-A	Method Blank	77	85

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

Client Sample ID: SO-17303-020316-CB-001

Lab Sample ID: 240-60613-1

Date Collected: 02/03/16 08:45

Matrix: Solid

Date Received: 02/05/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			217791	02/16/16 20:30	SMH	TAL CAN
TCLP	Analysis	8260B		1	217891	02/19/16 02:14	TJL1	TAL CAN
TCLP	Leach	1311			217708	02/16/16 18:00	DRJ	TAL CAN
TCLP	Prep	3510C			217787	02/17/16 09:56	JDR	TAL CAN
TCLP	Analysis	8270C		1	218338	02/20/16 18:44	JMG	TAL CAN
TCLP	Leach	1311			217708	02/16/16 18:00	DRJ	TAL CAN
TCLP	Prep	3010A			217846	02/17/16 13:46	DEE	TAL CAN
TCLP	Analysis	6010B		1	218611	02/23/16 07:14	KLC	TAL CAN
TCLP	Leach	1311			217708	02/16/16 18:00	DRJ	TAL CAN
TCLP	Prep	7470A			217848	02/17/16 13:51	DEE	TAL CAN
TCLP	Analysis	7470A		1	218242	02/18/16 15:12	DSH	TAL CAN
Total/NA	Analysis	1010		1	217501	02/15/16 09:38	TPH	TAL CAN
Total/NA	Analysis	Moisture		1	216933	02/08/16 15:04	GNR	TAL CAN

Client Sample ID: SO-17303-020316-CB-001

Lab Sample ID: 240-60613-1

Date Collected: 02/03/16 08:45

Matrix: Solid

Date Received: 02/05/16 09:30

Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			216954	02/09/16 06:59	YDN	TAL CAN
Total/NA	Analysis	8082		1	217985	02/18/16 22:37	LSH	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60613-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16 *
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-16 *
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16 *
West Virginia DEP	State Program	3	210	12-31-15 *
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

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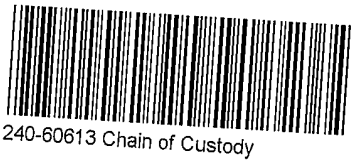
TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1-81613

Chain of Custody Record

122998

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/3/16	COC No: 002
Company Name: GHD	Tel/Fax: (734) 453-5123	Lab Contact: D. Heckler	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: (734) 453-5123	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: 017303	☐ 2 days			Job / SDG No.: 240006020
PO# SSOW# 17303-034	☐ 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	Ignitability (Flashpoint)	Sample Specific Notes:
SO-17303-020316-CB-001	2/03/16	845	C	SO	1	-	-	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:
Batch Complete Tracking # 6209 0763 2801

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company	Date/Time		Company	Date/Time
Relinquished by: C Bondy C Bondy	GHD	2/4/16 1615	Received by:		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TANC	Date/Time: 2/5/16 0930

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 600613

Client GHD Site Name CVO

Cooler unpacked by:

Cooler Received on 2/5/16 Opened on 2/5/16

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Thermo 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# 48 (CF -1.9 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 18 (CF -0.5 °C) Observed Cooler Temp. 1.8 °C Corrected Cooler Temp. 1.3 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity	Yes	(No)
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No	(NA)
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
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 sample(s) at the correct pH upon receipt?	Yes No	(NA) pH Strip Lot# HC559158
13. Were VOAs on the COC?	2-5-16 (Yes)	No TCLP VOCs
14. Were air bubbles >6 mm in any VOA vials?	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)

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):

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI-NC-099X-011816 Cooler Receipt Form.doc djl

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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: 240-60702-1
Client Project/Site: 17303-034, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
2/24/2016 4:23:22 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: 240-60702-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-60702-1

Comments
No additional comments.

Receipt
The sample was received on 2/9/2016 9:40 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7º 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) 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-020816-CB-014 (240-60702-1), (240-60702-B-1-B MS) and (240-60702-B-1-C MSD). 2391675, 2103100, 2283703.

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.
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

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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-60702-1	SO-17303-020816-CB-014	Solid	02/08/16 16:45	02/09/16 09:40

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

Client Sample ID: SO-17303-020816-CB-014 — Lab Sample ID: 240-60702-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.096	J	0.25	0.029	mg/L	1		8260B	TCLP
Aroclor-1260	1700		380	100	ug/Kg	10	☼	8082	Total/NA
Arsenic	0.0063	J	0.50	0.0029	mg/L	1		6010B	TCLP
Barium	0.63	J B	10	0.0010	mg/L	1		6010B	TCLP
Cadmium	0.024	J B	0.10	0.00014	mg/L	1		6010B	TCLP
Chromium	0.0041	J B	0.50	0.00055	mg/L	1		6010B	TCLP
Lead	0.15	J B	0.50	0.0019	mg/L	1		6010B	TCLP
Flashpoint	>200		1.00	1.00	Degrees F	1		1010	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1010	Ignitability, Pensky-Martens Closed-Cup Method	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: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

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

Client Sample ID: SO-17303-020816-CB-014
Date Collected: 02/08/16 16:45
Date Received: 02/09/16 09:40

Lab Sample ID: 240-60702-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			02/19/16 03:47	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			02/19/16 03:47	1
2-Butanone (MEK)	**0.096**	**J**	0.25	0.029	mg/L			02/19/16 03:47	1
Benzene	0.025	U	0.025	0.0065	mg/L			02/19/16 03:47	1
Carbon tetrachloride	0.025	U F1	0.025	0.0065	mg/L			02/19/16 03:47	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			02/19/16 03:47	1
Chloroform	0.025	U	0.025	0.0080	mg/L			02/19/16 03:47	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			02/19/16 03:47	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			02/19/16 03:47	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			02/19/16 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 121*		*02/19/16 03:47*	*1*
4-Bromofluorobenzene (Surr)	*85*		*70 - 124*		*02/19/16 03:47*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*02/19/16 03:47*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 128*		*02/19/16 03:47*	*1*

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

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

Client Sample ID: SO-17303-020816-CB-014
Date Collected: 02/08/16 16:45
Date Received: 02/09/16 09:40

Lab Sample ID: 240-60702-1
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		02/17/16 09:55	02/21/16 16:47	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		02/17/16 09:55	02/21/16 16:47	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		02/17/16 09:55	02/21/16 16:47	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		02/17/16 09:55	02/21/16 16:47	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		02/17/16 09:55	02/21/16 16:47	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		02/17/16 09:55	02/21/16 16:47	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		02/17/16 09:55	02/21/16 16:47	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		02/17/16 09:55	02/21/16 16:47	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		02/17/16 09:55	02/21/16 16:47	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		02/17/16 09:55	02/21/16 16:47	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		02/17/16 09:55	02/21/16 16:47	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		02/17/16 09:55	02/21/16 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*30 - 110*	*02/17/16 09:55*	*02/21/16 16:47*	*1*
2-Fluorophenol (Surr)	*55*		*20 - 110*	*02/17/16 09:55*	*02/21/16 16:47*	*1*
2,4,6-Tribromophenol (Surr)	*35*		*23 - 110*	*02/17/16 09:55*	*02/21/16 16:47*	*1*
Nitrobenzene-d5 (Surr)	*65*		*28 - 110*	*02/17/16 09:55*	*02/21/16 16:47*	*1*
Phenol-d5 (Surr)	*37*		*21 - 110*	*02/17/16 09:55*	*02/21/16 16:47*	*1*
Terphenyl-d14 (Surr)	*68*		*48 - 110*	*02/17/16 09:55*	*02/21/16 16:47*	*1*

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

Client Sample ID: SO-17303-020816-CB-014
Date Collected: 02/08/16 16:45
Date Received: 02/09/16 09:40

Lab Sample ID: 240-60702-1
Matrix: Solid
Percent Solids: 85.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	380	U	380	140	ug/Kg	☼	02/11/16 08:14	02/18/16 08:55	10
Aroclor-1221	380	U	380	180	ug/Kg	☼	02/11/16 08:14	02/18/16 08:55	10
Aroclor-1232	380	U	380	230	ug/Kg	☼	02/11/16 08:14	02/18/16 08:55	10
Aroclor-1242	380	U	380	130	ug/Kg	☼	02/11/16 08:14	02/18/16 08:55	10
Aroclor-1248	380	U	380	92	ug/Kg	☼	02/11/16 08:14	02/18/16 08:55	10
Aroclor-1254	380	U	380	160	ug/Kg	☼	02/11/16 08:14	02/18/16 08:55	10
Aroclor-1260	**1700**		380	100	ug/Kg	☼	02/11/16 08:14	02/18/16 08:55	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*13 - 134*	*02/11/16 08:14*	*02/18/16 08:55*	*10*
DCB Decachlorobiphenyl	*125*		*10 - 155*	*02/11/16 08:14*	*02/18/16 08:55*	*10*

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

Method: 6010B - Metals (ICP) - TCLP

Client Sample ID: SO-17303-020816-CB-014
Date Collected: 02/08/16 16:45
Date Received: 02/09/16 09:40

Lab Sample ID: 240-60702-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0063**	**J**	0.50	0.0029	mg/L		02/17/16 13:54	02/24/16 02:36	1
Barium	**0.63**	**J B**	10	0.0010	mg/L		02/17/16 13:54	02/24/16 02:36	1
Cadmium	**0.024**	**J B**	0.10	0.00014	mg/L		02/17/16 13:54	02/24/16 02:36	1
Chromium	**0.0041**	**J B**	0.50	0.00055	mg/L		02/17/16 13:54	02/24/16 02:36	1
Lead	**0.15**	**J B**	0.50	0.0019	mg/L		02/17/16 13:54	02/24/16 02:36	1
Selenium	0.25	U	0.25	0.0040	mg/L		02/17/16 13:54	02/24/16 02:36	1
Silver	0.50	U	0.50	0.00092	mg/L		02/17/16 13:54	02/24/16 02:36	1

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

Method: 7470A - Mercury (CVAA) - TCLP

Client Sample ID: SO-17303-020816-CB-014
Date Collected: 02/08/16 16:45
Date Received: 02/09/16 09:40

Lab Sample ID: 240-60702-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		02/17/16 13:57	02/18/16 15:27	1

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

General Chemistry

Client Sample ID: SO-17303-020816-CB-014
Date Collected: 02/08/16 16:45
Date Received: 02/09/16 09:40

Lab Sample ID: 240-60702-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>200		1.00	1.00	Degrees F			02/15/16 10:34	1
Percent Solids	85.6		0.1	0.1	%			02/10/16 12:58	1
Percent Moisture	14.4		0.1	0.1	%			02/10/16 12:58	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

GC/MS VOA

Leach Batch: 217791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	1311	
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	1311	
240-60702-1 MSD	SO-17303-020816-CB-014	TCLP	Solid	1311	
LB 240-217791/1-A MB	Method Blank	TCLP	Solid	1311	

Analysis Batch: 217891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	8260B	217791
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	8260B	217791
240-60702-1 MSD	SO-17303-020816-CB-014	TCLP	Solid	8260B	217791
LB 240-217791/1-A MB	Method Blank	TCLP	Solid	8260B	217791
LCS 240-217891/27	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 217712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	1311	
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	1311	

Prep Batch: 217786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	3510C	217712
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	3510C	217712
LCS 240-217786/4-A	Lab Control Sample	Total/NA	Solid	3510C	
MB 240-217786/3-A	Method Blank	Total/NA	Solid	3510C	

Analysis Batch: 218346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	8270C	217786
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	8270C	217786
LCS 240-217786/4-A	Lab Control Sample	Total/NA	Solid	8270C	217786
MB 240-217786/3-A	Method Blank	Total/NA	Solid	8270C	217786

GC Semi VOA

Prep Batch: 217147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	Total/NA	Solid	3540C	
240-60702-1 MS	SO-17303-020816-CB-014	Total/NA	Solid	3540C	
240-60702-1 MSD	SO-17303-020816-CB-014	Total/NA	Solid	3540C	
LCS 240-217147/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-217147/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 217925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	Total/NA	Solid	8082	217147
240-60702-1 MS	SO-17303-020816-CB-014	Total/NA	Solid	8082	217147
240-60702-1 MSD	SO-17303-020816-CB-014	Total/NA	Solid	8082	217147

GC Semi VOA (Continued)

Analysis Batch: 218079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-217147/24-A	Lab Control Sample	Total/NA	Solid	8082	217147
MB 240-217147/23-A	Method Blank	Total/NA	Solid	8082	217147

Metals

Leach Batch: 217712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	1311	
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	1311	
240-60702-1 MSD	SO-17303-020816-CB-014	TCLP	Solid	1311	
LB 240-217712/1-B	Method Blank	TCLP	Solid	1311	
LB 240-217712/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 217849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	3010A	217712
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	3010A	217712
240-60702-1 MSD	SO-17303-020816-CB-014	TCLP	Solid	3010A	217712
LB 240-217712/1-B	Method Blank	TCLP	Solid	3010A	217712
LCS 240-217849/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 240-217849/2-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 217853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	7470A	217712
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	7470A	217712
240-60702-1 MSD	SO-17303-020816-CB-014	TCLP	Solid	7470A	217712
LB 240-217712/1-C	Method Blank	TCLP	Solid	7470A	217712
LCS 240-217853/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 240-217853/2-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 218242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	7470A	217853
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	7470A	217853
240-60702-1 MSD	SO-17303-020816-CB-014	TCLP	Solid	7470A	217853
LB 240-217712/1-C	Method Blank	TCLP	Solid	7470A	217853
LCS 240-217853/3-A	Lab Control Sample	Total/NA	Solid	7470A	217853
MB 240-217853/2-A	Method Blank	Total/NA	Solid	7470A	217853

Analysis Batch: 218840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	TCLP	Solid	6010B	217849
240-60702-1 MS	SO-17303-020816-CB-014	TCLP	Solid	6010B	217849
240-60702-1 MSD	SO-17303-020816-CB-014	TCLP	Solid	6010B	217849
LB 240-217712/1-B	Method Blank	TCLP	Solid	6010B	217849
LCS 240-217849/3-A	Lab Control Sample	Total/NA	Solid	6010B	217849
MB 240-217849/2-A	Method Blank	Total/NA	Solid	6010B	217849

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

General Chemistry

Analysis Batch: 217073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	Total/NA	Solid	Moisture	
240-60702-1 DU	SO-17303-020816-CB-014	Total/NA	Solid	Moisture	

Analysis Batch: 217501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60702-1	SO-17303-020816-CB-014	Total/NA	Solid	1010	
LCS 240-217501/1	Lab Control Sample	Total/NA	Solid	1010	

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

Lab Sample ID: LCS 240-217891/27
Matrix: Solid
Analysis Batch: 217891

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	0.993		mg/L		99	71 - 133
1,2-Dichloroethane	1.00	1.06		mg/L		106	80 - 120
2-Butanone (MEK)	2.00	1.87		mg/L		93	49 - 120
Benzene	1.00	1.09		mg/L		109	80 - 120
Carbon tetrachloride	1.00	0.635		mg/L		64	54 - 122
Chlorobenzene	1.00	1.10		mg/L		110	80 - 120
Chloroform	1.00	1.08		mg/L		108	80 - 123
Tetrachloroethene	1.00	1.01		mg/L		101	79 - 134
Trichloroethene	1.00	1.14		mg/L		114	78 - 130
Vinyl chloride	1.00	1.01		mg/L		101	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 121*
4-Bromofluorobenzene (Surr)	*86*		*70 - 124*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 128*

Lab Sample ID: LB 240-217791/1-A MB
Matrix: Solid
Analysis Batch: 217891

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	0.0095	mg/L			02/19/16 01:03	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			02/19/16 01:03	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			02/19/16 01:03	1
Benzene	0.025	U	0.025	0.0065	mg/L			02/19/16 01:03	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			02/19/16 01:03	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			02/19/16 01:03	1
Chloroform	0.025	U	0.025	0.0080	mg/L			02/19/16 01:03	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			02/19/16 01:03	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			02/19/16 01:03	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			02/19/16 01:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 121*		*02/19/16 01:03*	*1*
4-Bromofluorobenzene (Surr)	*82*		*70 - 124*		*02/19/16 01:03*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*02/19/16 01:03*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 128*		*02/19/16 01:03*	*1*

Lab Sample ID: 240-60702-1 MS
Matrix: Solid
Analysis Batch: 217891

Client Sample ID: SO-17303-020816-CB-014
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	0.817		mg/L		82	67 - 139
1,2-Dichloroethane	0.025	U	1.00	0.821		mg/L		82	80 - 120
2-Butanone (MEK)	0.096	J	2.00	1.42		mg/L		66	49 - 120

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

Lab Sample ID: 240-60702-1 MS
Matrix: Solid
Analysis Batch: 217891

Client Sample ID: SO-17303-020816-CB-014
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	0.850		mg/L		85	80 - 120
Carbon tetrachloride	0.025	U F1	1.00	0.530	F1	mg/L		53	60 - 120
Chlorobenzene	0.025	U	1.00	0.857		mg/L		86	80 - 120
Chloroform	0.025	U	1.00	0.834		mg/L		83	80 - 124
Tetrachloroethene	0.025	U	1.00	0.806		mg/L		81	74 - 138
Trichloroethene	0.025	U	1.00	0.874		mg/L		87	75 - 134
Vinyl chloride	0.025	U	1.00	0.819		mg/L		82	51 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*	*X*	*80 - 121*
4-Bromofluorobenzene (Surr)	*81*		*70 - 124*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 128*

Lab Sample ID: 240-60702-1 MSD
Matrix: Solid
Analysis Batch: 217891

Client Sample ID: SO-17303-020816-CB-014
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	0.910		mg/L		91	67 - 139	11	30
1,2-Dichloroethane	0.025	U	1.00	1.00		mg/L		100	80 - 120	20	30
2-Butanone (MEK)	0.096	J	2.00	1.68		mg/L		79	49 - 120	17	30
Benzene	0.025	U	1.00	1.01		mg/L		101	80 - 120	17	30
Carbon tetrachloride	0.025	U F1	1.00	0.608		mg/L		61	60 - 120	14	30
Chlorobenzene	0.025	U	1.00	1.03		mg/L		103	80 - 120	18	30
Chloroform	0.025	U	1.00	1.00		mg/L		100	80 - 124	18	30
Tetrachloroethene	0.025	U	1.00	0.925		mg/L		92	74 - 138	14	30
Trichloroethene	0.025	U	1.00	1.02		mg/L		102	75 - 134	15	30
Vinyl chloride	0.025	U	1.00	0.965		mg/L		96	51 - 120	16	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 121*
4-Bromofluorobenzene (Surr)	*90*		*70 - 124*
Toluene-d8 (Surr)	*109*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 128*

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

Lab Sample ID: MB 240-217786/3-A
Matrix: Solid
Analysis Batch: 218346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217786

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		02/17/16 09:55	02/21/16 10:26	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		02/17/16 09:55	02/21/16 10:26	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		02/17/16 09:55	02/21/16 10:26	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		02/17/16 09:55	02/21/16 10:26	1

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

Lab Sample ID: MB 240-217786/3-A
Matrix: Solid
Analysis Batch: 218346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		02/17/16 09:55	02/21/16 10:26	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		02/17/16 09:55	02/21/16 10:26	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		02/17/16 09:55	02/21/16 10:26	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		02/17/16 09:55	02/21/16 10:26	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		02/17/16 09:55	02/21/16 10:26	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		02/17/16 09:55	02/21/16 10:26	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		02/17/16 09:55	02/21/16 10:26	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		02/17/16 09:55	02/21/16 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*30 - 110*	*02/17/16 09:55*	*02/21/16 10:26*	*1*
2-Fluorophenol (Surr)	*61*		*20 - 110*	*02/17/16 09:55*	*02/21/16 10:26*	*1*
2,4,6-Tribromophenol (Surr)	*64*		*23 - 110*	*02/17/16 09:55*	*02/21/16 10:26*	*1*
Nitrobenzene-d5 (Surr)	*69*		*28 - 110*	*02/17/16 09:55*	*02/21/16 10:26*	*1*
Phenol-d5 (Surr)	*46*		*21 - 110*	*02/17/16 09:55*	*02/21/16 10:26*	*1*
Terphenyl-d14 (Surr)	*74*		*48 - 110*	*02/17/16 09:55*	*02/21/16 10:26*	*1*

Lab Sample ID: LCS 240-217786/4-A
Matrix: Solid
Analysis Batch: 218346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0614		mg/L		77	52 - 110
2,4,5-Trichlorophenol	0.0800	0.0592		mg/L		74	51 - 110
2,4,6-Trichlorophenol	0.0800	0.0618		mg/L		77	46 - 110
2,4-Dinitrotoluene	0.0800	0.0645		mg/L		81	54 - 110
Hexachlorobenzene	0.0800	0.0586		mg/L		73	50 - 110
Hexachlorobutadiene	0.0800	0.0561		mg/L		70	34 - 110
Hexachloroethane	0.0800	0.0539		mg/L		67	41 - 110
3 & 4 Methylphenol	0.0800	0.0557		mg/L		70	48 - 110
2-Methylphenol	0.0800	0.0608		mg/L		76	44 - 111
Nitrobenzene	0.0800	0.0637		mg/L		80	40 - 110
Pentachlorophenol	0.160	0.102		mg/L		64	12 - 110
Pyridine	0.0800	0.0474		mg/L		59	30 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*81*		*30 - 110*
2-Fluorophenol (Surr)	*61*		*20 - 110*
2,4,6-Tribromophenol (Surr)	*74*		*23 - 110*
Nitrobenzene-d5 (Surr)	*79*		*28 - 110*
Phenol-d5 (Surr)	*44*		*21 - 110*
Terphenyl-d14 (Surr)	*80*		*48 - 110*

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

Lab Sample ID: 240-60702-1 MS
Matrix: Solid
Analysis Batch: 218346

Client Sample ID: SO-17303-020816-CB-014
Prep Type: TCLP
Prep Batch: 217786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0040	U	0.0800	0.0533		mg/L		67	31 - 110
2,4,5-Trichlorophenol	0.0040	U	0.0800	0.0451		mg/L		56	41 - 110
2,4,6-Trichlorophenol	0.0040	U	0.0800	0.0493		mg/L		62	35 - 110
2,4-Dinitrotoluene	0.0040	U	0.0800	0.0591		mg/L		74	42 - 110
Hexachlorobenzene	0.00080	U	0.0800	0.0551		mg/L		69	42 - 110
Hexachlorobutadiene	0.0040	U	0.0800	0.0464		mg/L		58	28 - 110
Hexachloroethane	0.0040	U	0.0800	0.0450		mg/L		56	26 - 110
3 & 4 Methylphenol	0.0040	U	0.0800	0.0543		mg/L		68	29 - 110
2-Methylphenol	0.0040	U	0.0800	0.0566		mg/L		71	33 - 112
Nitrobenzene	0.0040	U	0.0800	0.0605		mg/L		76	32 - 110
Pentachlorophenol	0.016	U	0.160	0.0715		mg/L		45	10 - 124
Pyridine	0.0040	U	0.0800	0.0358		mg/L		45	21 - 110

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*30 - 110*
2-Fluorophenol (Surr)	*49*		*20 - 110*
2,4,6-Tribromophenol (Surr)	*42*		*23 - 110*
Nitrobenzene-d5 (Surr)	*73*		*28 - 110*
Phenol-d5 (Surr)	*47*		*21 - 110*
Terphenyl-d14 (Surr)	*75*		*48 - 110*

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

Lab Sample ID: MB 240-217147/23-A
Matrix: Solid
Analysis Batch: 218079

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	33	U	33	12	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1221	33	U	33	16	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1232	33	U	33	20	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1242	33	U	33	11	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1248	33	U	33	8.0	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1254	33	U	33	14	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1260	33	U	33	9.0	ug/Kg		02/11/16 08:14	02/19/16 08:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*13 - 134*	*02/11/16 08:14*	*02/19/16 08:43*	*1*
DCB Decachlorobiphenyl	*73*		*10 - 155*	*02/11/16 08:14*	*02/19/16 08:43*	*1*

Lab Sample ID: LCS 240-217147/24-A
Matrix: Solid
Analysis Batch: 218079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	201		ug/Kg		60	51 - 120
Aroclor-1260	333	238		ug/Kg		71	48 - 120

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

Lab Sample ID: LCS 240-217147/24-A
Matrix: Solid
Analysis Batch: 218079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*13 - 134*
DCB Decachlorobiphenyl	*75*		*10 - 155*

Lab Sample ID: 240-60702-1 MS
Matrix: Solid
Analysis Batch: 217925

Client Sample ID: SO-17303-020816-CB-014
Prep Type: Total/NA
Prep Batch: 217147

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	380	U	395	294	J	ug/Kg	☼	74	17 - 141
Aroclor-1260	1700		395	1980	4	ug/Kg	☼	77	19 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*13 - 134*
DCB Decachlorobiphenyl	*121*		*10 - 155*

Lab Sample ID: 240-60702-1 MSD
Matrix: Solid
Analysis Batch: 217925

Client Sample ID: SO-17303-020816-CB-014
Prep Type: Total/NA
Prep Batch: 217147

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	380	U	393	355	J	ug/Kg	☼	90	17 - 141	19	56
Aroclor-1260	1700		393	2170	4	ug/Kg	☼	126	19 - 137	9	55

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*93*		*13 - 134*
DCB Decachlorobiphenyl	*124*		*10 - 155*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-217849/2-A
Matrix: Solid
Analysis Batch: 218840

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.50	U	0.50	0.0029	mg/L		02/17/16 13:54	02/24/16 02:28	1
Barium	10	U	10	0.0010	mg/L		02/17/16 13:54	02/24/16 02:28	1
Cadmium	0.000160	J	0.10	0.00014	mg/L		02/17/16 13:54	02/24/16 02:28	1
Chromium	0.50	U	0.50	0.00055	mg/L		02/17/16 13:54	02/24/16 02:28	1
Lead	0.50	U	0.50	0.0019	mg/L		02/17/16 13:54	02/24/16 02:28	1
Selenium	0.25	U	0.25	0.0040	mg/L		02/17/16 13:54	02/24/16 02:28	1
Silver	0.50	U	0.50	0.00092	mg/L		02/17/16 13:54	02/24/16 02:28	1

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

Lab Sample ID: LCS 240-217849/3-A
Matrix: Solid
Analysis Batch: 218840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.16		mg/L		108	50 - 150
Barium	2.00	2.09	J	mg/L		104	50 - 150
Cadmium	0.0500	0.0512	J	mg/L		102	50 - 150
Chromium	0.200	0.199	J	mg/L		99	50 - 150
Lead	0.500	0.492	J	mg/L		98	50 - 150
Selenium	2.00	2.30		mg/L		115	50 - 150
Silver	0.0500	0.0530	J	mg/L		106	50 - 150

Lab Sample ID: LB 240-217712/1-B
Matrix: Solid
Analysis Batch: 218840

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 217849

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.50	U	0.50	0.0029	mg/L		02/17/16 13:54	02/24/16 02:24	1
Barium	0.00123	J	10	0.0010	mg/L		02/17/16 13:54	02/24/16 02:24	1
Cadmium	0.000204	J	0.10	0.00014	mg/L		02/17/16 13:54	02/24/16 02:24	1
Chromium	0.00163	J	0.50	0.00055	mg/L		02/17/16 13:54	02/24/16 02:24	1
Lead	0.00202	J	0.50	0.0019	mg/L		02/17/16 13:54	02/24/16 02:24	1
Selenium	0.00422	J	0.25	0.0040	mg/L		02/17/16 13:54	02/24/16 02:24	1
Silver	0.50	U	0.50	0.00092	mg/L		02/17/16 13:54	02/24/16 02:24	1

Lab Sample ID: 240-60702-1 MS
Matrix: Solid
Analysis Batch: 218840

Client Sample ID: SO-17303-020816-CB-014
Prep Type: TCLP
Prep Batch: 217849

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0063	J	5.00	5.11		mg/L		102	75 - 125
Barium	0.63	J B	50.0	49.3	J	mg/L		97	75 - 125
Cadmium	0.024	J B	1.00	1.09		mg/L		106	75 - 125
Chromium	0.0041	J B	5.00	4.55		mg/L		91	75 - 125
Lead	0.15	J B	5.00	4.87		mg/L		94	75 - 125
Selenium	0.25	U	1.00	1.06	J	mg/L		106	75 - 125
Silver	0.50	U	1.00	1.02	J	mg/L		102	75 - 125

Lab Sample ID: 240-60702-1 MSD
Matrix: Solid
Analysis Batch: 218840

Client Sample ID: SO-17303-020816-CB-014
Prep Type: TCLP
Prep Batch: 217849

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0063	J	5.00	5.17		mg/L		103	75 - 125	1	20
Barium	0.63	J B	50.0	51.1		mg/L		101	75 - 125	4	20
Cadmium	0.024	J B	1.00	1.11		mg/L		108	75 - 125	2	20
Chromium	0.0041	J B	5.00	4.70		mg/L		94	75 - 125	3	20
Lead	0.15	J B	5.00	4.95		mg/L		96	75 - 125	2	20
Selenium	0.25	U	1.00	1.07	J	mg/L		107	75 - 125	1	20
Silver	0.50	U	1.00	1.03	J	mg/L		103	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-217853/2-A
Matrix: Solid
Analysis Batch: 218242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217853

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		02/17/16 13:57	02/18/16 15:19	1

Lab Sample ID: LCS 240-217853/3-A
Matrix: Solid
Analysis Batch: 218242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00542		mg/L		108	80 - 120

Lab Sample ID: LB 240-217712/1-C
Matrix: Solid
Analysis Batch: 218242

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 217853

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		02/17/16 13:57	02/18/16 15:16	1

Lab Sample ID: 240-60702-1 MS
Matrix: Solid
Analysis Batch: 218242

Client Sample ID: SO-17303-020816-CB-014
Prep Type: TCLP
Prep Batch: 217853

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0020	U	0.00500	0.00541		mg/L		108	80 - 120

Lab Sample ID: 240-60702-1 MSD
Matrix: Solid
Analysis Batch: 218242

Client Sample ID: SO-17303-020816-CB-014
Prep Type: TCLP
Prep Batch: 217853

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	0.00536		mg/L		107	80 - 120	1	20

Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 240-217501/1
Matrix: Solid
Analysis Batch: 217501

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	81.00		Degrees F		100	97 - 103

Method: Moisture - Percent Moisture

Lab Sample ID: 240-60702-1 DU
Matrix: Solid
Analysis Batch: 217073

Client Sample ID: SO-17303-020816-CB-014
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	85.6		85.0		%		0.7	20
Percent Moisture	14.4		15.0		%		4	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(80-121)	(70-124)	(80-120)	(80-128)
LCS 240-217891/27	Lab Control Sample	91	86	101	102

Surrogate Legend

12DCE = 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)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(80-121)	(70-124)	(80-120)	(80-128)
240-60702-1	SO-17303-020816-CB-014	92	85	103	100
240-60702-1 MS	SO-17303-020816-CB-014	79 X	81	98	96
240-60702-1 MSD	SO-17303-020816-CB-014	101	90	109	103
LB 240-217791/1-A MB	Method Blank	92	82	94	101

Surrogate Legend

12DCE = 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	TPH
Lab Sample ID	Client Sample ID	(30-110)	(20-110)	(23-110)	(28-110)	(21-110)	(48-110)
LCS 240-217786/4-A	Lab Control Sample	81	61	74	79	44	80
MB 240-217786/3-A	Method Blank	74	61	64	69	46	74

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = 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	TPH
Lab Sample ID	Client Sample ID	(30-110)	(20-110)	(23-110)	(28-110)	(21-110)	(48-110)
240-60702-1	SO-17303-020816-CB-014	68	55	35	65	37	68
240-60702-1 MS	SO-17303-020816-CB-014	72	49	42	73	47	75

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX1	DCB1								
Lab Sample ID	Client Sample ID	(13-134)	(10-155)								
240-60702-1	SO-17303-020816-CB-014	86	125								
240-60702-1 MS	SO-17303-020816-CB-014	89	121								
240-60702-1 MSD	SO-17303-020816-CB-014	93	124								
LCS 240-217147/24-A	Lab Control Sample	71	75								
MB 240-217147/23-A	Method Blank	72	73								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

Client Sample ID: SO-17303-020816-CB-014

Lab Sample ID: 240-60702-1

Date Collected: 02/08/16 16:45

Matrix: Solid

Date Received: 02/09/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			217791	02/16/16 20:30	SMH	TAL CAN
TCLP	Analysis	8260B		1	217891	02/19/16 03:47	TJL1	TAL CAN
TCLP	Leach	1311			217712	02/16/16 18:00	DRJ	TAL CAN
TCLP	Prep	3510C			217786	02/17/16 09:55	JDR	TAL CAN
TCLP	Analysis	8270C		1	218346	02/21/16 16:47	MRU	TAL CAN
TCLP	Leach	1311			217712	02/16/16 18:00	DRJ	TAL CAN
TCLP	Prep	3010A			217849	02/17/16 13:54	DEE	TAL CAN
TCLP	Analysis	6010B		1	218840	02/24/16 02:36	KLC	TAL CAN
TCLP	Leach	1311			217712	02/16/16 18:00	DRJ	TAL CAN
TCLP	Prep	7470A			217853	02/17/16 13:57	DEE	TAL CAN
TCLP	Analysis	7470A		1	218242	02/18/16 15:27	DSH	TAL CAN
Total/NA	Analysis	1010		1	217501	02/15/16 10:34	TPH	TAL CAN
Total/NA	Analysis	Moisture		1	217073	02/10/16 12:58	LCN	TAL CAN

Client Sample ID: SO-17303-020816-CB-014

Lab Sample ID: 240-60702-1

Date Collected: 02/08/16 16:45

Matrix: Solid

Date Received: 02/09/16 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	3540C			217147	02/11/16 08:14	JDR	TAL CAN
Total/NA	Analysis	8082		10	217925	02/18/16 08:55	KMG	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-034, RACER CVO

TestAmerica Job ID: 240-60702-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16 *
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-16 *
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16 *
West Virginia DEP	State Program	3	210	12-31-15 *
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

240-60702 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1,2/C0,7

Chain of Custody Record

122752

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: beth Landale	Site Contact: C Bondy	Date: 2/8/2016	COC No: 005
Company Name: GHD	Tel/Fax: (734) 453-5123	Lab Contact: D. Hunter	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: (734) 453-5123	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: 017303	☐ 2 days			Job / SDG No.: 24006020
PO # SSOW# 17303-034	☐ 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 VOCs	TCL SVOCs	TCL Metals	Total PCBs	Ignitability (Flashpoint)	Sample Specific Notes:
SO-17303-020816-CB-014	2/8/16	1645	C	SO	1	-	N	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:

BATCH COMPLETE

Tracking # 6209 0763 2720

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:
C. Bondy	GHD	2/8/16 1700			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Jacquelyn Benel	Company: TANC	Date/Time: 2-9-16 0940

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 160702

Client GHD Site Name

Cooler Received on 2-9-16 Opened on 2-9-16

Cooler unpacked by: Jennifer Miller

FedEx: 1st Grd (Exp) UPS FAS Stetson 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# 48 (CF -1.9 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 18 (CF -0.5 °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 0.7 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes (No) NA

-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)

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 sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC559158

13. Were VOAs on the COC? (Yes) No

14. Were air bubbles >6 mm in any VOA vials? 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)

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):

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: 240-60708-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Authorized for release by:
3/2/2016 11:02:17 AM
Nathan Pietras, Project Manager II
(330)966-8296
nathan.pietras@testamericainc.com

Designee for

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: 240-60708-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-60708-1

Comments
At the request of GHD, fractionated lead was added on February 23, 2016. This extended the TAT.

Receipt
The samples were received on 2/9/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for preparation batch 240-217398 and analytical batch 240-217706 recovered outside control limits for bromomethane. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The 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 following samples was diluted due to the nature of the sample matrix: SO-17303-020816-CB-009 (240-60708-1) and SO-17303-020816-CB-011 (240-60708-3). 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) 8082: 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-17303-020816-CB-011 (240-60708-3) and SO-17303-020816-CB-012 (240-60708-4). These results have been reported and qualified.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-020816-CB-011 (240-60708-3) and SO-17303-020816-CB-012 (240-60708-4). 2391675
2103100
2283703

Method(s) 8082: 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 sample contained an allowable number of surrogate compounds outside limits: SO-17303-020816-CB-009 (240-60708-1). These results have been reported and qualified.

Method(s) 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: (240-60702-B-1-A), (240-60702-B-1-B MS) and (240-60702-B-1-C MSD). 2391675
2103100
2283703

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-020816-CB-010 (240-60708-2).2391675
2103098
2333858

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-17303-020816-CB-009 (240-60708-1), SO-17303-020816-CB-010 (240-60708-2), SO-17303-020816-CB-011 (240-60708-3) and SO-17303-020816-CB-012 (240-60708-4). The continuing calibration blanks and method blanks may not support the lower PQL.

Job ID: 240-60708-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Method(s) 6020: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: SO-17303-020816-CB-009 (240-60708-1), SO-17303-020816-CB-010 (240-60708-2), SO-17303-020816-CB-011 (240-60708-3) and SO-17303-020816-CB-012 (240-60708-4). 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.
*	LCS or LCSD is outside acceptance 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.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control 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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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.
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.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-60708-1	SO-17303-020816-CB-009	Solid	02/08/16 08:50	02/10/16 09:23
240-60708-2	SO-17303-020816-CB-010	Solid	02/08/16 12:00	02/10/16 09:23
240-60708-3	SO-17303-020816-CB-011	Solid	02/08/16 15:00	02/10/16 09:23
240-60708-4	SO-17303-020816-CB-012	Solid	02/08/16 15:15	02/10/16 09:23
240-60708-5	TB-17303-020816-CB-013	Solid	02/08/16 00:00	02/10/16 09:23

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Client Sample ID: SO-17303-020816-CB-009 — Lab Sample ID: 240-60708-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	4900		88	85	ug/Kg	2	☼	8260B	Total/NA
Xylenes, Total	150	J	260	70	ug/Kg	2	☼	8260B	Total/NA
cis-1,2-Dichloroethene	150		88	83	ug/Kg	2	☼	8260B	Total/NA
1,2,4-Trichlorobenzene	410	J	440	66	ug/Kg	2	☼	8260B	Total/NA
2-Methylnaphthalene	27	J	1500	2.9	ug/Kg	5	☼	8270C	Total/NA
Anthracene	45	J	1500	4.5	ug/Kg	5	☼	8270C	Total/NA
Benzo[a]anthracene	530	J	1500	3.6	ug/Kg	5	☼	8270C	Total/NA
Benzo[a]pyrene	770	J F1	1500	3.7	ug/Kg	5	☼	8270C	Total/NA
Benzo[b]fluoranthene	1100	J F1	1500	3.4	ug/Kg	5	☼	8270C	Total/NA
Benzo[g,h,i]perylene	790	J F1	1500	2.0	ug/Kg	5	☼	8270C	Total/NA
Benzo[k]fluoranthene	400	J	1500	3.9	ug/Kg	5	☼	8270C	Total/NA
Chrysene	730	J F1	1500	6.3	ug/Kg	5	☼	8270C	Total/NA
Dibenz(a,h)anthracene	170	J	1500	3.8	ug/Kg	5	☼	8270C	Total/NA
Di-n-butyl phthalate	430	J F1	1500	86	ug/Kg	5	☼	8270C	Total/NA
Fluoranthene	860	J F1	1500	3.1	ug/Kg	5	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	640	J	1500	2.0	ug/Kg	5	☼	8270C	Total/NA
Naphthalene	41	J	1500	4.7	ug/Kg	5	☼	8270C	Total/NA
Phenanthrene	330	J	1500	4.2	ug/Kg	5	☼	8270C	Total/NA
Pyrene	760	J	1500	2.5	ug/Kg	5	☼	8270C	Total/NA
Aroclor-1260	3400	J	15000	510	ug/Kg	50	☼	8082	Total/NA
Barium	60		0.63	0.32	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.17		0.13	0.020	mg/Kg	1	☼	6010B	Total/NA
Cadmium	24	F2	0.063	0.016	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.0		0.31	0.037	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.63	0.059	mg/Kg	1	☼	6010B	Total/NA
Copper	28	B F1	0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.63	0.066	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.63	0.063	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.2		0.63	0.16	mg/Kg	1	☼	6010B	Total/NA
Zinc	180	F1	1.6	0.44	mg/Kg	1	☼	6010B	Total/NA
Lead	360		0.27	0.18	mg/Kg	1		6010B	Fractionated
Lead (coarse particulate matter)	420		0.28	0.18	mg/Kg	1	☼	6010B	Fractionated
Lead (fine particulate matter)	160		0.23	0.15	mg/Kg	1	☼	6010B	Fractionated
Antimony	8.8	B F1	0.25	0.011	mg/Kg	2	☼	6020	Total/NA
Arsenic	3.3		0.13	0.020	mg/Kg	2	☼	6020	Total/NA
Selenium	1.2	B	0.25	0.031	mg/Kg	2	☼	6020	Total/NA
Thallium	0.075	J	0.13	0.015	mg/Kg	2	☼	6020	Total/NA
Silver	0.19		0.13	0.0011	mg/Kg	2	☼	6020	Total/NA
Mercury	0.026	J B F1	0.048	0.017	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17303-020816-CB-010 — Lab Sample ID: 240-60708-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	74		42	36	ug/Kg	1	☼	8260B	Total/NA
Toluene	34	J	83	10	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	280		120	33	ug/Kg	1	☼	8260B	Total/NA
Isopropylbenzene	32	J	210	13	ug/Kg	1	☼	8260B	Total/NA
1,2,4-Trichlorobenzene	42	J	210	31	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	4300	J	29000	380	ug/Kg	100	☼	8270C	Total/NA
2-Methylnaphthalene	24000	J	29000	54	ug/Kg	100	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample ID: SO-17303-020816-CB-010 (Continued) — Lab Sample ID: 240-60708-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	25000	J	29000	83	ug/Kg	100	☼	8270C	Total/NA
Acenaphthylene	4700	J	29000	38	ug/Kg	100	☼	8270C	Total/NA
Anthracene	28000	J	29000	85	ug/Kg	100	☼	8270C	Total/NA
Benzo[a]anthracene	42000		29000	69	ug/Kg	100	☼	8270C	Total/NA
Benzo[a]pyrene	29000		29000	70	ug/Kg	100	☼	8270C	Total/NA
Benzo[b]fluoranthene	38000		29000	64	ug/Kg	100	☼	8270C	Total/NA
Benzo[g,h,i]perylene	11000	J	29000	38	ug/Kg	100	☼	8270C	Total/NA
Benzo[k]fluoranthene	16000	J	29000	74	ug/Kg	100	☼	8270C	Total/NA
Carbazole	4700	J	29000	2900	ug/Kg	100	☼	8270C	Total/NA
Chrysene	37000		29000	120	ug/Kg	100	☼	8270C	Total/NA
Dibenz(a,h)anthracene	2900	J	29000	72	ug/Kg	100	☼	8270C	Total/NA
Dibenzofuran	13000	J	29000	72	ug/Kg	100	☼	8270C	Total/NA
Fluoranthene	90000		29000	60	ug/Kg	100	☼	8270C	Total/NA
Fluorene	24000	J	29000	58	ug/Kg	100	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	11000	J	29000	38	ug/Kg	100	☼	8270C	Total/NA
Naphthalene	110000		29000	89	ug/Kg	100	☼	8270C	Total/NA
Phenanthrene	110000		29000	79	ug/Kg	100	☼	8270C	Total/NA
Pyrene	110000		29000	48	ug/Kg	100	☼	8270C	Total/NA
Aroclor-1260	1600	J	2900	97	ug/Kg	10	☼	8082	Total/NA
Barium	5.9		0.77	0.40	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.096	J	0.15	0.025	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10		0.077	0.020	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.2		0.39	0.045	mg/Kg	1	☼	6010B	Total/NA
Chromium	5.7		0.77	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	4.8	B	0.77	0.22	mg/Kg	1	☼	6010B	Total/NA
Manganese	240		0.77	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	3.9		0.77	0.077	mg/Kg	1	☼	6010B	Total/NA
Vanadium	7.6		0.77	0.19	mg/Kg	1	☼	6010B	Total/NA
Zinc	16		1.9	0.54	mg/Kg	1	☼	6010B	Total/NA
Lead	2.3		0.23	0.19	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.15	J B	0.31	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	2.4		0.15	0.025	mg/Kg	2	☼	6020	Total/NA
Selenium	0.97	B	0.31	0.039	mg/Kg	2	☼	6020	Total/NA
Thallium	0.060	J	0.15	0.018	mg/Kg	2	☼	6020	Total/NA
Silver	0.0075	J	0.15	0.0014	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-020816-CB-011 — Lab Sample ID: 240-60708-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	110		45	44	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	31	J	1500	2.8	ug/Kg	5	☼	8270C	Total/NA
Acenaphthene	220	J	1500	4.3	ug/Kg	5	☼	8270C	Total/NA
Anthracene	350	J	1500	4.4	ug/Kg	5	☼	8270C	Total/NA
Benzo[a]anthracene	1100	J	1500	3.5	ug/Kg	5	☼	8270C	Total/NA
Benzo[a]pyrene	1000	J	1500	3.6	ug/Kg	5	☼	8270C	Total/NA
Benzo[b]fluoranthene	1500		1500	3.3	ug/Kg	5	☼	8270C	Total/NA
Benzo[g,h,i]perylene	770	J	1500	2.0	ug/Kg	5	☼	8270C	Total/NA
Benzo[k]fluoranthene	590	J	1500	3.8	ug/Kg	5	☼	8270C	Total/NA
Carbazole	250	J	1500	150	ug/Kg	5	☼	8270C	Total/NA
Chrysene	1300	J	1500	6.2	ug/Kg	5	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-020816-CB-011 (Continued) — Lab Sample ID: 240-60708-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	200	J	1500	3.7	ug/Kg	5	☼	8270C	Total/NA
Dibenzofuran	91	J	1500	3.7	ug/Kg	5	☼	8270C	Total/NA
Di-n-butyl phthalate	310	J	1500	84	ug/Kg	5	☼	8270C	Total/NA
Fluoranthene	2000		1500	3.1	ug/Kg	5	☼	8270C	Total/NA
Fluorene	150	J	1500	3.0	ug/Kg	5	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	630	J	1500	2.0	ug/Kg	5	☼	8270C	Total/NA
Naphthalene	77	J	1500	4.6	ug/Kg	5	☼	8270C	Total/NA
Phenanthrene	1500		1500	4.1	ug/Kg	5	☼	8270C	Total/NA
Pyrene	2300		1500	2.5	ug/Kg	5	☼	8270C	Total/NA
Aroclor-1260	25	J	290	10	ug/Kg	1	☼	8082	Total/NA
Barium	280		0.80	0.41	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.28		0.16	0.026	mg/Kg	1	☼	6010B	Total/NA
Cadmium	4.6		0.080	0.021	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.6		0.40	0.047	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.80	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	130	B	0.80	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.80	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.3		0.80	0.080	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.9		0.80	0.20	mg/Kg	1	☼	6010B	Total/NA
Zinc	550		2.0	0.56	mg/Kg	1	☼	6010B	Total/NA
Lead	100		0.20	0.14	mg/Kg	1		6010B	Fractionated
Lead (coarse particulate matter)	100		0.20	0.13	mg/Kg	1	☼	6010B	Fractionated
Lead (fine particulate matter)	120		0.23	0.15	mg/Kg	1	☼	6010B	Fractionated
Antimony	7.3	B	0.32	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	44		0.16	0.026	mg/Kg	2	☼	6020	Total/NA
Selenium	1.6	B	0.32	0.040	mg/Kg	2	☼	6020	Total/NA
Thallium	0.24		0.16	0.019	mg/Kg	2	☼	6020	Total/NA
Silver	0.39		0.16	0.0014	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-020816-CB-012 — Lab Sample ID: 240-60708-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	94		44	43	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	8.2	J	290	3.9	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	20	J	290	0.56	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	100	J	290	0.84	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	5.9	J	290	0.39	ug/Kg	1	☼	8270C	Total/NA
Anthracene	200	J	290	0.87	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	700		290	0.70	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	660		290	0.71	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	960		290	0.66	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	570		290	0.39	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	400		290	0.76	ug/Kg	1	☼	8270C	Total/NA
Carbazole	100	J	290	30	ug/Kg	1	☼	8270C	Total/NA
Chrysene	840		290	1.2	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	130	J	290	0.73	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	50	J	290	0.73	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	72	J	290	17	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	1200		290	0.61	ug/Kg	1	☼	8270C	Total/NA
Fluorene	74	J	290	0.59	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SO-17303-020816-CB-012 (Continued) — Lab Sample ID: 240-60708-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	470		290	0.39	ug/Kg	1	☼	8270C	Total/NA
Isophorone	16	J	290	14	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	37	J	290	0.91	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	870		290	0.81	ug/Kg	1	☼	8270C	Total/NA
Pyrene	1400		290	0.49	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1260	34	J	290	10	ug/Kg	1	☼	8082	Total/NA
Barium	210		0.81	0.41	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.35		0.16	0.026	mg/Kg	1	☼	6010B	Total/NA
Cadmium	5.0		0.081	0.021	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.4		0.40	0.047	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.81	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	160	B	0.81	0.23	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.81	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.2		0.81	0.081	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.1		0.81	0.20	mg/Kg	1	☼	6010B	Total/NA
Zinc	820		2.0	0.57	mg/Kg	1	☼	6010B	Total/NA
Lead	110		0.24	0.16	mg/Kg	1		6010B	Fractionated
Lead (coarse particulate matter)	100		0.23	0.16	mg/Kg	1	☼	6010B	Fractionated
Lead (fine particulate matter)	160		0.26	0.17	mg/Kg	1	☼	6010B	Fractionated
Antimony	9.8	B	0.32	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	69		0.16	0.026	mg/Kg	2	☼	6020	Total/NA
Selenium	1.7	B	0.32	0.040	mg/Kg	2	☼	6020	Total/NA
Thallium	0.34		0.16	0.019	mg/Kg	2	☼	6020	Total/NA
Silver	0.45		0.16	0.0014	mg/Kg	2	☼	6020	Total/NA
Mercury	0.028	J B	0.045	0.016	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: TB-17303-020816-CB-013 — Lab Sample ID: 240-60708-5

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082	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
Moisture	Coarse Moisture	EPA	TAL CAN
Moisture	Fine 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: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1300	U	1300	490	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Benzene	88	U	88	20	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Bromodichloromethane	180	U	180	83	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Bromoform	180	U	180	130	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Bromomethane	440	U *	440	110	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
2-Butanone (MEK)	1300	U	1300	160	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Carbon disulfide	440	U	440	120	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Carbon tetrachloride	88	U	88	39	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Chlorobenzene	88	U	88	28	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Chloroethane	440	U	440	110	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Chloroform	88	U	88	79	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Chloromethane	440	U	440	110	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,1-Dichloroethane	88	U	88	77	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,2-Dichloroethane	88	U	88	22	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,1-Dichloroethene	88	U	88	66	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,2-Dichloropropane	88	U	88	70	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
cis-1,3-Dichloropropene	88	U	88	48	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
trans-1,3-Dichloropropene	88	U	88	57	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Ethylbenzene	88	U	88	77	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
2-Hexanone	4400	U	4400	180	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Methylene Chloride	440	U	440	190	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
4-Methyl-2-pentanone (MIBK)	4400	U	4400	120	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Styrene	88	U	88	59	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,1,2,2-Tetrachloroethane	88	U	88	55	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Tetrachloroethene	88	U	88	59	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Toluene	180	U	180	22	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Trichloroethene	**4900**		88	85	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Vinyl chloride	70	U	70	37	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Xylenes, Total	**150**	**J**	260	70	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,1,1-Trichloroethane	88	U	88	59	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,1,2-Trichloroethane	88	U	88	42	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Cyclohexane	2100	U	2100	66	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,2-Dibromo-3-Chloropropane	440	U	440	160	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,2-Dibromoethane	440	U	440	70	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Dichlorodifluoromethane	180	U	180	130	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
cis-1,2-Dichloroethene	**150**		88	83	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
trans-1,2-Dichloroethene	88	U	88	57	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Isopropylbenzene	440	U	440	28	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Methyl acetate	2100	U	2100	120	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Methyl tert-butyl ether	440	U	440	66	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,1,2-Trichloro-1,2,2-trifluoroethane	440	U	440	92	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,2,4-Trichlorobenzene	**410**	**J**	440	66	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,2-Dichlorobenzene	180	U	180	42	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,3-Dichlorobenzene	180	U	180	66	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
1,4-Dichlorobenzene	180	U	180	90	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Trichlorofluoromethane	180	U	180	77	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Dibromochloromethane	88	U	88	44	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2
Methylcyclohexane	2100	U	2100	83	ug/Kg	☼	02/13/16 22:46	02/18/16 04:23	2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		39 - 128	02/13/16 22:46	02/18/16 04:23	2
4-Bromofluorobenzene (Surr)	86		26 - 141	02/13/16 22:46	02/18/16 04:23	2
Toluene-d8 (Surr)	91		33 - 134	02/13/16 22:46	02/18/16 04:23	2
Dibromofluoromethane (Surr)	89		30 - 122	02/13/16 22:46	02/18/16 04:23	2

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

Client Sample ID: SO-17303-020816-CB-010
Date Collected: 02/08/16 12:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-2
Matrix: Solid
Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	620	U	620	230	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Benzene	42	U	42	9.3	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Bromodichloromethane	83	U	83	39	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Bromoform	83	U	83	63	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Bromomethane	210	U *	210	53	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
2-Butanone (MEK)	620	U	620	76	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Carbon disulfide	210	U	210	58	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Carbon tetrachloride	42	U	42	19	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Chlorobenzene	42	U	42	13	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Chloroethane	210	U	210	53	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Chloroform	42	U	42	37	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Chloromethane	210	U	210	50	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,1-Dichloroethane	42	U	42	36	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,2-Dichloroethane	42	U	42	10	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,1-Dichloroethene	42	U	42	31	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,2-Dichloropropane	42	U	42	33	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
cis-1,3-Dichloropropene	42	U	42	23	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
trans-1,3-Dichloropropene	42	U	42	27	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Ethylbenzene	**74**		42	36	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
2-Hexanone	2100	U	2100	87	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Methylene Chloride	210	U	210	88	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
4-Methyl-2-pentanone (MIBK)	2100	U	2100	58	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Styrene	42	U	42	28	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,1,2,2-Tetrachloroethane	42	U	42	26	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Tetrachloroethene	42	U	42	28	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Toluene	**34**	**J**	83	10	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Trichloroethene	42	U	42	40	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Vinyl chloride	33	U	33	18	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Xylenes, Total	**280**		120	33	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,1,1-Trichloroethane	42	U	42	28	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,1,2-Trichloroethane	42	U	42	20	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Cyclohexane	1000	U	1000	31	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,2-Dibromo-3-Chloropropane	210	U	210	74	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,2-Dibromoethane	210	U	210	33	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Dichlorodifluoromethane	83	U	83	63	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
cis-1,2-Dichloroethene	42	U	42	39	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
trans-1,2-Dichloroethene	42	U	42	27	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Isopropylbenzene	**32**	**J**	210	13	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Methyl acetate	1000	U	1000	57	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Methyl tert-butyl ether	210	U	210	31	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	210	U	210	44	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,2,4-Trichlorobenzene	**42**	**J**	210	31	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,2-Dichlorobenzene	83	U	83	20	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,3-Dichlorobenzene	83	U	83	31	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
1,4-Dichlorobenzene	83	U	83	43	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Trichlorofluoromethane	83	U	83	36	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Dibromochloromethane	42	U	42	21	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1
Methylcyclohexane	1000	U	1000	39	ug/Kg	☼	02/13/16 22:46	02/17/16 00:59	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		39 - 128	02/13/16 22:46	02/17/16 00:59	1
4-Bromofluorobenzene (Surr)	85		26 - 141	02/13/16 22:46	02/17/16 00:59	1
Toluene-d8 (Surr)	93		33 - 134	02/13/16 22:46	02/17/16 00:59	1
Dibromofluoromethane (Surr)	90		30 - 122	02/13/16 22:46	02/17/16 00:59	1

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

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U	670	250	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Benzene	45	U	45	10	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Bromodichloromethane	90	U	90	43	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Bromoform	90	U	90	68	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Bromomethane	220	U *	220	57	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
2-Butanone (MEK)	670	U	670	82	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Carbon disulfide	220	U	220	63	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Carbon tetrachloride	45	U	45	20	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Chlorobenzene	45	U	45	15	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Chloroethane	220	U	220	57	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Chloroform	45	U	45	40	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Chloromethane	220	U	220	54	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,1-Dichloroethane	45	U	45	39	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,2-Dichloroethane	45	U	45	11	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,1-Dichloroethene	45	U	45	34	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,2-Dichloropropane	45	U	45	36	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
cis-1,3-Dichloropropene	45	U	45	25	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
trans-1,3-Dichloropropene	45	U	45	29	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Ethylbenzene	45	U	45	39	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
2-Hexanone	2200	U	2200	94	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Methylene Chloride	220	U	220	95	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	63	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Styrene	45	U	45	30	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,1,2,2-Tetrachloroethane	45	U	45	28	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Tetrachloroethene	45	U	45	30	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Toluene	90	U	90	11	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Trichloroethene	**110**		45	44	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Vinyl chloride	36	U	36	19	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Xylenes, Total	130	U	130	36	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,1,1-Trichloroethane	45	U	45	30	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,1,2-Trichloroethane	45	U	45	21	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Cyclohexane	1100	U	1100	34	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,2-Dibromo-3-Chloropropane	220	U	220	80	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,2-Dibromoethane	220	U	220	36	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Dichlorodifluoromethane	90	U	90	68	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
cis-1,2-Dichloroethene	45	U	45	43	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
trans-1,2-Dichloroethene	45	U	45	29	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Isopropylbenzene	220	U	220	15	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Methyl acetate	1100	U	1100	62	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Methyl tert-butyl ether	220	U	220	34	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	47	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,2,4-Trichlorobenzene	220	U	220	34	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,2-Dichlorobenzene	90	U	90	21	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,3-Dichlorobenzene	90	U	90	34	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
1,4-Dichlorobenzene	90	U	90	46	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Trichlorofluoromethane	90	U	90	39	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Dibromochloromethane	45	U	45	22	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1
Methylcyclohexane	1100	U	1100	43	ug/Kg	☼	02/13/16 22:46	02/17/16 01:22	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		39 - 128	02/13/16 22:46	02/17/16 01:22	1
4-Bromofluorobenzene (Surr)	86		26 - 141	02/13/16 22:46	02/17/16 01:22	1
Toluene-d8 (Surr)	92		33 - 134	02/13/16 22:46	02/17/16 01:22	1
Dibromofluoromethane (Surr)	86		30 - 122	02/13/16 22:46	02/17/16 01:22	1

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

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	660	U	660	250	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Benzene	44	U	44	10	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Bromodichloromethane	88	U	88	42	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Bromoform	88	U	88	67	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Bromomethane	220	U *	220	56	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
2-Butanone (MEK)	660	U	660	81	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Carbon disulfide	220	U	220	62	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Carbon tetrachloride	44	U	44	20	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Chlorobenzene	44	U	44	14	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Chloroethane	220	U	220	56	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Chloroform	44	U	44	40	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Chloromethane	220	U	220	53	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,1-Dichloroethane	44	U	44	39	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,2-Dichloroethane	44	U	44	11	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,1-Dichloroethene	44	U	44	33	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,2-Dichloropropane	44	U	44	35	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
cis-1,3-Dichloropropene	44	U	44	24	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
trans-1,3-Dichloropropene	44	U	44	29	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Ethylbenzene	44	U	44	39	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
2-Hexanone	2200	U	2200	93	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Methylene Chloride	220	U	220	94	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	62	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Styrene	44	U	44	30	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,1,2,2-Tetrachloroethane	44	U	44	28	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Tetrachloroethene	44	U	44	30	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Toluene	88	U	88	11	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Trichloroethene	**94**		44	43	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Vinyl chloride	35	U	35	19	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Xylenes, Total	130	U	130	35	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,1,1-Trichloroethane	44	U	44	30	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,1,2-Trichloroethane	44	U	44	21	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Cyclohexane	1100	U	1100	33	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,2-Dibromo-3-Chloropropane	220	U	220	79	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,2-Dibromoethane	220	U	220	35	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Dichlorodifluoromethane	88	U	88	67	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
cis-1,2-Dichloroethene	44	U	44	42	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
trans-1,2-Dichloroethene	44	U	44	29	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Isopropylbenzene	220	U	220	14	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Methyl acetate	1100	U	1100	61	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Methyl tert-butyl ether	220	U	220	33	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	46	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,2,4-Trichlorobenzene	220	U	220	33	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,2-Dichlorobenzene	88	U	88	21	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,3-Dichlorobenzene	88	U	88	33	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
1,4-Dichlorobenzene	88	U	88	45	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Trichlorofluoromethane	88	U	88	39	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Dibromochloromethane	44	U	44	22	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1
Methylcyclohexane	1100	U	1100	42	ug/Kg	☼	02/13/16 22:46	02/17/16 01:45	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		39 - 128	02/13/16 22:46	02/17/16 01:45	1
4-Bromofluorobenzene (Surr)	89		26 - 141	02/13/16 22:46	02/17/16 01:45	1
Toluene-d8 (Surr)	95		33 - 134	02/13/16 22:46	02/17/16 01:45	1
Dibromofluoromethane (Surr)	91		30 - 122	02/13/16 22:46	02/17/16 01:45	1

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

Client Sample ID: TB-17303-020816-CB-013
Date Collected: 02/08/16 00:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	230	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Benzene	40	U	40	9.0	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Bromodichloromethane	80	U	80	38	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Bromoform	80	U	80	61	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Bromomethane	200	U *	200	51	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
2-Butanone (MEK)	600	U	600	73	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Carbon disulfide	200	U	200	56	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Carbon tetrachloride	40	U	40	18	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Chlorobenzene	40	U	40	13	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Chloroethane	200	U	200	51	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Chloroform	40	U	40	36	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Chloromethane	200	U	200	48	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,1-Dichloroethane	40	U	40	35	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,1-Dichloroethene	40	U	40	30	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,2-Dichloropropane	40	U	40	32	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
cis-1,3-Dichloropropene	40	U	40	22	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
trans-1,3-Dichloropropene	40	U	40	26	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Ethylbenzene	40	U	40	35	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
2-Hexanone	2000	U	2000	84	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Methylene Chloride	200	U	200	85	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	56	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Styrene	40	U	40	27	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,1,2,2-Tetrachloroethane	40	U	40	25	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Tetrachloroethene	40	U	40	27	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Toluene	80	U	80	10	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Trichloroethene	40	U	40	39	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Vinyl chloride	32	U	32	17	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Xylenes, Total	120	U	120	32	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,1,1-Trichloroethane	40	U	40	27	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,1,2-Trichloroethane	40	U	40	19	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Cyclohexane	960	U	960	30	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,2-Dibromo-3-Chloropropane	200	U	200	71	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,2-Dibromoethane	200	U	200	32	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Dichlorodifluoromethane	80	U	80	61	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
cis-1,2-Dichloroethene	40	U	40	38	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
trans-1,2-Dichloroethene	40	U	40	26	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Isopropylbenzene	200	U	200	13	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Methyl acetate	960	U	960	55	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Methyl tert-butyl ether	200	U	200	30	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	42	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,2,4-Trichlorobenzene	200	U	200	30	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,2-Dichlorobenzene	80	U	80	19	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,3-Dichlorobenzene	80	U	80	30	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
1,4-Dichlorobenzene	80	U	80	41	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Trichlorofluoromethane	80	U	80	35	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Dibromochloromethane	40	U	40	20	ug/Kg		02/13/16 22:46	02/17/16 02:08	1
Methylcyclohexane	960	U	960	38	ug/Kg		02/13/16 22:46	02/17/16 02:08	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		39 - 128	02/13/16 22:46	02/17/16 02:08	1
4-Bromofluorobenzene (Surr)	97		26 - 141	02/13/16 22:46	02/17/16 02:08	1
Toluene-d8 (Surr)	104		33 - 134	02/13/16 22:46	02/17/16 02:08	1
Dibromofluoromethane (Surr)	98		30 - 122	02/13/16 22:46	02/17/16 02:08	1

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

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1500	U	1500	20	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2,2'-oxybis[1-chloropropane]	1500	U	1500	54	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2,4,5-Trichlorophenol	1500	U	1500	140	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2,4,6-Trichlorophenol	1500	U	1500	51	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2,4-Dichlorophenol	1500	U	1500	110	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2,4-Dimethylphenol	1500	U	1500	110	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2,4-Dinitrophenol	860	U	860	120	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2,4-Dinitrotoluene	1500	U	1500	97	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2,6-Dinitrotoluene	1500	U	1500	120	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2-Chloronaphthalene	1500	U	1500	2.6	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2-Chlorophenol	1500	U	1500	47	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2-Methylnaphthalene	**27**	**J**	1500	2.9	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2-Methylphenol	1500	U	1500	63	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2-Nitroaniline	1100	U	1100	52	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
2-Nitrophenol	1500	U	1500	48	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
3,3'-Dichlorobenzidine	1500	U	1500	100	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
3-Nitroaniline	1100	U	1100	92	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
4,6-Dinitro-2-methylphenol	1100	U	1100	53	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
4-Bromophenyl phenyl ether	860	U	860	74	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
4-Chloro-3-methylphenol	1500	U	1500	120	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
4-Chloroaniline	1500	U	1500	97	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
4-Chlorophenyl phenyl ether	1100	U	1100	74	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
4-Nitroaniline	1100	U	1100	150	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
4-Nitrophenol	1900	U	1900	97	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Acenaphthene	1500	U	1500	4.4	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Acenaphthylene	1500	U	1500	2.0	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Acetophenone	1500	U	1500	53	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Anthracene	**45**	**J**	1500	4.5	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Atrazine	230	U	230	52	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Benzaldehyde	1500	U	1500	69	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Benzo[a]anthracene	**530**	**J**	1500	3.6	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Benzo[a]pyrene	**770**	**J F1**	1500	3.7	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Benzo[b]fluoranthene	**1100**	**J F1**	1500	3.4	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Benzo[g,h,i]perylene	**790**	**J F1**	1500	2.0	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Benzo[k]fluoranthene	**400**	**J**	1500	3.9	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Bis(2-chloroethoxy)methane	1500	U	1500	130	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Bis(2-chloroethyl)ether	460	U	460	11	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Bis(2-ethylhexyl) phthalate	1500	U	1500	110	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Butyl benzyl phthalate	1500	U	1500	57	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Caprolactam	1500	U	1500	210	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Carbazole	1500	U	1500	150	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Chrysene	**730**	**J F1**	1500	6.3	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Dibenz(a,h)anthracene	**170**	**J**	1500	3.8	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Dibenzofuran	1500	U	1500	3.8	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Diethyl phthalate	1500	U F1	1500	92	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Dimethyl phthalate	1500	U	1500	97	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Di-n-butyl phthalate	**430**	**J F1**	1500	86	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Di-n-octyl phthalate	1500	U	1500	45	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Fluoranthene	**860**	**J F1**	1500	3.1	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5

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

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	1500	U	1500	3.0	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Hexachlorobenzene	1500	U	1500	12	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Hexachlorobutadiene	230	U	230	32	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Hexachlorocyclopentadiene	1500	U F1	1500	46	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Hexachloroethane	1500	U	1500	52	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Indeno[1,2,3-cd]pyrene	**640**	**J**	1500	2.0	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Isophorone	1500	U	1500	74	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Naphthalene	**41**	**J**	1500	4.7	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Nitrobenzene	1500	U	1500	13	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
N-Nitrosodi-n-propylamine	1500	U	1500	36	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
N-Nitrosodiphenylamine	1500	U	1500	120	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Pentachlorophenol	860	U	860	52	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Phenol	1500	U	1500	42	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Phenanthrene	**330**	**J**	1500	4.2	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
Pyrene	**760**	**J**	1500	2.5	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5
3 & 4 Methylphenol	1500	U	1500	110	ug/Kg	☼	02/11/16 08:39	02/25/16 16:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*24 - 110*	*02/11/16 08:39*	*02/25/16 16:29*	*5*
2-Fluorophenol (Surr)	*75*		*24 - 110*	*02/11/16 08:39*	*02/25/16 16:29*	*5*
2,4,6-Tribromophenol (Surr)	*67*		*10 - 110*	*02/11/16 08:39*	*02/25/16 16:29*	*5*
Nitrobenzene-d5 (Surr)	*75*		*20 - 110*	*02/11/16 08:39*	*02/25/16 16:29*	*5*
Phenol-d5 (Surr)	*74*		*26 - 110*	*02/11/16 08:39*	*02/25/16 16:29*	*5*
Terphenyl-d14 (Surr)	*86*		*36 - 110*	*02/11/16 08:39*	*02/25/16 16:29*	*5*

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

Client Sample ID: SO-17303-020816-CB-010
Date Collected: 02/08/16 12:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-2
Matrix: Solid
Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**4300**	**J**	29000	380	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2,2'-oxybis[1-chloropropane]	29000	U	29000	1000	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2,4,5-Trichlorophenol	29000	U	29000	2700	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2,4,6-Trichlorophenol	29000	U	29000	970	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2,4-Dichlorophenol	29000	U	29000	2200	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2,4-Dimethylphenol	29000	U	29000	2200	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2,4-Dinitrophenol	16000	U	16000	2300	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2,4-Dinitrotoluene	29000	U	29000	1900	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2,6-Dinitrotoluene	29000	U	29000	2300	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2-Chloronaphthalene	29000	U	29000	49	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2-Chlorophenol	29000	U	29000	890	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2-Methylnaphthalene	**24000**	**J**	29000	54	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2-Methylphenol	29000	U	29000	1200	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2-Nitroaniline	22000	U	22000	990	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
2-Nitrophenol	29000	U	29000	900	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
3,3'-Dichlorobenzidine	29000	U	29000	2000	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
3-Nitroaniline	22000	U	22000	1700	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
4,6-Dinitro-2-methylphenol	22000	U	22000	1000	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
4-Bromophenyl phenyl ether	16000	U	16000	1400	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
4-Chloro-3-methylphenol	29000	U	29000	2300	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
4-Chloroaniline	29000	U	29000	1900	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
4-Chlorophenyl phenyl ether	22000	U	22000	1400	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
4-Nitroaniline	22000	U	22000	2800	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
4-Nitrophenol	36000	U	36000	1900	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Acenaphthene	**25000**	**J**	29000	83	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Acenaphthylene	**4700**	**J**	29000	38	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Acetophenone	29000	U	29000	1000	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Anthracene	**28000**	**J**	29000	85	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Atrazine	4400	U	4400	990	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Benzaldehyde	29000	U	29000	1300	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Benzo[a]anthracene	**42000**		29000	69	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Benzo[a]pyrene	**29000**		29000	70	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Benzo[b]fluoranthene	**38000**		29000	64	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Benzo[g,h,i]perylene	**11000**	**J**	29000	38	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Benzo[k]fluoranthene	**16000**	**J**	29000	74	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Bis(2-chloroethoxy)methane	29000	U	29000	2400	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Bis(2-chloroethyl)ether	8700	U	8700	220	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Bis(2-ethylhexyl) phthalate	29000	U	29000	2100	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Butyl benzyl phthalate	29000	U	29000	1100	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Caprolactam	29000	U	29000	4000	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Carbazole	**4700**	**J**	29000	2900	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Chrysene	**37000**		29000	120	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Dibenz(a,h)anthracene	**2900**	**J**	29000	72	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Dibenzofuran	**13000**	**J**	29000	72	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Diethyl phthalate	29000	U	29000	1700	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Dimethyl phthalate	29000	U	29000	1900	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Di-n-butyl phthalate	29000	U	29000	1600	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Di-n-octyl phthalate	29000	U	29000	860	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Fluoranthene	**90000**		29000	60	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100

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

Client Sample ID: SO-17303-020816-CB-010
Date Collected: 02/08/16 12:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-2
Matrix: Solid
Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**24000**	**J**	29000	58	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Hexachlorobenzene	29000	U	29000	230	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Hexachlorobutadiene	4400	U	4400	610	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Hexachlorocyclopentadiene	29000	U	29000	880	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Hexachloroethane	29000	U	29000	980	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Indeno[1,2,3-cd]pyrene	**11000**	**J**	29000	38	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Isophorone	29000	U	29000	1400	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Naphthalene	**110000**		29000	89	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Nitrobenzene	29000	U	29000	240	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
N-Nitrosodi-n-propylamine	29000	U	29000	690	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
N-Nitrosodiphenylamine	29000	U	29000	2300	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Pentachlorophenol	16000	U	16000	990	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Phenol	29000	U	29000	790	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Phenanthrene	**110000**		29000	79	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
Pyrene	**110000**		29000	48	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100
3 & 4 Methylphenol	29000	U	29000	2200	ug/Kg	☼	02/11/16 08:39	02/25/16 20:54	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*92*		*24 - 110*	*02/11/16 08:39*	*02/25/16 20:54*	*100*
2-Fluorophenol (Surr)	*120*	*X*	*24 - 110*	*02/11/16 08:39*	*02/25/16 20:54*	*100*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*10 - 110*	*02/11/16 08:39*	*02/25/16 20:54*	*100*
Nitrobenzene-d5 (Surr)	*144*	*X*	*20 - 110*	*02/11/16 08:39*	*02/25/16 20:54*	*100*
Phenol-d5 (Surr)	*85*		*26 - 110*	*02/11/16 08:39*	*02/25/16 20:54*	*100*
Terphenyl-d14 (Surr)	*114*	*X*	*36 - 110*	*02/11/16 08:39*	*02/25/16 20:54*	*100*

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

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1500	U	1500	20	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2,2'-oxybis[1-chloropropane]	1500	U	1500	53	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2,4,5-Trichlorophenol	1500	U	1500	140	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2,4,6-Trichlorophenol	1500	U	1500	50	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2,4-Dichlorophenol	1500	U	1500	110	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2,4-Dimethylphenol	1500	U	1500	110	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2,4-Dinitrophenol	840	U	840	120	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2,4-Dinitrotoluene	1500	U	1500	95	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2,6-Dinitrotoluene	1500	U	1500	120	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2-Chloronaphthalene	1500	U	1500	2.5	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2-Chlorophenol	1500	U	1500	46	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2-Methylnaphthalene	**31**	**J**	1500	2.8	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2-Methylphenol	1500	U	1500	62	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2-Nitroaniline	1100	U	1100	51	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
2-Nitrophenol	1500	U	1500	47	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
3,3'-Dichlorobenzidine	1500	U	1500	100	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
3-Nitroaniline	1100	U	1100	90	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
4,6-Dinitro-2-methylphenol	1100	U	1100	52	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
4-Bromophenyl phenyl ether	840	U	840	73	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
4-Chloro-3-methylphenol	1500	U	1500	120	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
4-Chloroaniline	1500	U	1500	95	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
4-Chlorophenyl phenyl ether	1100	U	1100	73	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
4-Nitroaniline	1100	U	1100	150	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
4-Nitrophenol	1900	U	1900	95	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Acenaphthene	**220**	**J**	1500	4.3	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Acenaphthylene	1500	U	1500	2.0	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Acetophenone	1500	U	1500	52	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Anthracene	**350**	**J**	1500	4.4	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Atrazine	220	U	220	51	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Benzaldehyde	1500	U	1500	67	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Benzo[a]anthracene	**1100**	**J**	1500	3.5	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Benzo[a]pyrene	**1000**	**J**	1500	3.6	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Benzo[b]fluoranthene	**1500**		1500	3.3	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Benzo[g,h,i]perylene	**770**	**J**	1500	2.0	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Benzo[k]fluoranthene	**590**	**J**	1500	3.8	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Bis(2-chloroethoxy)methane	1500	U	1500	120	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Bis(2-chloroethyl)ether	450	U	450	11	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Bis(2-ethylhexyl) phthalate	1500	U	1500	110	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Butyl benzyl phthalate	1500	U	1500	56	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Caprolactam	1500	U	1500	210	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Carbazole	**250**	**J**	1500	150	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Chrysene	**1300**	**J**	1500	6.2	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Dibenz(a,h)anthracene	**200**	**J**	1500	3.7	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Dibenzofuran	**91**	**J**	1500	3.7	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Diethyl phthalate	1500	U	1500	90	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Dimethyl phthalate	1500	U	1500	95	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Di-n-butyl phthalate	**310**	**J**	1500	84	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Di-n-octyl phthalate	1500	U	1500	44	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Fluoranthene	**2000**		1500	3.1	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5

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

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**150**	**J**	1500	3.0	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Hexachlorobenzene	1500	U	1500	12	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Hexachlorobutadiene	220	U	220	31	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Hexachlorocyclopentadiene	1500	U	1500	45	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Hexachloroethane	1500	U	1500	50	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Indeno[1,2,3-cd]pyrene	**630**	**J**	1500	2.0	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Isophorone	1500	U	1500	73	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Naphthalene	**77**	**J**	1500	4.6	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Nitrobenzene	1500	U	1500	12	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
N-Nitrosodi-n-propylamine	1500	U	1500	35	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
N-Nitrosodiphenylamine	1500	U	1500	120	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Pentachlorophenol	840	U	840	51	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Phenol	1500	U	1500	41	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Phenanthrene	**1500**		1500	4.1	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
Pyrene	**2300**		1500	2.5	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5
3 & 4 Methylphenol	1500	U	1500	110	ug/Kg	☼	02/11/16 08:39	02/25/16 17:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*87*		*24 - 110*	*02/11/16 08:39*	*02/25/16 17:41*	*5*
2-Fluorophenol (Surr)	*78*		*24 - 110*	*02/11/16 08:39*	*02/25/16 17:41*	*5*
2,4,6-Tribromophenol (Surr)	*58*		*10 - 110*	*02/11/16 08:39*	*02/25/16 17:41*	*5*
Nitrobenzene-d5 (Surr)	*73*		*20 - 110*	*02/11/16 08:39*	*02/25/16 17:41*	*5*
Phenol-d5 (Surr)	*85*		*26 - 110*	*02/11/16 08:39*	*02/25/16 17:41*	*5*
Terphenyl-d14 (Surr)	*98*		*36 - 110*	*02/11/16 08:39*	*02/25/16 17:41*	*5*

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

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**8.2**	**J**	290	3.9	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2,4,5-Trichlorophenol	290	U	290	28	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2,4,6-Trichlorophenol	290	U	290	9.9	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2,4-Dinitrophenol	170	U	170	23	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2,4-Dinitrotoluene	290	U	290	19	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2-Chloronaphthalene	290	U	290	0.50	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2-Chlorophenol	290	U	290	9.1	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2-Methylnaphthalene	**20**	**J**	290	0.56	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2-Methylphenol	290	U	290	12	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
2-Nitrophenol	290	U	290	9.2	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
3,3'-Dichlorobenzidine	290	U	290	20	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
4,6-Dinitro-2-methylphenol	220	U	220	10	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
4-Bromophenyl phenyl ether	170	U	170	14	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
4-Chloroaniline	290	U	290	19	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
4-Chlorophenyl phenyl ether	220	U	220	14	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
4-Nitrophenol	370	U	370	19	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Acenaphthene	**100**	**J**	290	0.84	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Acenaphthylene	**5.9**	**J**	290	0.39	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Acetophenone	290	U	290	10	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Anthracene	**200**	**J**	290	0.87	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Atrazine	44	U	44	10	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Benzo[a]anthracene	**700**		290	0.70	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Benzo[a]pyrene	**660**		290	0.71	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Benzo[b]fluoranthene	**960**		290	0.66	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Benzo[g,h,i]perylene	**570**		290	0.39	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Benzo[k]fluoranthene	**400**		290	0.76	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Bis(2-chloroethyl)ether	89	U	89	2.2	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Bis(2-ethylhexyl) phthalate	290	U	290	21	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Caprolactam	290	U	290	41	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Carbazole	**100**	**J**	290	30	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Chrysene	**840**		290	1.2	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Dibenz(a,h)anthracene	**130**	**J**	290	0.73	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Dibenzofuran	**50**	**J**	290	0.73	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Diethyl phthalate	290	U	290	18	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Di-n-butyl phthalate	**72**	**J**	290	17	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Di-n-octyl phthalate	290	U	290	8.8	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Fluoranthene	**1200**		290	0.61	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1

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

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**74**	**J**	290	0.59	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Hexachlorobutadiene	44	U	44	6.2	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Hexachlorocyclopentadiene	290	U	290	9.0	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Indeno[1,2,3-cd]pyrene	**470**		290	0.39	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Isophorone	**16**	**J**	290	14	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Naphthalene	**37**	**J**	290	0.91	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
N-Nitrosodi-n-propylamine	290	U	290	7.0	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Phenol	290	U	290	8.1	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Phenanthrene	**870**		290	0.81	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
Pyrene	**1400**		290	0.49	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	02/11/16 08:39	02/27/16 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*24 - 110*	*02/11/16 08:39*	*02/27/16 19:03*	*1*
2-Fluorophenol (Surr)	*58*		*24 - 110*	*02/11/16 08:39*	*02/27/16 19:03*	*1*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 110*	*02/11/16 08:39*	*02/27/16 19:03*	*1*
Nitrobenzene-d5 (Surr)	*58*		*20 - 110*	*02/11/16 08:39*	*02/27/16 19:03*	*1*
Phenol-d5 (Surr)	*60*		*26 - 110*	*02/11/16 08:39*	*02/27/16 19:03*	*1*
Terphenyl-d14 (Surr)	*82*		*36 - 110*	*02/11/16 08:39*	*02/27/16 19:03*	*1*

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

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	15000	U	15000	670	ug/Kg	☼	02/11/16 08:14	02/18/16 11:52	50
Aroclor-1221	15000	U	15000	900	ug/Kg	☼	02/11/16 08:14	02/18/16 11:52	50
Aroclor-1232	15000	U	15000	1100	ug/Kg	☼	02/11/16 08:14	02/18/16 11:52	50
Aroclor-1242	15000	U	15000	620	ug/Kg	☼	02/11/16 08:14	02/18/16 11:52	50
Aroclor-1248	15000	U	15000	450	ug/Kg	☼	02/11/16 08:14	02/18/16 11:52	50
Aroclor-1254	15000	U	15000	790	ug/Kg	☼	02/11/16 08:14	02/18/16 11:52	50
Aroclor-1260	**3400**	**J**	15000	510	ug/Kg	☼	02/11/16 08:14	02/18/16 11:52	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*95*		*13 - 134*	*02/11/16 08:14*	*02/18/16 11:52*	*50*
DCB Decachlorobiphenyl	*163*	*X*	*10 - 155*	*02/11/16 08:14*	*02/18/16 11:52*	*50*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

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

Client Sample ID: SO-17303-020816-CB-010
Date Collected: 02/08/16 12:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-2
Matrix: Solid
Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	2900	U	2900	130	ug/Kg	☼	02/11/16 08:14	02/22/16 20:38	10
Aroclor-1221	2900	U	2900	170	ug/Kg	☼	02/11/16 08:14	02/22/16 20:38	10
Aroclor-1232	2900	U	2900	220	ug/Kg	☼	02/11/16 08:14	02/22/16 20:38	10
Aroclor-1242	2900	U	2900	120	ug/Kg	☼	02/11/16 08:14	02/22/16 20:38	10
Aroclor-1248	2900	U	2900	87	ug/Kg	☼	02/11/16 08:14	02/22/16 20:38	10
Aroclor-1254	2900	U	2900	150	ug/Kg	☼	02/11/16 08:14	02/22/16 20:38	10
Aroclor-1260	**1600**	**J**	2900	97	ug/Kg	☼	02/11/16 08:14	02/22/16 20:38	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*170*	*X*	*13 - 134*	*02/11/16 08:14*	*02/22/16 20:38*	*10*
DCB Decachlorobiphenyl	*76*		*10 - 155*	*02/11/16 08:14*	*02/22/16 20:38*	*10*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

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

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	290	U	290	13	ug/Kg	☼	02/11/16 08:14	02/19/16 07:14	1
Aroclor-1221	290	U	290	18	ug/Kg	☼	02/11/16 08:14	02/19/16 07:14	1
Aroclor-1232	290	U	290	22	ug/Kg	☼	02/11/16 08:14	02/19/16 07:14	1
Aroclor-1242	290	U	290	12	ug/Kg	☼	02/11/16 08:14	02/19/16 07:14	1
Aroclor-1248	290	U	290	8.9	ug/Kg	☼	02/11/16 08:14	02/19/16 07:14	1
Aroclor-1254	290	U	290	16	ug/Kg	☼	02/11/16 08:14	02/19/16 07:14	1
Aroclor-1260	**25**	**J**	290	10	ug/Kg	☼	02/11/16 08:14	02/19/16 07:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*13 - 134*	*02/11/16 08:14*	*02/19/16 07:14*	*1*
DCB Decachlorobiphenyl	*356*	*X*	*10 - 155*	*02/11/16 08:14*	*02/19/16 07:14*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

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

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	290	U	290	13	ug/Kg	☼	02/11/16 08:14	02/19/16 07:32	1
Aroclor-1221	290	U	290	18	ug/Kg	☼	02/11/16 08:14	02/19/16 07:32	1
Aroclor-1232	290	U	290	22	ug/Kg	☼	02/11/16 08:14	02/19/16 07:32	1
Aroclor-1242	290	U	290	12	ug/Kg	☼	02/11/16 08:14	02/19/16 07:32	1
Aroclor-1248	290	U	290	8.9	ug/Kg	☼	02/11/16 08:14	02/19/16 07:32	1
Aroclor-1254	290	U	290	16	ug/Kg	☼	02/11/16 08:14	02/19/16 07:32	1
Aroclor-1260	**34**	**J**	290	10	ug/Kg	☼	02/11/16 08:14	02/19/16 07:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*13 - 134*	*02/11/16 08:14*	*02/19/16 07:32*	*1*
DCB Decachlorobiphenyl	*163*	*X*	*10 - 155*	*02/11/16 08:14*	*02/19/16 07:32*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	60		0.63	0.32	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Beryllium	0.17		0.13	0.020	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Cadmium	24	F2	0.063	0.016	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Cobalt	3.0		0.31	0.037	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Chromium	13		0.63	0.059	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Copper	28	B F1	0.63	0.18	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Manganese	310		0.63	0.066	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Nickel	12		0.63	0.063	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Vanadium	9.2		0.63	0.16	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1
Zinc	180	F1	1.6	0.44	mg/Kg	☼	02/12/16 10:44	02/19/16 22:26	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020816-CB-010
Date Collected: 02/08/16 12:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-2
Matrix: Solid
Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	5.9		0.77	0.40	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Beryllium	0.096	J	0.15	0.025	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Cadmium	0.10		0.077	0.020	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Cobalt	1.2		0.39	0.045	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Chromium	5.7		0.77	0.072	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Copper	4.8	B	0.77	0.22	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Manganese	240		0.77	0.081	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Nickel	3.9		0.77	0.077	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Vanadium	7.6		0.77	0.19	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Zinc	16		1.9	0.54	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1
Lead	2.3		0.23	0.19	mg/Kg	☼	02/12/16 10:44	02/19/16 22:46	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	280		0.80	0.41	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Beryllium	0.28		0.16	0.026	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Cadmium	4.6		0.080	0.021	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Cobalt	3.6		0.40	0.047	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Chromium	16		0.80	0.075	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Copper	130	B	0.80	0.23	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Manganese	330		0.80	0.084	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Nickel	8.3		0.80	0.080	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Vanadium	9.9		0.80	0.20	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1
Zinc	550		2.0	0.56	mg/Kg	☼	02/12/16 10:44	02/19/16 22:50	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	210		0.81	0.41	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Beryllium	0.35		0.16	0.026	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Cadmium	5.0		0.081	0.021	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Cobalt	3.4		0.40	0.047	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Chromium	16		0.81	0.076	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Copper	160	B	0.81	0.23	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Manganese	350		0.81	0.085	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Nickel	8.2		0.81	0.081	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Vanadium	9.1		0.81	0.20	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1
Zinc	820		2.0	0.57	mg/Kg	☼	02/12/16 10:44	02/19/16 23:02	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP) - Fractionated

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	360		0.27	0.18	mg/Kg			03/01/16 17:32	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP) - Fractionated

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 99.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (coarse particulate matter)	420		0.28	0.18	mg/Kg	☼	02/29/16 11:13	03/01/16 14:44	1
Lead (fine particulate matter)	160		0.23	0.15	mg/Kg	☼	02/29/16 11:13	03/01/16 14:48	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP) - Fractionated

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	100		0.20	0.14	mg/Kg			03/01/16 17:32	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP) - Fractionated

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 99.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (coarse particulate matter)	100		0.20	0.13	mg/Kg	☼	02/29/16 11:13	03/01/16 14:52	1
Lead (fine particulate matter)	120		0.23	0.15	mg/Kg	☼	02/29/16 11:13	03/01/16 14:56	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP) - Fractionated

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	110		0.24	0.16	mg/Kg			03/01/16 17:32	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6010B - Metals (ICP) - Fractionated

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 99.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (coarse particulate matter)	100		0.23	0.16	mg/Kg	☼	02/29/16 11:13	03/01/16 15:00	1
Lead (fine particulate matter)	160		0.26	0.17	mg/Kg	☼	02/29/16 11:13	03/01/16 15:04	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	8.8	B F1	0.25	0.011	mg/Kg	☼	02/12/16 10:44	02/15/16 20:01	2
Arsenic	3.3		0.13	0.020	mg/Kg	☼	02/12/16 10:44	02/15/16 20:01	2
Selenium	1.2	B	0.25	0.031	mg/Kg	☼	02/12/16 10:44	02/15/16 20:01	2
Thallium	0.075	J	0.13	0.015	mg/Kg	☼	02/12/16 10:44	02/15/16 20:01	2
Silver	0.19		0.13	0.0011	mg/Kg	☼	02/12/16 10:44	02/15/16 20:01	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020816-CB-010
Date Collected: 02/08/16 12:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-2
Matrix: Solid
Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.15	J B	0.31	0.014	mg/Kg	☼	02/12/16 10:44	02/15/16 20:21	2
Arsenic	2.4		0.15	0.025	mg/Kg	☼	02/12/16 10:44	02/15/16 20:21	2
Selenium	0.97	B	0.31	0.039	mg/Kg	☼	02/12/16 10:44	02/15/16 20:21	2
Thallium	0.060	J	0.15	0.018	mg/Kg	☼	02/12/16 10:44	02/15/16 20:21	2
Silver	0.0075	J	0.15	0.0014	mg/Kg	☼	02/12/16 10:44	02/15/16 20:21	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	7.3	B	0.32	0.014	mg/Kg	☼	02/12/16 10:44	02/15/16 20:25	2
Arsenic	44		0.16	0.026	mg/Kg	☼	02/12/16 10:44	02/15/16 20:25	2
Selenium	1.6	B	0.32	0.040	mg/Kg	☼	02/12/16 10:44	02/15/16 20:25	2
Thallium	0.24		0.16	0.019	mg/Kg	☼	02/12/16 10:44	02/15/16 20:25	2
Silver	0.39		0.16	0.0014	mg/Kg	☼	02/12/16 10:44	02/15/16 20:25	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	9.8	B	0.32	0.014	mg/Kg	☼	02/12/16 10:44	02/15/16 20:29	2
Arsenic	69		0.16	0.026	mg/Kg	☼	02/12/16 10:44	02/15/16 20:29	2
Selenium	1.7	B	0.32	0.040	mg/Kg	☼	02/12/16 10:44	02/15/16 20:29	2
Thallium	0.34		0.16	0.019	mg/Kg	☼	02/12/16 10:44	02/15/16 20:29	2
Silver	0.45		0.16	0.0014	mg/Kg	☼	02/12/16 10:44	02/15/16 20:29	2

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
Matrix: Solid
Percent Solids: 87.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	J B F1	0.048	0.017	mg/Kg	☼	02/12/16 14:00	02/13/16 13:30	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020816-CB-010
Date Collected: 02/08/16 12:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-2
Matrix: Solid
Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049	U	0.049	0.017	mg/Kg	☼	02/12/16 14:00	02/13/16 13:41	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
Matrix: Solid
Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048	U	0.048	0.017	mg/Kg	☼	02/12/16 14:00	02/13/16 13:43	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028	J B	0.045	0.016	mg/Kg	☼	02/12/16 14:00	02/13/16 13:45	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

General Chemistry

Client Sample ID: SO-17303-020816-CB-009
Date Collected: 02/08/16 08:50
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-1
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	%			02/10/16 12:58	1
Percent Solids Coarse	99.2		0.1	0.1	%			02/26/16 11:37	1
Percent Solids Fine	99.4		0.1	0.1	%			02/26/16 11:37	1
Coarse Moisture	0.8		0.1	0.1	%			02/26/16 11:37	1
Fine Moisture	0.6		0.1	0.1	%			02/26/16 11:37	1
Percent Moisture	12.1		0.1	0.1	%			02/10/16 12:58	1

General Chemistry

Client Sample ID: SO-17303-020816-CB-010
Date Collected: 02/08/16 12:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-2
Matrix: Solid
Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91.6		0.1	0.1	%			02/10/16 12:58	1
Percent Moisture	8.4		0.1	0.1	%			02/10/16 12:58	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

General Chemistry

Client Sample ID: SO-17303-020816-CB-011
Date Collected: 02/08/16 15:00
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-3
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	%			02/10/16 12:58	1
Percent Solids Coarse	99.2		0.1	0.1	%			02/26/16 11:37	1
Percent Solids Fine	99.0		0.1	0.1	%			02/26/16 11:37	1
Coarse Moisture	0.8		0.1	0.1	%			02/26/16 11:37	1
Fine Moisture	1		0.1	0.1	%			02/26/16 11:37	1
Percent Moisture	11.2		0.1	0.1	%			02/10/16 12:58	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

General Chemistry

Client Sample ID: SO-17303-020816-CB-012
Date Collected: 02/08/16 15:15
Date Received: 02/10/16 09:23

Lab Sample ID: 240-60708-4
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	%			02/10/16 12:58	1
Percent Solids Coarse	99.2		0.1	0.1	%			02/26/16 11:37	1
Percent Solids Fine	98.7		0.1	0.1	%			02/26/16 11:37	1
Coarse Moisture	0.8		0.1	0.1	%			02/26/16 11:37	1
Fine Moisture	1.3		0.1	0.1	%			02/26/16 11:37	1
Percent Moisture	10.7		0.1	0.1	%			02/10/16 12:58	1

GC/MS VOA

Prep Batch: 217398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	5035	
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	5035	
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	5035	
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	5035	
240-60708-5	TB-17303-020816-CB-013	Total/NA	Solid	5035	
LCS 240-217398/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 240-217398/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 217706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	8260B	217398
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	8260B	217398
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	8260B	217398
240-60708-5	TB-17303-020816-CB-013	Total/NA	Solid	8260B	217398
LCS 240-217398/2-A	Lab Control Sample	Total/NA	Solid	8260B	217398
MB 240-217398/1-A	Method Blank	Total/NA	Solid	8260B	217398

Analysis Batch: 217895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	8260B	217398

GC/MS Semi VOA

Prep Batch: 217148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	3540C	
240-60708-1 MS	SO-17303-020816-CB-009	Total/NA	Solid	3540C	
240-60708-1 MSD	SO-17303-020816-CB-009	Total/NA	Solid	3540C	
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	3540C	
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	3540C	
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	3540C	
LCS 240-217148/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-217148/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 218810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-217148/24-A	Lab Control Sample	Total/NA	Solid	8270C	217148
MB 240-217148/23-A	Method Blank	Total/NA	Solid	8270C	217148

Analysis Batch: 218997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	8270C	217148
240-60708-1 MS	SO-17303-020816-CB-009	Total/NA	Solid	8270C	217148
240-60708-1 MSD	SO-17303-020816-CB-009	Total/NA	Solid	8270C	217148
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	8270C	217148
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	8270C	217148

Analysis Batch: 219380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	8270C	217148

GC Semi VOA

Prep Batch: 217147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	3540C	
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	3540C	
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	3540C	
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	3540C	
LCS 240-217147/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-217147/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 217925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	8082	217147

Analysis Batch: 218079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	8082	217147
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	8082	217147
LCS 240-217147/24-A	Lab Control Sample	Total/NA	Solid	8082	217147
MB 240-217147/23-A	Method Blank	Total/NA	Solid	8082	217147

Analysis Batch: 218386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	8082	217147

Metals

Prep Batch: 217302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	3050B	
240-60708-1 MS	SO-17303-020816-CB-009	Total/NA	Solid	3050B	
240-60708-1 MS	SO-17303-020816-CB-009	Total/NA	Solid	3050B	
240-60708-1 MSD	SO-17303-020816-CB-009	Total/NA	Solid	3050B	
240-60708-1 MSD	SO-17303-020816-CB-009	Total/NA	Solid	3050B	
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	3050B	
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	3050B	
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	3050B	
LCS 240-217302/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-217302/3-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-217302/1-A	Method Blank	Total/NA	Solid	3050B	
MB 240-217302/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 217303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	7471A	
240-60708-1 MS	SO-17303-020816-CB-009	Total/NA	Solid	7471A	
240-60708-1 MSD	SO-17303-020816-CB-009	Total/NA	Solid	7471A	
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	7471A	
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	7471A	
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	7471A	
LCS 240-217303/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-217303/1-A	Method Blank	Total/NA	Solid	7471A	

Metals (Continued)

Analysis Batch: 217565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	7471A	217303
240-60708-1 MS	SO-17303-020816-CB-009	Total/NA	Solid	7471A	217303
240-60708-1 MSD	SO-17303-020816-CB-009	Total/NA	Solid	7471A	217303
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	7471A	217303
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	7471A	217303
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	7471A	217303
LCS 240-217303/2-A	Lab Control Sample	Total/NA	Solid	7471A	217303
MB 240-217303/1-A	Method Blank	Total/NA	Solid	7471A	217303

Analysis Batch: 217568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	6020	217302
240-60708-1 MS	SO-17303-020816-CB-009	Total/NA	Solid	6020	217302
240-60708-1 MSD	SO-17303-020816-CB-009	Total/NA	Solid	6020	217302
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	6020	217302
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	6020	217302
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	6020	217302
LCS 240-217302/3-A ^2	Lab Control Sample	Total/NA	Solid	6020	217302
MB 240-217302/1-A ^2	Method Blank	Total/NA	Solid	6020	217302

Analysis Batch: 218157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	6010B	217302
240-60708-1 MS	SO-17303-020816-CB-009	Total/NA	Solid	6010B	217302
240-60708-1 MSD	SO-17303-020816-CB-009	Total/NA	Solid	6010B	217302
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	6010B	217302
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	6010B	217302
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	6010B	217302
LCS 240-217302/2-A	Lab Control Sample	Total/NA	Solid	6010B	217302
MB 240-217302/1-A	Method Blank	Total/NA	Solid	6010B	217302

Cleanup Batch: 219288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Fractionated	Solid	Fractionation	
240-60708-3	SO-17303-020816-CB-011	Fractionated	Solid	Fractionation	
240-60708-4	SO-17303-020816-CB-012	Fractionated	Solid	Fractionation	

Cleanup Batch: 219290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Fractionated	Solid	Fractionation	
240-60708-3	SO-17303-020816-CB-011	Fractionated	Solid	Fractionation	
240-60708-4	SO-17303-020816-CB-012	Fractionated	Solid	Fractionation	

Prep Batch: 219499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Fractionated	Solid	3050B	219288
240-60708-1	SO-17303-020816-CB-009	Fractionated	Solid	3050B	219290
240-60708-3	SO-17303-020816-CB-011	Fractionated	Solid	3050B	219290
240-60708-3	SO-17303-020816-CB-011	Fractionated	Solid	3050B	219288
240-60708-4	SO-17303-020816-CB-012	Fractionated	Solid	3050B	219290
240-60708-4	SO-17303-020816-CB-012	Fractionated	Solid	3050B	219288

Metals (Continued)

Prep Batch: 219499 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-219499/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-219499/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 219736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Fractionated	Solid	6010B	219499
240-60708-1	SO-17303-020816-CB-009	Fractionated	Solid	6010B	219499
240-60708-3	SO-17303-020816-CB-011	Fractionated	Solid	6010B	219499
240-60708-3	SO-17303-020816-CB-011	Fractionated	Solid	6010B	219499
240-60708-4	SO-17303-020816-CB-012	Fractionated	Solid	6010B	219499
240-60708-4	SO-17303-020816-CB-012	Fractionated	Solid	6010B	219499
LCS 240-219499/2-A	Lab Control Sample	Total/NA	Solid	6010B	219499
MB 240-219499/1-A	Method Blank	Total/NA	Solid	6010B	219499

Analysis Batch: 219748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Fractionated	Solid	6010B	
240-60708-3	SO-17303-020816-CB-011	Fractionated	Solid	6010B	
240-60708-4	SO-17303-020816-CB-012	Fractionated	Solid	6010B	

General Chemistry

Analysis Batch: 217073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	Moisture	
240-60708-2	SO-17303-020816-CB-010	Total/NA	Solid	Moisture	
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	Moisture	
240-60708-3 DU	SO-17303-020816-CB-011	Total/NA	Solid	Moisture	
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	Moisture	

Analysis Batch: 219233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	Moisture	
240-60708-1	SO-17303-020816-CB-009	Total/NA	Solid	Moisture	
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	Moisture	
240-60708-3	SO-17303-020816-CB-011	Total/NA	Solid	Moisture	
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	Moisture	
240-60708-4	SO-17303-020816-CB-012	Total/NA	Solid	Moisture	

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

Lab Sample ID: MB 240-217398/1-A
Matrix: Solid
Analysis Batch: 217706

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217398

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	230	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Benzene	40	U	40	9.0	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Bromodichloromethane	80	U	80	38	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Bromoform	80	U	80	61	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Bromomethane	200	U	200	51	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
2-Butanone (MEK)	600	U	600	73	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Carbon disulfide	200	U	200	56	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Carbon tetrachloride	40	U	40	18	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Chlorobenzene	40	U	40	13	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Chloroethane	200	U	200	51	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Chloroform	40	U	40	36	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Chloromethane	200	U	200	48	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,1-Dichloroethane	40	U	40	35	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,1-Dichloroethene	40	U	40	30	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,2-Dichloropropane	40	U	40	32	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
cis-1,3-Dichloropropene	40	U	40	22	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
trans-1,3-Dichloropropene	40	U	40	26	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Ethylbenzene	40	U	40	35	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
2-Hexanone	2000	U	2000	84	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Methylene Chloride	200	U	200	85	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	56	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Styrene	40	U	40	27	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,1,2,2-Tetrachloroethane	40	U	40	25	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Tetrachloroethene	40	U	40	27	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Toluene	80	U	80	10	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Trichloroethene	40	U	40	39	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Vinyl chloride	32	U	32	17	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Xylenes, Total	120	U	120	32	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,1,1-Trichloroethane	40	U	40	27	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,1,2-Trichloroethane	40	U	40	19	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Cyclohexane	960	U	960	30	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,2-Dibromo-3-Chloropropane	200	U	200	71	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,2-Dibromoethane	200	U	200	32	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Dichlorodifluoromethane	80	U	80	61	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
cis-1,2-Dichloroethene	40	U	40	38	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
trans-1,2-Dichloroethene	40	U	40	26	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Isopropylbenzene	200	U	200	13	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Methyl acetate	960	U	960	55	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Methyl tert-butyl ether	200	U	200	30	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	42	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,2,4-Trichlorobenzene	200	U	200	30	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,2-Dichlorobenzene	80	U	80	19	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,3-Dichlorobenzene	80	U	80	30	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
1,4-Dichlorobenzene	80	U	80	41	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Trichlorofluoromethane	80	U	80	35	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Dibromochloromethane	40	U	40	20	ug/Kg		02/13/16 22:46	02/16/16 23:27	1
Methylcyclohexane	960	U	960	38	ug/Kg		02/13/16 22:46	02/16/16 23:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	73		39 - 128	02/13/16 22:46	02/16/16 23:27	1
4-Bromofluorobenzene (Surr)	78		26 - 141	02/13/16 22:46	02/16/16 23:27	1
Toluene-d8 (Surr)	85		33 - 134	02/13/16 22:46	02/16/16 23:27	1
Dibromofluoromethane (Surr)	82		30 - 122	02/13/16 22:46	02/16/16 23:27	1

Lab Sample ID: LCS 240-217398/2-A
Matrix: Solid
Analysis Batch: 217706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217398

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	1840		ug/Kg		92	16 - 156
Benzene	1000	1060		ug/Kg		106	70 - 120
Bromodichloromethane	1000	907		ug/Kg		91	28 - 123
Bromoform	1000	798		ug/Kg		80	10 - 120
Bromomethane	1000	1290	*	ug/Kg		129	10 - 120
2-Butanone (MEK)	2000	2190		ug/Kg		110	10 - 199
Carbon disulfide	1000	555		ug/Kg		55	10 - 132
Carbon tetrachloride	1000	1150		ug/Kg		115	29 - 120
Chlorobenzene	1000	1020		ug/Kg		102	71 - 120
Chloroethane	1000	1110		ug/Kg		111	10 - 120
Chloroform	1000	988		ug/Kg		99	63 - 120
Chloromethane	1000	1040		ug/Kg		104	25 - 120
1,1-Dichloroethane	1000	973		ug/Kg		97	63 - 120
1,2-Dichloroethane	1000	871		ug/Kg		87	68 - 120
1,1-Dichloroethene	1000	952		ug/Kg		95	44 - 143
1,2-Dichloropropane	1000	1070		ug/Kg		107	73 - 120
cis-1,3-Dichloropropene	1000	1010		ug/Kg		101	25 - 120
trans-1,3-Dichloropropene	1000	974		ug/Kg		97	22 - 122
Ethylbenzene	1000	1000		ug/Kg		100	66 - 120
2-Hexanone	2000	2190		ug/Kg		110	43 - 130
Methylene Chloride	1000	980		ug/Kg		98	27 - 172
4-Methyl-2-pentanone (MIBK)	2000	2170		ug/Kg		109	49 - 121
Styrene	1000	1020		ug/Kg		102	60 - 120
1,1,2,2-Tetrachloroethane	1000	1020		ug/Kg		102	54 - 121
Tetrachloroethene	1000	982		ug/Kg		98	58 - 131
Toluene	1000	1010		ug/Kg		101	66 - 123
Trichloroethene	1000	1000		ug/Kg		100	59 - 124
Vinyl chloride	1000	1090		ug/Kg		109	33 - 120
Xylenes, Total	2000	1990		ug/Kg		100	68 - 120
1,1,1-Trichloroethane	1000	1010		ug/Kg		101	38 - 122
1,1,2-Trichloroethane	1000	1070		ug/Kg		107	74 - 120
Cyclohexane	1000	1020		ug/Kg		102	40 - 120
1,2-Dibromo-3-Chloropropane	1000	981		ug/Kg		98	10 - 129
1,2-Dibromoethane	1000	1050		ug/Kg		105	47 - 123
Dichlorodifluoromethane	1000	828		ug/Kg		83	10 - 120
cis-1,2-Dichloroethene	1000	988		ug/Kg		99	60 - 125
trans-1,2-Dichloroethene	1000	1040		ug/Kg		104	58 - 121
Isopropylbenzene	1000	996		ug/Kg		100	61 - 123
Methyl acetate	5000	5350		ug/Kg		107	44 - 173
Methyl tert-butyl ether	1000	1030		ug/Kg		103	34 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	1010		ug/Kg		101	48 - 151
1,2,4-Trichlorobenzene	1000	919		ug/Kg		92	41 - 135
1,2-Dichlorobenzene	1000	974		ug/Kg		97	68 - 120

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

Lab Sample ID: LCS 240-217398/2-A
Matrix: Solid
Analysis Batch: 217706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217398

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	1000	927		ug/Kg		93	66 - 121
1,4-Dichlorobenzene	1000	922		ug/Kg		92	65 - 120
Trichlorofluoromethane	1000	1000		ug/Kg		100	17 - 145
Dibromochloromethane	1000	888		ug/Kg		89	22 - 120
Methylcyclohexane	1000	938	J	ug/Kg		94	41 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*39 - 128*
4-Bromofluorobenzene (Surr)	*87*		*26 - 141*
Toluene-d8 (Surr)	*90*		*33 - 134*
Dibromofluoromethane (Surr)	*92*		*30 - 122*

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

Lab Sample ID: MB 240-217148/23-A
Matrix: Solid
Analysis Batch: 218810

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	3.5	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2,4,6-Trichlorophenol	260	U	260	8.9	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2,4-Dichlorophenol	260	U	260	20	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2,4-Dinitrophenol	150	U	150	21	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2,4-Dinitrotoluene	260	U	260	17	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2-Chloronaphthalene	260	U	260	0.45	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2-Chlorophenol	260	U	260	8.2	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2-Methylnaphthalene	260	U	260	0.50	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2-Methylphenol	260	U	260	11	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
2-Nitrophenol	260	U	260	8.3	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
3,3'-Dichlorobenzidine	260	U	260	18	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
3-Nitroaniline	200	U	200	16	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
4,6-Dinitro-2-methylphenol	200	U	200	9.2	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
4-Bromophenyl phenyl ether	150	U	150	13	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
4-Chloroaniline	260	U	260	17	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
4-Chlorophenyl phenyl ether	200	U	200	13	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
4-Nitroaniline	200	U	200	26	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
4-Nitrophenol	330	U	330	17	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Acenaphthene	260	U	260	0.76	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Acenaphthylene	260	U	260	0.35	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Acetophenone	260	U	260	9.2	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Anthracene	260	U	260	0.78	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Atrazine	40	U	40	9.1	ug/Kg		02/11/16 08:39	02/24/16 14:34	1

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

Lab Sample ID: MB 240-217148/23-A
Matrix: Solid
Analysis Batch: 218810

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	260	U	260	12	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Benzo[a]anthracene	260	U	260	0.63	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Benzo[a]pyrene	260	U	260	0.64	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Benzo[b]fluoranthene	260	U	260	0.59	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Benzo[g,h,i]perylene	260	U	260	0.35	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Benzo[k]fluoranthene	260	U	260	0.68	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Bis(2-ethylhexyl) phthalate	260	U	260	19	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Caprolactam	260	U	260	37	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Carbazole	260	U	260	27	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Chrysene	260	U	260	1.1	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Dibenz(a,h)anthracene	260	U	260	0.66	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Dibenzofuran	260	U	260	0.66	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Diethyl phthalate	260	U	260	16	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Dimethyl phthalate	260	U	260	17	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Di-n-butyl phthalate	260	U	260	15	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Di-n-octyl phthalate	260	U	260	7.9	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Fluoranthene	260	U	260	0.55	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Fluorene	260	U	260	0.53	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Hexachlorobutadiene	40	U	40	5.6	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Hexachlorocyclopentadiene	260	U	260	8.1	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Hexachloroethane	260	U	260	9.0	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Indeno[1,2,3-cd]pyrene	260	U	260	0.35	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Isophorone	260	U	260	13	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Naphthalene	260	U	260	0.82	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Nitrobenzene	260	U	260	2.2	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
N-Nitrosodi-n-propylamine	260	U	260	6.3	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Phenol	260	U	260	7.3	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Phenanthrene	260	U	260	0.73	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
Pyrene	260	U	260	0.44	ug/Kg		02/11/16 08:39	02/24/16 14:34	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		02/11/16 08:39	02/24/16 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*24 - 110*	*02/11/16 08:39*	*02/24/16 14:34*	*1*
2-Fluorophenol (Surr)	*69*		*24 - 110*	*02/11/16 08:39*	*02/24/16 14:34*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*10 - 110*	*02/11/16 08:39*	*02/24/16 14:34*	*1*
Nitrobenzene-d5 (Surr)	*70*		*20 - 110*	*02/11/16 08:39*	*02/24/16 14:34*	*1*
Phenol-d5 (Surr)	*71*		*26 - 110*	*02/11/16 08:39*	*02/24/16 14:34*	*1*
Terphenyl-d14 (Surr)	*82*		*36 - 110*	*02/11/16 08:39*	*02/24/16 14:34*	*1*

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

Lab Sample ID: LCS 240-217148/24-A
Matrix: Solid
Analysis Batch: 218810

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	455		ug/Kg		68	35 - 110
2,2'-oxybis[1-chloropropane]	667	445		ug/Kg		67	29 - 110
2,4,5-Trichlorophenol	667	402		ug/Kg		60	25 - 110
2,4,6-Trichlorophenol	667	346		ug/Kg		52	12 - 110
2,4-Dichlorophenol	667	440		ug/Kg		66	39 - 110
2,4-Dimethylphenol	667	231	J	ug/Kg		35	29 - 110
2,4-Dinitrophenol	1330	535		ug/Kg		40	10 - 110
2,4-Dinitrotoluene	667	540		ug/Kg		81	48 - 110
2,6-Dinitrotoluene	667	487		ug/Kg		73	45 - 110
2-Chloronaphthalene	667	446		ug/Kg		67	32 - 110
2-Chlorophenol	667	440		ug/Kg		66	37 - 110
2-Methylnaphthalene	667	450		ug/Kg		68	36 - 110
2-Methylphenol	667	418		ug/Kg		63	41 - 110
2-Nitroaniline	667	486		ug/Kg		73	45 - 110
2-Nitrophenol	667	424		ug/Kg		64	34 - 110
3,3'-Dichlorobenzidine	1330	761		ug/Kg		57	28 - 110
3-Nitroaniline	667	408		ug/Kg		61	44 - 110
4,6-Dinitro-2-methylphenol	1330	685		ug/Kg		51	10 - 110
4-Bromophenyl phenyl ether	667	430		ug/Kg		65	39 - 110
4-Chloro-3-methylphenol	667	487		ug/Kg		73	48 - 110
4-Chloroaniline	667	309		ug/Kg		46	30 - 110
4-Chlorophenyl phenyl ether	667	493		ug/Kg		74	40 - 110
4-Nitroaniline	667	413		ug/Kg		62	48 - 110
4-Nitrophenol	1330	913		ug/Kg		68	28 - 110
Acenaphthene	667	453		ug/Kg		68	38 - 110
Acenaphthylene	667	426		ug/Kg		64	40 - 110
Acetophenone	667	437		ug/Kg		66	40 - 110
Anthracene	667	483		ug/Kg		72	48 - 110
Atrazine	1330	836		ug/Kg		63	54 - 120
Benzaldehyde	1330	962		ug/Kg		72	32 - 110
Benzo[a]anthracene	667	491		ug/Kg		74	50 - 110
Benzo[a]pyrene	667	462		ug/Kg		69	44 - 110
Benzo[b]fluoranthene	667	496		ug/Kg		74	43 - 110
Benzo[g,h,i]perylene	667	503		ug/Kg		75	51 - 110
Benzo[k]fluoranthene	667	508		ug/Kg		76	38 - 105
Bis(2-chloroethoxy)methane	667	468		ug/Kg		70	32 - 110
Bis(2-chloroethyl)ether	667	446		ug/Kg		67	34 - 110
Bis(2-ethylhexyl) phthalate	667	446		ug/Kg		67	50 - 110
Butyl benzyl phthalate	667	478		ug/Kg		72	51 - 110
Caprolactam	1330	1020		ug/Kg		76	44 - 114
Carbazole	667	385		ug/Kg		58	50 - 110
Chrysene	667	500		ug/Kg		75	50 - 110
Dibenz(a,h)anthracene	667	499		ug/Kg		75	51 - 110
Dibenzofuran	667	464		ug/Kg		70	43 - 110
Diethyl phthalate	667	565		ug/Kg		85	52 - 110
Dimethyl phthalate	667	498		ug/Kg		75	50 - 110
Di-n-butyl phthalate	667	375		ug/Kg		56	51 - 110
Di-n-octyl phthalate	667	471		ug/Kg		71	48 - 110

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

Lab Sample ID: LCS 240-217148/24-A
Matrix: Solid
Analysis Batch: 218810

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	667	371		ug/Kg		56	51 - 110
Fluorene	667	469		ug/Kg		70	46 - 110
Hexachlorobenzene	667	422		ug/Kg		63	43 - 110
Hexachlorobutadiene	667	438		ug/Kg		66	29 - 110
Hexachlorocyclopentadiene	667	356		ug/Kg		53	12 - 110
Hexachloroethane	667	400		ug/Kg		60	30 - 110
Indeno[1,2,3-cd]pyrene	667	502		ug/Kg		75	50 - 110
Isophorone	667	479		ug/Kg		72	36 - 110
Naphthalene	667	451		ug/Kg		68	36 - 110
Nitrobenzene	667	441		ug/Kg		66	32 - 110
N-Nitrosodi-n-propylamine	667	469		ug/Kg		70	38 - 110
N-Nitrosodiphenylamine	1330	941		ug/Kg		71	46 - 110
Pentachlorophenol	1330	593		ug/Kg		44	10 - 110
Phenol	667	446		ug/Kg		67	38 - 110
Phenanthrene	667	488		ug/Kg		73	49 - 110
Pyrene	667	459		ug/Kg		69	49 - 110
3 & 4 Methylphenol	667	425		ug/Kg		64	40 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*71*		*24 - 110*
2-Fluorophenol (Surr)	*67*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*52*		*10 - 110*
Nitrobenzene-d5 (Surr)	*67*		*20 - 110*
Phenol-d5 (Surr)	*68*		*26 - 110*
Terphenyl-d14 (Surr)	*69*		*36 - 110*

Lab Sample ID: 240-60708-1 MS
Matrix: Solid
Analysis Batch: 218997

Client Sample ID: SO-17303-020816-CB-009
Prep Type: Total/NA
Prep Batch: 217148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	1500	U	771	532	J	ug/Kg	☼	69	32 - 110
2,2'-oxybis[1-chloropropane]	1500	U	771	489	J	ug/Kg	☼	63	11 - 110
2,4,5-Trichlorophenol	1500	U	771	547	J	ug/Kg	☼	71	10 - 117
2,4,6-Trichlorophenol	1500	U	771	453	J	ug/Kg	☼	59	10 - 110
2,4-Dichlorophenol	1500	U	771	481	J	ug/Kg	☼	62	10 - 110
2,4-Dimethylphenol	1500	U	771	492	J	ug/Kg	☼	64	10 - 110
2,4-Dinitrophenol	860	U	1540	548	J	ug/Kg	☼	36	10 - 110
2,4-Dinitrotoluene	1500	U	771	579	J	ug/Kg	☼	75	32 - 110
2,6-Dinitrotoluene	1500	U	771	543	J	ug/Kg	☼	70	35 - 110
2-Chloronaphthalene	1500	U	771	533	J	ug/Kg	☼	69	28 - 110
2-Chlorophenol	1500	U	771	482	J	ug/Kg	☼	63	10 - 110
2-Methylnaphthalene	27	J	771	504	J	ug/Kg	☼	62	10 - 133
2-Methylphenol	1500	U	771	475	J	ug/Kg	☼	62	24 - 110
2-Nitroaniline	1100	U	771	508	J	ug/Kg	☼	66	39 - 110
2-Nitrophenol	1500	U	771	442	J	ug/Kg	☼	57	10 - 110
3,3'-Dichlorobenzidine	1500	U	1540	621	J	ug/Kg	☼	40	10 - 110
3-Nitroaniline	1100	U	771	453	J	ug/Kg	☼	59	10 - 110

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

Lab Sample ID: 240-60708-1 MS | **Client Sample ID: SO-17303-020816-CB-009**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 218997 | **Prep Batch: 217148**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	1100	U	1540	929	J	ug/Kg	☼	60	10 - 110
4-Bromophenyl phenyl ether	860	U	771	546	J	ug/Kg	☼	71	33 - 110
4-Chloro-3-methylphenol	1500	U	771	570	J	ug/Kg	☼	74	25 - 110
4-Chloroaniline	1500	U	771	337	J	ug/Kg	☼	44	10 - 110
4-Chlorophenyl phenyl ether	1100	U	771	602	J	ug/Kg	☼	78	32 - 110
4-Nitroaniline	1100	U	771	518	J	ug/Kg	☼	67	10 - 110
4-Nitrophenol	1900	U	1540	1140	J	ug/Kg	☼	74	10 - 113
Acenaphthene	1500	U	771	544	J	ug/Kg	☼	71	22 - 110
Acenaphthylene	1500	U	771	503	J	ug/Kg	☼	65	24 - 110
Acetophenone	1500	U	771	534	J	ug/Kg	☼	69	31 - 110
Anthracene	45	J	771	617	J	ug/Kg	☼	74	20 - 110
Atrazine	230	U	1540	1560		ug/Kg	☼	101	45 - 118
Benzaldehyde	1500	U	1540	1010	J	ug/Kg	☼	65	23 - 110
Benzo[a]anthracene	530	J	771	861	J	ug/Kg	☼	43	10 - 122
Benzo[a]pyrene	770	J F1	771	953	J	ug/Kg	☼	23	10 - 110
Benzo[b]fluoranthene	1100	J F1	771	1120	J F1	ug/Kg	☼	5	12 - 118
Benzo[g,h,i]perylene	790	J F1	771	1000	J	ug/Kg	☼	27	10 - 117
Benzo[k]fluoranthene	400	J	771	798	J	ug/Kg	☼	52	10 - 121
Bis(2-chloroethoxy)methane	1500	U	771	465	J	ug/Kg	☼	60	26 - 110
Bis(2-chloroethyl)ether	460	U	771	491		ug/Kg	☼	64	21 - 110
Bis(2-ethylhexyl) phthalate	1500	U	771	624	J	ug/Kg	☼	81	40 - 110
Butyl benzyl phthalate	1500	U	771	674	J	ug/Kg	☼	87	44 - 110
Caprolactam	1500	U	1540	1280	J	ug/Kg	☼	83	10 - 134
Carbazole	1500	U	771	592	J	ug/Kg	☼	77	34 - 110
Chrysene	730	J F1	771	926	J	ug/Kg	☼	26	10 - 125
Dibenz(a,h)anthracene	170	J	771	672	J	ug/Kg	☼	65	14 - 113
Dibenzofuran	1500	U	771	603	J	ug/Kg	☼	78	29 - 110
Diethyl phthalate	1500	U F1	771	318	J F1	ug/Kg	☼	41	42 - 110
Dimethyl phthalate	1500	U	771	624	J	ug/Kg	☼	81	41 - 110
Di-n-butyl phthalate	430	J F1	771	734	J F1	ug/Kg	☼	40	43 - 110
Di-n-octyl phthalate	1500	U	771	623	J	ug/Kg	☼	81	24 - 119
Fluoranthene	860	J F1	771	943	J	ug/Kg	☼	11	10 - 110
Fluorene	1500	U	771	552	J	ug/Kg	☼	72	23 - 110
Hexachlorobenzene	1500	U	771	488	J	ug/Kg	☼	63	34 - 110
Hexachlorobutadiene	230	U	771	444		ug/Kg	☼	58	25 - 110
Hexachlorocyclopentadiene	1500	U F1	771	1500	U F1	ug/Kg	☼	0	10 - 110
Hexachloroethane	1500	U	771	439	J	ug/Kg	☼	57	12 - 110
Indeno[1,2,3-cd]pyrene	640	J	771	944	J	ug/Kg	☼	39	10 - 114
Isophorone	1500	U	771	520	J	ug/Kg	☼	67	29 - 110
Naphthalene	41	J	771	516	J	ug/Kg	☼	62	10 - 111
Nitrobenzene	1500	U	771	497	J	ug/Kg	☼	64	23 - 110
N-Nitrosodi-n-propylamine	1500	U	771	460	J	ug/Kg	☼	60	26 - 110
N-Nitrosodiphenylamine	1500	U	1540	1040	J	ug/Kg	☼	67	22 - 110
Pentachlorophenol	860	U	1540	541	J	ug/Kg	☼	35	10 - 110
Phenol	1500	U	771	457	J	ug/Kg	☼	59	17 - 110
Phenanthrene	330	J	771	790	J	ug/Kg	☼	59	10 - 166
Pyrene	760	J	771	995	J	ug/Kg	☼	30	10 - 147
3 & 4 Methylphenol	1500	U	771	495	J	ug/Kg	☼	64	25 - 110

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

Lab Sample ID: 240-60708-1 MS
Matrix: Solid
Analysis Batch: 218997

Client Sample ID: SO-17303-020816-CB-009
Prep Type: Total/NA
Prep Batch: 217148

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*69*		*24 - 110*
2-Fluorophenol (Surr)	*64*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*66*		*10 - 110*
Nitrobenzene-d5 (Surr)	*60*		*20 - 110*
Phenol-d5 (Surr)	*64*		*26 - 110*
Terphenyl-d14 (Surr)	*86*		*36 - 110*

Lab Sample ID: 240-60708-1 MSD
Matrix: Solid
Analysis Batch: 218997

Client Sample ID: SO-17303-020816-CB-009
Prep Type: Total/NA
Prep Batch: 217148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	1500	U	751	475	J	ug/Kg	☼	63	32 - 110	11	32
2,2'-oxybis[1-chloropropane]	1500	U	751	455	J	ug/Kg	☼	60	11 - 110	7	42
2,4,5-Trichlorophenol	1500	U	751	532	J	ug/Kg	☼	71	10 - 117	3	99
2,4,6-Trichlorophenol	1500	U	751	529	J	ug/Kg	☼	70	10 - 110	15	38
2,4-Dichlorophenol	1500	U	751	478	J	ug/Kg	☼	64	10 - 110	1	34
2,4-Dimethylphenol	1500	U	751	459	J	ug/Kg	☼	61	10 - 110	7	31
2,4-Dinitrophenol	860	U	1500	424	J	ug/Kg	☼	28	10 - 110	26	99
2,4-Dinitrotoluene	1500	U	751	511	J	ug/Kg	☼	68	32 - 110	13	30
2,6-Dinitrotoluene	1500	U	751	534	J	ug/Kg	☼	71	35 - 110	2	30
2-Chloronaphthalene	1500	U	751	472	J	ug/Kg	☼	63	28 - 110	12	30
2-Chlorophenol	1500	U	751	464	J	ug/Kg	☼	62	10 - 110	4	47
2-Methylnaphthalene	27	J	751	499	J	ug/Kg	☼	63	10 - 133	1	42
2-Methylphenol	1500	U	751	495	J	ug/Kg	☼	66	24 - 110	4	51
2-Nitroaniline	1100	U	751	529	J	ug/Kg	☼	70	39 - 110	4	31
2-Nitrophenol	1500	U	751	388	J	ug/Kg	☼	52	10 - 110	13	49
3,3'-Dichlorobenzidine	1500	U	1500	679	J	ug/Kg	☼	45	10 - 110	9	56
3-Nitroaniline	1100	U	751	421	J	ug/Kg	☼	56	10 - 110	7	30
4,6-Dinitro-2-methylphenol	1100	U	1500	765	J	ug/Kg	☼	51	10 - 110	19	55
4-Bromophenyl phenyl ether	860	U	751	512	J	ug/Kg	☼	68	33 - 110	6	30
4-Chloro-3-methylphenol	1500	U	751	545	J	ug/Kg	☼	73	25 - 110	5	54
4-Chloroaniline	1500	U	751	350	J	ug/Kg	☼	47	10 - 110	4	36
4-Chlorophenyl phenyl ether	1100	U	751	570	J	ug/Kg	☼	76	32 - 110	6	30
4-Nitroaniline	1100	U	751	457	J	ug/Kg	☼	61	10 - 110	13	48
4-Nitrophenol	1900	U	1500	973	J	ug/Kg	☼	65	10 - 113	16	49
Acenaphthene	1500	U	751	515	J	ug/Kg	☼	69	22 - 110	6	99
Acenaphthylene	1500	U	751	494	J	ug/Kg	☼	66	24 - 110	2	99
Acetophenone	1500	U	751	466	J	ug/Kg	☼	62	31 - 110	14	43
Anthracene	45	J	751	550	J	ug/Kg	☼	67	20 - 110	11	99
Atrazine	230	U	1500	1390		ug/Kg	☼	92	45 - 118	11	30
Benzaldehyde	1500	U	1500	974	J	ug/Kg	☼	65	23 - 110	4	42
Benzo[a]anthracene	530	J	751	756	J	ug/Kg	☼	30	10 - 122	13	99
Benzo[a]pyrene	770	J F1	751	719	J F1	ug/Kg	☼	-7	10 - 110	28	99
Benzo[b]fluoranthene	1100	J F1	751	786	J F1	ug/Kg	☼	-40	12 - 118	35	99
Benzo[g,h,i]perylene	790	J F1	751	802	J F1	ug/Kg	☼	1	10 - 117	22	99
Benzo[k]fluoranthene	400	J	751	681	J	ug/Kg	☼	38	10 - 121	16	99
Bis(2-chloroethoxy)methane	1500	U	751	497	J	ug/Kg	☼	66	26 - 110	7	37

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

Lab Sample ID: 240-60708-1 MSD
Matrix: Solid
Analysis Batch: 218997

Client Sample ID: SO-17303-020816-CB-009
Prep Type: Total/NA
Prep Batch: 217148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	460	U	751	487		ug/Kg	☼	65	21 - 110	1	55
Bis(2-ethylhexyl) phthalate	1500	U	751	627	J	ug/Kg	☼	83	40 - 110	1	30
Butyl benzyl phthalate	1500	U	751	634	J	ug/Kg	☼	84	44 - 110	6	30
Caprolactam	1500	U	1500	1110	J	ug/Kg	☼	74	10 - 134	14	32
Carbazole	1500	U	751	539	J	ug/Kg	☼	72	34 - 110	9	30
Chrysene	730	J F1	751	777	J F1	ug/Kg	☼	7	10 - 125	18	99
Dibenz(a,h)anthracene	170	J	751	560	J	ug/Kg	☼	52	14 - 113	18	99
Dibenzofuran	1500	U	751	560	J	ug/Kg	☼	74	29 - 110	7	30
Diethyl phthalate	1500	U F1	751	342	J	ug/Kg	☼	46	42 - 110	7	30
Dimethyl phthalate	1500	U	751	561	J	ug/Kg	☼	75	41 - 110	11	30
Di-n-butyl phthalate	430	J F1	751	698	J F1	ug/Kg	☼	36	43 - 110	5	30
Di-n-octyl phthalate	1500	U	751	563	J	ug/Kg	☼	75	24 - 119	10	30
Fluoranthene	860	J F1	751	777	J F1	ug/Kg	☼	-11	10 - 110	19	99
Fluorene	1500	U	751	539	J	ug/Kg	☼	72	23 - 110	2	99
Hexachlorobenzene	1500	U	751	438	J	ug/Kg	☼	58	34 - 110	11	30
Hexachlorobutadiene	230	U	751	460		ug/Kg	☼	61	25 - 110	4	34
Hexachlorocyclopentadiene	1500	U F1	751	1500	U F1	ug/Kg	☼	0	10 - 110	NC	79
Hexachloroethane	1500	U	751	463	J	ug/Kg	☼	62	12 - 110	5	50
Indeno[1,2,3-cd]pyrene	640	J	751	756	J	ug/Kg	☼	15	10 - 114	22	99
Isophorone	1500	U	751	469	J	ug/Kg	☼	62	29 - 110	10	38
Naphthalene	41	J	751	473	J	ug/Kg	☼	58	10 - 111	9	99
Nitrobenzene	1500	U	751	474	J	ug/Kg	☼	63	23 - 110	5	41
N-Nitrosodi-n-propylamine	1500	U	751	525	J	ug/Kg	☼	70	26 - 110	13	42
N-Nitrosodiphenylamine	1500	U	1500	947	J	ug/Kg	☼	63	22 - 110	9	30
Pentachlorophenol	860	U	1500	737	J	ug/Kg	☼	49	10 - 110	31	50
Phenol	1500	U	751	499	J	ug/Kg	☼	66	17 - 110	9	53
Phenanthrene	330	J	751	676	J	ug/Kg	☼	46	10 - 166	16	99
Pyrene	760	J	751	839	J	ug/Kg	☼	10	10 - 147	17	99
3 & 4 Methylphenol	1500	U	751	467	J	ug/Kg	☼	62	25 - 110	6	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*65*		*24 - 110*
2-Fluorophenol (Surr)	*63*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*80*		*10 - 110*
Nitrobenzene-d5 (Surr)	*64*		*20 - 110*
Phenol-d5 (Surr)	*65*		*26 - 110*
Terphenyl-d14 (Surr)	*84*		*36 - 110*

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

Lab Sample ID: MB 240-217147/23-A
Matrix: Solid
Analysis Batch: 218079

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	260	U	260	12	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1221	260	U	260	16	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1232	260	U	260	20	ug/Kg		02/11/16 08:14	02/19/16 08:43	1

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

Lab Sample ID: MB 240-217147/23-A
Matrix: Solid
Analysis Batch: 218079

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1242	260	U	260	11	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1248	260	U	260	8.0	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1254	260	U	260	14	ug/Kg		02/11/16 08:14	02/19/16 08:43	1
Aroclor-1260	260	U	260	9.0	ug/Kg		02/11/16 08:14	02/19/16 08:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*13 - 134*	*02/11/16 08:14*	*02/19/16 08:43*	*1*
DCB Decachlorobiphenyl	*73*		*10 - 155*	*02/11/16 08:14*	*02/19/16 08:43*	*1*

Lab Sample ID: LCS 240-217147/24-A
Matrix: Solid
Analysis Batch: 218079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	201	J	ug/Kg		60	51 - 120
Aroclor-1260	333	238	J	ug/Kg		71	48 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*13 - 134*
DCB Decachlorobiphenyl	*75*		*10 - 155*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-217302/1-A
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80	U	0.80	0.41	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Beryllium	0.16	U	0.16	0.026	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Cadmium	0.080	U	0.080	0.021	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Cobalt	0.40	U	0.40	0.047	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Chromium	0.80	U	0.80	0.075	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Copper	0.287	J	0.80	0.23	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Manganese	0.80	U	0.80	0.084	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Nickel	0.80	U	0.80	0.080	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Vanadium	0.80	U	0.80	0.20	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Zinc	2.0	U	2.0	0.56	mg/Kg		02/12/16 10:44	02/19/16 22:18	1
Lead	0.24	U	0.24	0.20	mg/Kg		02/12/16 10:44	02/19/16 22:18	1

Lab Sample ID: LCS 240-217302/2-A
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	195		mg/Kg		98	80 - 120
Beryllium	5.00	4.76		mg/Kg		95	80 - 120
Cadmium	5.00	4.38		mg/Kg		88	80 - 120

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

Lab Sample ID: LCS 240-217302/2-A
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	50.0	45.5		mg/Kg		91	80 - 120
Chromium	20.0	17.7		mg/Kg		89	80 - 120
Copper	25.0	24.7		mg/Kg		99	80 - 120
Manganese	50.0	43.5		mg/Kg		87	80 - 120
Nickel	50.0	45.1		mg/Kg		90	80 - 120
Vanadium	50.0	42.9		mg/Kg		86	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120
Lead	50.0	44.6		mg/Kg		89	80 - 120

Lab Sample ID: 240-60708-1 MS
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: SO-17303-020816-CB-009
Prep Type: Total/NA
Prep Batch: 217302

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	60		223	268		mg/Kg	☼	93	75 - 125
Beryllium	0.17		5.58	5.24		mg/Kg	☼	91	75 - 125
Cadmium	24	F2	5.58	11.2	4	mg/Kg	☼	-227	75 - 125
Cobalt	3.0		55.8	53.3		mg/Kg	☼	90	75 - 125
Chromium	13		22.3	31.7		mg/Kg	☼	85	75 - 125
Copper	28	B F1	27.9	52.5		mg/Kg	☼	87	75 - 125
Manganese	310		55.8	249	4	mg/Kg	☼	-112	75 - 125
Nickel	12		55.8	58.9		mg/Kg	☼	83	75 - 125
Vanadium	9.2		55.8	55.3		mg/Kg	☼	83	75 - 125
Zinc	180	F1	55.8	195	F1	mg/Kg	☼	31	75 - 125
Lead	270		55.8	328	4	mg/Kg	☼	108	75 - 125

Lab Sample ID: 240-60708-1 MSD
Matrix: Solid
Analysis Batch: 218157

Client Sample ID: SO-17303-020816-CB-009
Prep Type: Total/NA
Prep Batch: 217302

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	60		223	263		mg/Kg	☼	91	75 - 125	2	20
Beryllium	0.17		5.58	5.22		mg/Kg	☼	91	75 - 125	0	20
Cadmium	24	F2	5.58	21.5	4 F2	mg/Kg	☼	-44	75 - 125	62	20
Cobalt	3.0		55.8	53.1		mg/Kg	☼	90	75 - 125	1	20
Chromium	13		22.3	31.6		mg/Kg	☼	85	75 - 125	0	20
Copper	28	B F1	27.9	46.8	F1	mg/Kg	☼	67	75 - 125	11	20
Manganese	310		55.8	248	4	mg/Kg	☼	-116	75 - 125	1	20
Nickel	12		55.8	59.0		mg/Kg	☼	84	75 - 125	0	20
Vanadium	9.2		55.8	54.0		mg/Kg	☼	80	75 - 125	2	20
Zinc	180	F1	55.8	172	F1	mg/Kg	☼	-11	75 - 125	12	20
Lead	270		55.8	271	4	mg/Kg	☼	4	75 - 125	19	20

Lab Sample ID: MB 240-219499/1-A
Matrix: Solid
Analysis Batch: 219736

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 219499

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (coarse particulate matter)	0.30	U	0.30	0.20	mg/Kg		02/29/16 11:13	03/01/16 11:33	1

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

Lab Sample ID: MB 240-219499/1-A
Matrix: Solid
Analysis Batch: 219736

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 219499

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead (fine particulate matter)	0.30	U	0.30	0.20	mg/Kg		02/29/16 11:13	03/01/16 11:33	1

Lab Sample ID: LCS 240-219499/2-A
Matrix: Solid
Analysis Batch: 219736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 219499

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead (coarse particulate matter)	50.0	45.1		mg/Kg		90	80 - 120
Lead (fine particulate matter)	50.0	45.1		mg/Kg		90	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-217302/1-A ^2
Matrix: Solid
Analysis Batch: 217568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 217302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0570	J	0.32	0.014	mg/Kg		02/12/16 10:44	02/15/16 19:52	2
Arsenic	0.16	U	0.16	0.026	mg/Kg		02/12/16 10:44	02/15/16 19:52	2
Selenium	0.120	J	0.32	0.040	mg/Kg		02/12/16 10:44	02/15/16 19:52	2
Thallium	0.16	U	0.16	0.019	mg/Kg		02/12/16 10:44	02/15/16 19:52	2
Silver	0.16	U	0.16	0.0014	mg/Kg		02/12/16 10:44	02/15/16 19:52	2

Lab Sample ID: LCS 240-217302/3-A ^2
Matrix: Solid
Analysis Batch: 217568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	9.34		mg/Kg		93	68 - 113
Arsenic	100	87.7		mg/Kg		88	73 - 110
Selenium	100	86.4		mg/Kg		86	65 - 110
Thallium	25.0	24.5		mg/Kg		98	71 - 110
Silver	10.0	9.83		mg/Kg		98	60 - 114

Lab Sample ID: 240-60708-1 MS
Matrix: Solid
Analysis Batch: 217568

Client Sample ID: SO-17303-020816-CB-009
Prep Type: Total/NA
Prep Batch: 217302

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	8.8	B F1	11.2	13.2	F1	mg/Kg	☼	40	75 - 125
Arsenic	3.3		112	103		mg/Kg	☼	89	75 - 125
Selenium	1.2	B	112	96.2		mg/Kg	☼	85	75 - 125
Thallium	0.075	J	27.9	26.6		mg/Kg	☼	95	75 - 125
Silver	0.19		11.2	11.1		mg/Kg	☼	97	75 - 125

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

Lab Sample ID: 240-60708-1 MSD — **Client Sample ID: SO-17303-020816-CB-009**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217568 — **Prep Batch: 217302**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	8.8	B F1	11.2	15.1	F1	mg/Kg	☼	56	75 - 125	13	20
Arsenic	3.3		112	102		mg/Kg	☼	89	75 - 125	0	20
Selenium	1.2	B	112	96.8		mg/Kg	☼	86	75 - 125	1	20
Thallium	0.075	J	27.9	26.3		mg/Kg	☼	94	75 - 125	1	20
Silver	0.19		11.2	11.1		mg/Kg	☼	98	75 - 125	0	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-217303/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217565 — **Prep Batch: 217303**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0176	J	0.040	0.014	mg/Kg		02/12/16 14:00	02/13/16 13:26	1

Lab Sample ID: LCS 240-217303/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217565 — **Prep Batch: 217303**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.739		mg/Kg		89	80 - 120

Lab Sample ID: 240-60708-1 MS — **Client Sample ID: SO-17303-020816-CB-009**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217565 — **Prep Batch: 217303**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.026	J B F1	0.165	0.233	F1	mg/Kg	☼	125	80 - 120

Lab Sample ID: 240-60708-1 MSD — **Client Sample ID: SO-17303-020816-CB-009**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217565 — **Prep Batch: 217303**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.026	J B F1	0.165	0.204		mg/Kg	☼	108	80 - 120	13	20

Method: Moisture - Percent Moisture

Lab Sample ID: 240-60708-3 DU — **Client Sample ID: SO-17303-020816-CB-011**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 217073

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	88.8		88.5		%		0.3	20
Percent Moisture	11.2		11.5		%		2	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(39-128)	(26-141)	(33-134)	(30-122)
240-60708-1	SO-17303-020816-CB-009	79	86	91	89
240-60708-2	SO-17303-020816-CB-010	79	85	93	90
240-60708-3	SO-17303-020816-CB-011	78	86	92	86
240-60708-4	SO-17303-020816-CB-012	83	89	95	91
240-60708-5	TB-17303-020816-CB-013	87	97	104	98
LCS 240-217398/2-A	Lab Control Sample	80	87	90	92
MB 240-217398/1-A	Method Blank	73	78	85	82

Surrogate Legend

12DCE = 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	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-60708-1	SO-17303-020816-CB-009	80	75	67	75	74	86
240-60708-1 MS	SO-17303-020816-CB-009	69	64	66	60	64	86
240-60708-1 MSD	SO-17303-020816-CB-009	65	63	80	64	65	84
240-60708-2	SO-17303-020816-CB-010	92	120 X	0 X	144 X	85	114 X
240-60708-3	SO-17303-020816-CB-011	87	78	58	73	85	98
240-60708-4	SO-17303-020816-CB-012	71	58	49	58	60	82
LCS 240-217148/24-A	Lab Control Sample	71	67	52	67	68	69
MB 240-217148/23-A	Method Blank	76	69	41	70	71	82

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(13-134)	(10-155)
240-60708-1	SO-17303-020816-CB-009	95	163 X
240-60708-3	SO-17303-020816-CB-011	68	356 X
240-60708-4	SO-17303-020816-CB-012	75	163 X
LCS 240-217147/24-A	Lab Control Sample	71	75
MB 240-217147/23-A	Method Blank	72	73

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX2	DCB2								
Lab Sample ID	Client Sample ID	(13-134)	(10-155)								
240-60708-2	SO-17303-020816-CB-010	170 X	76								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Client Sample ID: SO-17303-020816-CB-009
Lab Sample ID: 240-60708-1
Date Collected: 02/08/16 08:50
Matrix: Solid
Date Received: 02/10/16 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Analysis	6010B		1	219748	03/01/16 17:32	KLC	TAL CAN
Total/NA	Analysis	Moisture		1	217073	02/10/16 12:58	LCN	TAL CAN
Total/NA	Analysis	Moisture		1	219233	02/26/16 11:37	TPH	TAL CAN
Total/NA	Analysis	Moisture		1	219233	02/26/16 11:37	TPH	TAL CAN

Client Sample ID: SO-17303-020816-CB-009
Lab Sample ID: 240-60708-1
Date Collected: 02/08/16 08:50
Matrix: Solid
Date Received: 02/10/16 09:23
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217398	02/13/16 22:46	LAM	TAL CAN
Total/NA	Analysis	8260B		2	217895	02/18/16 04:23	TJL1	TAL CAN
Total/NA	Prep	3540C			217148	02/11/16 08:39	JDR	TAL CAN
Total/NA	Analysis	8270C		5	218997	02/25/16 16:29	JMG	TAL CAN
Total/NA	Prep	3540C			217147	02/11/16 08:14	JDR	TAL CAN
Total/NA	Analysis	8082		50	217925	02/18/16 11:52	KMG	TAL CAN
Total/NA	Prep	3050B			217302	02/12/16 10:44	DEE	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/19/16 22:26	KLC	TAL CAN
Total/NA	Prep	3050B			217302	02/12/16 10:44	DEE	TAL CAN
Total/NA	Analysis	6020		2	217568	02/15/16 20:01	KLC	TAL CAN
Total/NA	Prep	7471A			217303	02/12/16 14:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	217565	02/13/16 13:30	WKD	TAL CAN

Client Sample ID: SO-17303-020816-CB-009
Lab Sample ID: 240-60708-1
Date Collected: 02/08/16 08:50
Matrix: Solid
Date Received: 02/10/16 09:23
Percent Solids: 99.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Cleanup	Fractionation			219288	02/23/16 17:00	SMH	TAL CAN
Fractionated	Prep	3050B			219499	02/29/16 11:13	DEE	TAL CAN
Fractionated	Analysis	6010B		1	219736	03/01/16 14:44	KLC	TAL CAN
Fractionated	Cleanup	Fractionation			219290	02/23/16 17:00	DRJ	TAL CAN
Fractionated	Prep	3050B			219499	02/29/16 11:13	DEE	TAL CAN
Fractionated	Analysis	6010B		1	219736	03/01/16 14:48	KLC	TAL CAN

Client Sample ID: SO-17303-020816-CB-010
Lab Sample ID: 240-60708-2
Date Collected: 02/08/16 12:00
Matrix: Solid
Date Received: 02/10/16 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	217073	02/10/16 12:58	LCN	TAL CAN

Client Sample ID: SO-17303-020816-CB-010

Lab Sample ID: 240-60708-2
Date Collected: 02/08/16 12:00
Matrix: Solid
Date Received: 02/10/16 09:23
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217398	02/13/16 22:46	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217706	02/17/16 00:59	TJL1	TAL CAN
Total/NA	Prep	3540C			217148	02/11/16 08:39	JDR	TAL CAN
Total/NA	Analysis	8270C		100	218997	02/25/16 20:54	JMG	TAL CAN
Total/NA	Prep	3540C			217147	02/11/16 08:14	JDR	TAL CAN
Total/NA	Analysis	8082		10	218386	02/22/16 20:38	LSH	TAL CAN
Total/NA	Prep	3050B			217302	02/12/16 10:44	DEE	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/19/16 22:46	KLC	TAL CAN
Total/NA	Prep	3050B			217302	02/12/16 10:44	DEE	TAL CAN
Total/NA	Analysis	6020		2	217568	02/15/16 20:21	KLC	TAL CAN
Total/NA	Prep	7471A			217303	02/12/16 14:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	217565	02/13/16 13:41	WKD	TAL CAN

Client Sample ID: SO-17303-020816-CB-011

Lab Sample ID: 240-60708-3
Date Collected: 02/08/16 15:00
Matrix: Solid
Date Received: 02/10/16 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Analysis	6010B		1	219748	03/01/16 17:32	KLC	TAL CAN
Total/NA	Analysis	Moisture		1	217073	02/10/16 12:58	LCN	TAL CAN
Total/NA	Analysis	Moisture		1	219233	02/26/16 11:37	TPH	TAL CAN
Total/NA	Analysis	Moisture		1	219233	02/26/16 11:37	TPH	TAL CAN

Client Sample ID: SO-17303-020816-CB-011

Lab Sample ID: 240-60708-3
Date Collected: 02/08/16 15:00
Matrix: Solid
Date Received: 02/10/16 09:23
Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217398	02/13/16 22:46	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217706	02/17/16 01:22	TJL1	TAL CAN
Total/NA	Prep	3540C			217148	02/11/16 08:39	JDR	TAL CAN
Total/NA	Analysis	8270C		5	218997	02/25/16 17:41	JMG	TAL CAN
Total/NA	Prep	3540C			217147	02/11/16 08:14	JDR	TAL CAN
Total/NA	Analysis	8082		1	218079	02/19/16 07:14	KMG	TAL CAN
Total/NA	Prep	3050B			217302	02/12/16 10:44	DEE	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/19/16 22:50	KLC	TAL CAN
Total/NA	Prep	3050B			217302	02/12/16 10:44	DEE	TAL CAN
Total/NA	Analysis	6020		2	217568	02/15/16 20:25	KLC	TAL CAN
Total/NA	Prep	7471A			217303	02/12/16 14:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	217565	02/13/16 13:43	WKD	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Client Sample ID: SO-17303-020816-CB-011 — Lab Sample ID: 240-60708-3

Date Collected: 02/08/16 15:00 — **Matrix: Solid**
Date Received: 02/10/16 09:23 — **Percent Solids: 99.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Cleanup	Fractionation			219288	02/23/16 17:00	SMH	TAL CAN
Fractionated	Prep	3050B			219499	02/29/16 11:13	DEE	TAL CAN
Fractionated	Analysis	6010B		1	219736	03/01/16 14:52	KLC	TAL CAN
Fractionated	Cleanup	Fractionation			219290	02/23/16 17:00	DRJ	TAL CAN
Fractionated	Prep	3050B			219499	02/29/16 11:13	DEE	TAL CAN
Fractionated	Analysis	6010B		1	219736	03/01/16 14:56	KLC	TAL CAN

Client Sample ID: SO-17303-020816-CB-012 — Lab Sample ID: 240-60708-4

Date Collected: 02/08/16 15:15 — **Matrix: Solid**
Date Received: 02/10/16 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Analysis	6010B		1	219748	03/01/16 17:32	KLC	TAL CAN
Total/NA	Analysis	Moisture		1	217073	02/10/16 12:58	LCN	TAL CAN
Total/NA	Analysis	Moisture		1	219233	02/26/16 11:37	TPH	TAL CAN
Total/NA	Analysis	Moisture		1	219233	02/26/16 11:37	TPH	TAL CAN

Client Sample ID: SO-17303-020816-CB-012 — Lab Sample ID: 240-60708-4

Date Collected: 02/08/16 15:15 — **Matrix: Solid**
Date Received: 02/10/16 09:23 — **Percent Solids: 89.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217398	02/13/16 22:46	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217706	02/17/16 01:45	TJL1	TAL CAN
Total/NA	Prep	3540C			217148	02/11/16 08:39	JDR	TAL CAN
Total/NA	Analysis	8270C		1	219380	02/27/16 19:03	JMG	TAL CAN
Total/NA	Prep	3540C			217147	02/11/16 08:14	JDR	TAL CAN
Total/NA	Analysis	8082		1	218079	02/19/16 07:32	KMG	TAL CAN
Total/NA	Prep	3050B			217302	02/12/16 10:44	DEE	TAL CAN
Total/NA	Analysis	6010B		1	218157	02/19/16 23:02	KLC	TAL CAN
Total/NA	Prep	3050B			217302	02/12/16 10:44	DEE	TAL CAN
Total/NA	Analysis	6020		2	217568	02/15/16 20:29	KLC	TAL CAN
Total/NA	Prep	7471A			217303	02/12/16 14:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	217565	02/13/16 13:45	WKD	TAL CAN

Client Sample ID: SO-17303-020816-CB-012 — Lab Sample ID: 240-60708-4

Date Collected: 02/08/16 15:15 — **Matrix: Solid**
Date Received: 02/10/16 09:23 — **Percent Solids: 99.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Cleanup	Fractionation			219288	02/23/16 17:00	SMH	TAL CAN
Fractionated	Prep	3050B			219499	02/29/16 11:13	DEE	TAL CAN
Fractionated	Analysis	6010B		1	219736	03/01/16 15:00	KLC	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

Client Sample ID: SO-17303-020816-CB-012

Lab Sample ID: 240-60708-4
Date Collected: 02/08/16 15:15
Matrix: Solid
Date Received: 02/10/16 09:23
Percent Solids: 99.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Fractionated	Cleanup	Fractionation			219290	02/23/16 17:00	DRJ	TAL CAN
Fractionated	Prep	3050B			219499	02/29/16 11:13	DEE	TAL CAN
Fractionated	Analysis	6010B		1	219736	03/01/16 15:04	KLC	TAL CAN

Client Sample ID: TB-17303-020816-CB-013

Lab Sample ID: 240-60708-5
Date Collected: 02/08/16 00:00
Matrix: Solid
Date Received: 02/10/16 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			217398	02/13/16 22:46	LAM	TAL CAN
Total/NA	Analysis	8260B		1	217706	02/17/16 02:08	TJL1	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60708-1

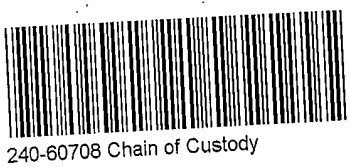
Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1,2/C0,7

Chain of Custody Record

122753

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/8/2016	COC No: 004
Company Name: GHD	Tel/Fax: (734)453-5123	Lab Contact: D. Hickler	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time: ☐ CALENDAR DAYS ☒ WORKING DAYS			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	TAT if different from Below ____			For Lab Use Only:
Phone: (734)453-5123	☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Walk-in Client:
Fax:				Lab Sampling:
Project Name: CVD				Job / SDG No.: 240060 20
Site: 017303				
PO# SSOW# 17303-033				

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 VOCs	TCL SVOCs	SS TAL Metals	Total PCBs	Sample Specific Notes:
SO-17303-020816-CB-009	02/08/16	850	G	SO	2	-	N	X	X	X	X	
-010		1200			2			X	X	X	X	
-011		1500			2			X	X	X	X	
-012		1515			2			X	X	X	X	
CB- -013		—	—	SOQ	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:

BATH COMPLETE Tracking # 6209 0763 2720

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:
C. Bondy	GHD	02/8/16 @ 1700		TA	2.9.16 940
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 # : 60706
Canton Facility

Client GHD Site Name
Cooler Received on 2-9-16 Opened on 2-9-16
Cooler unpacked by: Jennifer Miller
FedEx: 1st Grd (Exp) UPS FAS Stetson 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# 48 (CF -1.9 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
IR GUN# 18 (CF -0.5 °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 0.7 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
-Were custody seals on the outside of the cooler(s) signed & dated? Yes (No) NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
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 sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC559158
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? 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)

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):

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: 240-60834-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
2/25/2016 9:09:37 AM

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

LINKS

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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: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

Job ID: 240-60834-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-60834-1

Comments
No additional comments.

Receipt
The samples were received on 2/12/2016 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.1° C.

GC/MS VOA
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-60834-1	SW-17303-021016-CB-012	Water	02/10/16 14:50	02/12/16 09:45
240-60834-2	SW-17303-021016-CB-013	Water	02/10/16 15:00	02/12/16 09:45
240-60834-3	SW-17303-021016-CB-014	Water	02/10/16 15:10	02/12/16 09:45
240-60834-4	GW-17303-021116-CB-015	Water	02/11/16 15:05	02/12/16 09:45
240-60834-5	GW-17303-021116-CB-016	Water	02/11/16 09:45	02/12/16 09:45
240-60834-6	GW-17303-021116-CB-017	Water	02/11/16 11:45	02/12/16 09:45
240-60834-7	GW-17303-021116-CB-018	Water	02/11/16 11:25	02/12/16 09:45
240-60834-8	GW-17303-021116-CB-019	Water	02/11/16 14:40	02/12/16 09:45
240-60834-9	GW-17303-021116-CB-020	Water	02/11/16 15:45	02/12/16 09:45
240-60834-10	TB-17303-021116-CB-022	Water	02/11/16 00:00	02/12/16 09:45
240-60834-11	GW-17303-021116-CB-021	Water	02/11/16 16:10	02/12/16 09:45

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

Client Sample ID: SW-17303-021016-CB-012 — Lab Sample ID: 240-60834-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.43	J	1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	0.65	J	1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.5		1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: SW-17303-021016-CB-013 — Lab Sample ID: 240-60834-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.9		1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	1.1		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: SW-17303-021016-CB-014 — Lab Sample ID: 240-60834-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.38	J	1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.82	J	1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-021116-CB-015 — Lab Sample ID: 240-60834-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.28	J	1.0	0.23	ug/L	1		8260B	Total/NA
Vinyl chloride	2.7		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-021116-CB-016 — Lab Sample ID: 240-60834-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.72	J	1.0	0.29	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-021116-CB-017 — Lab Sample ID: 240-60834-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	510		29	8.3	ug/L	28.57		8260B	Total/NA
cis-1,2-Dichloroethene	710		29	7.4	ug/L	28.57		8260B	Total/NA
trans-1,2-Dichloroethene	34		29	8.6	ug/L	28.57		8260B	Total/NA

Client Sample ID: GW-17303-021116-CB-018 — Lab Sample ID: 240-60834-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	9800		500	150	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene	2600		500	130	ug/L	500		8260B	Total/NA

Client Sample ID: GW-17303-021116-CB-019 — Lab Sample ID: 240-60834-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	4700		170	48	ug/L	166.67		8260B	Total/NA
cis-1,2-Dichloroethene	3300		170	43	ug/L	166.67		8260B	Total/NA
trans-1,2-Dichloroethene	110	J	170	50	ug/L	166.67		8260B	Total/NA

Client Sample ID: GW-17303-021116-CB-020 — Lab Sample ID: 240-60834-9

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

Client Sample ID: GW-17303-021116-CB-020 (Continued) — Lab Sample ID: 240-60834-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	6.1	J	8.0	2.3	ug/L	8		8260B	Total/NA
cis-1,2-Dichloroethene	240		8.0	2.1	ug/L	8		8260B	Total/NA
trans-1,2-Dichloroethene	16		8.0	2.4	ug/L	8		8260B	Total/NA

Client Sample ID: TB-17303-021116-CB-022 — Lab Sample ID: 240-60834-10

No Detections.

Client Sample ID: GW-17303-021116-CB-021 — Lab Sample ID: 240-60834-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	9100		250	73	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	2200		250	65	ug/L	250		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: SW-17303-021016-CB-012
Date Collected: 02/10/16 14:50
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/23/16 17:16	1
Benzene	1.0	U	1.0	0.35	ug/L			02/23/16 17:16	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/23/16 17:16	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/23/16 17:16	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/23/16 17:16	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/23/16 17:16	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/23/16 17:16	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/23/16 17:16	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 17:16	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/23/16 17:16	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/23/16 17:16	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/23/16 17:16	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/23/16 17:16	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/23/16 17:16	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/23/16 17:16	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/23/16 17:16	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/23/16 17:16	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/23/16 17:16	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/23/16 17:16	1
2-Hexanone	10	U	10	0.48	ug/L			02/23/16 17:16	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/23/16 17:16	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/23/16 17:16	1
Styrene	1.0	U	1.0	0.45	ug/L			02/23/16 17:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/23/16 17:16	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/23/16 17:16	1
Toluene	1.0	U	1.0	0.23	ug/L			02/23/16 17:16	1
Trichloroethene	**0.43**	**J**	1.0	0.22	ug/L			02/23/16 17:16	1
Vinyl chloride	**0.65**	**J**	1.0	0.29	ug/L			02/23/16 17:16	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/23/16 17:16	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/23/16 17:16	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/23/16 17:16	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/23/16 17:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/23/16 17:16	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/23/16 17:16	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/23/16 17:16	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.26	ug/L			02/23/16 17:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/23/16 17:16	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/23/16 17:16	1
Methyl acetate	10	U	10	2.3	ug/L			02/23/16 17:16	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/23/16 17:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/23/16 17:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/23/16 17:16	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 17:16	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/23/16 17:16	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/23/16 17:16	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/23/16 17:16	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/23/16 17:16	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/23/16 17:16	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		78 - 125		02/23/16 17:16	1
4-Bromofluorobenzene (Surr)	80		61 - 120		02/23/16 17:16	1
Toluene-d8 (Surr)	84		80 - 120		02/23/16 17:16	1
Dibromofluoromethane (Surr)	86		79 - 120		02/23/16 17:16	1

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

Client Sample ID: SW-17303-021016-CB-013
Date Collected: 02/10/16 15:00
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/23/16 17:38	1
Benzene	1.0	U	1.0	0.35	ug/L			02/23/16 17:38	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/23/16 17:38	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/23/16 17:38	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/23/16 17:38	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/23/16 17:38	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/23/16 17:38	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/23/16 17:38	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 17:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/23/16 17:38	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/23/16 17:38	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/23/16 17:38	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/23/16 17:38	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/23/16 17:38	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/23/16 17:38	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/23/16 17:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/23/16 17:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/23/16 17:38	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/23/16 17:38	1
2-Hexanone	10	U	10	0.48	ug/L			02/23/16 17:38	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/23/16 17:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/23/16 17:38	1
Styrene	1.0	U	1.0	0.45	ug/L			02/23/16 17:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/23/16 17:38	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/23/16 17:38	1
Toluene	1.0	U	1.0	0.23	ug/L			02/23/16 17:38	1
Trichloroethene	**3.9**		1.0	0.22	ug/L			02/23/16 17:38	1
Vinyl chloride	**1.1**		1.0	0.29	ug/L			02/23/16 17:38	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/23/16 17:38	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/23/16 17:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/23/16 17:38	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/23/16 17:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/23/16 17:38	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/23/16 17:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/23/16 17:38	1
cis-1,2-Dichloroethene	**11**		1.0	0.26	ug/L			02/23/16 17:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/23/16 17:38	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/23/16 17:38	1
Methyl acetate	10	U	10	2.3	ug/L			02/23/16 17:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/23/16 17:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/23/16 17:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/23/16 17:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 17:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/23/16 17:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/23/16 17:38	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/23/16 17:38	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/23/16 17:38	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/23/16 17:38	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		78 - 125		02/23/16 17:38	1
4-Bromofluorobenzene (Surr)	84		61 - 120		02/23/16 17:38	1
Toluene-d8 (Surr)	86		80 - 120		02/23/16 17:38	1
Dibromofluoromethane (Surr)	88		79 - 120		02/23/16 17:38	1

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

Client Sample ID: SW-17303-021016-CB-014
Date Collected: 02/10/16 15:10
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/23/16 18:00	1
Benzene	1.0	U	1.0	0.35	ug/L			02/23/16 18:00	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/23/16 18:00	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/23/16 18:00	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:00	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/23/16 18:00	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/23/16 18:00	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/23/16 18:00	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:00	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:00	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/23/16 18:00	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:00	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/23/16 18:00	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/23/16 18:00	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/23/16 18:00	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/23/16 18:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/23/16 18:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/23/16 18:00	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:00	1
2-Hexanone	10	U	10	0.48	ug/L			02/23/16 18:00	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/23/16 18:00	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/23/16 18:00	1
Styrene	1.0	U	1.0	0.45	ug/L			02/23/16 18:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/23/16 18:00	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/23/16 18:00	1
Toluene	1.0	U	1.0	0.23	ug/L			02/23/16 18:00	1
Trichloroethene	**0.38**	**J**	1.0	0.22	ug/L			02/23/16 18:00	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/23/16 18:00	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/23/16 18:00	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/23/16 18:00	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/23/16 18:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/23/16 18:00	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:00	1
cis-1,2-Dichloroethene	**0.82**	**J**	1.0	0.26	ug/L			02/23/16 18:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/23/16 18:00	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/23/16 18:00	1
Methyl acetate	10	U	10	2.3	ug/L			02/23/16 18:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/23/16 18:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/23/16 18:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/23/16 18:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/23/16 18:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/23/16 18:00	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/23/16 18:00	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/23/16 18:00	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/23/16 18:00	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		78 - 125		02/23/16 18:00	1
4-Bromofluorobenzene (Surr)	82		61 - 120		02/23/16 18:00	1
Toluene-d8 (Surr)	84		80 - 120		02/23/16 18:00	1
Dibromofluoromethane (Surr)	86		79 - 120		02/23/16 18:00	1

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

Client Sample ID: GW-17303-021116-CB-015
Date Collected: 02/11/16 15:05
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/23/16 18:22	1
Benzene	1.0	U	1.0	0.35	ug/L			02/23/16 18:22	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/23/16 18:22	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/23/16 18:22	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:22	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/23/16 18:22	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/23/16 18:22	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/23/16 18:22	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:22	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:22	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/23/16 18:22	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:22	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/23/16 18:22	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/23/16 18:22	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/23/16 18:22	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/23/16 18:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/23/16 18:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/23/16 18:22	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:22	1
2-Hexanone	10	U	10	0.48	ug/L			02/23/16 18:22	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/23/16 18:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/23/16 18:22	1
Styrene	1.0	U	1.0	0.45	ug/L			02/23/16 18:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/23/16 18:22	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/23/16 18:22	1
Toluene	**0.28**	**J**	1.0	0.23	ug/L			02/23/16 18:22	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/23/16 18:22	1
Vinyl chloride	**2.7**		1.0	0.29	ug/L			02/23/16 18:22	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/23/16 18:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/23/16 18:22	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/23/16 18:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/23/16 18:22	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:22	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.26	ug/L			02/23/16 18:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/23/16 18:22	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/23/16 18:22	1
Methyl acetate	10	U	10	2.3	ug/L			02/23/16 18:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/23/16 18:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/23/16 18:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/23/16 18:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/23/16 18:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/23/16 18:22	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/23/16 18:22	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/23/16 18:22	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/23/16 18:22	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		78 - 125		02/23/16 18:22	1
4-Bromofluorobenzene (Surr)	82		61 - 120		02/23/16 18:22	1
Toluene-d8 (Surr)	84		80 - 120		02/23/16 18:22	1
Dibromofluoromethane (Surr)	88		79 - 120		02/23/16 18:22	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

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

Client Sample ID: GW-17303-021116-CB-016
Date Collected: 02/11/16 09:45
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/22/16 21:11	1
Benzene	1.0	U	1.0	0.35	ug/L			02/22/16 21:11	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/22/16 21:11	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/22/16 21:11	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/22/16 21:11	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/22/16 21:11	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/22/16 21:11	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/22/16 21:11	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/22/16 21:11	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/22/16 21:11	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/22/16 21:11	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/22/16 21:11	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/22/16 21:11	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/22/16 21:11	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/22/16 21:11	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/22/16 21:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/22/16 21:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/22/16 21:11	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/22/16 21:11	1
2-Hexanone	10	U	10	0.48	ug/L			02/22/16 21:11	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/22/16 21:11	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/22/16 21:11	1
Styrene	1.0	U	1.0	0.45	ug/L			02/22/16 21:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/22/16 21:11	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/22/16 21:11	1
Toluene	1.0	U	1.0	0.23	ug/L			02/22/16 21:11	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/22/16 21:11	1
Vinyl chloride	**0.72**	**J**	1.0	0.29	ug/L			02/22/16 21:11	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/22/16 21:11	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/22/16 21:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/22/16 21:11	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/22/16 21:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/22/16 21:11	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/22/16 21:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/22/16 21:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/22/16 21:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/22/16 21:11	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/22/16 21:11	1
Methyl acetate	10	U	10	2.3	ug/L			02/22/16 21:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/22/16 21:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/22/16 21:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/22/16 21:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/22/16 21:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/22/16 21:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/22/16 21:11	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/22/16 21:11	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/22/16 21:11	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/22/16 21:11	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		78 - 125		02/22/16 21:11	1
4-Bromofluorobenzene (Surr)	83		61 - 120		02/22/16 21:11	1
Toluene-d8 (Surr)	84		80 - 120		02/22/16 21:11	1
Dibromofluoromethane (Surr)	88		79 - 120		02/22/16 21:11	1

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

Client Sample ID: GW-17303-021116-CB-017
Date Collected: 02/11/16 11:45
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	290	U	290	27	ug/L			02/22/16 19:20	28.57
Benzene	29	U	29	10	ug/L			02/22/16 19:20	28.57
Bromodichloromethane	29	U	29	8.3	ug/L			02/22/16 19:20	28.57
Bromoform	29	U	29	16	ug/L			02/22/16 19:20	28.57
Bromomethane	29	U	29	13	ug/L			02/22/16 19:20	28.57
2-Butanone (MEK)	290	U	290	15	ug/L			02/22/16 19:20	28.57
Carbon disulfide	140	U	140	11	ug/L			02/22/16 19:20	28.57
Carbon tetrachloride	29	U	29	12	ug/L			02/22/16 19:20	28.57
Chlorobenzene	29	U	29	7.1	ug/L			02/22/16 19:20	28.57
Chloroethane	29	U	29	9.1	ug/L			02/22/16 19:20	28.57
Chloroform	29	U	29	7.1	ug/L			02/22/16 19:20	28.57
Chloromethane	29	U	29	13	ug/L			02/22/16 19:20	28.57
1,1-Dichloroethane	29	U	29	8.6	ug/L			02/22/16 19:20	28.57
1,2-Dichloroethane	29	U	29	6.6	ug/L			02/22/16 19:20	28.57
1,1-Dichloroethene	29	U	29	13	ug/L			02/22/16 19:20	28.57
1,2-Dichloropropane	29	U	29	7.1	ug/L			02/22/16 19:20	28.57
cis-1,3-Dichloropropene	29	U	29	13	ug/L			02/22/16 19:20	28.57
trans-1,3-Dichloropropene	29	U	29	16	ug/L			02/22/16 19:20	28.57
Ethylbenzene	29	U	29	7.1	ug/L			02/22/16 19:20	28.57
2-Hexanone	290	U	290	14	ug/L			02/22/16 19:20	28.57
Methylene Chloride	140	U	140	9.4	ug/L			02/22/16 19:20	28.57
4-Methyl-2-pentanone (MIBK)	290	U	290	28	ug/L			02/22/16 19:20	28.57
Styrene	29	U	29	13	ug/L			02/22/16 19:20	28.57
1,1,2,2-Tetrachloroethane	29	U	29	6.3	ug/L			02/22/16 19:20	28.57
Tetrachloroethene	29	U	29	8.9	ug/L			02/22/16 19:20	28.57
Toluene	29	U	29	6.6	ug/L			02/22/16 19:20	28.57
Trichloroethene	29	U	29	6.3	ug/L			02/22/16 19:20	28.57
Vinyl chloride	**510**		29	8.3	ug/L			02/22/16 19:20	28.57
Xylenes, Total	57	U	57	15	ug/L			02/22/16 19:20	28.57
1,1,1-Trichloroethane	29	U	29	13	ug/L			02/22/16 19:20	28.57
1,1,2-Trichloroethane	29	U	29	6.9	ug/L			02/22/16 19:20	28.57
Cyclohexane	29	U	29	13	ug/L			02/22/16 19:20	28.57
1,2-Dibromo-3-Chloropropane	29	U	29	23	ug/L			02/22/16 19:20	28.57
1,2-Dibromoethane	29	U	29	9.1	ug/L			02/22/16 19:20	28.57
Dichlorodifluoromethane	29	U	29	9.1	ug/L			02/22/16 19:20	28.57
cis-1,2-Dichloroethene	**710**		29	7.4	ug/L			02/22/16 19:20	28.57
trans-1,2-Dichloroethene	**34**		29	8.6	ug/L			02/22/16 19:20	28.57
Isopropylbenzene	29	U	29	10	ug/L			02/22/16 19:20	28.57
Methyl acetate	290	U	290	65	ug/L			02/22/16 19:20	28.57
Methyl tert-butyl ether	29	U	29	5.7	ug/L			02/22/16 19:20	28.57
1,1,2-Trichloro-1,2,2-trifluoroethane	29	U	29	13	ug/L			02/22/16 19:20	28.57
1,2,4-Trichlorobenzene	29	U	29	9.1	ug/L			02/22/16 19:20	28.57
1,2-Dichlorobenzene	29	U	29	7.1	ug/L			02/22/16 19:20	28.57
1,3-Dichlorobenzene	29	U	29	5.4	ug/L			02/22/16 19:20	28.57
1,4-Dichlorobenzene	29	U	29	7.7	ug/L			02/22/16 19:20	28.57
Trichlorofluoromethane	29	U	29	14	ug/L			02/22/16 19:20	28.57
Dibromochloromethane	29	U	29	12	ug/L			02/22/16 19:20	28.57
Methylcyclohexane	29	U	29	12	ug/L			02/22/16 19:20	28.57

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		78 - 125		02/22/16 19:20	28.57
4-Bromofluorobenzene (Surr)	84		61 - 120		02/22/16 19:20	28.57
Toluene-d8 (Surr)	86		80 - 120		02/22/16 19:20	28.57
Dibromofluoromethane (Surr)	89		79 - 120		02/22/16 19:20	28.57

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

Client Sample ID: GW-17303-021116-CB-018
Date Collected: 02/11/16 11:25
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5000	U	5000	470	ug/L			02/22/16 19:42	500
Benzene	500	U	500	180	ug/L			02/22/16 19:42	500
Bromodichloromethane	500	U	500	150	ug/L			02/22/16 19:42	500
Bromoform	500	U	500	280	ug/L			02/22/16 19:42	500
Bromomethane	500	U	500	220	ug/L			02/22/16 19:42	500
2-Butanone (MEK)	5000	U	5000	270	ug/L			02/22/16 19:42	500
Carbon disulfide	2500	U	2500	190	ug/L			02/22/16 19:42	500
Carbon tetrachloride	500	U	500	220	ug/L			02/22/16 19:42	500
Chlorobenzene	500	U	500	130	ug/L			02/22/16 19:42	500
Chloroethane	500	U	500	160	ug/L			02/22/16 19:42	500
Chloroform	500	U	500	130	ug/L			02/22/16 19:42	500
Chloromethane	500	U	500	220	ug/L			02/22/16 19:42	500
1,1-Dichloroethane	500	U	500	150	ug/L			02/22/16 19:42	500
1,2-Dichloroethane	500	U	500	120	ug/L			02/22/16 19:42	500
1,1-Dichloroethene	500	U	500	230	ug/L			02/22/16 19:42	500
1,2-Dichloropropane	500	U	500	130	ug/L			02/22/16 19:42	500
cis-1,3-Dichloropropene	500	U	500	230	ug/L			02/22/16 19:42	500
trans-1,3-Dichloropropene	500	U	500	280	ug/L			02/22/16 19:42	500
Ethylbenzene	500	U	500	130	ug/L			02/22/16 19:42	500
2-Hexanone	5000	U	5000	240	ug/L			02/22/16 19:42	500
Methylene Chloride	2500	U	2500	170	ug/L			02/22/16 19:42	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	500	ug/L			02/22/16 19:42	500
Styrene	500	U	500	230	ug/L			02/22/16 19:42	500
1,1,2,2-Tetrachloroethane	500	U	500	110	ug/L			02/22/16 19:42	500
Tetrachloroethene	500	U	500	160	ug/L			02/22/16 19:42	500
Toluene	500	U	500	120	ug/L			02/22/16 19:42	500
Trichloroethene	500	U	500	110	ug/L			02/22/16 19:42	500
Vinyl chloride	**9800**		500	150	ug/L			02/22/16 19:42	500
Xylenes, Total	1000	U	1000	260	ug/L			02/22/16 19:42	500
1,1,1-Trichloroethane	500	U	500	220	ug/L			02/22/16 19:42	500
1,1,2-Trichloroethane	500	U	500	120	ug/L			02/22/16 19:42	500
Cyclohexane	500	U	500	230	ug/L			02/22/16 19:42	500
1,2-Dibromo-3-Chloropropane	500	U	500	410	ug/L			02/22/16 19:42	500
1,2-Dibromoethane	500	U	500	160	ug/L			02/22/16 19:42	500
Dichlorodifluoromethane	500	U	500	160	ug/L			02/22/16 19:42	500
cis-1,2-Dichloroethene	**2600**		500	130	ug/L			02/22/16 19:42	500
trans-1,2-Dichloroethene	500	U	500	150	ug/L			02/22/16 19:42	500
Isopropylbenzene	500	U	500	180	ug/L			02/22/16 19:42	500
Methyl acetate	5000	U	5000	1100	ug/L			02/22/16 19:42	500
Methyl tert-butyl ether	500	U	500	100	ug/L			02/22/16 19:42	500
1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	230	ug/L			02/22/16 19:42	500
1,2,4-Trichlorobenzene	500	U	500	160	ug/L			02/22/16 19:42	500
1,2-Dichlorobenzene	500	U	500	130	ug/L			02/22/16 19:42	500
1,3-Dichlorobenzene	500	U	500	95	ug/L			02/22/16 19:42	500
1,4-Dichlorobenzene	500	U	500	140	ug/L			02/22/16 19:42	500
Trichlorofluoromethane	500	U	500	250	ug/L			02/22/16 19:42	500
Dibromochloromethane	500	U	500	220	ug/L			02/22/16 19:42	500
Methylcyclohexane	500	U	500	220	ug/L			02/22/16 19:42	500

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		78 - 125		02/22/16 19:42	500
4-Bromofluorobenzene (Surr)	83		61 - 120		02/22/16 19:42	500
Toluene-d8 (Surr)	85		80 - 120		02/22/16 19:42	500
Dibromofluoromethane (Surr)	89		79 - 120		02/22/16 19:42	500

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

Client Sample ID: GW-17303-021116-CB-019
Date Collected: 02/11/16 14:40
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1700	U	1700	160	ug/L			02/22/16 20:04	166.67
Benzene	170	U	170	58	ug/L			02/22/16 20:04	166.67
Bromodichloromethane	170	U	170	48	ug/L			02/22/16 20:04	166.67
Bromoform	170	U	170	93	ug/L			02/22/16 20:04	166.67
Bromomethane	170	U	170	73	ug/L			02/22/16 20:04	166.67
2-Butanone (MEK)	1700	U	1700	88	ug/L			02/22/16 20:04	166.67
Carbon disulfide	830	U	830	63	ug/L			02/22/16 20:04	166.67
Carbon tetrachloride	170	U	170	72	ug/L			02/22/16 20:04	166.67
Chlorobenzene	170	U	170	42	ug/L			02/22/16 20:04	166.67
Chloroethane	170	U	170	53	ug/L			02/22/16 20:04	166.67
Chloroform	170	U	170	42	ug/L			02/22/16 20:04	166.67
Chloromethane	170	U	170	73	ug/L			02/22/16 20:04	166.67
1,1-Dichloroethane	170	U	170	50	ug/L			02/22/16 20:04	166.67
1,2-Dichloroethane	170	U	170	38	ug/L			02/22/16 20:04	166.67
1,1-Dichloroethene	170	U	170	75	ug/L			02/22/16 20:04	166.67
1,2-Dichloropropane	170	U	170	42	ug/L			02/22/16 20:04	166.67
cis-1,3-Dichloropropene	170	U	170	77	ug/L			02/22/16 20:04	166.67
trans-1,3-Dichloropropene	170	U	170	93	ug/L			02/22/16 20:04	166.67
Ethylbenzene	170	U	170	42	ug/L			02/22/16 20:04	166.67
2-Hexanone	1700	U	1700	80	ug/L			02/22/16 20:04	166.67
Methylene Chloride	830	U	830	55	ug/L			02/22/16 20:04	166.67
4-Methyl-2-pentanone (MIBK)	1700	U	1700	170	ug/L			02/22/16 20:04	166.67
Styrene	170	U	170	75	ug/L			02/22/16 20:04	166.67
1,1,2,2-Tetrachloroethane	170	U	170	37	ug/L			02/22/16 20:04	166.67
Tetrachloroethene	170	U	170	52	ug/L			02/22/16 20:04	166.67
Toluene	170	U	170	38	ug/L			02/22/16 20:04	166.67
Trichloroethene	170	U	170	37	ug/L			02/22/16 20:04	166.67
Vinyl chloride	**4700**		170	48	ug/L			02/22/16 20:04	166.67
Xylenes, Total	330	U	330	87	ug/L			02/22/16 20:04	166.67
1,1,1-Trichloroethane	170	U	170	73	ug/L			02/22/16 20:04	166.67
1,1,2-Trichloroethane	170	U	170	40	ug/L			02/22/16 20:04	166.67
Cyclohexane	170	U	170	75	ug/L			02/22/16 20:04	166.67
1,2-Dibromo-3-Chloropropane	170	U	170	140	ug/L			02/22/16 20:04	166.67
1,2-Dibromoethane	170	U	170	53	ug/L			02/22/16 20:04	166.67
Dichlorodifluoromethane	170	U	170	53	ug/L			02/22/16 20:04	166.67
cis-1,2-Dichloroethene	**3300**		170	43	ug/L			02/22/16 20:04	166.67
trans-1,2-Dichloroethene	**110**	**J**	170	50	ug/L			02/22/16 20:04	166.67
Isopropylbenzene	170	U	170	58	ug/L			02/22/16 20:04	166.67
Methyl acetate	1700	U	1700	380	ug/L			02/22/16 20:04	166.67
Methyl tert-butyl ether	170	U	170	33	ug/L			02/22/16 20:04	166.67
1,1,2-Trichloro-1,2,2-trifluoroethane	170	U	170	75	ug/L			02/22/16 20:04	166.67
1,2,4-Trichlorobenzene	170	U	170	53	ug/L			02/22/16 20:04	166.67
1,2-Dichlorobenzene	170	U	170	42	ug/L			02/22/16 20:04	166.67
1,3-Dichlorobenzene	170	U	170	32	ug/L			02/22/16 20:04	166.67
1,4-Dichlorobenzene	170	U	170	45	ug/L			02/22/16 20:04	166.67
Trichlorofluoromethane	170	U	170	82	ug/L			02/22/16 20:04	166.67
Dibromochloromethane	170	U	170	72	ug/L			02/22/16 20:04	166.67
Methylcyclohexane	170	U	170	72	ug/L			02/22/16 20:04	166.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		78 - 125		02/22/16 20:04	166.67
4-Bromofluorobenzene (Surr)	82		61 - 120		02/22/16 20:04	166.67
Toluene-d8 (Surr)	87		80 - 120		02/22/16 20:04	166.67
Dibromofluoromethane (Surr)	87		79 - 120		02/22/16 20:04	166.67

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

Client Sample ID: GW-17303-021116-CB-020
Date Collected: 02/11/16 15:45
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	80	U	80	7.5	ug/L			02/22/16 20:27	8
Benzene	8.0	U	8.0	2.8	ug/L			02/22/16 20:27	8
Bromodichloromethane	8.0	U	8.0	2.3	ug/L			02/22/16 20:27	8
Bromoform	8.0	U	8.0	4.5	ug/L			02/22/16 20:27	8
Bromomethane	8.0	U	8.0	3.5	ug/L			02/22/16 20:27	8
2-Butanone (MEK)	80	U	80	4.2	ug/L			02/22/16 20:27	8
Carbon disulfide	40	U	40	3.0	ug/L			02/22/16 20:27	8
Carbon tetrachloride	8.0	U	8.0	3.4	ug/L			02/22/16 20:27	8
Chlorobenzene	8.0	U	8.0	2.0	ug/L			02/22/16 20:27	8
Chloroethane	8.0	U	8.0	2.6	ug/L			02/22/16 20:27	8
Chloroform	8.0	U	8.0	2.0	ug/L			02/22/16 20:27	8
Chloromethane	8.0	U	8.0	3.5	ug/L			02/22/16 20:27	8
1,1-Dichloroethane	8.0	U	8.0	2.4	ug/L			02/22/16 20:27	8
1,2-Dichloroethane	8.0	U	8.0	1.8	ug/L			02/22/16 20:27	8
1,1-Dichloroethene	8.0	U	8.0	3.6	ug/L			02/22/16 20:27	8
1,2-Dichloropropane	8.0	U	8.0	2.0	ug/L			02/22/16 20:27	8
cis-1,3-Dichloropropene	8.0	U	8.0	3.7	ug/L			02/22/16 20:27	8
trans-1,3-Dichloropropene	8.0	U	8.0	4.5	ug/L			02/22/16 20:27	8
Ethylbenzene	8.0	U	8.0	2.0	ug/L			02/22/16 20:27	8
2-Hexanone	80	U	80	3.8	ug/L			02/22/16 20:27	8
Methylene Chloride	40	U	40	2.6	ug/L			02/22/16 20:27	8
4-Methyl-2-pentanone (MIBK)	80	U	80	7.9	ug/L			02/22/16 20:27	8
Styrene	8.0	U	8.0	3.6	ug/L			02/22/16 20:27	8
1,1,2,2-Tetrachloroethane	8.0	U	8.0	1.8	ug/L			02/22/16 20:27	8
Tetrachloroethene	8.0	U	8.0	2.5	ug/L			02/22/16 20:27	8
Toluene	8.0	U	8.0	1.8	ug/L			02/22/16 20:27	8
Trichloroethene	8.0	U	8.0	1.8	ug/L			02/22/16 20:27	8
Vinyl chloride	**6.1**	**J**	8.0	2.3	ug/L			02/22/16 20:27	8
Xylenes, Total	16	U	16	4.2	ug/L			02/22/16 20:27	8
1,1,1-Trichloroethane	8.0	U	8.0	3.5	ug/L			02/22/16 20:27	8
1,1,2-Trichloroethane	8.0	U	8.0	1.9	ug/L			02/22/16 20:27	8
Cyclohexane	8.0	U	8.0	3.6	ug/L			02/22/16 20:27	8
1,2-Dibromo-3-Chloropropane	8.0	U	8.0	6.6	ug/L			02/22/16 20:27	8
1,2-Dibromoethane	8.0	U	8.0	2.6	ug/L			02/22/16 20:27	8
Dichlorodifluoromethane	8.0	U	8.0	2.6	ug/L			02/22/16 20:27	8
cis-1,2-Dichloroethene	**240**		8.0	2.1	ug/L			02/22/16 20:27	8
trans-1,2-Dichloroethene	**16**		8.0	2.4	ug/L			02/22/16 20:27	8
Isopropylbenzene	8.0	U	8.0	2.8	ug/L			02/22/16 20:27	8
Methyl acetate	80	U	80	18	ug/L			02/22/16 20:27	8
Methyl tert-butyl ether	8.0	U	8.0	1.6	ug/L			02/22/16 20:27	8
1,1,2-Trichloro-1,2,2-trifluoroethane	8.0	U	8.0	3.6	ug/L			02/22/16 20:27	8
1,2,4-Trichlorobenzene	8.0	U	8.0	2.6	ug/L			02/22/16 20:27	8
1,2-Dichlorobenzene	8.0	U	8.0	2.0	ug/L			02/22/16 20:27	8
1,3-Dichlorobenzene	8.0	U	8.0	1.5	ug/L			02/22/16 20:27	8
1,4-Dichlorobenzene	8.0	U	8.0	2.2	ug/L			02/22/16 20:27	8
Trichlorofluoromethane	8.0	U	8.0	3.9	ug/L			02/22/16 20:27	8
Dibromochloromethane	8.0	U	8.0	3.4	ug/L			02/22/16 20:27	8
Methylcyclohexane	8.0	U	8.0	3.4	ug/L			02/22/16 20:27	8

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		78 - 125		02/22/16 20:27	8
4-Bromofluorobenzene (Surr)	81		61 - 120		02/22/16 20:27	8
Toluene-d8 (Surr)	85		80 - 120		02/22/16 20:27	8
Dibromofluoromethane (Surr)	87		79 - 120		02/22/16 20:27	8

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

Client Sample ID: TB-17303-021116-CB-022
Date Collected: 02/11/16 00:00
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/23/16 18:45	1
Benzene	1.0	U	1.0	0.35	ug/L			02/23/16 18:45	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/23/16 18:45	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/23/16 18:45	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:45	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/23/16 18:45	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/23/16 18:45	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/23/16 18:45	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:45	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:45	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/23/16 18:45	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:45	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/23/16 18:45	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/23/16 18:45	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/23/16 18:45	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/23/16 18:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/23/16 18:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/23/16 18:45	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:45	1
2-Hexanone	10	U	10	0.48	ug/L			02/23/16 18:45	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/23/16 18:45	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/23/16 18:45	1
Styrene	1.0	U	1.0	0.45	ug/L			02/23/16 18:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/23/16 18:45	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/23/16 18:45	1
Toluene	1.0	U	1.0	0.23	ug/L			02/23/16 18:45	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/23/16 18:45	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/23/16 18:45	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/23/16 18:45	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/23/16 18:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/23/16 18:45	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/23/16 18:45	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/23/16 18:45	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:45	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/23/16 18:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/23/16 18:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/23/16 18:45	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/23/16 18:45	1
Methyl acetate	10	U	10	2.3	ug/L			02/23/16 18:45	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/23/16 18:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/23/16 18:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/23/16 18:45	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 18:45	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/23/16 18:45	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/23/16 18:45	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/23/16 18:45	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/23/16 18:45	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/23/16 18:45	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		78 - 125		02/23/16 18:45	1
4-Bromofluorobenzene (Surr)	82		61 - 120		02/23/16 18:45	1
Toluene-d8 (Surr)	84		80 - 120		02/23/16 18:45	1
Dibromofluoromethane (Surr)	86		79 - 120		02/23/16 18:45	1

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

Client Sample ID: GW-17303-021116-CB-021
Date Collected: 02/11/16 16:10
Date Received: 02/12/16 09:45

Lab Sample ID: 240-60834-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2500	U	2500	240	ug/L			02/22/16 20:49	250
Benzene	250	U	250	88	ug/L			02/22/16 20:49	250
Bromodichloromethane	250	U	250	73	ug/L			02/22/16 20:49	250
Bromoform	250	U	250	140	ug/L			02/22/16 20:49	250
Bromomethane	250	U	250	110	ug/L			02/22/16 20:49	250
2-Butanone (MEK)	2500	U	2500	130	ug/L			02/22/16 20:49	250
Carbon disulfide	1300	U	1300	95	ug/L			02/22/16 20:49	250
Carbon tetrachloride	250	U	250	110	ug/L			02/22/16 20:49	250
Chlorobenzene	250	U	250	63	ug/L			02/22/16 20:49	250
Chloroethane	250	U	250	80	ug/L			02/22/16 20:49	250
Chloroform	250	U	250	63	ug/L			02/22/16 20:49	250
Chloromethane	250	U	250	110	ug/L			02/22/16 20:49	250
1,1-Dichloroethane	250	U	250	75	ug/L			02/22/16 20:49	250
1,2-Dichloroethane	250	U	250	58	ug/L			02/22/16 20:49	250
1,1-Dichloroethene	250	U	250	110	ug/L			02/22/16 20:49	250
1,2-Dichloropropane	250	U	250	63	ug/L			02/22/16 20:49	250
cis-1,3-Dichloropropene	250	U	250	120	ug/L			02/22/16 20:49	250
trans-1,3-Dichloropropene	250	U	250	140	ug/L			02/22/16 20:49	250
Ethylbenzene	250	U	250	63	ug/L			02/22/16 20:49	250
2-Hexanone	2500	U	2500	120	ug/L			02/22/16 20:49	250
Methylene Chloride	1300	U	1300	83	ug/L			02/22/16 20:49	250
4-Methyl-2-pentanone (MIBK)	2500	U	2500	250	ug/L			02/22/16 20:49	250
Styrene	250	U	250	110	ug/L			02/22/16 20:49	250
1,1,2,2-Tetrachloroethane	250	U	250	55	ug/L			02/22/16 20:49	250
Tetrachloroethene	250	U	250	78	ug/L			02/22/16 20:49	250
Toluene	250	U	250	58	ug/L			02/22/16 20:49	250
Trichloroethene	250	U	250	55	ug/L			02/22/16 20:49	250
Vinyl chloride	**9100**		250	73	ug/L			02/22/16 20:49	250
Xylenes, Total	500	U	500	130	ug/L			02/22/16 20:49	250
1,1,1-Trichloroethane	250	U	250	110	ug/L			02/22/16 20:49	250
1,1,2-Trichloroethane	250	U	250	60	ug/L			02/22/16 20:49	250
Cyclohexane	250	U	250	110	ug/L			02/22/16 20:49	250
1,2-Dibromo-3-Chloropropane	250	U	250	210	ug/L			02/22/16 20:49	250
1,2-Dibromoethane	250	U	250	80	ug/L			02/22/16 20:49	250
Dichlorodifluoromethane	250	U	250	80	ug/L			02/22/16 20:49	250
cis-1,2-Dichloroethene	**2200**		250	65	ug/L			02/22/16 20:49	250
trans-1,2-Dichloroethene	250	U	250	75	ug/L			02/22/16 20:49	250
Isopropylbenzene	250	U	250	88	ug/L			02/22/16 20:49	250
Methyl acetate	2500	U	2500	570	ug/L			02/22/16 20:49	250
Methyl tert-butyl ether	250	U	250	50	ug/L			02/22/16 20:49	250
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	110	ug/L			02/22/16 20:49	250
1,2,4-Trichlorobenzene	250	U	250	80	ug/L			02/22/16 20:49	250
1,2-Dichlorobenzene	250	U	250	63	ug/L			02/22/16 20:49	250
1,3-Dichlorobenzene	250	U	250	48	ug/L			02/22/16 20:49	250
1,4-Dichlorobenzene	250	U	250	68	ug/L			02/22/16 20:49	250
Trichlorofluoromethane	250	U	250	120	ug/L			02/22/16 20:49	250
Dibromochloromethane	250	U	250	110	ug/L			02/22/16 20:49	250
Methylcyclohexane	250	U	250	110	ug/L			02/22/16 20:49	250

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		78 - 125		02/22/16 20:49	250
4-Bromofluorobenzene (Surr)	82		61 - 120		02/22/16 20:49	250
Toluene-d8 (Surr)	85		80 - 120		02/22/16 20:49	250
Dibromofluoromethane (Surr)	89		79 - 120		02/22/16 20:49	250

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

GC/MS VOA

Analysis Batch: 218458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60834-5	GW-17303-021116-CB-016	Total/NA	Water	8260B	
240-60834-5 MS	GW-17303-021116-CB-016	Total/NA	Water	8260B	
240-60834-5 MSD	GW-17303-021116-CB-016	Total/NA	Water	8260B	
240-60834-6	GW-17303-021116-CB-017	Total/NA	Water	8260B	
240-60834-7	GW-17303-021116-CB-018	Total/NA	Water	8260B	
240-60834-8	GW-17303-021116-CB-019	Total/NA	Water	8260B	
240-60834-9	GW-17303-021116-CB-020	Total/NA	Water	8260B	
240-60834-11	GW-17303-021116-CB-021	Total/NA	Water	8260B	
LCS 240-218458/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-218458/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 218691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-60834-1	SW-17303-021016-CB-012	Total/NA	Water	8260B	
240-60834-2	SW-17303-021016-CB-013	Total/NA	Water	8260B	
240-60834-3	SW-17303-021016-CB-014	Total/NA	Water	8260B	
240-60834-4	GW-17303-021116-CB-015	Total/NA	Water	8260B	
240-60834-10	TB-17303-021116-CB-022	Total/NA	Water	8260B	
LCS 240-218691/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-218691/6	Method Blank	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-218458/6
Matrix: Water
Analysis Batch: 218458

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	0.94	ug/L			02/22/16 13:25	1
Benzene	1.0	U	1.0	0.35	ug/L			02/22/16 13:25	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/22/16 13:25	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/22/16 13:25	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/22/16 13:25	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/22/16 13:25	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/22/16 13:25	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/22/16 13:25	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/22/16 13:25	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/22/16 13:25	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/22/16 13:25	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/22/16 13:25	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/22/16 13:25	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/22/16 13:25	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/22/16 13:25	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/22/16 13:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/22/16 13:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/22/16 13:25	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/22/16 13:25	1
2-Hexanone	10	U	10	0.48	ug/L			02/22/16 13:25	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/22/16 13:25	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/22/16 13:25	1
Styrene	1.0	U	1.0	0.45	ug/L			02/22/16 13:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/22/16 13:25	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/22/16 13:25	1
Toluene	1.0	U	1.0	0.23	ug/L			02/22/16 13:25	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/22/16 13:25	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/22/16 13:25	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/22/16 13:25	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/22/16 13:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/22/16 13:25	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/22/16 13:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/22/16 13:25	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/22/16 13:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/22/16 13:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/22/16 13:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/22/16 13:25	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/22/16 13:25	1
Methyl acetate	10	U	10	2.3	ug/L			02/22/16 13:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/22/16 13:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/22/16 13:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/22/16 13:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/22/16 13:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/22/16 13:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/22/16 13:25	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/22/16 13:25	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/22/16 13:25	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/22/16 13:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		78 - 125		02/22/16 13:25	1
4-Bromofluorobenzene (Surr)	84		61 - 120		02/22/16 13:25	1
Toluene-d8 (Surr)	84		80 - 120		02/22/16 13:25	1
Dibromofluoromethane (Surr)	87		79 - 120		02/22/16 13:25	1

Lab Sample ID: LCS 240-218458/4
Matrix: Water
Analysis Batch: 218458

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	34 - 148
Benzene	10.0	9.63		ug/L		96	80 - 120
Bromodichloromethane	10.0	9.80		ug/L		98	80 - 120
Bromoform	10.0	11.3		ug/L		113	56 - 122
Bromomethane	10.0	9.68		ug/L		97	38 - 132
2-Butanone (MEK)	20.0	19.6		ug/L		98	56 - 138
Carbon disulfide	10.0	10.5		ug/L		105	65 - 144
Carbon tetrachloride	10.0	10.3		ug/L		103	77 - 131
Chlorobenzene	10.0	9.51		ug/L		95	80 - 120
Chloroethane	10.0	7.92		ug/L		79	36 - 126
Chloroform	10.0	9.60		ug/L		96	80 - 120
Chloromethane	10.0	8.78		ug/L		88	48 - 133
1,1-Dichloroethane	10.0	9.39		ug/L		94	79 - 125
1,2-Dichloroethane	10.0	9.36		ug/L		94	80 - 120
1,1-Dichloroethene	10.0	9.85		ug/L		99	76 - 124
1,2-Dichloropropane	10.0	9.84		ug/L		98	78 - 124
cis-1,3-Dichloropropene	10.0	10.5		ug/L		105	74 - 126
trans-1,3-Dichloropropene	10.0	9.38		ug/L		94	75 - 131
Ethylbenzene	10.0	9.72		ug/L		97	80 - 120
2-Hexanone	20.0	20.8		ug/L		104	55 - 141
Methylene Chloride	10.0	10.2		ug/L		102	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	20.8		ug/L		104	64 - 135
Styrene	10.0	10.1		ug/L		101	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.83		ug/L		98	71 - 123
Tetrachloroethene	10.0	9.76		ug/L		98	78 - 121
Toluene	10.0	9.58		ug/L		96	80 - 120
Trichloroethene	10.0	9.84		ug/L		98	80 - 121
Vinyl chloride	10.0	8.96		ug/L		90	52 - 121
Xylenes, Total	20.0	19.8		ug/L		99	80 - 120
1,1,1-Trichloroethane	10.0	9.86		ug/L		99	77 - 123
1,1,2-Trichloroethane	10.0	9.66		ug/L		97	80 - 120
Cyclohexane	10.0	10.1		ug/L		101	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	10.7		ug/L		107	50 - 132
1,2-Dibromoethane	10.0	10.4		ug/L		104	80 - 120
Dichlorodifluoromethane	10.0	7.66		ug/L		77	23 - 136
cis-1,2-Dichloroethene	10.0	9.71		ug/L		97	79 - 120
trans-1,2-Dichloroethene	10.0	9.90		ug/L		99	80 - 124
Isopropylbenzene	10.0	9.79		ug/L		98	77 - 120
Methyl acetate	50.0	50.7		ug/L		101	67 - 131
Methyl tert-butyl ether	10.0	9.68		ug/L		97	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.1		ug/L		101	67 - 138
1,2,4-Trichlorobenzene	10.0	8.87		ug/L		89	61 - 120
1,2-Dichlorobenzene	10.0	9.56		ug/L		96	79 - 120

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

Lab Sample ID: LCS 240-218458/4
Matrix: Water
Analysis Batch: 218458

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	9.40		ug/L		94	79 - 120
1,4-Dichlorobenzene	10.0	9.32		ug/L		93	79 - 120
Trichlorofluoromethane	10.0	10.5		ug/L		105	61 - 133
Dibromochloromethane	10.0	10.5		ug/L		105	74 - 120
Methylcyclohexane	10.0	10.0		ug/L		100	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*78 - 125*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*
Toluene-d8 (Surr)	*88*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*79 - 120*

Lab Sample ID: 240-60834-5 MS
Matrix: Water
Analysis Batch: 218458

Client Sample ID: GW-17303-021116-CB-016
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10	U	20.0	16.6		ug/L		83	32 - 126
Benzene	1.0	U	10.0	9.02		ug/L		90	73 - 121
Bromodichloromethane	1.0	U	10.0	8.82		ug/L		88	72 - 120
Bromoform	1.0	U	10.0	9.46		ug/L		95	45 - 121
Bromomethane	1.0	U	10.0	10.4		ug/L		104	26 - 136
2-Butanone (MEK)	10	U	20.0	18.2		ug/L		91	49 - 132
Carbon disulfide	5.0	U	10.0	8.88		ug/L		89	54 - 144
Carbon tetrachloride	1.0	U	10.0	9.11		ug/L		91	65 - 129
Chlorobenzene	1.0	U	10.0	8.88		ug/L		89	72 - 120
Chloroethane	1.0	U	10.0	9.57		ug/L		96	27 - 131
Chloroform	1.0	U	10.0	9.04		ug/L		90	73 - 121
Chloromethane	1.0	U	10.0	8.66		ug/L		87	39 - 134
1,1-Dichloroethane	1.0	U	10.0	8.74		ug/L		87	73 - 124
1,2-Dichloroethane	1.0	U	10.0	8.79		ug/L		88	74 - 125
1,1-Dichloroethene	1.0	U	10.0	9.00		ug/L		90	67 - 124
1,2-Dichloropropane	1.0	U	10.0	8.94		ug/L		89	73 - 122
cis-1,3-Dichloropropene	1.0	U	10.0	8.64		ug/L		86	60 - 120
trans-1,3-Dichloropropene	1.0	U	10.0	7.75		ug/L		77	58 - 132
Ethylbenzene	1.0	U	10.0	8.56		ug/L		86	68 - 121
2-Hexanone	10	U	20.0	19.0		ug/L		95	49 - 142
Methylene Chloride	5.0	U	10.0	9.40		ug/L		94	70 - 124
4-Methyl-2-pentanone (MIBK)	10	U	20.0	18.3		ug/L		92	58 - 136
Styrene	1.0	U	10.0	9.33		ug/L		93	64 - 126
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.35		ug/L		94	61 - 130
Tetrachloroethene	1.0	U	10.0	8.79		ug/L		88	59 - 125
Toluene	1.0	U	10.0	8.89		ug/L		89	72 - 122
Trichloroethene	1.0	U	10.0	8.75		ug/L		87	61 - 129
Vinyl chloride	0.72	J	10.0	9.61		ug/L		89	44 - 122
Xylenes, Total	2.0	U	20.0	17.9		ug/L		89	67 - 122
1,1,1-Trichloroethane	1.0	U	10.0	8.60		ug/L		86	69 - 122
1,1,2-Trichloroethane	1.0	U	10.0	9.34		ug/L		93	72 - 125

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

Lab Sample ID: 240-60834-5 MS
Matrix: Water
Analysis Batch: 218458

Client Sample ID: GW-17303-021116-CB-016
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	1.0	U	10.0	8.32		ug/L		83	41 - 137
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	9.28		ug/L		93	42 - 130
1,2-Dibromoethane	1.0	U	10.0	9.73		ug/L		97	69 - 125
Dichlorodifluoromethane	1.0	U	10.0	6.96		ug/L		70	14 - 137
cis-1,2-Dichloroethene	1.0	U	10.0	8.99		ug/L		90	66 - 124
trans-1,2-Dichloroethene	1.0	U	10.0	9.04		ug/L		90	72 - 125
Isopropylbenzene	1.0	U	10.0	8.65		ug/L		86	61 - 122
Methyl acetate	10	U	50.0	44.6		ug/L		89	64 - 124
Methyl tert-butyl ether	1.0	U	10.0	8.41		ug/L		84	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	8.72		ug/L		87	44 - 140
1,2,4-Trichlorobenzene	1.0	U	10.0	7.81		ug/L		78	48 - 120
1,2-Dichlorobenzene	1.0	U	10.0	8.83		ug/L		88	67 - 118
1,3-Dichlorobenzene	1.0	U	10.0	8.66		ug/L		87	65 - 120
1,4-Dichlorobenzene	1.0	U	10.0	8.71		ug/L		87	66 - 120
Trichlorofluoromethane	1.0	U	10.0	9.47		ug/L		95	49 - 133
Dibromochloromethane	1.0	U	10.0	9.53		ug/L		95	62 - 122
Methylcyclohexane	1.0	U	10.0	8.24		ug/L		82	39 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*78 - 125*
4-Bromofluorobenzene (Surr)	*93*		*61 - 120*
Toluene-d8 (Surr)	*90*		*80 - 120*
Dibromofluoromethane (Surr)	*88*		*79 - 120*

Lab Sample ID: 240-60834-5 MSD
Matrix: Water
Analysis Batch: 218458

Client Sample ID: GW-17303-021116-CB-016
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10	U	20.0	17.4		ug/L		87	32 - 126	5	28
Benzene	1.0	U	10.0	9.15		ug/L		92	73 - 121	1	13
Bromodichloromethane	1.0	U	10.0	8.83		ug/L		88	72 - 120	0	19
Bromoform	1.0	U	10.0	9.77		ug/L		98	45 - 121	3	19
Bromomethane	1.0	U	10.0	10.9		ug/L		109	26 - 136	5	35
2-Butanone (MEK)	10	U	20.0	19.1		ug/L		96	49 - 132	5	19
Carbon disulfide	5.0	U	10.0	8.97		ug/L		90	54 - 144	1	34
Carbon tetrachloride	1.0	U	10.0	9.12		ug/L		91	65 - 129	0	20
Chlorobenzene	1.0	U	10.0	8.85		ug/L		89	72 - 120	0	15
Chloroethane	1.0	U	10.0	11.4		ug/L		114	27 - 131	17	35
Chloroform	1.0	U	10.0	9.23		ug/L		92	73 - 121	2	17
Chloromethane	1.0	U	10.0	8.92		ug/L		89	39 - 134	3	20
1,1-Dichloroethane	1.0	U	10.0	8.82		ug/L		88	73 - 124	1	14
1,2-Dichloroethane	1.0	U	10.0	9.01		ug/L		90	74 - 125	2	24
1,1-Dichloroethene	1.0	U	10.0	8.96		ug/L		90	67 - 124	0	24
1,2-Dichloropropane	1.0	U	10.0	9.02		ug/L		90	73 - 122	1	15
cis-1,3-Dichloropropene	1.0	U	10.0	8.79		ug/L		88	60 - 120	2	21
trans-1,3-Dichloropropene	1.0	U	10.0	7.94		ug/L		79	58 - 132	2	22

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

Lab Sample ID: 240-60834-5 MSD
Matrix: Water
Analysis Batch: 218458

Client Sample ID: GW-17303-021116-CB-016
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	1.0	U	10.0	8.75		ug/L		88	68 - 121	2	16
2-Hexanone	10	U	20.0	19.7		ug/L		98	49 - 142	4	27
Methylene Chloride	5.0	U	10.0	9.63		ug/L		96	70 - 124	2	14
4-Methyl-2-pentanone (MIBK)	10	U	20.0	19.5		ug/L		98	58 - 136	6	32
Styrene	1.0	U	10.0	9.48		ug/L		95	64 - 126	2	15
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.72		ug/L		97	61 - 130	4	18
Tetrachloroethene	1.0	U	10.0	8.91		ug/L		89	59 - 125	1	20
Toluene	1.0	U	10.0	8.88		ug/L		89	72 - 122	0	15
Trichloroethene	1.0	U	10.0	8.95		ug/L		89	61 - 129	2	14
Vinyl chloride	0.72	J	10.0	9.43		ug/L		87	44 - 122	2	35
Xylenes, Total	2.0	U	20.0	18.2		ug/L		91	67 - 122	2	14
1,1,1-Trichloroethane	1.0	U	10.0	8.93		ug/L		89	69 - 122	4	14
1,1,2-Trichloroethane	1.0	U	10.0	9.34		ug/L		93	72 - 125	0	19
Cyclohexane	1.0	U	10.0	8.71		ug/L		87	41 - 137	4	35
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	9.86		ug/L		99	42 - 130	6	24
1,2-Dibromoethane	1.0	U	10.0	9.93		ug/L		99	69 - 125	2	24
Dichlorodifluoromethane	1.0	U	10.0	6.78		ug/L		68	14 - 137	3	34
cis-1,2-Dichloroethene	1.0	U	10.0	9.18		ug/L		92	66 - 124	2	22
trans-1,2-Dichloroethene	1.0	U	10.0	9.22		ug/L		92	72 - 125	2	25
Isopropylbenzene	1.0	U	10.0	8.84		ug/L		88	61 - 122	2	20
Methyl acetate	10	U	50.0	46.6		ug/L		93	64 - 124	4	12
Methyl tert-butyl ether	1.0	U	10.0	8.79		ug/L		88	61 - 121	4	12
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	8.84		ug/L		88	44 - 140	1	35
1,2,4-Trichlorobenzene	1.0	U	10.0	8.20		ug/L		82	48 - 120	5	28
1,2-Dichlorobenzene	1.0	U	10.0	8.76		ug/L		88	67 - 118	1	15
1,3-Dichlorobenzene	1.0	U	10.0	8.64		ug/L		86	65 - 120	0	15
1,4-Dichlorobenzene	1.0	U	10.0	8.57		ug/L		86	66 - 120	2	16
Trichlorofluoromethane	1.0	U	10.0	9.46		ug/L		95	49 - 133	0	25
Dibromochloromethane	1.0	U	10.0	9.31		ug/L		93	62 - 122	2	19
Methylcyclohexane	1.0	U	10.0	8.56		ug/L		86	39 - 135	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*78 - 125*
4-Bromofluorobenzene (Surr)	*93*		*61 - 120*
Toluene-d8 (Surr)	*89*		*80 - 120*
Dibromofluoromethane (Surr)	*89*		*79 - 120*

Lab Sample ID: MB 240-218691/6
Matrix: Water
Analysis Batch: 218691

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	0.94	ug/L			02/23/16 14:40	1
Benzene	1.0	U	1.0	0.35	ug/L			02/23/16 14:40	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/23/16 14:40	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/23/16 14:40	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/23/16 14:40	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

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

Lab Sample ID: MB 240-218691/6
Matrix: Water
Analysis Batch: 218691

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/23/16 14:40	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/23/16 14:40	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/23/16 14:40	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 14:40	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/23/16 14:40	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/23/16 14:40	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/23/16 14:40	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/23/16 14:40	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/23/16 14:40	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/23/16 14:40	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/23/16 14:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/23/16 14:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/23/16 14:40	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/23/16 14:40	1
2-Hexanone	10	U	10	0.48	ug/L			02/23/16 14:40	1
Methylene Chloride	0.517	J	5.0	0.33	ug/L			02/23/16 14:40	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/23/16 14:40	1
Styrene	1.0	U	1.0	0.45	ug/L			02/23/16 14:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/23/16 14:40	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/23/16 14:40	1
Toluene	1.0	U	1.0	0.23	ug/L			02/23/16 14:40	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/23/16 14:40	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/23/16 14:40	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/23/16 14:40	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/23/16 14:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/23/16 14:40	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/23/16 14:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/23/16 14:40	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/23/16 14:40	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/23/16 14:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/23/16 14:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/23/16 14:40	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/23/16 14:40	1
Methyl acetate	10	U	10	2.3	ug/L			02/23/16 14:40	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/23/16 14:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/23/16 14:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/23/16 14:40	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/23/16 14:40	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/23/16 14:40	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/23/16 14:40	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/23/16 14:40	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/23/16 14:40	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/23/16 14:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 125*		*02/23/16 14:40*	*1*
4-Bromofluorobenzene (Surr)	*83*		*61 - 120*		*02/23/16 14:40*	*1*
Toluene-d8 (Surr)	*85*		*80 - 120*		*02/23/16 14:40*	*1*

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

Lab Sample ID: MB 240-218691/6
Matrix: Water
Analysis Batch: 218691

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	88		79 - 120		02/23/16 14:40	1

Lab Sample ID: LCS 240-218691/4
Matrix: Water
Analysis Batch: 218691

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	19.3		ug/L		96	34 - 148
Benzene	10.0	9.49		ug/L		95	80 - 120
Bromodichloromethane	10.0	9.29		ug/L		93	80 - 120
Bromoform	10.0	10.3		ug/L		103	56 - 122
Bromomethane	10.0	9.86		ug/L		99	38 - 132
2-Butanone (MEK)	20.0	21.0		ug/L		105	56 - 138
Carbon disulfide	10.0	9.62		ug/L		96	65 - 144
Carbon tetrachloride	10.0	9.94		ug/L		99	77 - 131
Chlorobenzene	10.0	9.46		ug/L		95	80 - 120
Chloroethane	10.0	7.99		ug/L		80	36 - 126
Chloroform	10.0	9.47		ug/L		95	80 - 120
Chloromethane	10.0	8.77		ug/L		88	48 - 133
1,1-Dichloroethane	10.0	9.14		ug/L		91	79 - 125
1,2-Dichloroethane	10.0	9.20		ug/L		92	80 - 120
1,1-Dichloroethene	10.0	9.66		ug/L		97	76 - 124
1,2-Dichloropropane	10.0	9.66		ug/L		97	78 - 124
cis-1,3-Dichloropropene	10.0	9.94		ug/L		99	74 - 126
trans-1,3-Dichloropropene	10.0	8.71		ug/L		87	75 - 131
Ethylbenzene	10.0	9.51		ug/L		95	80 - 120
2-Hexanone	20.0	20.5		ug/L		103	55 - 141
Methylene Chloride	10.0	10.5		ug/L		105	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	20.9		ug/L		104	64 - 135
Styrene	10.0	10.0		ug/L		100	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.0		ug/L		100	71 - 123
Tetrachloroethene	10.0	9.66		ug/L		97	78 - 121
Toluene	10.0	9.51		ug/L		95	80 - 120
Trichloroethene	10.0	9.60		ug/L		96	80 - 121
Vinyl chloride	10.0	8.82		ug/L		88	52 - 121
Xylenes, Total	20.0	19.3		ug/L		97	80 - 120
1,1,1-Trichloroethane	10.0	9.59		ug/L		96	77 - 123
1,1,2-Trichloroethane	10.0	9.61		ug/L		96	80 - 120
Cyclohexane	10.0	9.93		ug/L		99	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	10.0		ug/L		100	50 - 132
1,2-Dibromoethane	10.0	10.4		ug/L		104	80 - 120
Dichlorodifluoromethane	10.0	7.53		ug/L		75	23 - 136
cis-1,2-Dichloroethene	10.0	9.57		ug/L		96	79 - 120
trans-1,2-Dichloroethene	10.0	9.70		ug/L		97	80 - 124
Isopropylbenzene	10.0	9.72		ug/L		97	77 - 120
Methyl acetate	50.0	51.0		ug/L		102	67 - 131
Methyl tert-butyl ether	10.0	9.13		ug/L		91	69 - 121

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

Lab Sample ID: LCS 240-218691/4
Matrix: Water
Analysis Batch: 218691

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	9.80		ug/L		98	67 - 138		
1,2,4-Trichlorobenzene			10.0	8.67		ug/L		87	61 - 120		
1,2-Dichlorobenzene			10.0	9.52		ug/L		95	79 - 120		
1,3-Dichlorobenzene			10.0	9.46		ug/L		95	79 - 120		
1,4-Dichlorobenzene			10.0	9.24		ug/L		92	79 - 120		
Trichlorofluoromethane			10.0	10.2		ug/L		102	61 - 133		
Dibromochloromethane			10.0	10.0		ug/L		100	74 - 120		
Methylcyclohexane			10.0	9.99		ug/L		100	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*78 - 125*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*
Toluene-d8 (Surr)	*90*		*80 - 120*
Dibromofluoromethane (Surr)	*88*		*79 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-60834-1	SW-17303-021016-CB-012	89	80	84	86
240-60834-2	SW-17303-021016-CB-013	88	84	86	88
240-60834-3	SW-17303-021016-CB-014	91	82	84	86
240-60834-4	GW-17303-021116-CB-015	91	82	84	88
240-60834-5	GW-17303-021116-CB-016	92	83	84	88
240-60834-5 MS	GW-17303-021116-CB-016	83	93	90	88
240-60834-5 MSD	GW-17303-021116-CB-016	84	93	89	89
240-60834-6	GW-17303-021116-CB-017	92	84	86	89
240-60834-7	GW-17303-021116-CB-018	91	83	85	89
240-60834-8	GW-17303-021116-CB-019	90	82	87	87
240-60834-9	GW-17303-021116-CB-020	89	81	85	87
240-60834-10	TB-17303-021116-CB-022	89	82	84	86
240-60834-11	GW-17303-021116-CB-021	89	82	85	89
LCS 240-218458/4	Lab Control Sample	84	92	88	90
LCS 240-218691/4	Lab Control Sample	82	92	90	88
MB 240-218458/6	Method Blank	89	84	84	87
MB 240-218691/6	Method Blank	92	83	85	88

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

Client Sample ID: SW-17303-021016-CB-012 — Lab Sample ID: 240-60834-1

Date Collected: 02/10/16 14:50 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	218691	02/23/16 17:16	LRW	TAL CAN

Client Sample ID: SW-17303-021016-CB-013 — Lab Sample ID: 240-60834-2

Date Collected: 02/10/16 15:00 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	218691	02/23/16 17:38	LRW	TAL CAN

Client Sample ID: SW-17303-021016-CB-014 — Lab Sample ID: 240-60834-3

Date Collected: 02/10/16 15:10 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	218691	02/23/16 18:00	LRW	TAL CAN

Client Sample ID: GW-17303-021116-CB-015 — Lab Sample ID: 240-60834-4

Date Collected: 02/11/16 15:05 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	218691	02/23/16 18:22	LRW	TAL CAN

Client Sample ID: GW-17303-021116-CB-016 — Lab Sample ID: 240-60834-5

Date Collected: 02/11/16 09:45 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	218458	02/22/16 21:11	LRW	TAL CAN

Client Sample ID: GW-17303-021116-CB-017 — Lab Sample ID: 240-60834-6

Date Collected: 02/11/16 11:45 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		28.57	218458	02/22/16 19:20	LRW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

Client Sample ID: GW-17303-021116-CB-018 — Lab Sample ID: 240-60834-7

Date Collected: 02/11/16 11:25 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	218458	02/22/16 19:42	LRW	TAL CAN

Client Sample ID: GW-17303-021116-CB-019 — Lab Sample ID: 240-60834-8

Date Collected: 02/11/16 14:40 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		166.67	218458	02/22/16 20:04	LRW	TAL CAN

Client Sample ID: GW-17303-021116-CB-020 — Lab Sample ID: 240-60834-9

Date Collected: 02/11/16 15:45 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8	218458	02/22/16 20:27	LRW	TAL CAN

Client Sample ID: TB-17303-021116-CB-022 — Lab Sample ID: 240-60834-10

Date Collected: 02/11/16 00:00 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	218691	02/23/16 18:45	LRW	TAL CAN

Client Sample ID: GW-17303-021116-CB-021 — Lab Sample ID: 240-60834-11

Date Collected: 02/11/16 16:10 — **Matrix: Water**
Date Received: 02/12/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	218458	02/22/16 20:49	LRW	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-60834-1

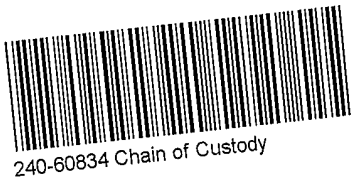
Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16 *
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-16 *
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16 *
West Virginia DEP	State Program	3	210	12-31-15 *
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

0.61 CO.1

Chain of Custody Record

122754

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/11/2016	COC No: 006
Company Name: GHD	Tel/Fax: (734) 453-5123	Lab Contact: D. Heckler	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: (734) 453-5123	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: # 017303	☐ 2 days			Job / SDG No.:
PO# SSOW# 17303-033	☐ 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 VOCs	Sample Specific Notes:
SW GW-17303-021016-CB-012	02/10/16	1450	G	WS	3	N	N	X	
-013		1500			3			X	
-014		1510			3			X	
GW- -021116- -015	02/11/16	1505		WG	3		Y	X	
-016		945			9		Y	X	
-017		1145			3		N	X	
-018		1125			3			X	
-019		1440			3			X	
-020		1545			3			X	
TB- -022 CB.		—	~~WG~~ WG	WG	1			X	
GW- -021		1610	G	WG	3	N	N	X	

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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:
1	C. Bondy	GHD	02/11/16 1500		TA	2-12-16 945
2	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
3	Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

2/26/2016

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 60854

Client GHD Site Name

Cooler Received on 2-12-16 Opened on 2-12-16

Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS Stetson 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# 48 (CF -1.9 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN# 18 (CF -0.5 °C) Observed Cooler Temp. 0.6 °C Corrected Cooler Temp. 0.1 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
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 sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC559158
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? 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

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):

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI-NC-099X-011816 Cooler Receipt Form.doc djl

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: 240-61103-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Authorized for release by:
3/3/2016 10:17:10 AM
Nathan Pietras, Project Manager II
(330)966-8296
nathan.pietras@testamericainc.com

Designee for

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: 240-61103-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-61103-1

Comments
No additional comments.

Receipt
The samples were received on 2/19/2016 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9º C.

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

GC VOA
No analytical or quality issues were noted, other than those described 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.

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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Qualifiers

GC/MS VOA

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.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

GC 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.
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-61103-1	GW-17303-021716-CB-022	Water	02/17/16 11:15	02/19/16 09:30
240-61103-2	GW-17303-021716-CB-023	Water	02/17/16 12:55	02/19/16 09:30
240-61103-3	GW-17303-021716-CB-024	Water	02/17/16 14:15	02/19/16 09:30
240-61103-4	GW-17303-021716-CB-025	Water	02/17/16 15:45	02/19/16 09:30
240-61103-5	GW-17303-021816-CB-026	Water	02/18/16 09:55	02/19/16 09:30
240-61103-6	GW-17303-021816-CB-027	Water	02/18/16 11:40	02/19/16 09:30
240-61103-7	GW-17303-021816-CB-028	Water	02/18/16 13:10	02/19/16 09:30
240-61103-8	GW-17303-021816-CB-029	Water	02/18/16 00:00	02/19/16 09:30
240-61103-9	TB-17303-021816-CB-030	Water	02/18/16 00:00	02/19/16 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Client Sample ID: GW-17303-021716-CB-022 — Lab Sample ID: 240-61103-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	14		3.3	0.73	ug/L	3.33		8260B	Total/NA
Vinyl chloride	110		3.3	0.97	ug/L	3.33		8260B	Total/NA
cis-1,2-Dichloroethene	46		3.3	0.87	ug/L	3.33		8260B	Total/NA
trans-1,2-Dichloroethene	5.4		3.3	1.0	ug/L	3.33		8260B	Total/NA

Client Sample ID: GW-17303-021716-CB-023 — Lab Sample ID: 240-61103-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	68	J B	400	38	ug/L	40		8260B	Total/NA
Chlorobenzene	160		40	10	ug/L	40		8260B	Total/NA
Ethylbenzene	72		40	10	ug/L	40		8260B	Total/NA
Toluene	16	J	40	9.2	ug/L	40		8260B	Total/NA
Trichloroethene	8.8	J	40	8.8	ug/L	40		8260B	Total/NA
Vinyl chloride	1100		40	12	ug/L	40		8260B	Total/NA
Xylenes, Total	27	J	80	21	ug/L	40		8260B	Total/NA
cis-1,2-Dichloroethene	760		40	10	ug/L	40		8260B	Total/NA

Client Sample ID: GW-17303-021716-CB-024 — Lab Sample ID: 240-61103-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	300	J B	2000	190	ug/L	200		8260B	Total/NA
Vinyl chloride	7000		200	58	ug/L	200		8260B	Total/NA

Client Sample ID: GW-17303-021716-CB-025 — Lab Sample ID: 240-61103-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.34	J	1.0	0.29	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-021816-CB-026 — Lab Sample ID: 240-61103-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	73	J B	500	47	ug/L	50		8260B	Total/NA
Vinyl chloride	1600		50	15	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	980	F1	50	13	ug/L	50		8260B	Total/NA
trans-1,2-Dichloroethene	54		50	15	ug/L	50		8260B	Total/NA
Methane	360	F1	0.50	0.080	ug/L	1		RSK-175	Total/NA
Ethane	0.37	J	0.50	0.14	ug/L	1		RSK-175	Total/NA
Ethylene	240	F1	0.50	0.13	ug/L	1		RSK-175	Total/NA
Iron	2600	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	560	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	3000	B	100	13	ug/L	1		6010B	Dissolved
Manganese	610	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	430		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	100	F1	1.0	0.41	mg/L	1		300.0	Total/NA
Sulfate	56	B F1	1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	2.8	B	1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: GW-17303-021816-CB-027 — Lab Sample ID: 240-61103-6

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17303-021816-CB-027 (Continued) — Lab Sample ID: 240-61103-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	69	J B	670	63	ug/L	66.67		8260B	Total/NA
Vinyl chloride	2600		67	19	ug/L	66.67		8260B	Total/NA
cis-1,2-Dichloroethene	860		67	17	ug/L	66.67		8260B	Total/NA

Client Sample ID: GW-17303-021816-CB-028 — Lab Sample ID: 240-61103-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	720	J B	5000	470	ug/L	500		8260B	Total/NA
Vinyl chloride	14000		500	150	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene	3700		500	130	ug/L	500		8260B	Total/NA
trans-1,2-Dichloroethene	170	J	500	150	ug/L	500		8260B	Total/NA
Methane	230		0.50	0.080	ug/L	1		RSK-175	Total/NA
Ethane	7.3		0.50	0.14	ug/L	1		RSK-175	Total/NA
Ethylene	720		0.50	0.13	ug/L	1		RSK-175	Total/NA
Iron	3300	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	110	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	3300	B	100	13	ug/L	1		6010B	Dissolved
Manganese	110	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	380		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	160		1.0	0.41	mg/L	1		300.0	Total/NA
Nitrate as N	0.18		0.10	0.035	mg/L	1		300.0	Total/NA
Sulfate	16	B	1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	3.0	B	1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: GW-17303-021816-CB-029 — Lab Sample ID: 240-61103-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	310	J B	2000	190	ug/L	200		8260B	Total/NA
Methylene Chloride	67	J B	1000	66	ug/L	200		8260B	Total/NA
Vinyl chloride	4800		200	58	ug/L	200		8260B	Total/NA
cis-1,2-Dichloroethene	81	J	200	52	ug/L	200		8260B	Total/NA

Client Sample ID: TB-17303-021816-CB-030 — Lab Sample ID: 240-61103-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.1	J B	10	0.94	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
RSK-175	Dissolved Gases (GC)	RSK	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
2320B-1997	Alkalinity, Total	SM	TAL CAN
300.0	Anions, Ion Chromatography	MCAWW	TAL CAN
9060	Organic Carbon, Total (TOC)	SW846	TAL CAN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

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: GW-17303-021716-CB-022
Date Collected: 02/17/16 11:15
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	33	U	33	3.1	ug/L			02/25/16 16:08	3.33
Benzene	3.3	U	3.3	1.2	ug/L			02/25/16 16:08	3.33
Bromodichloromethane	3.3	U	3.3	0.97	ug/L			02/25/16 16:08	3.33
Bromoform	3.3	U	3.3	1.9	ug/L			02/25/16 16:08	3.33
Bromomethane	3.3	U	3.3	1.5	ug/L			02/25/16 16:08	3.33
2-Butanone (MEK)	33	U	33	1.8	ug/L			02/25/16 16:08	3.33
Carbon disulfide	17	U	17	1.3	ug/L			02/25/16 16:08	3.33
Carbon tetrachloride	3.3	U	3.3	1.4	ug/L			02/25/16 16:08	3.33
Chlorobenzene	3.3	U	3.3	0.83	ug/L			02/25/16 16:08	3.33
Chloroethane	3.3	U	3.3	1.1	ug/L			02/25/16 16:08	3.33
Chloroform	3.3	U	3.3	0.83	ug/L			02/25/16 16:08	3.33
Chloromethane	3.3	U	3.3	1.5	ug/L			02/25/16 16:08	3.33
1,1-Dichloroethane	3.3	U	3.3	1.0	ug/L			02/25/16 16:08	3.33
1,2-Dichloroethane	3.3	U	3.3	0.77	ug/L			02/25/16 16:08	3.33
1,1-Dichloroethene	3.3	U	3.3	1.5	ug/L			02/25/16 16:08	3.33
1,2-Dichloropropane	3.3	U	3.3	0.83	ug/L			02/25/16 16:08	3.33
cis-1,3-Dichloropropene	3.3	U	3.3	1.5	ug/L			02/25/16 16:08	3.33
trans-1,3-Dichloropropene	3.3	U	3.3	1.9	ug/L			02/25/16 16:08	3.33
Ethylbenzene	3.3	U	3.3	0.83	ug/L			02/25/16 16:08	3.33
2-Hexanone	33	U	33	1.6	ug/L			02/25/16 16:08	3.33
Methylene Chloride	17	U	17	1.1	ug/L			02/25/16 16:08	3.33
4-Methyl-2-pentanone (MIBK)	33	U	33	3.3	ug/L			02/25/16 16:08	3.33
Styrene	3.3	U	3.3	1.5	ug/L			02/25/16 16:08	3.33
1,1,2,2-Tetrachloroethane	3.3	U	3.3	0.73	ug/L			02/25/16 16:08	3.33
Tetrachloroethene	3.3	U	3.3	1.0	ug/L			02/25/16 16:08	3.33
Toluene	3.3	U	3.3	0.77	ug/L			02/25/16 16:08	3.33
Trichloroethene	**14**		3.3	0.73	ug/L			02/25/16 16:08	3.33
Vinyl chloride	**110**		3.3	0.97	ug/L			02/25/16 16:08	3.33
Xylenes, Total	6.7	U	6.7	1.7	ug/L			02/25/16 16:08	3.33
1,1,1-Trichloroethane	3.3	U	3.3	1.5	ug/L			02/25/16 16:08	3.33
1,1,2-Trichloroethane	3.3	U	3.3	0.80	ug/L			02/25/16 16:08	3.33
Cyclohexane	3.3	U	3.3	1.5	ug/L			02/25/16 16:08	3.33
1,2-Dibromo-3-Chloropropane	3.3	U	3.3	2.7	ug/L			02/25/16 16:08	3.33
1,2-Dibromoethane	3.3	U	3.3	1.1	ug/L			02/25/16 16:08	3.33
Dichlorodifluoromethane	3.3	U	3.3	1.1	ug/L			02/25/16 16:08	3.33
cis-1,2-Dichloroethene	**46**		3.3	0.87	ug/L			02/25/16 16:08	3.33
trans-1,2-Dichloroethene	**5.4**		3.3	1.0	ug/L			02/25/16 16:08	3.33
Isopropylbenzene	3.3	U	3.3	1.2	ug/L			02/25/16 16:08	3.33
Methyl acetate	33	U	33	7.6	ug/L			02/25/16 16:08	3.33
Methyl tert-butyl ether	3.3	U	3.3	0.67	ug/L			02/25/16 16:08	3.33
1,1,2-Trichloro-1,2,2-trifluoroethane	3.3	U	3.3	1.5	ug/L			02/25/16 16:08	3.33
1,2,4-Trichlorobenzene	3.3	U	3.3	1.1	ug/L			02/25/16 16:08	3.33
1,2-Dichlorobenzene	3.3	U	3.3	0.83	ug/L			02/25/16 16:08	3.33
1,3-Dichlorobenzene	3.3	U	3.3	0.63	ug/L			02/25/16 16:08	3.33
1,4-Dichlorobenzene	3.3	U	3.3	0.90	ug/L			02/25/16 16:08	3.33
Trichlorofluoromethane	3.3	U	3.3	1.6	ug/L			02/25/16 16:08	3.33
Dibromochloromethane	3.3	U	3.3	1.4	ug/L			02/25/16 16:08	3.33
Methylcyclohexane	3.3	U	3.3	1.4	ug/L			02/25/16 16:08	3.33

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		78 - 125		02/25/16 16:08	3.33
4-Bromofluorobenzene (Surr)	97		61 - 120		02/25/16 16:08	3.33
Toluene-d8 (Surr)	108		80 - 120		02/25/16 16:08	3.33
Dibromofluoromethane (Surr)	100		79 - 120		02/25/16 16:08	3.33

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

Client Sample ID: GW-17303-021716-CB-023
Date Collected: 02/17/16 12:55
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**68**	**J B**	400	38	ug/L			02/25/16 16:30	40
Benzene	40	U	40	14	ug/L			02/25/16 16:30	40
Bromodichloromethane	40	U	40	12	ug/L			02/25/16 16:30	40
Bromoform	40	U	40	22	ug/L			02/25/16 16:30	40
Bromomethane	40	U	40	18	ug/L			02/25/16 16:30	40
2-Butanone (MEK)	400	U	400	21	ug/L			02/25/16 16:30	40
Carbon disulfide	200	U	200	15	ug/L			02/25/16 16:30	40
Carbon tetrachloride	40	U	40	17	ug/L			02/25/16 16:30	40
Chlorobenzene	**160**		40	10	ug/L			02/25/16 16:30	40
Chloroethane	40	U	40	13	ug/L			02/25/16 16:30	40
Chloroform	40	U	40	10	ug/L			02/25/16 16:30	40
Chloromethane	40	U	40	18	ug/L			02/25/16 16:30	40
1,1-Dichloroethane	40	U	40	12	ug/L			02/25/16 16:30	40
1,2-Dichloroethane	40	U	40	9.2	ug/L			02/25/16 16:30	40
1,1-Dichloroethene	40	U	40	18	ug/L			02/25/16 16:30	40
1,2-Dichloropropane	40	U	40	10	ug/L			02/25/16 16:30	40
cis-1,3-Dichloropropene	40	U	40	18	ug/L			02/25/16 16:30	40
trans-1,3-Dichloropropene	40	U	40	22	ug/L			02/25/16 16:30	40
Ethylbenzene	**72**		40	10	ug/L			02/25/16 16:30	40
2-Hexanone	400	U	400	19	ug/L			02/25/16 16:30	40
Methylene Chloride	200	U	200	13	ug/L			02/25/16 16:30	40
4-Methyl-2-pentanone (MIBK)	400	U	400	40	ug/L			02/25/16 16:30	40
Styrene	40	U	40	18	ug/L			02/25/16 16:30	40
1,1,2,2-Tetrachloroethane	40	U	40	8.8	ug/L			02/25/16 16:30	40
Tetrachloroethene	40	U	40	12	ug/L			02/25/16 16:30	40
Toluene	**16**	**J**	40	9.2	ug/L			02/25/16 16:30	40
Trichloroethene	**8.8**	**J**	40	8.8	ug/L			02/25/16 16:30	40
Vinyl chloride	**1100**		40	12	ug/L			02/25/16 16:30	40
Xylenes, Total	**27**	**J**	80	21	ug/L			02/25/16 16:30	40
1,1,1-Trichloroethane	40	U	40	18	ug/L			02/25/16 16:30	40
1,1,2-Trichloroethane	40	U	40	9.6	ug/L			02/25/16 16:30	40
Cyclohexane	40	U	40	18	ug/L			02/25/16 16:30	40
1,2-Dibromo-3-Chloropropane	40	U	40	33	ug/L			02/25/16 16:30	40
1,2-Dibromoethane	40	U	40	13	ug/L			02/25/16 16:30	40
Dichlorodifluoromethane	40	U	40	13	ug/L			02/25/16 16:30	40
cis-1,2-Dichloroethene	**760**		40	10	ug/L			02/25/16 16:30	40
trans-1,2-Dichloroethene	40	U	40	12	ug/L			02/25/16 16:30	40
Isopropylbenzene	40	U	40	14	ug/L			02/25/16 16:30	40
Methyl acetate	400	U	400	91	ug/L			02/25/16 16:30	40
Methyl tert-butyl ether	40	U	40	8.0	ug/L			02/25/16 16:30	40
1,1,2-Trichloro-1,2,2-trifluoroethane	40	U	40	18	ug/L			02/25/16 16:30	40
1,2,4-Trichlorobenzene	40	U	40	13	ug/L			02/25/16 16:30	40
1,2-Dichlorobenzene	40	U	40	10	ug/L			02/25/16 16:30	40
1,3-Dichlorobenzene	40	U	40	7.6	ug/L			02/25/16 16:30	40
1,4-Dichlorobenzene	40	U	40	11	ug/L			02/25/16 16:30	40
Trichlorofluoromethane	40	U	40	20	ug/L			02/25/16 16:30	40
Dibromochloromethane	40	U	40	17	ug/L			02/25/16 16:30	40
Methylcyclohexane	40	U	40	17	ug/L			02/25/16 16:30	40

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		78 - 125		02/25/16 16:30	40
4-Bromofluorobenzene (Surr)	93		61 - 120		02/25/16 16:30	40
Toluene-d8 (Surr)	103		80 - 120		02/25/16 16:30	40
Dibromofluoromethane (Surr)	96		79 - 120		02/25/16 16:30	40

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

Client Sample ID: GW-17303-021716-CB-024
Date Collected: 02/17/16 14:15
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**300**	**J B**	2000	190	ug/L			02/25/16 16:53	200
Benzene	200	U	200	70	ug/L			02/25/16 16:53	200
Bromodichloromethane	200	U	200	58	ug/L			02/25/16 16:53	200
Bromoform	200	U	200	110	ug/L			02/25/16 16:53	200
Bromomethane	200	U	200	88	ug/L			02/25/16 16:53	200
2-Butanone (MEK)	2000	U	2000	110	ug/L			02/25/16 16:53	200
Carbon disulfide	1000	U	1000	76	ug/L			02/25/16 16:53	200
Carbon tetrachloride	200	U	200	86	ug/L			02/25/16 16:53	200
Chlorobenzene	200	U	200	50	ug/L			02/25/16 16:53	200
Chloroethane	200	U	200	64	ug/L			02/25/16 16:53	200
Chloroform	200	U	200	50	ug/L			02/25/16 16:53	200
Chloromethane	200	U	200	88	ug/L			02/25/16 16:53	200
1,1-Dichloroethane	200	U	200	60	ug/L			02/25/16 16:53	200
1,2-Dichloroethane	200	U	200	46	ug/L			02/25/16 16:53	200
1,1-Dichloroethene	200	U	200	90	ug/L			02/25/16 16:53	200
1,2-Dichloropropane	200	U	200	50	ug/L			02/25/16 16:53	200
cis-1,3-Dichloropropene	200	U	200	92	ug/L			02/25/16 16:53	200
trans-1,3-Dichloropropene	200	U	200	110	ug/L			02/25/16 16:53	200
Ethylbenzene	200	U	200	50	ug/L			02/25/16 16:53	200
2-Hexanone	2000	U	2000	96	ug/L			02/25/16 16:53	200
Methylene Chloride	1000	U	1000	66	ug/L			02/25/16 16:53	200
4-Methyl-2-pentanone (MIBK)	2000	U	2000	200	ug/L			02/25/16 16:53	200
Styrene	200	U	200	90	ug/L			02/25/16 16:53	200
1,1,2,2-Tetrachloroethane	200	U	200	44	ug/L			02/25/16 16:53	200
Tetrachloroethene	200	U	200	62	ug/L			02/25/16 16:53	200
Toluene	200	U	200	46	ug/L			02/25/16 16:53	200
Trichloroethene	200	U	200	44	ug/L			02/25/16 16:53	200
Vinyl chloride	**7000**		200	58	ug/L			02/25/16 16:53	200
Xylenes, Total	400	U	400	100	ug/L			02/25/16 16:53	200
1,1,1-Trichloroethane	200	U	200	88	ug/L			02/25/16 16:53	200
1,1,2-Trichloroethane	200	U	200	48	ug/L			02/25/16 16:53	200
Cyclohexane	200	U	200	90	ug/L			02/25/16 16:53	200
1,2-Dibromo-3-Chloropropane	200	U	200	160	ug/L			02/25/16 16:53	200
1,2-Dibromoethane	200	U	200	64	ug/L			02/25/16 16:53	200
Dichlorodifluoromethane	200	U	200	64	ug/L			02/25/16 16:53	200
cis-1,2-Dichloroethene	200	U	200	52	ug/L			02/25/16 16:53	200
trans-1,2-Dichloroethene	200	U	200	60	ug/L			02/25/16 16:53	200
Isopropylbenzene	200	U	200	70	ug/L			02/25/16 16:53	200
Methyl acetate	2000	U	2000	450	ug/L			02/25/16 16:53	200
Methyl tert-butyl ether	200	U	200	40	ug/L			02/25/16 16:53	200
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	90	ug/L			02/25/16 16:53	200
1,2,4-Trichlorobenzene	200	U	200	64	ug/L			02/25/16 16:53	200
1,2-Dichlorobenzene	200	U	200	50	ug/L			02/25/16 16:53	200
1,3-Dichlorobenzene	200	U	200	38	ug/L			02/25/16 16:53	200
1,4-Dichlorobenzene	200	U	200	54	ug/L			02/25/16 16:53	200
Trichlorofluoromethane	200	U	200	98	ug/L			02/25/16 16:53	200
Dibromochloromethane	200	U	200	86	ug/L			02/25/16 16:53	200
Methylcyclohexane	200	U	200	86	ug/L			02/25/16 16:53	200

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		78 - 125		02/25/16 16:53	200
4-Bromofluorobenzene (Surr)	95		61 - 120		02/25/16 16:53	200
Toluene-d8 (Surr)	107		80 - 120		02/25/16 16:53	200
Dibromofluoromethane (Surr)	99		79 - 120		02/25/16 16:53	200

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

Client Sample ID: GW-17303-021716-CB-025
Date Collected: 02/17/16 15:45
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/25/16 17:15	1
Benzene	1.0	U	1.0	0.35	ug/L			02/25/16 17:15	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/25/16 17:15	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/25/16 17:15	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/25/16 17:15	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/25/16 17:15	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/25/16 17:15	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/25/16 17:15	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 17:15	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/25/16 17:15	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/25/16 17:15	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/25/16 17:15	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/25/16 17:15	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/25/16 17:15	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/25/16 17:15	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/25/16 17:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/25/16 17:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/25/16 17:15	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/25/16 17:15	1
2-Hexanone	10	U	10	0.48	ug/L			02/25/16 17:15	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/25/16 17:15	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/25/16 17:15	1
Styrene	1.0	U	1.0	0.45	ug/L			02/25/16 17:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/25/16 17:15	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/25/16 17:15	1
Toluene	1.0	U	1.0	0.23	ug/L			02/25/16 17:15	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/25/16 17:15	1
Vinyl chloride	**0.34**	**J**	1.0	0.29	ug/L			02/25/16 17:15	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/25/16 17:15	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/25/16 17:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/25/16 17:15	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/25/16 17:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/25/16 17:15	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/25/16 17:15	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/25/16 17:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/25/16 17:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/25/16 17:15	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/25/16 17:15	1
Methyl acetate	10	U	10	2.3	ug/L			02/25/16 17:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/25/16 17:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/25/16 17:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/25/16 17:15	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 17:15	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/25/16 17:15	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/25/16 17:15	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/25/16 17:15	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/25/16 17:15	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/25/16 17:15	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		78 - 125		02/25/16 17:15	1
4-Bromofluorobenzene (Surr)	94		61 - 120		02/25/16 17:15	1
Toluene-d8 (Surr)	105		80 - 120		02/25/16 17:15	1
Dibromofluoromethane (Surr)	99		79 - 120		02/25/16 17:15	1

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

Client Sample ID: GW-17303-021816-CB-026
Date Collected: 02/18/16 09:55
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**73**	**J B**	500	47	ug/L			02/25/16 17:38	50
Benzene	50	U F2	50	18	ug/L			02/25/16 17:38	50
Bromodichloromethane	50	U	50	15	ug/L			02/25/16 17:38	50
Bromoform	50	U	50	28	ug/L			02/25/16 17:38	50
Bromomethane	50	U	50	22	ug/L			02/25/16 17:38	50
2-Butanone (MEK)	500	U	500	27	ug/L			02/25/16 17:38	50
Carbon disulfide	250	U	250	19	ug/L			02/25/16 17:38	50
Carbon tetrachloride	50	U	50	22	ug/L			02/25/16 17:38	50
Chlorobenzene	50	U	50	13	ug/L			02/25/16 17:38	50
Chloroethane	50	U	50	16	ug/L			02/25/16 17:38	50
Chloroform	50	U	50	13	ug/L			02/25/16 17:38	50
Chloromethane	50	U	50	22	ug/L			02/25/16 17:38	50
1,1-Dichloroethane	50	U F2	50	15	ug/L			02/25/16 17:38	50
1,2-Dichloroethane	50	U	50	12	ug/L			02/25/16 17:38	50
1,1-Dichloroethene	50	U	50	23	ug/L			02/25/16 17:38	50
1,2-Dichloropropane	50	U F2	50	13	ug/L			02/25/16 17:38	50
cis-1,3-Dichloropropene	50	U	50	23	ug/L			02/25/16 17:38	50
trans-1,3-Dichloropropene	50	U	50	28	ug/L			02/25/16 17:38	50
Ethylbenzene	50	U	50	13	ug/L			02/25/16 17:38	50
2-Hexanone	500	U	500	24	ug/L			02/25/16 17:38	50
Methylene Chloride	250	U	250	17	ug/L			02/25/16 17:38	50
4-Methyl-2-pentanone (MIBK)	500	U	500	50	ug/L			02/25/16 17:38	50
Styrene	50	U	50	23	ug/L			02/25/16 17:38	50
1,1,2,2-Tetrachloroethane	50	U	50	11	ug/L			02/25/16 17:38	50
Tetrachloroethene	50	U	50	16	ug/L			02/25/16 17:38	50
Toluene	50	U F2	50	12	ug/L			02/25/16 17:38	50
Trichloroethene	50	U F2	50	11	ug/L			02/25/16 17:38	50
Vinyl chloride	**1600**		50	15	ug/L			02/25/16 17:38	50
Xylenes, Total	100	U F2	100	26	ug/L			02/25/16 17:38	50
1,1,1-Trichloroethane	50	U	50	22	ug/L			02/25/16 17:38	50
1,1,2-Trichloroethane	50	U	50	12	ug/L			02/25/16 17:38	50
Cyclohexane	50	U	50	23	ug/L			02/25/16 17:38	50
1,2-Dibromo-3-Chloropropane	50	U	50	41	ug/L			02/25/16 17:38	50
1,2-Dibromoethane	50	U	50	16	ug/L			02/25/16 17:38	50
Dichlorodifluoromethane	50	U	50	16	ug/L			02/25/16 17:38	50
cis-1,2-Dichloroethene	**980**	**F1**	50	13	ug/L			02/25/16 17:38	50
trans-1,2-Dichloroethene	**54**		50	15	ug/L			02/25/16 17:38	50
Isopropylbenzene	50	U	50	18	ug/L			02/25/16 17:38	50
Methyl acetate	500	U	500	110	ug/L			02/25/16 17:38	50
Methyl tert-butyl ether	50	U F2	50	10	ug/L			02/25/16 17:38	50
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	50	23	ug/L			02/25/16 17:38	50
1,2,4-Trichlorobenzene	50	U	50	16	ug/L			02/25/16 17:38	50
1,2-Dichlorobenzene	50	U F2	50	13	ug/L			02/25/16 17:38	50
1,3-Dichlorobenzene	50	U F2	50	9.5	ug/L			02/25/16 17:38	50
1,4-Dichlorobenzene	50	U	50	14	ug/L			02/25/16 17:38	50
Trichlorofluoromethane	50	U	50	25	ug/L			02/25/16 17:38	50
Dibromochloromethane	50	U	50	22	ug/L			02/25/16 17:38	50
Methylcyclohexane	50	U	50	22	ug/L			02/25/16 17:38	50

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		78 - 125		02/25/16 17:38	50
4-Bromofluorobenzene (Surr)	95		61 - 120		02/25/16 17:38	50
Toluene-d8 (Surr)	109		80 - 120		02/25/16 17:38	50
Dibromofluoromethane (Surr)	99		79 - 120		02/25/16 17:38	50

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

Client Sample ID: GW-17303-021816-CB-027
Date Collected: 02/18/16 11:40
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**69**	**J B**	670	63	ug/L			02/25/16 18:00	66.67
Benzene	67	U	67	23	ug/L			02/25/16 18:00	66.67
Bromodichloromethane	67	U	67	19	ug/L			02/25/16 18:00	66.67
Bromoform	67	U	67	37	ug/L			02/25/16 18:00	66.67
Bromomethane	67	U	67	29	ug/L			02/25/16 18:00	66.67
2-Butanone (MEK)	670	U	670	35	ug/L			02/25/16 18:00	66.67
Carbon disulfide	330	U	330	25	ug/L			02/25/16 18:00	66.67
Carbon tetrachloride	67	U	67	29	ug/L			02/25/16 18:00	66.67
Chlorobenzene	67	U	67	17	ug/L			02/25/16 18:00	66.67
Chloroethane	67	U	67	21	ug/L			02/25/16 18:00	66.67
Chloroform	67	U	67	17	ug/L			02/25/16 18:00	66.67
Chloromethane	67	U	67	29	ug/L			02/25/16 18:00	66.67
1,1-Dichloroethane	67	U	67	20	ug/L			02/25/16 18:00	66.67
1,2-Dichloroethane	67	U	67	15	ug/L			02/25/16 18:00	66.67
1,1-Dichloroethene	67	U	67	30	ug/L			02/25/16 18:00	66.67
1,2-Dichloropropane	67	U	67	17	ug/L			02/25/16 18:00	66.67
cis-1,3-Dichloropropene	67	U	67	31	ug/L			02/25/16 18:00	66.67
trans-1,3-Dichloropropene	67	U	67	37	ug/L			02/25/16 18:00	66.67
Ethylbenzene	67	U	67	17	ug/L			02/25/16 18:00	66.67
2-Hexanone	670	U	670	32	ug/L			02/25/16 18:00	66.67
Methylene Chloride	330	U	330	22	ug/L			02/25/16 18:00	66.67
4-Methyl-2-pentanone (MIBK)	670	U	670	66	ug/L			02/25/16 18:00	66.67
Styrene	67	U	67	30	ug/L			02/25/16 18:00	66.67
1,1,2,2-Tetrachloroethane	67	U	67	15	ug/L			02/25/16 18:00	66.67
Tetrachloroethene	67	U	67	21	ug/L			02/25/16 18:00	66.67
Toluene	67	U	67	15	ug/L			02/25/16 18:00	66.67
Trichloroethene	67	U	67	15	ug/L			02/25/16 18:00	66.67
Vinyl chloride	**2600**		67	19	ug/L			02/25/16 18:00	66.67
Xylenes, Total	130	U	130	35	ug/L			02/25/16 18:00	66.67
1,1,1-Trichloroethane	67	U	67	29	ug/L			02/25/16 18:00	66.67
1,1,2-Trichloroethane	67	U	67	16	ug/L			02/25/16 18:00	66.67
Cyclohexane	67	U	67	30	ug/L			02/25/16 18:00	66.67
1,2-Dibromo-3-Chloropropane	67	U	67	55	ug/L			02/25/16 18:00	66.67
1,2-Dibromoethane	67	U	67	21	ug/L			02/25/16 18:00	66.67
Dichlorodifluoromethane	67	U	67	21	ug/L			02/25/16 18:00	66.67
cis-1,2-Dichloroethene	**860**		67	17	ug/L			02/25/16 18:00	66.67
trans-1,2-Dichloroethene	67	U	67	20	ug/L			02/25/16 18:00	66.67
Isopropylbenzene	67	U	67	23	ug/L			02/25/16 18:00	66.67
Methyl acetate	670	U	670	150	ug/L			02/25/16 18:00	66.67
Methyl tert-butyl ether	67	U	67	13	ug/L			02/25/16 18:00	66.67
1,1,2-Trichloro-1,2,2-trifluoroethane	67	U	67	30	ug/L			02/25/16 18:00	66.67
1,2,4-Trichlorobenzene	67	U	67	21	ug/L			02/25/16 18:00	66.67
1,2-Dichlorobenzene	67	U	67	17	ug/L			02/25/16 18:00	66.67
1,3-Dichlorobenzene	67	U	67	13	ug/L			02/25/16 18:00	66.67
1,4-Dichlorobenzene	67	U	67	18	ug/L			02/25/16 18:00	66.67
Trichlorofluoromethane	67	U	67	33	ug/L			02/25/16 18:00	66.67
Dibromochloromethane	67	U	67	29	ug/L			02/25/16 18:00	66.67
Methylcyclohexane	67	U	67	29	ug/L			02/25/16 18:00	66.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		78 - 125		02/25/16 18:00	66.67
4-Bromofluorobenzene (Surr)	94		61 - 120		02/25/16 18:00	66.67
Toluene-d8 (Surr)	104		80 - 120		02/25/16 18:00	66.67
Dibromofluoromethane (Surr)	98		79 - 120		02/25/16 18:00	66.67

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

Client Sample ID: GW-17303-021816-CB-028
Date Collected: 02/18/16 13:10
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**720**	**J B**	5000	470	ug/L			02/26/16 12:17	500
Benzene	500	U	500	180	ug/L			02/26/16 12:17	500
Bromodichloromethane	500	U	500	150	ug/L			02/26/16 12:17	500
Bromoform	500	U	500	280	ug/L			02/26/16 12:17	500
Bromomethane	500	U	500	220	ug/L			02/26/16 12:17	500
2-Butanone (MEK)	5000	U	5000	270	ug/L			02/26/16 12:17	500
Carbon disulfide	2500	U	2500	190	ug/L			02/26/16 12:17	500
Carbon tetrachloride	500	U	500	220	ug/L			02/26/16 12:17	500
Chlorobenzene	500	U	500	130	ug/L			02/26/16 12:17	500
Chloroethane	500	U	500	160	ug/L			02/26/16 12:17	500
Chloroform	500	U	500	130	ug/L			02/26/16 12:17	500
Chloromethane	500	U	500	220	ug/L			02/26/16 12:17	500
1,1-Dichloroethane	500	U	500	150	ug/L			02/26/16 12:17	500
1,2-Dichloroethane	500	U	500	120	ug/L			02/26/16 12:17	500
1,1-Dichloroethene	500	U	500	230	ug/L			02/26/16 12:17	500
1,2-Dichloropropane	500	U	500	130	ug/L			02/26/16 12:17	500
cis-1,3-Dichloropropene	500	U	500	230	ug/L			02/26/16 12:17	500
trans-1,3-Dichloropropene	500	U	500	280	ug/L			02/26/16 12:17	500
Ethylbenzene	500	U	500	130	ug/L			02/26/16 12:17	500
2-Hexanone	5000	U	5000	240	ug/L			02/26/16 12:17	500
Methylene Chloride	2500	U	2500	170	ug/L			02/26/16 12:17	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	500	ug/L			02/26/16 12:17	500
Styrene	500	U	500	230	ug/L			02/26/16 12:17	500
1,1,2,2-Tetrachloroethane	500	U	500	110	ug/L			02/26/16 12:17	500
Tetrachloroethene	500	U	500	160	ug/L			02/26/16 12:17	500
Toluene	500	U	500	120	ug/L			02/26/16 12:17	500
Trichloroethene	500	U	500	110	ug/L			02/26/16 12:17	500
Vinyl chloride	**14000**		500	150	ug/L			02/26/16 12:17	500
Xylenes, Total	1000	U	1000	260	ug/L			02/26/16 12:17	500
1,1,1-Trichloroethane	500	U	500	220	ug/L			02/26/16 12:17	500
1,1,2-Trichloroethane	500	U	500	120	ug/L			02/26/16 12:17	500
Cyclohexane	500	U	500	230	ug/L			02/26/16 12:17	500
1,2-Dibromo-3-Chloropropane	500	U	500	410	ug/L			02/26/16 12:17	500
1,2-Dibromoethane	500	U	500	160	ug/L			02/26/16 12:17	500
Dichlorodifluoromethane	500	U	500	160	ug/L			02/26/16 12:17	500
cis-1,2-Dichloroethene	**3700**		500	130	ug/L			02/26/16 12:17	500
trans-1,2-Dichloroethene	**170**	**J**	500	150	ug/L			02/26/16 12:17	500
Isopropylbenzene	500	U	500	180	ug/L			02/26/16 12:17	500
Methyl acetate	5000	U	5000	1100	ug/L			02/26/16 12:17	500
Methyl tert-butyl ether	500	U	500	100	ug/L			02/26/16 12:17	500
1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	230	ug/L			02/26/16 12:17	500
1,2,4-Trichlorobenzene	500	U	500	160	ug/L			02/26/16 12:17	500
1,2-Dichlorobenzene	500	U	500	130	ug/L			02/26/16 12:17	500
1,3-Dichlorobenzene	500	U	500	95	ug/L			02/26/16 12:17	500
1,4-Dichlorobenzene	500	U	500	140	ug/L			02/26/16 12:17	500
Trichlorofluoromethane	500	U	500	250	ug/L			02/26/16 12:17	500
Dibromochloromethane	500	U	500	220	ug/L			02/26/16 12:17	500
Methylcyclohexane	500	U	500	220	ug/L			02/26/16 12:17	500

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		02/26/16 12:17	500
4-Bromofluorobenzene (Surr)	94		61 - 120		02/26/16 12:17	500
Toluene-d8 (Surr)	104		80 - 120		02/26/16 12:17	500
Dibromofluoromethane (Surr)	98		79 - 120		02/26/16 12:17	500

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

Client Sample ID: GW-17303-021816-CB-029
Date Collected: 02/18/16 00:00
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**310**	**J B**	2000	190	ug/L			02/26/16 12:39	200
Benzene	200	U	200	70	ug/L			02/26/16 12:39	200
Bromodichloromethane	200	U	200	58	ug/L			02/26/16 12:39	200
Bromoform	200	U	200	110	ug/L			02/26/16 12:39	200
Bromomethane	200	U	200	88	ug/L			02/26/16 12:39	200
2-Butanone (MEK)	2000	U	2000	110	ug/L			02/26/16 12:39	200
Carbon disulfide	1000	U	1000	76	ug/L			02/26/16 12:39	200
Carbon tetrachloride	200	U	200	86	ug/L			02/26/16 12:39	200
Chlorobenzene	200	U	200	50	ug/L			02/26/16 12:39	200
Chloroethane	200	U	200	64	ug/L			02/26/16 12:39	200
Chloroform	200	U	200	50	ug/L			02/26/16 12:39	200
Chloromethane	200	U	200	88	ug/L			02/26/16 12:39	200
1,1-Dichloroethane	200	U	200	60	ug/L			02/26/16 12:39	200
1,2-Dichloroethane	200	U	200	46	ug/L			02/26/16 12:39	200
1,1-Dichloroethene	200	U	200	90	ug/L			02/26/16 12:39	200
1,2-Dichloropropane	200	U	200	50	ug/L			02/26/16 12:39	200
cis-1,3-Dichloropropene	200	U	200	92	ug/L			02/26/16 12:39	200
trans-1,3-Dichloropropene	200	U	200	110	ug/L			02/26/16 12:39	200
Ethylbenzene	200	U	200	50	ug/L			02/26/16 12:39	200
2-Hexanone	2000	U	2000	96	ug/L			02/26/16 12:39	200
Methylene Chloride	**67**	**J B**	1000	66	ug/L			02/26/16 12:39	200
4-Methyl-2-pentanone (MIBK)	2000	U	2000	200	ug/L			02/26/16 12:39	200
Styrene	200	U	200	90	ug/L			02/26/16 12:39	200
1,1,2,2-Tetrachloroethane	200	U	200	44	ug/L			02/26/16 12:39	200
Tetrachloroethene	200	U	200	62	ug/L			02/26/16 12:39	200
Toluene	200	U	200	46	ug/L			02/26/16 12:39	200
Trichloroethene	200	U	200	44	ug/L			02/26/16 12:39	200
Vinyl chloride	**4800**		200	58	ug/L			02/26/16 12:39	200
Xylenes, Total	400	U	400	100	ug/L			02/26/16 12:39	200
1,1,1-Trichloroethane	200	U	200	88	ug/L			02/26/16 12:39	200
1,1,2-Trichloroethane	200	U	200	48	ug/L			02/26/16 12:39	200
Cyclohexane	200	U	200	90	ug/L			02/26/16 12:39	200
1,2-Dibromo-3-Chloropropane	200	U	200	160	ug/L			02/26/16 12:39	200
1,2-Dibromoethane	200	U	200	64	ug/L			02/26/16 12:39	200
Dichlorodifluoromethane	200	U	200	64	ug/L			02/26/16 12:39	200
cis-1,2-Dichloroethene	**81**	**J**	200	52	ug/L			02/26/16 12:39	200
trans-1,2-Dichloroethene	200	U	200	60	ug/L			02/26/16 12:39	200
Isopropylbenzene	200	U	200	70	ug/L			02/26/16 12:39	200
Methyl acetate	2000	U	2000	450	ug/L			02/26/16 12:39	200
Methyl tert-butyl ether	200	U	200	40	ug/L			02/26/16 12:39	200
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	90	ug/L			02/26/16 12:39	200
1,2,4-Trichlorobenzene	200	U	200	64	ug/L			02/26/16 12:39	200
1,2-Dichlorobenzene	200	U	200	50	ug/L			02/26/16 12:39	200
1,3-Dichlorobenzene	200	U	200	38	ug/L			02/26/16 12:39	200
1,4-Dichlorobenzene	200	U	200	54	ug/L			02/26/16 12:39	200
Trichlorofluoromethane	200	U	200	98	ug/L			02/26/16 12:39	200
Dibromochloromethane	200	U	200	86	ug/L			02/26/16 12:39	200
Methylcyclohexane	200	U	200	86	ug/L			02/26/16 12:39	200

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		78 - 125		02/26/16 12:39	200
4-Bromofluorobenzene (Surr)	95		61 - 120		02/26/16 12:39	200
Toluene-d8 (Surr)	104		80 - 120		02/26/16 12:39	200
Dibromofluoromethane (Surr)	99		79 - 120		02/26/16 12:39	200

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

Client Sample ID: TB-17303-021816-CB-030
Date Collected: 02/18/16 00:00
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.1**	**J B**	10	0.94	ug/L			02/25/16 19:07	1
Benzene	1.0	U	1.0	0.35	ug/L			02/25/16 19:07	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/25/16 19:07	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/25/16 19:07	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/25/16 19:07	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/25/16 19:07	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/25/16 19:07	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/25/16 19:07	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 19:07	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/25/16 19:07	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/25/16 19:07	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/25/16 19:07	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/25/16 19:07	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/25/16 19:07	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/25/16 19:07	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/25/16 19:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/25/16 19:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/25/16 19:07	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/25/16 19:07	1
2-Hexanone	10	U	10	0.48	ug/L			02/25/16 19:07	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/25/16 19:07	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/25/16 19:07	1
Styrene	1.0	U	1.0	0.45	ug/L			02/25/16 19:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/25/16 19:07	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/25/16 19:07	1
Toluene	1.0	U	1.0	0.23	ug/L			02/25/16 19:07	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/25/16 19:07	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/25/16 19:07	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/25/16 19:07	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/25/16 19:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/25/16 19:07	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/25/16 19:07	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/25/16 19:07	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/25/16 19:07	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/25/16 19:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/25/16 19:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/25/16 19:07	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/25/16 19:07	1
Methyl acetate	10	U	10	2.3	ug/L			02/25/16 19:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/25/16 19:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/25/16 19:07	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/25/16 19:07	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 19:07	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/25/16 19:07	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/25/16 19:07	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/25/16 19:07	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/25/16 19:07	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/25/16 19:07	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		78 - 125		02/25/16 19:07	1
4-Bromofluorobenzene (Surr)	93		61 - 120		02/25/16 19:07	1
Toluene-d8 (Surr)	105		80 - 120		02/25/16 19:07	1
Dibromofluoromethane (Surr)	99		79 - 120		02/25/16 19:07	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-021816-CB-026
Date Collected: 02/18/16 09:55
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	360	F1	0.50	0.080	ug/L			02/22/16 15:43	1
Ethane	0.37	J	0.50	0.14	ug/L			02/22/16 15:43	1
Ethylene	240	F1	0.50	0.13	ug/L			02/22/16 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*111*		*66 - 132*		*02/22/16 15:43*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-021816-CB-028
Date Collected: 02/18/16 13:10
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	230		0.50	0.080	ug/L			02/22/16 16:35	1
Ethane	7.3		0.50	0.14	ug/L			02/22/16 16:35	1
Ethylene	720		0.50	0.13	ug/L			02/22/16 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*101*		*66 - 132*		*02/22/16 16:35*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-021816-CB-026
Date Collected: 02/18/16 09:55
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2600	B	100	13	ug/L		02/22/16 09:19	02/24/16 17:11	1
Manganese	560	B	15	0.46	ug/L		02/22/16 09:19	02/24/16 17:11	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-021816-CB-028
Date Collected: 02/18/16 13:10
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3300	B	100	13	ug/L		02/22/16 09:19	02/24/16 18:32	1
Manganese	110	B	15	0.46	ug/L		02/22/16 09:19	02/24/16 18:32	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-021816-CB-026
Date Collected: 02/18/16 09:55
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3000	B	100	13	ug/L		02/22/16 09:19	02/24/16 17:39	1
Manganese	610	B	15	0.46	ug/L		02/22/16 09:19	02/24/16 17:39	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-021816-CB-028
Date Collected: 02/18/16 13:10
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3300	B	100	13	ug/L		02/22/16 09:19	02/24/16 18:36	1
Manganese	110	B	15	0.46	ug/L		02/22/16 09:19	02/24/16 18:36	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

General Chemistry

Client Sample ID: GW-17303-021816-CB-026
Date Collected: 02/18/16 09:55
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**430**		5.0	1.9	mg/L			03/02/16 14:39	1
Chloride	**100**	**F1**	1.0	0.41	mg/L			02/19/16 17:10	1
Nitrate as N	0.10	U	0.10	0.035	mg/L			02/19/16 17:10	1
Sulfate	**56**	**B F1**	1.0	0.13	mg/L			02/19/16 17:10	1
Total Organic Carbon	**2.8**	**B**	1.0	0.080	mg/L			02/22/16 11:24	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

General Chemistry

Client Sample ID: GW-17303-021816-CB-028
Date Collected: 02/18/16 13:10
Date Received: 02/19/16 09:30

Lab Sample ID: 240-61103-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	380		5.0	1.9	mg/L			02/26/16 11:07	1
Chloride	160		1.0	0.41	mg/L			02/19/16 16:21	1
Nitrate as N	0.18		0.10	0.035	mg/L			02/19/16 16:21	1
Sulfate	16	B	1.0	0.13	mg/L			02/19/16 16:21	1
Total Organic Carbon	3.0	B	1.0	0.080	mg/L			02/22/16 12:06	1

GC/MS VOA

Analysis Batch: 219007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-1	GW-17303-021716-CB-022	Total/NA	Water	8260B	
240-61103-2	GW-17303-021716-CB-023	Total/NA	Water	8260B	
240-61103-3	GW-17303-021716-CB-024	Total/NA	Water	8260B	
240-61103-4	GW-17303-021716-CB-025	Total/NA	Water	8260B	
240-61103-5	GW-17303-021816-CB-026	Total/NA	Water	8260B	
240-61103-5 MS	GW-17303-021816-CB-026	Total/NA	Water	8260B	
240-61103-5 MSD	GW-17303-021816-CB-026	Total/NA	Water	8260B	
240-61103-6	GW-17303-021816-CB-027	Total/NA	Water	8260B	
240-61103-9	TB-17303-021816-CB-030	Total/NA	Water	8260B	
LCS 240-219007/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-219007/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 219188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-7	GW-17303-021816-CB-028	Total/NA	Water	8260B	
240-61103-8	GW-17303-021816-CB-029	Total/NA	Water	8260B	
LCS 240-219188/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-219188/6	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 218397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-5	GW-17303-021816-CB-026	Total/NA	Water	RSK-175	
240-61103-5 MS	GW-17303-021816-CB-026	Total/NA	Water	RSK-175	
240-61103-5 MSD	GW-17303-021816-CB-026	Total/NA	Water	RSK-175	
240-61103-7	GW-17303-021816-CB-028	Total/NA	Water	RSK-175	
LCS 240-218397/5	Lab Control Sample	Total/NA	Water	RSK-175	
MB 240-218397/4	Method Blank	Total/NA	Water	RSK-175	

Metals

Prep Batch: 218421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-5	GW-17303-021816-CB-026	Dissolved	Water	3005A	
240-61103-5	GW-17303-021816-CB-026	Total Recoverable	Water	3005A	
240-61103-5 MS	GW-17303-021816-CB-026	Dissolved	Water	3005A	
240-61103-5 MS	GW-17303-021816-CB-026	Total Recoverable	Water	3005A	
240-61103-5 MSD	GW-17303-021816-CB-026	Dissolved	Water	3005A	
240-61103-5 MSD	GW-17303-021816-CB-026	Total Recoverable	Water	3005A	
240-61103-7	GW-17303-021816-CB-028	Dissolved	Water	3005A	
240-61103-7	GW-17303-021816-CB-028	Total Recoverable	Water	3005A	
LCS 240-218421/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-218421/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 218991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-5	GW-17303-021816-CB-026	Dissolved	Water	6010B	218421
240-61103-5	GW-17303-021816-CB-026	Total Recoverable	Water	6010B	218421
240-61103-5 MS	GW-17303-021816-CB-026	Dissolved	Water	6010B	218421

Metals (Continued)

Analysis Batch: 218991 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-5 MS	GW-17303-021816-CB-026	Total Recoverable	Water	6010B	218421
240-61103-5 MSD	GW-17303-021816-CB-026	Dissolved	Water	6010B	218421
240-61103-5 MSD	GW-17303-021816-CB-026	Total Recoverable	Water	6010B	218421
240-61103-7	GW-17303-021816-CB-028	Dissolved	Water	6010B	218421
240-61103-7	GW-17303-021816-CB-028	Total Recoverable	Water	6010B	218421
LCS 240-218421/2-A	Lab Control Sample	Total Recoverable	Water	6010B	218421
MB 240-218421/1-A	Method Blank	Total Recoverable	Water	6010B	218421

General Chemistry

Analysis Batch: 218245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-5	GW-17303-021816-CB-026	Total/NA	Water	300.0	
240-61103-5 MS	GW-17303-021816-CB-026	Total/NA	Water	300.0	
240-61103-5 MSD	GW-17303-021816-CB-026	Total/NA	Water	300.0	
240-61103-7	GW-17303-021816-CB-028	Total/NA	Water	300.0	
LCS 240-218245/4	Lab Control Sample	Total/NA	Water	300.0	
MB 240-218245/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 218246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-5	GW-17303-021816-CB-026	Total/NA	Water	300.0	
240-61103-5 MS	GW-17303-021816-CB-026	Total/NA	Water	300.0	
240-61103-5 MSD	GW-17303-021816-CB-026	Total/NA	Water	300.0	
240-61103-7	GW-17303-021816-CB-028	Total/NA	Water	300.0	
LCS 240-218246/4	Lab Control Sample	Total/NA	Water	300.0	
MB 240-218246/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 218553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-5	GW-17303-021816-CB-026	Total/NA	Water	9060	
240-61103-5 MS	GW-17303-021816-CB-026	Total/NA	Water	9060	
240-61103-5 MSD	GW-17303-021816-CB-026	Total/NA	Water	9060	
240-61103-7	GW-17303-021816-CB-028	Total/NA	Water	9060	
LCS 240-218553/6	Lab Control Sample	Total/NA	Water	9060	
LLCS 240-218553/5	Lab Control Sample	Total/NA	Water	9060	
MB 240-218553/4	Method Blank	Total/NA	Water	9060	

Analysis Batch: 219226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-7	GW-17303-021816-CB-028	Total/NA	Water	2320B-1997	
LCS 240-219226/2	Lab Control Sample	Total/NA	Water	2320B-1997	
MB 240-219226/12	Method Blank	Total/NA	Water	2320B-1997	

Analysis Batch: 219929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61103-5	GW-17303-021816-CB-026	Total/NA	Water	2320B-1997	
240-61103-5 MS	GW-17303-021816-CB-026	Total/NA	Water	2320B-1997	
240-61103-5 MSD	GW-17303-021816-CB-026	Total/NA	Water	2320B-1997	
LCS 240-219929/2	Lab Control Sample	Total/NA	Water	2320B-1997	

General Chemistry (Continued)

Analysis Batch: 219929 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-219929/3	Method Blank	Total/NA	Water	2320B-1997	

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

Lab Sample ID: MB 240-219007/6
Matrix: Water
Analysis Batch: 219007

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.56	J	10	0.94	ug/L			02/25/16 11:38	1
Benzene	1.0	U	1.0	0.35	ug/L			02/25/16 11:38	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/25/16 11:38	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/25/16 11:38	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/25/16 11:38	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/25/16 11:38	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/25/16 11:38	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/25/16 11:38	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 11:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/25/16 11:38	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/25/16 11:38	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/25/16 11:38	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/25/16 11:38	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/25/16 11:38	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/25/16 11:38	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/25/16 11:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/25/16 11:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/25/16 11:38	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/25/16 11:38	1
2-Hexanone	10	U	10	0.48	ug/L			02/25/16 11:38	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/25/16 11:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/25/16 11:38	1
Styrene	1.0	U	1.0	0.45	ug/L			02/25/16 11:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/25/16 11:38	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/25/16 11:38	1
Toluene	1.0	U	1.0	0.23	ug/L			02/25/16 11:38	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/25/16 11:38	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/25/16 11:38	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/25/16 11:38	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/25/16 11:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/25/16 11:38	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/25/16 11:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/25/16 11:38	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/25/16 11:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/25/16 11:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/25/16 11:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/25/16 11:38	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/25/16 11:38	1
Methyl acetate	10	U	10	2.3	ug/L			02/25/16 11:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/25/16 11:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/25/16 11:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/25/16 11:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 11:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/25/16 11:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/25/16 11:38	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/25/16 11:38	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/25/16 11:38	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/25/16 11:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		78 - 125		02/25/16 11:38	1
4-Bromofluorobenzene (Surr)	93		61 - 120		02/25/16 11:38	1
Toluene-d8 (Surr)	103		80 - 120		02/25/16 11:38	1
Dibromofluoromethane (Surr)	95		79 - 120		02/25/16 11:38	1

Lab Sample ID: LCS 240-219007/4
Matrix: Water
Analysis Batch: 219007

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	34 - 148
Benzene	10.0	10.4		ug/L		104	80 - 120
Bromodichloromethane	10.0	10.5		ug/L		105	80 - 120
Bromoform	10.0	11.5		ug/L		115	56 - 122
Bromomethane	10.0	7.16		ug/L		72	38 - 132
2-Butanone (MEK)	20.0	17.8		ug/L		89	56 - 138
Carbon disulfide	10.0	10.6		ug/L		106	65 - 144
Carbon tetrachloride	10.0	10.8		ug/L		108	77 - 131
Chlorobenzene	10.0	10.0		ug/L		100	80 - 120
Chloroethane	10.0	7.96		ug/L		80	36 - 126
Chloroform	10.0	10.1		ug/L		101	80 - 120
Chloromethane	10.0	11.1		ug/L		111	48 - 133
1,1-Dichloroethane	10.0	10.3		ug/L		103	79 - 125
1,2-Dichloroethane	10.0	9.78		ug/L		98	80 - 120
1,1-Dichloroethene	10.0	10.1		ug/L		101	76 - 124
1,2-Dichloropropane	10.0	10.6		ug/L		106	78 - 124
cis-1,3-Dichloropropene	10.0	10.6		ug/L		106	74 - 126
trans-1,3-Dichloropropene	10.0	11.3		ug/L		113	75 - 131
Ethylbenzene	10.0	9.82		ug/L		98	80 - 120
2-Hexanone	20.0	20.4		ug/L		102	55 - 141
Methylene Chloride	10.0	9.97		ug/L		100	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	19.5		ug/L		97	64 - 135
Styrene	10.0	9.60		ug/L		96	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	71 - 123
Tetrachloroethene	10.0	10.3		ug/L		103	78 - 121
Toluene	10.0	10.8		ug/L		108	80 - 120
Trichloroethene	10.0	10.1		ug/L		101	80 - 121
Vinyl chloride	10.0	10.6		ug/L		106	52 - 121
Xylenes, Total	20.0	19.3		ug/L		96	80 - 120
1,1,1-Trichloroethane	10.0	9.73		ug/L		97	77 - 123
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	80 - 120
Cyclohexane	10.0	10.3		ug/L		103	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	11.3		ug/L		113	50 - 132
1,2-Dibromoethane	10.0	10.5		ug/L		105	80 - 120
Dichlorodifluoromethane	10.0	8.31		ug/L		83	23 - 136
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	79 - 120
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	80 - 124
Isopropylbenzene	10.0	9.38		ug/L		94	77 - 120
Methyl acetate	50.0	51.9		ug/L		104	67 - 131
Methyl tert-butyl ether	10.0	9.99		ug/L		100	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.73		ug/L		87	67 - 138
1,2,4-Trichlorobenzene	10.0	8.35		ug/L		84	61 - 120
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	79 - 120

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

Lab Sample ID: LCS 240-219007/4
Matrix: Water
Analysis Batch: 219007

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	10.0		ug/L		100	79 - 120		
1,4-Dichlorobenzene			10.0	9.90		ug/L		99	79 - 120		
Trichlorofluoromethane			10.0	8.74		ug/L		87	61 - 133		
Dibromochloromethane			10.0	11.4		ug/L		114	74 - 120		
Methylcyclohexane			10.0	9.90		ug/L		99	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*
4-Bromofluorobenzene (Surr)	*102*		*61 - 120*
Toluene-d8 (Surr)	*112*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*79 - 120*

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 219007

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetone	73	J B	1000	690		ug/L		62	32 - 126		
Benzene	50	U F2	500	461		ug/L		92	73 - 121		
Bromodichloromethane	50	U	500	455		ug/L		91	72 - 120		
Bromoform	50	U	500	524		ug/L		105	45 - 121		
Bromomethane	50	U	500	317		ug/L		63	26 - 136		
2-Butanone (MEK)	500	U	1000	831		ug/L		83	49 - 132		
Carbon disulfide	250	U	500	499		ug/L		100	54 - 144		
Carbon tetrachloride	50	U	500	472		ug/L		94	65 - 129		
Chlorobenzene	50	U	500	430		ug/L		86	72 - 120		
Chloroethane	50	U	500	383		ug/L		77	27 - 131		
Chloroform	50	U	500	442		ug/L		88	73 - 121		
Chloromethane	50	U	500	519		ug/L		104	39 - 134		
1,1-Dichloroethane	50	U F2	500	447		ug/L		89	73 - 124		
1,2-Dichloroethane	50	U	500	434		ug/L		87	74 - 125		
1,1-Dichloroethene	50	U	500	467		ug/L		93	67 - 124		
1,2-Dichloropropane	50	U F2	500	465		ug/L		93	73 - 122		
cis-1,3-Dichloropropene	50	U	500	453		ug/L		91	60 - 120		
trans-1,3-Dichloropropene	50	U	500	463		ug/L		93	58 - 132		
Ethylbenzene	50	U	500	417		ug/L		83	68 - 121		
2-Hexanone	500	U	1000	915		ug/L		92	49 - 142		
Methylene Chloride	250	U	500	460		ug/L		92	70 - 124		
4-Methyl-2-pentanone (MIBK)	500	U	1000	907		ug/L		91	58 - 136		
Styrene	50	U	500	411		ug/L		82	64 - 126		
1,1,2,2-Tetrachloroethane	50	U	500	480		ug/L		96	61 - 130		
Tetrachloroethene	50	U	500	427		ug/L		85	59 - 125		
Toluene	50	U F2	500	455		ug/L		91	72 - 122		
Trichloroethene	50	U F2	500	428		ug/L		86	61 - 129		
Vinyl chloride	1600		500	2020	E	ug/L		83	44 - 122		
Xylenes, Total	100	U F2	1000	832		ug/L		83	67 - 122		
1,1,1-Trichloroethane	50	U	500	436		ug/L		87	69 - 122		
1,1,2-Trichloroethane	50	U	500	483		ug/L		97	72 - 125		

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

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 219007

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	50	U	500	432		ug/L		86	41 - 137
1,2-Dibromo-3-Chloropropane	50	U	500	513		ug/L		103	42 - 130
1,2-Dibromoethane	50	U	500	458		ug/L		92	69 - 125
Dichlorodifluoromethane	50	U	500	375		ug/L		75	14 - 137
cis-1,2-Dichloroethene	980	F1	500	1420		ug/L		89	66 - 124
trans-1,2-Dichloroethene	54		500	521		ug/L		93	72 - 125
Isopropylbenzene	50	U	500	391		ug/L		78	61 - 122
Methyl acetate	500	U	2500	2410		ug/L		96	64 - 124
Methyl tert-butyl ether	50	U F2	500	443		ug/L		89	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	500	380		ug/L		76	44 - 140
1,2,4-Trichlorobenzene	50	U	500	332		ug/L		66	48 - 120
1,2-Dichlorobenzene	50	U F2	500	415		ug/L		83	67 - 118
1,3-Dichlorobenzene	50	U F2	500	406		ug/L		81	65 - 120
1,4-Dichlorobenzene	50	U	500	416		ug/L		83	66 - 120
Trichlorofluoromethane	50	U	500	391		ug/L		78	49 - 133
Dibromochloromethane	50	U	500	492		ug/L		98	62 - 122
Methylcyclohexane	50	U	500	419		ug/L		84	39 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*79 - 120*

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 219007

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	73	J B	1000	774		ug/L		70	32 - 126	11	28
Benzene	50	U F2	500	535	F2	ug/L		107	73 - 121	15	13
Bromodichloromethane	50	U	500	521		ug/L		104	72 - 120	14	19
Bromoform	50	U	500	565		ug/L		113	45 - 121	7	19
Bromomethane	50	U	500	315		ug/L		63	26 - 136	1	35
2-Butanone (MEK)	500	U	1000	956		ug/L		96	49 - 132	14	19
Carbon disulfide	250	U	500	534		ug/L		107	54 - 144	7	34
Carbon tetrachloride	50	U	500	524		ug/L		105	65 - 129	11	20
Chlorobenzene	50	U	500	500		ug/L		100	72 - 120	15	15
Chloroethane	50	U	500	372		ug/L		74	27 - 131	3	35
Chloroform	50	U	500	511		ug/L		102	73 - 121	14	17
Chloromethane	50	U	500	581		ug/L		116	39 - 134	11	20
1,1-Dichloroethane	50	U F2	500	519	F2	ug/L		104	73 - 124	15	14
1,2-Dichloroethane	50	U	500	495		ug/L		99	74 - 125	13	24
1,1-Dichloroethene	50	U	500	512		ug/L		102	67 - 124	9	24
1,2-Dichloropropane	50	U F2	500	547	F2	ug/L		109	73 - 122	16	15
cis-1,3-Dichloropropene	50	U	500	523		ug/L		105	60 - 120	14	21
trans-1,3-Dichloropropene	50	U	500	550		ug/L		110	58 - 132	17	22

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

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 219007

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	50	U	500	486		ug/L		97	68 - 121	15	16
2-Hexanone	500	U	1000	1000		ug/L		100	49 - 142	9	27
Methylene Chloride	250	U	500	518		ug/L		104	70 - 124	12	14
4-Methyl-2-pentanone (MIBK)	500	U	1000	965		ug/L		96	58 - 136	6	32
Styrene	50	U	500	480		ug/L		96	64 - 126	15	15
1,1,2,2-Tetrachloroethane	50	U	500	532		ug/L		106	61 - 130	10	18
Tetrachloroethene	50	U	500	499		ug/L		100	59 - 125	16	20
Toluene	50	U F2	500	540	F2	ug/L		108	72 - 122	17	15
Trichloroethene	50	U F2	500	504	F2	ug/L		101	61 - 129	16	14
Vinyl chloride	1600		500	2180	E	ug/L		115	44 - 122	8	35
Xylenes, Total	100	U F2	1000	970	F2	ug/L		97	67 - 122	15	14
1,1,1-Trichloroethane	50	U	500	492		ug/L		98	69 - 122	12	14
1,1,2-Trichloroethane	50	U	500	557		ug/L		111	72 - 125	14	19
Cyclohexane	50	U	500	478		ug/L		96	41 - 137	10	35
1,2-Dibromo-3-Chloropropane	50	U	500	563		ug/L		113	42 - 130	9	24
1,2-Dibromoethane	50	U	500	531		ug/L		106	69 - 125	15	24
Dichlorodifluoromethane	50	U	500	358		ug/L		72	14 - 137	5	34
cis-1,2-Dichloroethene	980	F1	500	1610	F1	ug/L		127	66 - 124	12	22
trans-1,2-Dichloroethene	54		500	585		ug/L		106	72 - 125	11	25
Isopropylbenzene	50	U	500	452		ug/L		90	61 - 122	15	20
Methyl acetate	500	U	2500	2660		ug/L		107	64 - 124	10	12
Methyl tert-butyl ether	50	U F2	500	507	F2	ug/L		101	61 - 121	13	12
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	500	411		ug/L		82	44 - 140	8	35
1,2,4-Trichlorobenzene	50	U	500	409		ug/L		82	48 - 120	21	28
1,2-Dichlorobenzene	50	U F2	500	497	F2	ug/L		99	67 - 118	18	15
1,3-Dichlorobenzene	50	U F2	500	489	F2	ug/L		98	65 - 120	19	15
1,4-Dichlorobenzene	50	U	500	486		ug/L		97	66 - 120	15	16
Trichlorofluoromethane	50	U	500	391		ug/L		78	49 - 133	0	25
Dibromochloromethane	50	U	500	572		ug/L		114	62 - 122	15	19
Methylcyclohexane	50	U	500	445		ug/L		89	39 - 135	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*78 - 125*
4-Bromofluorobenzene (Surr)	*108*		*61 - 120*
Toluene-d8 (Surr)	*119*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*79 - 120*

Lab Sample ID: MB 240-219188/6
Matrix: Water
Analysis Batch: 219188

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.53	J	10	0.94	ug/L			02/26/16 10:45	1
Benzene	1.0	U	1.0	0.35	ug/L			02/26/16 10:45	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/26/16 10:45	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/26/16 10:45	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/26/16 10:45	1

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

Lab Sample ID: MB 240-219188/6
Matrix: Water
Analysis Batch: 219188

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/26/16 10:45	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/26/16 10:45	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/26/16 10:45	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/26/16 10:45	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/26/16 10:45	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/26/16 10:45	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/26/16 10:45	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/26/16 10:45	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/26/16 10:45	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/26/16 10:45	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/26/16 10:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/26/16 10:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/26/16 10:45	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/26/16 10:45	1
2-Hexanone	10	U	10	0.48	ug/L			02/26/16 10:45	1
Methylene Chloride	0.334	J	5.0	0.33	ug/L			02/26/16 10:45	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/26/16 10:45	1
Styrene	1.0	U	1.0	0.45	ug/L			02/26/16 10:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/26/16 10:45	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/26/16 10:45	1
Toluene	1.0	U	1.0	0.23	ug/L			02/26/16 10:45	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/26/16 10:45	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/26/16 10:45	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/26/16 10:45	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/26/16 10:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/26/16 10:45	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/26/16 10:45	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/26/16 10:45	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/26/16 10:45	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/26/16 10:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/26/16 10:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/26/16 10:45	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/26/16 10:45	1
Methyl acetate	10	U	10	2.3	ug/L			02/26/16 10:45	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/26/16 10:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/26/16 10:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/26/16 10:45	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/26/16 10:45	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/26/16 10:45	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/26/16 10:45	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/26/16 10:45	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/26/16 10:45	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/26/16 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*02/26/16 10:45*	*1*
4-Bromofluorobenzene (Surr)	*95*		*61 - 120*		*02/26/16 10:45*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*02/26/16 10:45*	*1*

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

Lab Sample ID: MB 240-219188/6
Matrix: Water
Analysis Batch: 219188

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	98		79 - 120		02/26/16 10:45	1

Lab Sample ID: LCS 240-219188/4
Matrix: Water
Analysis Batch: 219188

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	34 - 148
Benzene	10.0	9.63		ug/L		96	80 - 120
Bromodichloromethane	10.0	9.63		ug/L		96	80 - 120
Bromoform	10.0	10.7		ug/L		107	56 - 122
Bromomethane	10.0	6.75		ug/L		68	38 - 132
2-Butanone (MEK)	20.0	16.4		ug/L		82	56 - 138
Carbon disulfide	10.0	10.3		ug/L		103	65 - 144
Carbon tetrachloride	10.0	9.97		ug/L		100	77 - 131
Chlorobenzene	10.0	9.38		ug/L		94	80 - 120
Chloroethane	10.0	7.48		ug/L		75	36 - 126
Chloroform	10.0	9.20		ug/L		92	80 - 120
Chloromethane	10.0	9.72		ug/L		97	48 - 133
1,1-Dichloroethane	10.0	9.62		ug/L		96	79 - 125
1,2-Dichloroethane	10.0	8.97		ug/L		90	80 - 120
1,1-Dichloroethene	10.0	9.51		ug/L		95	76 - 124
1,2-Dichloropropane	10.0	9.74		ug/L		97	78 - 124
cis-1,3-Dichloropropene	10.0	9.77		ug/L		98	74 - 126
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	75 - 131
Ethylbenzene	10.0	9.08		ug/L		91	80 - 120
2-Hexanone	20.0	19.2		ug/L		96	55 - 141
Methylene Chloride	10.0	9.51		ug/L		95	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	17.8		ug/L		89	64 - 135
Styrene	10.0	8.99		ug/L		90	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.48		ug/L		95	71 - 123
Tetrachloroethene	10.0	9.31		ug/L		93	78 - 121
Toluene	10.0	9.91		ug/L		99	80 - 120
Trichloroethene	10.0	9.09		ug/L		91	80 - 121
Vinyl chloride	10.0	9.25		ug/L		93	52 - 121
Xylenes, Total	20.0	18.5		ug/L		93	80 - 120
1,1,1-Trichloroethane	10.0	9.03		ug/L		90	77 - 123
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	80 - 120
Cyclohexane	10.0	9.37		ug/L		94	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	10.3		ug/L		103	50 - 132
1,2-Dibromoethane	10.0	9.57		ug/L		96	80 - 120
Dichlorodifluoromethane	10.0	6.56		ug/L		66	23 - 136
cis-1,2-Dichloroethene	10.0	9.49		ug/L		95	79 - 120
trans-1,2-Dichloroethene	10.0	9.75		ug/L		98	80 - 124
Isopropylbenzene	10.0	8.77		ug/L		88	77 - 120
Methyl acetate	50.0	48.6		ug/L		97	67 - 131
Methyl tert-butyl ether	10.0	9.40		ug/L		94	69 - 121

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

Lab Sample ID: LCS 240-219188/4
Matrix: Water
Analysis Batch: 219188

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.35		ug/L		84	67 - 138
1,2,4-Trichlorobenzene	10.0	7.38		ug/L		74	61 - 120
1,2-Dichlorobenzene	10.0	9.36		ug/L		94	79 - 120
1,3-Dichlorobenzene	10.0	9.21		ug/L		92	79 - 120
1,4-Dichlorobenzene	10.0	9.11		ug/L		91	79 - 120
Trichlorofluoromethane	10.0	7.01		ug/L		70	61 - 133
Dibromochloromethane	10.0	10.4		ug/L		104	74 - 120
Methylcyclohexane	10.0	8.89		ug/L		89	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*78 - 125*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*79 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-218397/4
Matrix: Water
Analysis Batch: 218397

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.50	U	0.50	0.080	ug/L			02/22/16 15:09	1
Ethane	0.50	U	0.50	0.14	ug/L			02/22/16 15:09	1
Ethylene	0.50	U	0.50	0.13	ug/L			02/22/16 15:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*113*		*66 - 132*		*02/22/16 15:09*	*1*

Lab Sample ID: LCS 240-218397/5
Matrix: Water
Analysis Batch: 218397

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	199	187		ug/L		94	76 - 120
Ethane	374	347		ug/L		93	80 - 120
Ethylene	349	327		ug/L		94	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*110*		*66 - 132*

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 218397

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	360	F1	199	648		ug/L		148	34 - 153
Ethane	0.37	J	374	330		ug/L		88	61 - 120
Ethylene	240	F1	349	642		ug/L		114	60 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*105*		*66 - 132*

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 218397

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	360	F1	199	735	F1	ug/L		191	34 - 153	12	22
Ethane	0.37	J	374	320		ug/L		85	61 - 120	3	21
Ethylene	240	F1	349	680	F1	ug/L		125	60 - 120	6	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,1,1-Trifluoroethane	*99*		*66 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-218421/1-A
Matrix: Water
Analysis Batch: 218991

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 218421

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	19.4	J	100	13	ug/L		02/22/16 09:19	02/24/16 17:03	1
Manganese	0.897	J	15	0.46	ug/L		02/22/16 09:19	02/24/16 17:03	1

Lab Sample ID: LCS 240-218421/2-A
Matrix: Water
Analysis Batch: 218991

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 218421

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	940		ug/L		94	80 - 120
Manganese	500	497		ug/L		99	80 - 120

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 218991

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total Recoverable
Prep Batch: 218421

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2600	B	1000	3480		ug/L		90	75 - 125
Manganese	560	B	500	1060		ug/L		99	75 - 125

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

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 218991

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total Recoverable
Prep Batch: 218421

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	2600	B	1000	3660		ug/L		107	75 - 125	5	20
Manganese	560	B	500	1100		ug/L		107	75 - 125	4	20

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 218991

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Dissolved
Prep Batch: 218421

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	3000	B	1000	3940		ug/L		96	75 - 125
Manganese	610	B	500	1150		ug/L		107	75 - 125

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 218991

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Dissolved
Prep Batch: 218421

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	3000	B	1000	3960		ug/L		98	75 - 125	1	20
Manganese	610	B	500	1150		ug/L		108	75 - 125	0	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-219226/12
Matrix: Water
Analysis Batch: 219226

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	1.9	mg/L			02/26/16 13:47	1

Lab Sample ID: LCS 240-219226/2
Matrix: Water
Analysis Batch: 219226

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	284	279		mg/L		98	90 - 127

Lab Sample ID: MB 240-219929/3
Matrix: Water
Analysis Batch: 219929

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	1.9	mg/L			03/02/16 14:39	1

Lab Sample ID: LCS 240-219929/2
Matrix: Water
Analysis Batch: 219929

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	368	444		mg/L		121	90 - 127

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 219929

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	430		500	898		mg/L		95	10 - 160

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 219929

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	430		500	864		mg/L		88	10 - 160	4	24

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-218245/3
Matrix: Water
Analysis Batch: 218245

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.41	mg/L			02/19/16 13:53	1
Sulfate	0.557	J	1.0	0.13	mg/L			02/19/16 13:53	1

Lab Sample ID: LCS 240-218245/4
Matrix: Water
Analysis Batch: 218245

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	53.1		mg/L		106	90 - 110
Sulfate	50.0	49.5		mg/L		99	90 - 110

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 218245

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	F1	50.0	170	F1	mg/L		132	80 - 120
Sulfate	56	B F1	50.0	124	F1	mg/L		137	80 - 120

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 218245

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	F1	50.0	172	F1	mg/L		135	80 - 120	1	15
Sulfate	56	B F1	50.0	125	F1	mg/L		139	80 - 120	0	15

Lab Sample ID: MB 240-218246/3
Matrix: Water
Analysis Batch: 218246

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.035	mg/L			02/19/16 13:53	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-218246/4
Matrix: Water
Analysis Batch: 218246

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.50	2.48		mg/L		99	90 - 110

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 218246

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.10	U	2.50	2.79		mg/L		112	80 - 120

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 218246

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.10	U	2.50	2.84		mg/L		114	80 - 120	2	15

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 240-218553/4
Matrix: Water
Analysis Batch: 218553

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.102	J	1.0	0.080	mg/L			02/22/16 11:01	1

Lab Sample ID: LCS 240-218553/6
Matrix: Water
Analysis Batch: 218553

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	69.3	70.1		mg/L		101	88 - 115

Lab Sample ID: LLCS 240-218553/5
Matrix: Water
Analysis Batch: 218553

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	6.93	7.03		mg/L		101	88 - 115

Lab Sample ID: 240-61103-5 MS
Matrix: Water
Analysis Batch: 218553

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	2.8	B	25.0	28.3		mg/L		102	72 - 136

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 240-61103-5 MSD
Matrix: Water
Analysis Batch: 218553

Client Sample ID: GW-17303-021816-CB-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	2.8	B	25.0	28.8		mg/L		104	72 - 136	1	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (78-125)	BFB (61-120)	TOL (80-120)	DBFM (79-120)
240-61103-1	GW-17303-021716-CB-022	99	97	108	100
240-61103-2	GW-17303-021716-CB-023	95	93	103	96
240-61103-3	GW-17303-021716-CB-024	100	95	107	99
240-61103-4	GW-17303-021716-CB-025	98	94	105	99
240-61103-5	GW-17303-021816-CB-026	99	95	109	99
240-61103-5 MS	GW-17303-021816-CB-026	103	98	107	99
240-61103-5 MSD	GW-17303-021816-CB-026	113	108	119	105
240-61103-6	GW-17303-021816-CB-027	96	94	104	98
240-61103-7	GW-17303-021816-CB-028	94	94	104	98
240-61103-8	GW-17303-021816-CB-029	98	95	104	99
240-61103-9	TB-17303-021816-CB-030	98	93	105	99
LCS 240-219007/4	Lab Control Sample	103	102	112	100
LCS 240-219188/4	Lab Control Sample	99	99	109	97
MB 240-219007/6	Method Blank	95	93	103	95
MB 240-219188/6	Method Blank	94	95	103	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: RSK-175 - Dissolved Gases (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	rifluoroet (66-132)
240-61103-5	GW-17303-021816-CB-026	111
240-61103-5 MS	GW-17303-021816-CB-026	105
240-61103-5 MSD	GW-17303-021816-CB-026	99
240-61103-7	GW-17303-021816-CB-028	101
LCS 240-218397/5	Lab Control Sample	110
MB 240-218397/4	Method Blank	113

Surrogate Legend

1,1,1-Trifluoroethane = 1,1,1-Trifluoroethane

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Client Sample ID: GW-17303-021716-CB-022 — Lab Sample ID: 240-61103-1

Date Collected: 02/17/16 11:15 — **Matrix: Water**
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3.33	219007	02/25/16 16:08	LEE	TAL CAN

Client Sample ID: GW-17303-021716-CB-023 — Lab Sample ID: 240-61103-2

Date Collected: 02/17/16 12:55 — **Matrix: Water**
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	219007	02/25/16 16:30	LEE	TAL CAN

Client Sample ID: GW-17303-021716-CB-024 — Lab Sample ID: 240-61103-3

Date Collected: 02/17/16 14:15 — **Matrix: Water**
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	219007	02/25/16 16:53	LEE	TAL CAN

Client Sample ID: GW-17303-021716-CB-025 — Lab Sample ID: 240-61103-4

Date Collected: 02/17/16 15:45 — **Matrix: Water**
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219007	02/25/16 17:15	LEE	TAL CAN

Client Sample ID: GW-17303-021816-CB-026 — Lab Sample ID: 240-61103-5

Date Collected: 02/18/16 09:55 — **Matrix: Water**
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	219007	02/25/16 17:38	LEE	TAL CAN
Total/NA	Analysis	RSK-175		1	218397	02/22/16 15:43	BPM	TAL CAN
Dissolved	Prep	3005A			218421	02/22/16 09:19	WKD	TAL CAN
Dissolved	Analysis	6010B		1	218991	02/24/16 17:39	RKT	TAL CAN
Total Recoverable	Prep	3005A			218421	02/22/16 09:19	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	218991	02/24/16 17:11	RKT	TAL CAN
Total/NA	Analysis	2320B-1997		1	219929	03/02/16 14:39	LCN	TAL CAN
Total/NA	Analysis	300.0		1	218245	02/19/16 17:10	LKG	TAL CAN
Total/NA	Analysis	300.0		1	218246	02/19/16 17:10	LKG	TAL CAN
Total/NA	Analysis	9060		1	218553	02/22/16 11:24	TPH	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

Client Sample ID: GW-17303-021816-CB-027

Lab Sample ID: 240-61103-6

Date Collected: 02/18/16 11:40
Matrix: Water
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		66.67	219007	02/25/16 18:00	LEE	TAL CAN

Client Sample ID: GW-17303-021816-CB-028

Lab Sample ID: 240-61103-7

Date Collected: 02/18/16 13:10
Matrix: Water
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	219188	02/26/16 12:17	RJQ	TAL CAN
Total/NA	Analysis	RSK-175		1	218397	02/22/16 16:35	BPM	TAL CAN
Dissolved	Prep	3005A			218421	02/22/16 09:19	WKD	TAL CAN
Dissolved	Analysis	6010B		1	218991	02/24/16 18:36	RKT	TAL CAN
Total Recoverable	Prep	3005A			218421	02/22/16 09:19	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	218991	02/24/16 18:32	RKT	TAL CAN
Total/NA	Analysis	2320B-1997		1	219226	02/26/16 11:07	JWW	TAL CAN
Total/NA	Analysis	300.0		1	218245	02/19/16 16:21	LKG	TAL CAN
Total/NA	Analysis	300.0		1	218246	02/19/16 16:21	LKG	TAL CAN
Total/NA	Analysis	9060		1	218553	02/22/16 12:06	TPH	TAL CAN

Client Sample ID: GW-17303-021816-CB-029

Lab Sample ID: 240-61103-8

Date Collected: 02/18/16 00:00
Matrix: Water
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	219188	02/26/16 12:39	RJQ	TAL CAN

Client Sample ID: TB-17303-021816-CB-030

Lab Sample ID: 240-61103-9

Date Collected: 02/18/16 00:00
Matrix: Water
Date Received: 02/19/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219007	02/25/16 19:07	LEE	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61103-1

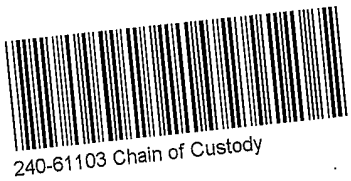
Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1,4/C0,9

Chain of Custody Record

122755

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/17/2016	COC No: 007
Company Name: GHD	Tel/Fax: (734)453-5123	Lab Contact: D. Herkler	Carrier: FedEx	1 of ____ COCs
Address: 14996 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: (734)453-5123	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVD	☐ 1 week			Job / SDG No.:
Site: 017303	☐ 2 days			
P O # SSOW # 17303-033	☐ 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 VOCs	Nitrate	Sulfate	Chloride	Total Iron + Manganese	*Dissolved Iron + Manganese	Methane/Ethane/Ethene	Alkalinity	Total Organic Carbon	Sample Specific Notes:
GW-17303-021716-CB-022	2/17/16	1115	G	WG	3	N	N	X									
-023		1255			3			X									
-024		1415			3			X									
-025		1545			3			X									
-021816- -026	2/18/16	955			32		Y	X	X	X	X	X	X	X	X	X	
-027		1140			3		N	X									
-028		1310			12			X	X	X	X	X	X	X	X	X	
-029					3			X									
TB- -030		—	—	WQ	1	—	—	X									

Page 56 of 58

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:
Tracking #: 6209 0763 2786 *Dissolved Iron + Manganese were field filtered.

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:
C Bondy C Bondy	GHD	2/18/16 1530			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Jacquelyn Kenel	Company: TANC	Date/Time: 2/19/16 930

2/3/2016

TestAmerica Canton Sample Receipt Form/Narrative Login # : 16103
Canton Facility

Client GHD Site Name

Cooler Received on 2/19/16 Opened on 2/19/16

Cooler unpacked by: A. Jewell

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Mich. 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# 48 (CF -1.9 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# I8 (CF -0.5 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 0.9 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity	Yes	(No)
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No	(NA)
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
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 sample(s) at the correct pH upon receipt?	(Yes)	No NA	pH Strip Lot# HC559158
13. Were VOAs on the COC?	(Yes)	No	
14. Were air bubbles >6 mm in any VOA vials?	Yes	(No) NA	
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B53150IVB	(Yes)	No	
16. Was a LL Hg or Me Hg trip blank present?	Yes	(No)	

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):

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
GW-17303-021816-CB-026	240-61103-AC-5	Plastic 500ml - with Nitric Acid	<2		
GW-17303-021816-CB-026	240-61103-AD-5	Plastic 500ml - with Nitric Acid	<2		
GW-17303-021816-CB-026	240-61103-AE-5	Plastic 500ml - w/ Nitric - Dis.	<2		
GW-17303-021816-CB-026	240-61103-AF-5	Plastic 500ml - w/ Nitric - Dis.	<2		
GW-17303-021816-CB-028	240-61103-K-7	Plastic 500ml - with Nitric Acid	<2		
GW-17303-021816-CB-028	240-61103-L-7	Plastic 250ml - w/nitric - dis	<2		

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: 240-61167-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Authorized for release by:
3/3/2016 9:13:22 AM
Nathan Pietras, Project Manager II
(330)966-8296
nathan.pietras@testamericainc.com

Designee for

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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Job ID: 240-61167-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-61167-1

Comments
No additional comments.

Receipt
The samples were received on 2/20/2016 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 VOA
No analytical or quality issues were noted, other than those described 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.

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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

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 VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
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.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-61167-1	GW-17303-021916-CB-030	Water	02/19/16 09:55	02/20/16 09:40
240-61167-2	GW-17303-021916-CB-031	Water	02/19/16 10:15	02/20/16 09:40
240-61167-3	GW-17303-021916-CB-032	Water	02/19/16 11:20	02/20/16 09:40
240-61167-4	GW-17303-021916-CB-033	Water	02/19/16 12:40	02/20/16 09:40
240-61167-5	TB-17303-021916-CB-034	Water	02/19/16 00:00	02/20/16 09:40

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Client Sample ID: GW-17303-021916-CB-030 — Lab Sample ID: 240-61167-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.69	J	1.0	0.43	ug/L	1		8260B	Total/NA
Chloroform	0.26	J	1.0	0.25	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.73	J	1.0	0.31	ug/L	1		8260B	Total/NA
Trichloroethene	22		1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	11		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	24		1.0	0.26	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.4		1.0	0.30	ug/L	1		8260B	Total/NA
Methane	2.6		0.50	0.080	ug/L	1		RSK-175	Total/NA
Iron	1700	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	98	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	1300	B	100	13	ug/L	1		6010B	Dissolved
Manganese	190	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	320		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	85		1.0	0.41	mg/L	1		300.0	Total/NA
Nitrate as N	0.80		0.10	0.035	mg/L	1		300.0	Total/NA
Sulfate	55	B	1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	1.2	B	1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: GW-17303-021916-CB-031 — Lab Sample ID: 240-61167-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.66	J	1.0	0.43	ug/L	1		8260B	Total/NA
Chloroform	0.25	J	1.0	0.25	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.45	J	1.0	0.45	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.77	J	1.0	0.31	ug/L	1		8260B	Total/NA
Trichloroethene	23		1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	12		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	25		1.0	0.26	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.4		1.0	0.30	ug/L	1		8260B	Total/NA
Methane	2.9		0.50	0.080	ug/L	1		RSK-175	Total/NA
Iron	1800	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	120	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	1200	B	100	13	ug/L	1		6010B	Dissolved
Manganese	200	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	340		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	86		1.0	0.41	mg/L	1		300.0	Total/NA
Nitrate as N	0.80		0.10	0.035	mg/L	1		300.0	Total/NA
Sulfate	55	B	1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	1.2	B	1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: GW-17303-021916-CB-032 — Lab Sample ID: 240-61167-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	10		5.0	1.8	ug/L	5		8260B	Total/NA
Vinyl chloride	130		5.0	1.5	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	4.2	J	5.0	1.3	ug/L	5		8260B	Total/NA
Methane	1400		0.50	0.080	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Client Sample ID: GW-17303-021916-CB-032 (Continued) — Lab Sample ID: 240-61167-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethane	220		0.50	0.14	ug/L	1		RSK-175	Total/NA
Ethylene	1600		0.50	0.13	ug/L	1		RSK-175	Total/NA
Iron	4100	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	210	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	4100	B	100	13	ug/L	1		6010B	Dissolved
Manganese	210	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	490		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	180		1.0	0.41	mg/L	1		300.0	Total/NA
Sulfate	23	B	1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	3.9	B	1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: GW-17303-021916-CB-033 — Lab Sample ID: 240-61167-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	30	J	110	24	ug/L	111.11		8260B	Total/NA
Vinyl chloride	4000		110	32	ug/L	111.11		8260B	Total/NA
cis-1,2-Dichloroethene	2400		110	29	ug/L	111.11		8260B	Total/NA
trans-1,2-Dichloroethene	87	J	110	33	ug/L	111.11		8260B	Total/NA
Methane	1100		0.50	0.080	ug/L	1		RSK-175	Total/NA
Ethane	39		0.50	0.14	ug/L	1		RSK-175	Total/NA
Ethylene	320		0.50	0.13	ug/L	1		RSK-175	Total/NA
Iron	1900	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	200	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	1900	B	100	13	ug/L	1		6010B	Dissolved
Manganese	200	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	340		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	48		1.0	0.41	mg/L	1		300.0	Total/NA
Nitrate as N	0.43		0.10	0.035	mg/L	1		300.0	Total/NA
Sulfate	26	B	1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	2.7	B	1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: TB-17303-021916-CB-034 — Lab Sample ID: 240-61167-5

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
RSK-175	Dissolved Gases (GC)	RSK	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
2320B-1997	Alkalinity, Total	SM	TAL CAN
300.0	Anions, Ion Chromatography	MCAWW	TAL CAN
9060	Organic Carbon, Total (TOC)	SW846	TAL CAN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

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: GW-17303-021916-CB-030
Date Collected: 02/19/16 09:55
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/25/16 21:20	1
Benzene	1.0	U	1.0	0.35	ug/L			02/25/16 21:20	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/25/16 21:20	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/25/16 21:20	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/25/16 21:20	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/25/16 21:20	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/25/16 21:20	1
Carbon tetrachloride	**0.69**	**J**	1.0	0.43	ug/L			02/25/16 21:20	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 21:20	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/25/16 21:20	1
Chloroform	**0.26**	**J**	1.0	0.25	ug/L			02/25/16 21:20	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/25/16 21:20	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/25/16 21:20	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/25/16 21:20	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/25/16 21:20	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/25/16 21:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/25/16 21:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/25/16 21:20	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/25/16 21:20	1
2-Hexanone	10	U	10	0.48	ug/L			02/25/16 21:20	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/25/16 21:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/25/16 21:20	1
Styrene	1.0	U	1.0	0.45	ug/L			02/25/16 21:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/25/16 21:20	1
Tetrachloroethene	**0.73**	**J**	1.0	0.31	ug/L			02/25/16 21:20	1
Toluene	1.0	U	1.0	0.23	ug/L			02/25/16 21:20	1
Trichloroethene	**22**		1.0	0.22	ug/L			02/25/16 21:20	1
Vinyl chloride	**11**		1.0	0.29	ug/L			02/25/16 21:20	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/25/16 21:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/25/16 21:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/25/16 21:20	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/25/16 21:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/25/16 21:20	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/25/16 21:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/25/16 21:20	1
cis-1,2-Dichloroethene	**24**		1.0	0.26	ug/L			02/25/16 21:20	1
trans-1,2-Dichloroethene	**1.4**		1.0	0.30	ug/L			02/25/16 21:20	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/25/16 21:20	1
Methyl acetate	10	U	10	2.3	ug/L			02/25/16 21:20	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/25/16 21:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/25/16 21:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/25/16 21:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 21:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/25/16 21:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/25/16 21:20	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/25/16 21:20	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/25/16 21:20	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/25/16 21:20	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		78 - 125		02/25/16 21:20	1
4-Bromofluorobenzene (Surr)	83		61 - 120		02/25/16 21:20	1
Toluene-d8 (Surr)	85		80 - 120		02/25/16 21:20	1
Dibromofluoromethane (Surr)	85		79 - 120		02/25/16 21:20	1

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

Client Sample ID: GW-17303-021916-CB-031
Date Collected: 02/19/16 10:15
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/25/16 21:43	1
Benzene	1.0	U	1.0	0.35	ug/L			02/25/16 21:43	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/25/16 21:43	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/25/16 21:43	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/25/16 21:43	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/25/16 21:43	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/25/16 21:43	1
Carbon tetrachloride	**0.66**	**J**	1.0	0.43	ug/L			02/25/16 21:43	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 21:43	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/25/16 21:43	1
Chloroform	**0.25**	**J**	1.0	0.25	ug/L			02/25/16 21:43	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/25/16 21:43	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/25/16 21:43	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/25/16 21:43	1
1,1-Dichloroethene	**0.45**	**J**	1.0	0.45	ug/L			02/25/16 21:43	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/25/16 21:43	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/25/16 21:43	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/25/16 21:43	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/25/16 21:43	1
2-Hexanone	10	U	10	0.48	ug/L			02/25/16 21:43	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/25/16 21:43	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/25/16 21:43	1
Styrene	1.0	U	1.0	0.45	ug/L			02/25/16 21:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/25/16 21:43	1
Tetrachloroethene	**0.77**	**J**	1.0	0.31	ug/L			02/25/16 21:43	1
Toluene	1.0	U	1.0	0.23	ug/L			02/25/16 21:43	1
Trichloroethene	**23**		1.0	0.22	ug/L			02/25/16 21:43	1
Vinyl chloride	**12**		1.0	0.29	ug/L			02/25/16 21:43	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/25/16 21:43	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/25/16 21:43	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/25/16 21:43	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/25/16 21:43	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/25/16 21:43	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/25/16 21:43	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/25/16 21:43	1
cis-1,2-Dichloroethene	**25**		1.0	0.26	ug/L			02/25/16 21:43	1
trans-1,2-Dichloroethene	**1.4**		1.0	0.30	ug/L			02/25/16 21:43	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/25/16 21:43	1
Methyl acetate	10	U	10	2.3	ug/L			02/25/16 21:43	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/25/16 21:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/25/16 21:43	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/25/16 21:43	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 21:43	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/25/16 21:43	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/25/16 21:43	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/25/16 21:43	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/25/16 21:43	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/25/16 21:43	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		78 - 125		02/25/16 21:43	1
4-Bromofluorobenzene (Surr)	85		61 - 120		02/25/16 21:43	1
Toluene-d8 (Surr)	87		80 - 120		02/25/16 21:43	1
Dibromofluoromethane (Surr)	87		79 - 120		02/25/16 21:43	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

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

Client Sample ID: GW-17303-021916-CB-032
Date Collected: 02/19/16 11:20
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	50	U	50	4.7	ug/L			02/25/16 22:05	5
Benzene	**10**		5.0	1.8	ug/L			02/25/16 22:05	5
Bromodichloromethane	5.0	U	5.0	1.5	ug/L			02/25/16 22:05	5
Bromoform	5.0	U	5.0	2.8	ug/L			02/25/16 22:05	5
Bromomethane	5.0	U	5.0	2.2	ug/L			02/25/16 22:05	5
2-Butanone (MEK)	50	U	50	2.7	ug/L			02/25/16 22:05	5
Carbon disulfide	25	U	25	1.9	ug/L			02/25/16 22:05	5
Carbon tetrachloride	5.0	U	5.0	2.2	ug/L			02/25/16 22:05	5
Chlorobenzene	5.0	U	5.0	1.3	ug/L			02/25/16 22:05	5
Chloroethane	5.0	U	5.0	1.6	ug/L			02/25/16 22:05	5
Chloroform	5.0	U	5.0	1.3	ug/L			02/25/16 22:05	5
Chloromethane	5.0	U	5.0	2.2	ug/L			02/25/16 22:05	5
1,1-Dichloroethane	5.0	U	5.0	1.5	ug/L			02/25/16 22:05	5
1,2-Dichloroethane	5.0	U	5.0	1.2	ug/L			02/25/16 22:05	5
1,1-Dichloroethene	5.0	U	5.0	2.3	ug/L			02/25/16 22:05	5
1,2-Dichloropropane	5.0	U	5.0	1.3	ug/L			02/25/16 22:05	5
cis-1,3-Dichloropropene	5.0	U	5.0	2.3	ug/L			02/25/16 22:05	5
trans-1,3-Dichloropropene	5.0	U	5.0	2.8	ug/L			02/25/16 22:05	5
Ethylbenzene	5.0	U	5.0	1.3	ug/L			02/25/16 22:05	5
2-Hexanone	50	U	50	2.4	ug/L			02/25/16 22:05	5
Methylene Chloride	25	U	25	1.7	ug/L			02/25/16 22:05	5
4-Methyl-2-pentanone (MIBK)	50	U	50	5.0	ug/L			02/25/16 22:05	5
Styrene	5.0	U	5.0	2.3	ug/L			02/25/16 22:05	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.1	ug/L			02/25/16 22:05	5
Tetrachloroethene	5.0	U	5.0	1.6	ug/L			02/25/16 22:05	5
Toluene	5.0	U	5.0	1.2	ug/L			02/25/16 22:05	5
Trichloroethene	5.0	U	5.0	1.1	ug/L			02/25/16 22:05	5
Vinyl chloride	**130**		5.0	1.5	ug/L			02/25/16 22:05	5
Xylenes, Total	10	U	10	2.6	ug/L			02/25/16 22:05	5
1,1,1-Trichloroethane	5.0	U	5.0	2.2	ug/L			02/25/16 22:05	5
1,1,2-Trichloroethane	5.0	U	5.0	1.2	ug/L			02/25/16 22:05	5
Cyclohexane	5.0	U	5.0	2.3	ug/L			02/25/16 22:05	5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	4.1	ug/L			02/25/16 22:05	5
1,2-Dibromoethane	5.0	U	5.0	1.6	ug/L			02/25/16 22:05	5
Dichlorodifluoromethane	5.0	U	5.0	1.6	ug/L			02/25/16 22:05	5
cis-1,2-Dichloroethene	**4.2**	**J**	5.0	1.3	ug/L			02/25/16 22:05	5
trans-1,2-Dichloroethene	5.0	U	5.0	1.5	ug/L			02/25/16 22:05	5
Isopropylbenzene	5.0	U	5.0	1.8	ug/L			02/25/16 22:05	5
Methyl acetate	50	U	50	11	ug/L			02/25/16 22:05	5
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			02/25/16 22:05	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	2.3	ug/L			02/25/16 22:05	5
1,2,4-Trichlorobenzene	5.0	U	5.0	1.6	ug/L			02/25/16 22:05	5
1,2-Dichlorobenzene	5.0	U	5.0	1.3	ug/L			02/25/16 22:05	5
1,3-Dichlorobenzene	5.0	U	5.0	0.95	ug/L			02/25/16 22:05	5
1,4-Dichlorobenzene	5.0	U	5.0	1.4	ug/L			02/25/16 22:05	5
Trichlorofluoromethane	5.0	U	5.0	2.5	ug/L			02/25/16 22:05	5
Dibromochloromethane	5.0	U	5.0	2.2	ug/L			02/25/16 22:05	5
Methylcyclohexane	5.0	U	5.0	2.2	ug/L			02/25/16 22:05	5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		78 - 125		02/25/16 22:05	5
4-Bromofluorobenzene (Surr)	83		61 - 120		02/25/16 22:05	5
Toluene-d8 (Surr)	85		80 - 120		02/25/16 22:05	5
Dibromofluoromethane (Surr)	83		79 - 120		02/25/16 22:05	5

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

Client Sample ID: GW-17303-021916-CB-033
Date Collected: 02/19/16 12:40
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1100	U	1100	100	ug/L			02/25/16 22:27	111.11
Benzene	110	U	110	39	ug/L			02/25/16 22:27	111.11
Bromodichloromethane	110	U	110	32	ug/L			02/25/16 22:27	111.11
Bromoform	110	U	110	62	ug/L			02/25/16 22:27	111.11
Bromomethane	110	U	110	49	ug/L			02/25/16 22:27	111.11
2-Butanone (MEK)	1100	U	1100	59	ug/L			02/25/16 22:27	111.11
Carbon disulfide	560	U	560	42	ug/L			02/25/16 22:27	111.11
Carbon tetrachloride	110	U	110	48	ug/L			02/25/16 22:27	111.11
Chlorobenzene	110	U	110	28	ug/L			02/25/16 22:27	111.11
Chloroethane	110	U	110	36	ug/L			02/25/16 22:27	111.11
Chloroform	110	U	110	28	ug/L			02/25/16 22:27	111.11
Chloromethane	110	U	110	49	ug/L			02/25/16 22:27	111.11
1,1-Dichloroethane	110	U	110	33	ug/L			02/25/16 22:27	111.11
1,2-Dichloroethane	110	U	110	26	ug/L			02/25/16 22:27	111.11
1,1-Dichloroethene	110	U	110	50	ug/L			02/25/16 22:27	111.11
1,2-Dichloropropane	110	U	110	28	ug/L			02/25/16 22:27	111.11
cis-1,3-Dichloropropene	110	U	110	51	ug/L			02/25/16 22:27	111.11
trans-1,3-Dichloropropene	110	U	110	62	ug/L			02/25/16 22:27	111.11
Ethylbenzene	110	U	110	28	ug/L			02/25/16 22:27	111.11
2-Hexanone	1100	U	1100	53	ug/L			02/25/16 22:27	111.11
Methylene Chloride	560	U	560	37	ug/L			02/25/16 22:27	111.11
4-Methyl-2-pentanone (MIBK)	1100	U	1100	110	ug/L			02/25/16 22:27	111.11
Styrene	110	U	110	50	ug/L			02/25/16 22:27	111.11
1,1,2,2-Tetrachloroethane	110	U	110	24	ug/L			02/25/16 22:27	111.11
Tetrachloroethene	110	U	110	34	ug/L			02/25/16 22:27	111.11
Toluene	110	U	110	26	ug/L			02/25/16 22:27	111.11
Trichloroethene	**30**	**J**	110	24	ug/L			02/25/16 22:27	111.11
Vinyl chloride	**4000**		110	32	ug/L			02/25/16 22:27	111.11
Xylenes, Total	220	U	220	58	ug/L			02/25/16 22:27	111.11
1,1,1-Trichloroethane	110	U	110	49	ug/L			02/25/16 22:27	111.11
1,1,2-Trichloroethane	110	U	110	27	ug/L			02/25/16 22:27	111.11
Cyclohexane	110	U	110	50	ug/L			02/25/16 22:27	111.11
1,2-Dibromo-3-Chloropropane	110	U	110	91	ug/L			02/25/16 22:27	111.11
1,2-Dibromoethane	110	U	110	36	ug/L			02/25/16 22:27	111.11
Dichlorodifluoromethane	110	U	110	36	ug/L			02/25/16 22:27	111.11
cis-1,2-Dichloroethene	**2400**		110	29	ug/L			02/25/16 22:27	111.11
trans-1,2-Dichloroethene	**87**	**J**	110	33	ug/L			02/25/16 22:27	111.11
Isopropylbenzene	110	U	110	39	ug/L			02/25/16 22:27	111.11
Methyl acetate	1100	U	1100	250	ug/L			02/25/16 22:27	111.11
Methyl tert-butyl ether	110	U	110	22	ug/L			02/25/16 22:27	111.11
1,1,2-Trichloro-1,2,2-trifluoroethane	110	U	110	50	ug/L			02/25/16 22:27	111.11
1,2,4-Trichlorobenzene	110	U	110	36	ug/L			02/25/16 22:27	111.11
1,2-Dichlorobenzene	110	U	110	28	ug/L			02/25/16 22:27	111.11
1,3-Dichlorobenzene	110	U	110	21	ug/L			02/25/16 22:27	111.11
1,4-Dichlorobenzene	110	U	110	30	ug/L			02/25/16 22:27	111.11
Trichlorofluoromethane	110	U	110	54	ug/L			02/25/16 22:27	111.11
Dibromochloromethane	110	U	110	48	ug/L			02/25/16 22:27	111.11
Methylcyclohexane	110	U	110	48	ug/L			02/25/16 22:27	111.11

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		78 - 125		02/25/16 22:27	111.11
4-Bromofluorobenzene (Surr)	81		61 - 120		02/25/16 22:27	111.11
Toluene-d8 (Surr)	84		80 - 120		02/25/16 22:27	111.11
Dibromofluoromethane (Surr)	84		79 - 120		02/25/16 22:27	111.11

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

Client Sample ID: TB-17303-021916-CB-034
Date Collected: 02/19/16 00:00
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			02/25/16 22:50	1
Benzene	1.0	U	1.0	0.35	ug/L			02/25/16 22:50	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/25/16 22:50	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/25/16 22:50	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/25/16 22:50	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/25/16 22:50	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/25/16 22:50	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/25/16 22:50	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 22:50	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/25/16 22:50	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/25/16 22:50	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/25/16 22:50	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/25/16 22:50	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/25/16 22:50	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/25/16 22:50	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/25/16 22:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/25/16 22:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/25/16 22:50	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/25/16 22:50	1
2-Hexanone	10	U	10	0.48	ug/L			02/25/16 22:50	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/25/16 22:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/25/16 22:50	1
Styrene	1.0	U	1.0	0.45	ug/L			02/25/16 22:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/25/16 22:50	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/25/16 22:50	1
Toluene	1.0	U	1.0	0.23	ug/L			02/25/16 22:50	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/25/16 22:50	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/25/16 22:50	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/25/16 22:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/25/16 22:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/25/16 22:50	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/25/16 22:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/25/16 22:50	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/25/16 22:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/25/16 22:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/25/16 22:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/25/16 22:50	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/25/16 22:50	1
Methyl acetate	10	U	10	2.3	ug/L			02/25/16 22:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/25/16 22:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/25/16 22:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/25/16 22:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 22:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/25/16 22:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/25/16 22:50	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/25/16 22:50	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/25/16 22:50	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/25/16 22:50	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		78 - 125		02/25/16 22:50	1
4-Bromofluorobenzene (Surr)	82		61 - 120		02/25/16 22:50	1
Toluene-d8 (Surr)	85		80 - 120		02/25/16 22:50	1
Dibromofluoromethane (Surr)	86		79 - 120		02/25/16 22:50	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-021916-CB-030
Date Collected: 02/19/16 09:55
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2.6**		0.50	0.080	ug/L			02/22/16 17:26	1
Ethane	0.50	U	0.50	0.14	ug/L			02/22/16 17:26	1
Ethylene	0.50	U	0.50	0.13	ug/L			02/22/16 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*103*		*66 - 132*		*02/22/16 17:26*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-021916-CB-031
Date Collected: 02/19/16 10:15
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2.9**		0.50	0.080	ug/L			02/22/16 17:44	1
Ethane	0.50	U	0.50	0.14	ug/L			02/22/16 17:44	1
Ethylene	0.50	U	0.50	0.13	ug/L			02/22/16 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*98*		*66 - 132*		*02/22/16 17:44*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-021916-CB-032
Date Collected: 02/19/16 11:20
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	1400		0.50	0.080	ug/L			02/22/16 18:18	1
Ethane	220		0.50	0.14	ug/L			02/22/16 18:18	1
Ethylene	1600		0.50	0.13	ug/L			02/22/16 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*99*		*66 - 132*		*02/22/16 18:18*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-021916-CB-033
Date Collected: 02/19/16 12:40
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	1100		0.50	0.080	ug/L			02/22/16 18:35	1
Ethane	39		0.50	0.14	ug/L			02/22/16 18:35	1
Ethylene	320		0.50	0.13	ug/L			02/22/16 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*96*		*66 - 132*		*02/22/16 18:35*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-021916-CB-030
Date Collected: 02/19/16 09:55
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1700	B	100	13	ug/L		02/22/16 09:29	02/23/16 14:57	1
Manganese	98	B	15	0.46	ug/L		02/22/16 09:29	02/23/16 14:57	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-021916-CB-031
Date Collected: 02/19/16 10:15
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1800	B	100	13	ug/L		02/22/16 09:29	02/23/16 15:05	1
Manganese	120	B	15	0.46	ug/L		02/22/16 09:29	02/23/16 15:05	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-021916-CB-032
Date Collected: 02/19/16 11:20
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4100	B	100	13	ug/L		02/22/16 09:29	02/23/16 15:13	1
Manganese	210	B	15	0.46	ug/L		02/22/16 09:29	02/23/16 15:13	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-021916-CB-033
Date Collected: 02/19/16 12:40
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1900	B	100	13	ug/L		02/22/16 09:29	02/23/16 15:25	1
Manganese	200	B	15	0.46	ug/L		02/22/16 09:29	02/23/16 15:25	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-021916-CB-030
Date Collected: 02/19/16 09:55
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1300	B	100	13	ug/L		02/22/16 09:29	02/23/16 15:01	1
Manganese	190	B	15	0.46	ug/L		02/22/16 09:29	02/23/16 15:01	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-021916-CB-031
Date Collected: 02/19/16 10:15
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1200	B	100	13	ug/L		02/22/16 09:29	02/23/16 15:09	1
Manganese	200	B	15	0.46	ug/L		02/22/16 09:29	02/23/16 15:09	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-021916-CB-032
Date Collected: 02/19/16 11:20
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4100	B	100	13	ug/L		02/22/16 09:29	02/23/16 15:17	1
Manganese	210	B	15	0.46	ug/L		02/22/16 09:29	02/23/16 15:17	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-021916-CB-033
Date Collected: 02/19/16 12:40
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1900	B	100	13	ug/L		02/22/16 09:29	02/23/16 15:21	1
Manganese	200	B	15	0.46	ug/L		02/22/16 09:29	02/23/16 15:21	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

General Chemistry

Client Sample ID: GW-17303-021916-CB-030
Date Collected: 02/19/16 09:55
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	320		5.0	1.9	mg/L			03/02/16 14:39	1
Chloride	85		1.0	0.41	mg/L			02/20/16 15:38	1
Nitrate as N	0.80		0.10	0.035	mg/L			02/20/16 15:38	1
Sulfate	55	B	1.0	0.13	mg/L			02/20/16 15:38	1
Total Organic Carbon	1.2	B	1.0	0.080	mg/L			02/22/16 18:29	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

General Chemistry

Client Sample ID: GW-17303-021916-CB-031
Date Collected: 02/19/16 10:15
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	340		5.0	1.9	mg/L			03/02/16 14:39	1
Chloride	86		1.0	0.41	mg/L			02/20/16 15:22	1
Nitrate as N	0.80		0.10	0.035	mg/L			02/20/16 15:22	1
Sulfate	55	B	1.0	0.13	mg/L			02/20/16 15:22	1
Total Organic Carbon	1.2	B	1.0	0.080	mg/L			02/22/16 18:55	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

General Chemistry

Client Sample ID: GW-17303-021916-CB-032
Date Collected: 02/19/16 11:20
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**490**		5.0	1.9	mg/L			03/02/16 14:39	1
Chloride	**180**		1.0	0.41	mg/L			02/20/16 15:55	1
Nitrate as N	0.10	U	0.10	0.035	mg/L			02/20/16 15:55	1
Sulfate	**23**	**B**	1.0	0.13	mg/L			02/20/16 15:55	1
Total Organic Carbon	**3.9**	**B**	1.0	0.080	mg/L			02/22/16 19:22	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

General Chemistry

Client Sample ID: GW-17303-021916-CB-033
Date Collected: 02/19/16 12:40
Date Received: 02/20/16 09:40

Lab Sample ID: 240-61167-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	340		5.0	1.9	mg/L			03/02/16 14:39	1
Chloride	48		1.0	0.41	mg/L			02/20/16 16:11	1
Nitrate as N	0.43		0.10	0.035	mg/L			02/20/16 16:11	1
Sulfate	26	B	1.0	0.13	mg/L			02/20/16 16:11	1
Total Organic Carbon	2.7	B	1.0	0.080	mg/L			02/22/16 19:47	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

GC/MS VOA

Analysis Batch: 219050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61167-1	GW-17303-021916-CB-030	Total/NA	Water	8260B	
240-61167-2	GW-17303-021916-CB-031	Total/NA	Water	8260B	
240-61167-3	GW-17303-021916-CB-032	Total/NA	Water	8260B	
240-61167-4	GW-17303-021916-CB-033	Total/NA	Water	8260B	
240-61167-5	TB-17303-021916-CB-034	Total/NA	Water	8260B	
LCS 240-219050/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-219050/6	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 218397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61167-1	GW-17303-021916-CB-030	Total/NA	Water	RSK-175	
240-61167-2	GW-17303-021916-CB-031	Total/NA	Water	RSK-175	
240-61167-3	GW-17303-021916-CB-032	Total/NA	Water	RSK-175	
240-61167-4	GW-17303-021916-CB-033	Total/NA	Water	RSK-175	
LCS 240-218397/5	Lab Control Sample	Total/NA	Water	RSK-175	
MB 240-218397/4	Method Blank	Total/NA	Water	RSK-175	

Metals

Prep Batch: 218424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61167-1	GW-17303-021916-CB-030	Dissolved	Water	3005A	
240-61167-1	GW-17303-021916-CB-030	Total Recoverable	Water	3005A	
240-61167-2	GW-17303-021916-CB-031	Dissolved	Water	3005A	
240-61167-2	GW-17303-021916-CB-031	Total Recoverable	Water	3005A	
240-61167-3	GW-17303-021916-CB-032	Dissolved	Water	3005A	
240-61167-3	GW-17303-021916-CB-032	Total Recoverable	Water	3005A	
240-61167-4	GW-17303-021916-CB-033	Dissolved	Water	3005A	
240-61167-4	GW-17303-021916-CB-033	Total Recoverable	Water	3005A	
LCS 240-218424/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-218424/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 218840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61167-1	GW-17303-021916-CB-030	Dissolved	Water	6010B	218424
240-61167-1	GW-17303-021916-CB-030	Total Recoverable	Water	6010B	218424
240-61167-2	GW-17303-021916-CB-031	Dissolved	Water	6010B	218424
240-61167-2	GW-17303-021916-CB-031	Total Recoverable	Water	6010B	218424
240-61167-3	GW-17303-021916-CB-032	Dissolved	Water	6010B	218424
240-61167-3	GW-17303-021916-CB-032	Total Recoverable	Water	6010B	218424
240-61167-4	GW-17303-021916-CB-033	Dissolved	Water	6010B	218424
240-61167-4	GW-17303-021916-CB-033	Total Recoverable	Water	6010B	218424
LCS 240-218424/2-A	Lab Control Sample	Total Recoverable	Water	6010B	218424
MB 240-218424/1-A	Method Blank	Total Recoverable	Water	6010B	218424

General Chemistry

Analysis Batch: 218399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61167-1	GW-17303-021916-CB-030	Total/NA	Water	300.0	
240-61167-2	GW-17303-021916-CB-031	Total/NA	Water	300.0	
240-61167-3	GW-17303-021916-CB-032	Total/NA	Water	300.0	
240-61167-4	GW-17303-021916-CB-033	Total/NA	Water	300.0	
LCS 240-218399/4	Lab Control Sample	Total/NA	Water	300.0	
MB 240-218399/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 218400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61167-1	GW-17303-021916-CB-030	Total/NA	Water	300.0	
240-61167-2	GW-17303-021916-CB-031	Total/NA	Water	300.0	
240-61167-3	GW-17303-021916-CB-032	Total/NA	Water	300.0	
240-61167-4	GW-17303-021916-CB-033	Total/NA	Water	300.0	
LCS 240-218400/4	Lab Control Sample	Total/NA	Water	300.0	
MB 240-218400/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 218553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61167-1	GW-17303-021916-CB-030	Total/NA	Water	9060	
240-61167-2	GW-17303-021916-CB-031	Total/NA	Water	9060	
240-61167-3	GW-17303-021916-CB-032	Total/NA	Water	9060	
240-61167-4	GW-17303-021916-CB-033	Total/NA	Water	9060	
LCS 240-218553/6	Lab Control Sample	Total/NA	Water	9060	
LLCS 240-218553/5	Lab Control Sample	Total/NA	Water	9060	
MB 240-218553/4	Method Blank	Total/NA	Water	9060	

Analysis Batch: 219929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61167-1	GW-17303-021916-CB-030	Total/NA	Water	2320B-1997	
240-61167-2	GW-17303-021916-CB-031	Total/NA	Water	2320B-1997	
240-61167-3	GW-17303-021916-CB-032	Total/NA	Water	2320B-1997	
240-61167-4	GW-17303-021916-CB-033	Total/NA	Water	2320B-1997	
240-61167-4 DU	GW-17303-021916-CB-033	Total/NA	Water	2320B-1997	
LCS 240-219929/2	Lab Control Sample	Total/NA	Water	2320B-1997	
MB 240-219929/3	Method Blank	Total/NA	Water	2320B-1997	

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

Lab Sample ID: MB 240-219050/6
Matrix: Water
Analysis Batch: 219050

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	0.94	ug/L			02/25/16 15:36	1
Benzene	1.0	U	1.0	0.35	ug/L			02/25/16 15:36	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			02/25/16 15:36	1
Bromoform	1.0	U	1.0	0.56	ug/L			02/25/16 15:36	1
Bromomethane	1.0	U	1.0	0.44	ug/L			02/25/16 15:36	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			02/25/16 15:36	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			02/25/16 15:36	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			02/25/16 15:36	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 15:36	1
Chloroethane	1.0	U	1.0	0.32	ug/L			02/25/16 15:36	1
Chloroform	1.0	U	1.0	0.25	ug/L			02/25/16 15:36	1
Chloromethane	1.0	U	1.0	0.44	ug/L			02/25/16 15:36	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			02/25/16 15:36	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			02/25/16 15:36	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			02/25/16 15:36	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			02/25/16 15:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			02/25/16 15:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			02/25/16 15:36	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			02/25/16 15:36	1
2-Hexanone	10	U	10	0.48	ug/L			02/25/16 15:36	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			02/25/16 15:36	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			02/25/16 15:36	1
Styrene	1.0	U	1.0	0.45	ug/L			02/25/16 15:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			02/25/16 15:36	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			02/25/16 15:36	1
Toluene	1.0	U	1.0	0.23	ug/L			02/25/16 15:36	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			02/25/16 15:36	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			02/25/16 15:36	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			02/25/16 15:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			02/25/16 15:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			02/25/16 15:36	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			02/25/16 15:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			02/25/16 15:36	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			02/25/16 15:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			02/25/16 15:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			02/25/16 15:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			02/25/16 15:36	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			02/25/16 15:36	1
Methyl acetate	10	U	10	2.3	ug/L			02/25/16 15:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			02/25/16 15:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			02/25/16 15:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			02/25/16 15:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			02/25/16 15:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			02/25/16 15:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			02/25/16 15:36	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			02/25/16 15:36	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			02/25/16 15:36	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			02/25/16 15:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		78 - 125		02/25/16 15:36	1
4-Bromofluorobenzene (Surr)	83		61 - 120		02/25/16 15:36	1
Toluene-d8 (Surr)	87		80 - 120		02/25/16 15:36	1
Dibromofluoromethane (Surr)	84		79 - 120		02/25/16 15:36	1

Lab Sample ID: LCS 240-219050/4
Matrix: Water
Analysis Batch: 219050

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	18.5		ug/L		92	34 - 148
Benzene	10.0	9.66		ug/L		97	80 - 120
Bromodichloromethane	10.0	9.22		ug/L		92	80 - 120
Bromoform	10.0	9.73		ug/L		97	56 - 122
Bromomethane	10.0	9.56		ug/L		96	38 - 132
2-Butanone (MEK)	20.0	19.7		ug/L		99	56 - 138
Carbon disulfide	10.0	9.47		ug/L		95	65 - 144
Carbon tetrachloride	10.0	9.69		ug/L		97	77 - 131
Chlorobenzene	10.0	9.67		ug/L		97	80 - 120
Chloroethane	10.0	6.93		ug/L		69	36 - 126
Chloroform	10.0	9.61		ug/L		96	80 - 120
Chloromethane	10.0	8.17		ug/L		82	48 - 133
1,1-Dichloroethane	10.0	9.34		ug/L		93	79 - 125
1,2-Dichloroethane	10.0	9.18		ug/L		92	80 - 120
1,1-Dichloroethene	10.0	9.50		ug/L		95	76 - 124
1,2-Dichloropropane	10.0	9.51		ug/L		95	78 - 124
cis-1,3-Dichloropropene	10.0	10.2		ug/L		102	74 - 126
trans-1,3-Dichloropropene	10.0	8.60		ug/L		86	75 - 131
Ethylbenzene	10.0	9.69		ug/L		97	80 - 120
2-Hexanone	20.0	19.9		ug/L		99	55 - 141
Methylene Chloride	10.0	10.2		ug/L		102	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	19.4		ug/L		97	64 - 135
Styrene	10.0	10.1		ug/L		101	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.75		ug/L		98	71 - 123
Tetrachloroethene	10.0	9.83		ug/L		98	78 - 121
Toluene	10.0	9.74		ug/L		97	80 - 120
Trichloroethene	10.0	9.76		ug/L		98	80 - 121
Vinyl chloride	10.0	8.65		ug/L		87	52 - 121
Xylenes, Total	20.0	19.8		ug/L		99	80 - 120
1,1,1-Trichloroethane	10.0	9.65		ug/L		97	77 - 123
1,1,2-Trichloroethane	10.0	9.61		ug/L		96	80 - 120
Cyclohexane	10.0	9.60		ug/L		96	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	9.41		ug/L		94	50 - 132
1,2-Dibromoethane	10.0	10.3		ug/L		103	80 - 120
Dichlorodifluoromethane	10.0	6.64		ug/L		66	23 - 136
cis-1,2-Dichloroethene	10.0	9.84		ug/L		98	79 - 120
trans-1,2-Dichloroethene	10.0	9.85		ug/L		98	80 - 124
Isopropylbenzene	10.0	9.90		ug/L		99	77 - 120
Methyl acetate	50.0	49.3		ug/L		99	67 - 131
Methyl tert-butyl ether	10.0	8.91		ug/L		89	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.69		ug/L		97	67 - 138
1,2,4-Trichlorobenzene	10.0	8.85		ug/L		89	61 - 120
1,2-Dichlorobenzene	10.0	9.52		ug/L		95	79 - 120

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

Lab Sample ID: LCS 240-219050/4
Matrix: Water
Analysis Batch: 219050

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	9.41		ug/L		94	79 - 120
1,4-Dichlorobenzene	10.0	9.52		ug/L		95	79 - 120
Trichlorofluoromethane	10.0	9.56		ug/L		96	61 - 133
Dibromochloromethane	10.0	9.76		ug/L		98	74 - 120
Methylcyclohexane	10.0	9.74		ug/L		97	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*78 - 125*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*
Toluene-d8 (Surr)	*90*		*80 - 120*
Dibromofluoromethane (Surr)	*87*		*79 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-218397/4
Matrix: Water
Analysis Batch: 218397

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.50	U	0.50	0.080	ug/L			02/22/16 15:09	1
Ethane	0.50	U	0.50	0.14	ug/L			02/22/16 15:09	1
Ethylene	0.50	U	0.50	0.13	ug/L			02/22/16 15:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*113*		*66 - 132*		*02/22/16 15:09*	*1*

Lab Sample ID: LCS 240-218397/5
Matrix: Water
Analysis Batch: 218397

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	199	187		ug/L		94	76 - 120
Ethane	374	347		ug/L		93	80 - 120
Ethylene	349	327		ug/L		94	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*110*		*66 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-218424/1-A
Matrix: Water
Analysis Batch: 218840

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 218424

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	122		100	13	ug/L		02/22/16 09:29	02/23/16 13:48	1
Manganese	1.84	J	15	0.46	ug/L		02/22/16 09:29	02/23/16 13:48	1

Lab Sample ID: LCS 240-218424/2-A
Matrix: Water
Analysis Batch: 218840

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 218424

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	938		ug/L		94	80 - 120
Manganese	500	477		ug/L		95	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-219929/3
Matrix: Water
Analysis Batch: 219929

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	1.9	mg/L			03/02/16 14:39	1

Lab Sample ID: LCS 240-219929/2
Matrix: Water
Analysis Batch: 219929

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	368	444		mg/L		121	90 - 127

Lab Sample ID: 240-61167-4 DU
Matrix: Water
Analysis Batch: 219929

Client Sample ID: GW-17303-021916-CB-033
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	340		333		mg/L		0.6	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-218399/3
Matrix: Water
Analysis Batch: 218399

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.41	mg/L			02/20/16 12:54	1
Sulfate	0.565	J	1.0	0.13	mg/L			02/20/16 12:54	1

Lab Sample ID: LCS 240-218399/4
Matrix: Water
Analysis Batch: 218399

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	53.0		mg/L		106	90 - 110
Sulfate	50.0	49.5		mg/L		99	90 - 110

Lab Sample ID: MB 240-218400/3
Matrix: Water
Analysis Batch: 218400

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.035	mg/L			02/20/16 12:54	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-218400/4
Matrix: Water
Analysis Batch: 218400

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.50	2.48		mg/L		99	90 - 110

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 240-218553/4
Matrix: Water
Analysis Batch: 218553

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.102	J	1.0	0.080	mg/L			02/22/16 11:01	1

Lab Sample ID: LCS 240-218553/6
Matrix: Water
Analysis Batch: 218553

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	69.3	70.1		mg/L		101	88 - 115

Lab Sample ID: LLCS 240-218553/5
Matrix: Water
Analysis Batch: 218553

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	6.93	7.03		mg/L		101	88 - 115

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-61167-1	GW-17303-021916-CB-030	88	83	85	85
240-61167-2	GW-17303-021916-CB-031	86	85	87	87
240-61167-3	GW-17303-021916-CB-032	88	83	85	83
240-61167-4	GW-17303-021916-CB-033	85	81	84	84
240-61167-5	TB-17303-021916-CB-034	88	82	85	86
LCS 240-219050/4	Lab Control Sample	81	92	90	87
MB 240-219050/6	Method Blank	87	83	87	84

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: RSK-175 - Dissolved Gases (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		rifluoroet
Lab Sample ID	Client Sample ID	(66-132)
240-61167-1	GW-17303-021916-CB-030	103
240-61167-2	GW-17303-021916-CB-031	98
240-61167-3	GW-17303-021916-CB-032	99
240-61167-4	GW-17303-021916-CB-033	96
LCS 240-218397/5	Lab Control Sample	110
MB 240-218397/4	Method Blank	113

Surrogate Legend

1,1,1-Trifluoroethane = 1,1,1-Trifluoroethane

Client Sample ID: GW-17303-021916-CB-030

Lab Sample ID: 240-61167-1

Date Collected: 02/19/16 09:55

Matrix: Water

Date Received: 02/20/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219050	02/25/16 21:20	LRW	TAL CAN
Total/NA	Analysis	RSK-175		1	218397	02/22/16 17:26	BPM	TAL CAN
Dissolved	Prep	3005A			218424	02/22/16 09:29	WKD	TAL CAN
Dissolved	Analysis	6010B		1	218840	02/23/16 15:01	KLC	TAL CAN
Total Recoverable	Prep	3005A			218424	02/22/16 09:29	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	218840	02/23/16 14:57	KLC	TAL CAN
Total/NA	Analysis	2320B-1997		1	219929	03/02/16 14:39	LCN	TAL CAN
Total/NA	Analysis	300.0		1	218399	02/20/16 15:38	LKG	TAL CAN
Total/NA	Analysis	300.0		1	218400	02/20/16 15:38	LKG	TAL CAN
Total/NA	Analysis	9060		1	218553	02/22/16 18:29	TPH	TAL CAN

Client Sample ID: GW-17303-021916-CB-031

Lab Sample ID: 240-61167-2

Date Collected: 02/19/16 10:15

Matrix: Water

Date Received: 02/20/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219050	02/25/16 21:43	LRW	TAL CAN
Total/NA	Analysis	RSK-175		1	218397	02/22/16 17:44	BPM	TAL CAN
Dissolved	Prep	3005A			218424	02/22/16 09:29	WKD	TAL CAN
Dissolved	Analysis	6010B		1	218840	02/23/16 15:09	KLC	TAL CAN
Total Recoverable	Prep	3005A			218424	02/22/16 09:29	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	218840	02/23/16 15:05	KLC	TAL CAN
Total/NA	Analysis	2320B-1997		1	219929	03/02/16 14:39	LCN	TAL CAN
Total/NA	Analysis	300.0		1	218399	02/20/16 15:22	LKG	TAL CAN
Total/NA	Analysis	300.0		1	218400	02/20/16 15:22	LKG	TAL CAN
Total/NA	Analysis	9060		1	218553	02/22/16 18:55	TPH	TAL CAN

Client Sample ID: GW-17303-021916-CB-032

Lab Sample ID: 240-61167-3

Date Collected: 02/19/16 11:20

Matrix: Water

Date Received: 02/20/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	219050	02/25/16 22:05	LRW	TAL CAN
Total/NA	Analysis	RSK-175		1	218397	02/22/16 18:18	BPM	TAL CAN
Dissolved	Prep	3005A			218424	02/22/16 09:29	WKD	TAL CAN
Dissolved	Analysis	6010B		1	218840	02/23/16 15:17	KLC	TAL CAN
Total Recoverable	Prep	3005A			218424	02/22/16 09:29	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	218840	02/23/16 15:13	KLC	TAL CAN
Total/NA	Analysis	2320B-1997		1	219929	03/02/16 14:39	LCN	TAL CAN
Total/NA	Analysis	300.0		1	218399	02/20/16 15:55	LKG	TAL CAN
Total/NA	Analysis	300.0		1	218400	02/20/16 15:55	LKG	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

Client Sample ID: GW-17303-021916-CB-032

Lab Sample ID: 240-61167-3

Date Collected: 02/19/16 11:20
Matrix: Water
Date Received: 02/20/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060		1	218553	02/22/16 19:22	TPH	TAL CAN

Client Sample ID: GW-17303-021916-CB-033

Lab Sample ID: 240-61167-4

Date Collected: 02/19/16 12:40
Matrix: Water
Date Received: 02/20/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		111.11	219050	02/25/16 22:27	LRW	TAL CAN
Total/NA	Analysis	RSK-175		1	218397	02/22/16 18:35	BPM	TAL CAN
Dissolved	Prep	3005A			218424	02/22/16 09:29	WKD	TAL CAN
Dissolved	Analysis	6010B		1	218840	02/23/16 15:21	KLC	TAL CAN
Total Recoverable	Prep	3005A			218424	02/22/16 09:29	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	218840	02/23/16 15:25	KLC	TAL CAN
Total/NA	Analysis	2320B-1997		1	219929	03/02/16 14:39	LCN	TAL CAN
Total/NA	Analysis	300.0		1	218399	02/20/16 16:11	LKG	TAL CAN
Total/NA	Analysis	300.0		1	218400	02/20/16 16:11	LKG	TAL CAN
Total/NA	Analysis	9060		1	218553	02/22/16 19:47	TPH	TAL CAN

Client Sample ID: TB-17303-021916-CB-034

Lab Sample ID: 240-61167-5

Date Collected: 02/19/16 00:00
Matrix: Water
Date Received: 02/20/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219050	02/25/16 22:50	LRW	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61167-1

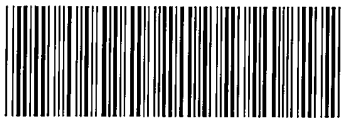
Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



240-61167 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

2.22/C1.7

Chain of Custody Record

122756

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: B. Landale	Site Contact: C. Bondy	Date: 2/19/2016	COC No: 008
Company Name: GHD	Tel/Fax: 734-453-5123	Lab Contact: D. Hechter	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 734-453-5123	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVD	☐ 1 week			Job / SDG No.:
Site: 017303	☐ 2 days			
P O # SSOW# 17303-033	☐ 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 VOCs	Nitrate	Sulfate	Chloride	Total Iron + Manganese	Diss Iron + Manganese *	Methane / E. thane / E. thene	Alkalinity	Total Organic carbon	Sample Specific Notes:
GW-17303-021916-CB-030	2/19/16	955	G	WG	12	N	N	X	X	X	X	X	X	X	X	X	
-031		1015			12			X	X	X	X	X	X	X	X		
-032		1120			12			X	X	X	X	X	X	X	X	X	
-033		1240	↓	↓	12			X	X	X	X	X	X	X	X		
-034	↓	—	—	WGQ	1	—	—	X									

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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:
Tracking #: 6209 0763 2775 batch complete * Diss Iron + Manganese were field filtered

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:
C. Bondy C Bondy	GHD	2/19/16 1345			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Jacquelyn Benel	TANC	2/20/16 940

3/3/2016

TestAmerica Canton Sample Receipt Form/Narrative Login # : 601167
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: T. Jewel

Cooler Received on 2/20/16 Opened on 2/20/16

FedEx: 1st Grd (Exp) UPS FAS Stetson 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# 48 (CF -1.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN# I8 (CF -0.5 °C) Observed Cooler Temp. 2.2 °C Corrected Cooler Temp. 1.7 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
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 sample(s) at the correct pH upon receipt? (Yes) No NA pH Strip Lot# HC559158
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot# B531501VB (Yes) No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

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): _____

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
GW-17303-021916-CB-030	240-61167-K-1	Plastic 500ml - with Nitric Acid	<2		
GW-17303-021916-CB-030	240-61167-L-1	Plastic 500ml - w/ Nitric - Dis.	<2		
GW-17303-021916-CB-031	240-61167-K-2	Plastic 500ml - with Nitric Acid	<2		
GW-17303-021916-CB-031	240-61167-L-2	Plastic 500ml - w/ Nitric - Dis.	<2		
GW-17303-021916-CB-032	240-61167-K-3	Plastic 500ml - with Nitric Acid	<2		
GW-17303-021916-CB-032	240-61167-L-3	Plastic 500ml - w/ Nitric - Dis.	<2		
GW-17303-021916-CB-033	240-61167-K-4	Plastic 500ml - with Nitric Acid	<2		
GW-17303-021916-CB-033	240-61167-L-4	Plastic 500ml - w/ Nitric - Dis.	<2		

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: 240-61363-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
3/7/2016 1:56:38 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: 240-61363-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-61363-1

Comments
No additional comments.

Receipt
The samples were received on 2/25/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 219899 recovered outside control limits for the following analytes: Chloroethane, Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.GW-17303-022316-CB-039 (240-61363-5) and (LCS 240-219899/4)

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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61363-1

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.
*	LCS or LCSD 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61363-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-61363-1	GW-17303-022316-CB-035	Water	02/23/16 11:25	02/25/16 09:40
240-61363-2	GW-17303-022316-CB-036	Water	02/23/16 13:10	02/25/16 09:40
240-61363-3	GW-17303-022316-CB-037	Water	02/23/16 14:20	02/25/16 09:40
240-61363-4	GW-17303-022316-CB-038	Water	02/23/16 15:10	02/25/16 09:40
240-61363-5	GW-17303-022316-CB-039	Water	02/23/16 16:00	02/25/16 09:40
240-61363-6	TB-17303-022316-CB-040	Water	02/23/16 00:00	02/25/16 09:40

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61363-1

Client Sample ID: GW-17303-022316-CB-035 — Lab Sample ID: 240-61363-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	8500		5000	380	ug/L	1000		8260B	Total/NA
Vinyl chloride	8800		1000	290	ug/L	1000		8260B	Total/NA
cis-1,2-Dichloroethene	34000		1000	260	ug/L	1000		8260B	Total/NA

Client Sample ID: GW-17303-022316-CB-036 — Lab Sample ID: 240-61363-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	140		83	6.3	ug/L	16.67		8260B	Total/NA
Trichloroethene	4.7	J	17	3.7	ug/L	16.67		8260B	Total/NA
Vinyl chloride	420		17	4.8	ug/L	16.67		8260B	Total/NA
cis-1,2-Dichloroethene	37		17	4.3	ug/L	16.67		8260B	Total/NA
trans-1,2-Dichloroethene	21		17	5.0	ug/L	16.67		8260B	Total/NA

Client Sample ID: GW-17303-022316-CB-037 — Lab Sample ID: 240-61363-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	2700		1300	95	ug/L	250		8260B	Total/NA
Ethylbenzene	140	J	250	63	ug/L	250		8260B	Total/NA
Toluene	2100		250	58	ug/L	250		8260B	Total/NA
Vinyl chloride	6400		250	73	ug/L	250		8260B	Total/NA
Xylenes, Total	880		500	130	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	980		250	65	ug/L	250		8260B	Total/NA

Client Sample ID: GW-17303-022316-CB-038 — Lab Sample ID: 240-61363-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.7	J	10	0.94	ug/L	1		8260B	Total/NA
Benzene	2.1		1.0	0.35	ug/L	1		8260B	Total/NA
Carbon disulfide	9.3		5.0	0.38	ug/L	1		8260B	Total/NA
Ethylbenzene	9.5		1.0	0.25	ug/L	1		8260B	Total/NA
Toluene	27		1.0	0.23	ug/L	1		8260B	Total/NA
Trichloroethene	0.41	J	1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	30		1.0	0.29	ug/L	1		8260B	Total/NA
Xylenes, Total	41		2.0	0.52	ug/L	1		8260B	Total/NA
Cyclohexane	10		1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	16		1.0	0.26	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	3.5		1.0	0.30	ug/L	1		8260B	Total/NA
Isopropylbenzene	6.9		1.0	0.35	ug/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.37	J	1.0	0.25	ug/L	1		8260B	Total/NA
Methylcyclohexane	2.0		1.0	0.43	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-022316-CB-039 — Lab Sample ID: 240-61363-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	4500		330	97	ug/L	333.33		8260B	Total/NA
Xylenes, Total	180	J	670	170	ug/L	333.33		8260B	Total/NA
cis-1,2-Dichloroethene	320	J	330	87	ug/L	333.33		8260B	Total/NA

Client Sample ID: TB-17303-022316-CB-040 — Lab Sample ID: 240-61363-6

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample ID: TB-17303-022316-CB-040 (Continued)

Lab Sample ID: 240-61363-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	11		5.0	0.38	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61363-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: GW-17303-022316-CB-035
Date Collected: 02/23/16 11:25
Date Received: 02/25/16 09:40

Lab Sample ID: 240-61363-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10000	U	10000	940	ug/L			03/01/16 16:46	1000
Benzene	1000	U	1000	350	ug/L			03/01/16 16:46	1000
Bromodichloromethane	1000	U	1000	290	ug/L			03/01/16 16:46	1000
Bromoform	1000	U	1000	560	ug/L			03/01/16 16:46	1000
Bromomethane	1000	U	1000	440	ug/L			03/01/16 16:46	1000
2-Butanone (MEK)	10000	U	10000	530	ug/L			03/01/16 16:46	1000
Carbon disulfide	**8500**		5000	380	ug/L			03/01/16 16:46	1000
Carbon tetrachloride	1000	U	1000	430	ug/L			03/01/16 16:46	1000
Chlorobenzene	1000	U	1000	250	ug/L			03/01/16 16:46	1000
Chloroethane	1000	U	1000	320	ug/L			03/01/16 16:46	1000
Chloroform	1000	U	1000	250	ug/L			03/01/16 16:46	1000
Chloromethane	1000	U	1000	440	ug/L			03/01/16 16:46	1000
1,1-Dichloroethane	1000	U	1000	300	ug/L			03/01/16 16:46	1000
1,2-Dichloroethane	1000	U	1000	230	ug/L			03/01/16 16:46	1000
1,1-Dichloroethene	1000	U	1000	450	ug/L			03/01/16 16:46	1000
1,2-Dichloropropane	1000	U	1000	250	ug/L			03/01/16 16:46	1000
cis-1,3-Dichloropropene	1000	U	1000	460	ug/L			03/01/16 16:46	1000
trans-1,3-Dichloropropene	1000	U	1000	560	ug/L			03/01/16 16:46	1000
Ethylbenzene	1000	U	1000	250	ug/L			03/01/16 16:46	1000
2-Hexanone	10000	U	10000	480	ug/L			03/01/16 16:46	1000
Methylene Chloride	5000	U	5000	330	ug/L			03/01/16 16:46	1000
4-Methyl-2-pentanone (MIBK)	10000	U	10000	990	ug/L			03/01/16 16:46	1000
Styrene	1000	U	1000	450	ug/L			03/01/16 16:46	1000
1,1,2,2-Tetrachloroethane	1000	U	1000	220	ug/L			03/01/16 16:46	1000
Tetrachloroethene	1000	U	1000	310	ug/L			03/01/16 16:46	1000
Toluene	1000	U	1000	230	ug/L			03/01/16 16:46	1000
Trichloroethene	1000	U	1000	220	ug/L			03/01/16 16:46	1000
Vinyl chloride	**8800**		1000	290	ug/L			03/01/16 16:46	1000
Xylenes, Total	2000	U	2000	520	ug/L			03/01/16 16:46	1000
1,1,1-Trichloroethane	1000	U	1000	440	ug/L			03/01/16 16:46	1000
1,1,2-Trichloroethane	1000	U	1000	240	ug/L			03/01/16 16:46	1000
Cyclohexane	1000	U	1000	450	ug/L			03/01/16 16:46	1000
1,2-Dibromo-3-Chloropropane	1000	U	1000	820	ug/L			03/01/16 16:46	1000
1,2-Dibromoethane	1000	U	1000	320	ug/L			03/01/16 16:46	1000
Dichlorodifluoromethane	1000	U	1000	320	ug/L			03/01/16 16:46	1000
cis-1,2-Dichloroethene	**34000**		1000	260	ug/L			03/01/16 16:46	1000
trans-1,2-Dichloroethene	1000	U	1000	300	ug/L			03/01/16 16:46	1000
Isopropylbenzene	1000	U	1000	350	ug/L			03/01/16 16:46	1000
Methyl acetate	10000	U	10000	2300	ug/L			03/01/16 16:46	1000
Methyl tert-butyl ether	1000	U	1000	200	ug/L			03/01/16 16:46	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	U	1000	450	ug/L			03/01/16 16:46	1000
1,2,4-Trichlorobenzene	1000	U	1000	320	ug/L			03/01/16 16:46	1000
1,2-Dichlorobenzene	1000	U	1000	250	ug/L			03/01/16 16:46	1000
1,3-Dichlorobenzene	1000	U	1000	190	ug/L			03/01/16 16:46	1000
1,4-Dichlorobenzene	1000	U	1000	270	ug/L			03/01/16 16:46	1000
Trichlorofluoromethane	1000	U	1000	490	ug/L			03/01/16 16:46	1000
Dibromochloromethane	1000	U	1000	430	ug/L			03/01/16 16:46	1000
Methylcyclohexane	1000	U	1000	430	ug/L			03/01/16 16:46	1000

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		78 - 125		03/01/16 16:46	1000
4-Bromofluorobenzene (Surr)	99		61 - 120		03/01/16 16:46	1000
Toluene-d8 (Surr)	102		80 - 120		03/01/16 16:46	1000
Dibromofluoromethane (Surr)	94		79 - 120		03/01/16 16:46	1000

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

Client Sample ID: GW-17303-022316-CB-036
Date Collected: 02/23/16 13:10
Date Received: 02/25/16 09:40

Lab Sample ID: 240-61363-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	170	U	170	16	ug/L			03/01/16 17:09	16.67
Benzene	17	U	17	5.8	ug/L			03/01/16 17:09	16.67
Bromodichloromethane	17	U	17	4.8	ug/L			03/01/16 17:09	16.67
Bromoform	17	U	17	9.3	ug/L			03/01/16 17:09	16.67
Bromomethane	17	U	17	7.3	ug/L			03/01/16 17:09	16.67
2-Butanone (MEK)	170	U	170	8.8	ug/L			03/01/16 17:09	16.67
Carbon disulfide	**140**		83	6.3	ug/L			03/01/16 17:09	16.67
Carbon tetrachloride	17	U	17	7.2	ug/L			03/01/16 17:09	16.67
Chlorobenzene	17	U	17	4.2	ug/L			03/01/16 17:09	16.67
Chloroethane	17	U	17	5.3	ug/L			03/01/16 17:09	16.67
Chloroform	17	U	17	4.2	ug/L			03/01/16 17:09	16.67
Chloromethane	17	U	17	7.3	ug/L			03/01/16 17:09	16.67
1,1-Dichloroethane	17	U	17	5.0	ug/L			03/01/16 17:09	16.67
1,2-Dichloroethane	17	U	17	3.8	ug/L			03/01/16 17:09	16.67
1,1-Dichloroethene	17	U	17	7.5	ug/L			03/01/16 17:09	16.67
1,2-Dichloropropane	17	U	17	4.2	ug/L			03/01/16 17:09	16.67
cis-1,3-Dichloropropene	17	U	17	7.7	ug/L			03/01/16 17:09	16.67
trans-1,3-Dichloropropene	17	U	17	9.3	ug/L			03/01/16 17:09	16.67
Ethylbenzene	17	U	17	4.2	ug/L			03/01/16 17:09	16.67
2-Hexanone	170	U	170	8.0	ug/L			03/01/16 17:09	16.67
Methylene Chloride	83	U	83	5.5	ug/L			03/01/16 17:09	16.67
4-Methyl-2-pentanone (MIBK)	170	U	170	17	ug/L			03/01/16 17:09	16.67
Styrene	17	U	17	7.5	ug/L			03/01/16 17:09	16.67
1,1,2,2-Tetrachloroethane	17	U	17	3.7	ug/L			03/01/16 17:09	16.67
Tetrachloroethene	17	U	17	5.2	ug/L			03/01/16 17:09	16.67
Toluene	17	U	17	3.8	ug/L			03/01/16 17:09	16.67
Trichloroethene	**4.7**	**J**	17	3.7	ug/L			03/01/16 17:09	16.67
Vinyl chloride	**420**		17	4.8	ug/L			03/01/16 17:09	16.67
Xylenes, Total	33	U	33	8.7	ug/L			03/01/16 17:09	16.67
1,1,1-Trichloroethane	17	U	17	7.3	ug/L			03/01/16 17:09	16.67
1,1,2-Trichloroethane	17	U	17	4.0	ug/L			03/01/16 17:09	16.67
Cyclohexane	17	U	17	7.5	ug/L			03/01/16 17:09	16.67
1,2-Dibromo-3-Chloropropane	17	U	17	14	ug/L			03/01/16 17:09	16.67
1,2-Dibromoethane	17	U	17	5.3	ug/L			03/01/16 17:09	16.67
Dichlorodifluoromethane	17	U	17	5.3	ug/L			03/01/16 17:09	16.67
cis-1,2-Dichloroethene	**37**		17	4.3	ug/L			03/01/16 17:09	16.67
trans-1,2-Dichloroethene	**21**		17	5.0	ug/L			03/01/16 17:09	16.67
Isopropylbenzene	17	U	17	5.8	ug/L			03/01/16 17:09	16.67
Methyl acetate	170	U	170	38	ug/L			03/01/16 17:09	16.67
Methyl tert-butyl ether	17	U	17	3.3	ug/L			03/01/16 17:09	16.67
1,1,2-Trichloro-1,2,2-trifluoroethane	17	U	17	7.5	ug/L			03/01/16 17:09	16.67
1,2,4-Trichlorobenzene	17	U	17	5.3	ug/L			03/01/16 17:09	16.67
1,2-Dichlorobenzene	17	U	17	4.2	ug/L			03/01/16 17:09	16.67
1,3-Dichlorobenzene	17	U	17	3.2	ug/L			03/01/16 17:09	16.67
1,4-Dichlorobenzene	17	U	17	4.5	ug/L			03/01/16 17:09	16.67
Trichlorofluoromethane	17	U	17	8.2	ug/L			03/01/16 17:09	16.67
Dibromochloromethane	17	U	17	7.2	ug/L			03/01/16 17:09	16.67
Methylcyclohexane	17	U	17	7.2	ug/L			03/01/16 17:09	16.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		78 - 125		03/01/16 17:09	16.67
4-Bromofluorobenzene (Surr)	104		61 - 120		03/01/16 17:09	16.67
Toluene-d8 (Surr)	101		80 - 120		03/01/16 17:09	16.67
Dibromofluoromethane (Surr)	97		79 - 120		03/01/16 17:09	16.67

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

Client Sample ID: GW-17303-022316-CB-037
Date Collected: 02/23/16 14:20
Date Received: 02/25/16 09:40

Lab Sample ID: 240-61363-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2500	U	2500	240	ug/L			03/01/16 17:31	250
Benzene	250	U	250	88	ug/L			03/01/16 17:31	250
Bromodichloromethane	250	U	250	73	ug/L			03/01/16 17:31	250
Bromoform	250	U	250	140	ug/L			03/01/16 17:31	250
Bromomethane	250	U	250	110	ug/L			03/01/16 17:31	250
2-Butanone (MEK)	2500	U	2500	130	ug/L			03/01/16 17:31	250
Carbon disulfide	**2700**		1300	95	ug/L			03/01/16 17:31	250
Carbon tetrachloride	250	U	250	110	ug/L			03/01/16 17:31	250
Chlorobenzene	250	U	250	63	ug/L			03/01/16 17:31	250
Chloroethane	250	U	250	80	ug/L			03/01/16 17:31	250
Chloroform	250	U	250	63	ug/L			03/01/16 17:31	250
Chloromethane	250	U	250	110	ug/L			03/01/16 17:31	250
1,1-Dichloroethane	250	U	250	75	ug/L			03/01/16 17:31	250
1,2-Dichloroethane	250	U	250	58	ug/L			03/01/16 17:31	250
1,1-Dichloroethene	250	U	250	110	ug/L			03/01/16 17:31	250
1,2-Dichloropropane	250	U	250	63	ug/L			03/01/16 17:31	250
cis-1,3-Dichloropropene	250	U	250	120	ug/L			03/01/16 17:31	250
trans-1,3-Dichloropropene	250	U	250	140	ug/L			03/01/16 17:31	250
Ethylbenzene	**140**	**J**	250	63	ug/L			03/01/16 17:31	250
2-Hexanone	2500	U	2500	120	ug/L			03/01/16 17:31	250
Methylene Chloride	1300	U	1300	83	ug/L			03/01/16 17:31	250
4-Methyl-2-pentanone (MIBK)	2500	U	2500	250	ug/L			03/01/16 17:31	250
Styrene	250	U	250	110	ug/L			03/01/16 17:31	250
1,1,2,2-Tetrachloroethane	250	U	250	55	ug/L			03/01/16 17:31	250
Tetrachloroethene	250	U	250	78	ug/L			03/01/16 17:31	250
Toluene	**2100**		250	58	ug/L			03/01/16 17:31	250
Trichloroethene	250	U	250	55	ug/L			03/01/16 17:31	250
Vinyl chloride	**6400**		250	73	ug/L			03/01/16 17:31	250
Xylenes, Total	**880**		500	130	ug/L			03/01/16 17:31	250
1,1,1-Trichloroethane	250	U	250	110	ug/L			03/01/16 17:31	250
1,1,2-Trichloroethane	250	U	250	60	ug/L			03/01/16 17:31	250
Cyclohexane	250	U	250	110	ug/L			03/01/16 17:31	250
1,2-Dibromo-3-Chloropropane	250	U	250	210	ug/L			03/01/16 17:31	250
1,2-Dibromoethane	250	U	250	80	ug/L			03/01/16 17:31	250
Dichlorodifluoromethane	250	U	250	80	ug/L			03/01/16 17:31	250
cis-1,2-Dichloroethene	**980**		250	65	ug/L			03/01/16 17:31	250
trans-1,2-Dichloroethene	250	U	250	75	ug/L			03/01/16 17:31	250
Isopropylbenzene	250	U	250	88	ug/L			03/01/16 17:31	250
Methyl acetate	2500	U	2500	570	ug/L			03/01/16 17:31	250
Methyl tert-butyl ether	250	U	250	50	ug/L			03/01/16 17:31	250
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	110	ug/L			03/01/16 17:31	250
1,2,4-Trichlorobenzene	250	U	250	80	ug/L			03/01/16 17:31	250
1,2-Dichlorobenzene	250	U	250	63	ug/L			03/01/16 17:31	250
1,3-Dichlorobenzene	250	U	250	48	ug/L			03/01/16 17:31	250
1,4-Dichlorobenzene	250	U	250	68	ug/L			03/01/16 17:31	250
Trichlorofluoromethane	250	U	250	120	ug/L			03/01/16 17:31	250
Dibromochloromethane	250	U	250	110	ug/L			03/01/16 17:31	250
Methylcyclohexane	250	U	250	110	ug/L			03/01/16 17:31	250

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		78 - 125		03/01/16 17:31	250
4-Bromofluorobenzene (Surr)	104		61 - 120		03/01/16 17:31	250
Toluene-d8 (Surr)	100		80 - 120		03/01/16 17:31	250
Dibromofluoromethane (Surr)	95		79 - 120		03/01/16 17:31	250

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

Client Sample ID: GW-17303-022316-CB-038
Date Collected: 02/23/16 15:10
Date Received: 02/25/16 09:40

Lab Sample ID: 240-61363-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.7**	**J**	10	0.94	ug/L			03/01/16 17:53	1
Benzene	**2.1**		1.0	0.35	ug/L			03/01/16 17:53	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/01/16 17:53	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/01/16 17:53	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/01/16 17:53	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/01/16 17:53	1
Carbon disulfide	**9.3**		5.0	0.38	ug/L			03/01/16 17:53	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/01/16 17:53	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/01/16 17:53	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/01/16 17:53	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/01/16 17:53	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/01/16 17:53	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/01/16 17:53	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/01/16 17:53	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/01/16 17:53	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/01/16 17:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/01/16 17:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/01/16 17:53	1
Ethylbenzene	**9.5**		1.0	0.25	ug/L			03/01/16 17:53	1
2-Hexanone	10	U	10	0.48	ug/L			03/01/16 17:53	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/01/16 17:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/01/16 17:53	1
Styrene	1.0	U	1.0	0.45	ug/L			03/01/16 17:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/01/16 17:53	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/01/16 17:53	1
Toluene	**27**		1.0	0.23	ug/L			03/01/16 17:53	1
Trichloroethene	**0.41**	**J**	1.0	0.22	ug/L			03/01/16 17:53	1
Vinyl chloride	**30**		1.0	0.29	ug/L			03/01/16 17:53	1
Xylenes, Total	**41**		2.0	0.52	ug/L			03/01/16 17:53	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/01/16 17:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/01/16 17:53	1
Cyclohexane	**10**		1.0	0.45	ug/L			03/01/16 17:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/01/16 17:53	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/01/16 17:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/01/16 17:53	1
cis-1,2-Dichloroethene	**16**		1.0	0.26	ug/L			03/01/16 17:53	1
trans-1,2-Dichloroethene	**3.5**		1.0	0.30	ug/L			03/01/16 17:53	1
Isopropylbenzene	**6.9**		1.0	0.35	ug/L			03/01/16 17:53	1
Methyl acetate	10	U	10	2.3	ug/L			03/01/16 17:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/01/16 17:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/01/16 17:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/01/16 17:53	1
1,2-Dichlorobenzene	**0.37**	**J**	1.0	0.25	ug/L			03/01/16 17:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/01/16 17:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/01/16 17:53	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/01/16 17:53	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/01/16 17:53	1
Methylcyclohexane	**2.0**		1.0	0.43	ug/L			03/01/16 17:53	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		78 - 125		03/01/16 17:53	1
4-Bromofluorobenzene (Surr)	108		61 - 120		03/01/16 17:53	1
Toluene-d8 (Surr)	99		80 - 120		03/01/16 17:53	1
Dibromofluoromethane (Surr)	97		79 - 120		03/01/16 17:53	1

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

Client Sample ID: GW-17303-022316-CB-039
Date Collected: 02/23/16 16:00
Date Received: 02/25/16 09:40

Lab Sample ID: 240-61363-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3300	U	3300	310	ug/L			03/02/16 16:01	333.33
Benzene	330	U	330	120	ug/L			03/02/16 16:01	333.33
Bromodichloromethane	330	U	330	97	ug/L			03/02/16 16:01	333.33
Bromoform	330	U	330	190	ug/L			03/02/16 16:01	333.33
Bromomethane	330	U *	330	150	ug/L			03/02/16 16:01	333.33
2-Butanone (MEK)	3300	U	3300	180	ug/L			03/02/16 16:01	333.33
Carbon disulfide	1700	U	1700	130	ug/L			03/02/16 16:01	333.33
Carbon tetrachloride	330	U	330	140	ug/L			03/02/16 16:01	333.33
Chlorobenzene	330	U	330	83	ug/L			03/02/16 16:01	333.33
Chloroethane	330	U *	330	110	ug/L			03/02/16 16:01	333.33
Chloroform	330	U	330	83	ug/L			03/02/16 16:01	333.33
Chloromethane	330	U	330	150	ug/L			03/02/16 16:01	333.33
1,1-Dichloroethane	330	U	330	100	ug/L			03/02/16 16:01	333.33
1,2-Dichloroethane	330	U	330	77	ug/L			03/02/16 16:01	333.33
1,1-Dichloroethene	330	U	330	150	ug/L			03/02/16 16:01	333.33
1,2-Dichloropropane	330	U	330	83	ug/L			03/02/16 16:01	333.33
cis-1,3-Dichloropropene	330	U	330	150	ug/L			03/02/16 16:01	333.33
trans-1,3-Dichloropropene	330	U	330	190	ug/L			03/02/16 16:01	333.33
Ethylbenzene	330	U	330	83	ug/L			03/02/16 16:01	333.33
2-Hexanone	3300	U	3300	160	ug/L			03/02/16 16:01	333.33
Methylene Chloride	1700	U	1700	110	ug/L			03/02/16 16:01	333.33
4-Methyl-2-pentanone (MIBK)	3300	U	3300	330	ug/L			03/02/16 16:01	333.33
Styrene	330	U	330	150	ug/L			03/02/16 16:01	333.33
1,1,2,2-Tetrachloroethane	330	U	330	73	ug/L			03/02/16 16:01	333.33
Tetrachloroethene	330	U	330	100	ug/L			03/02/16 16:01	333.33
Toluene	330	U	330	77	ug/L			03/02/16 16:01	333.33
Trichloroethene	330	U	330	73	ug/L			03/02/16 16:01	333.33
Vinyl chloride	**4500**		330	97	ug/L			03/02/16 16:01	333.33
Xylenes, Total	**180**	**J**	670	170	ug/L			03/02/16 16:01	333.33
1,1,1-Trichloroethane	330	U	330	150	ug/L			03/02/16 16:01	333.33
1,1,2-Trichloroethane	330	U	330	80	ug/L			03/02/16 16:01	333.33
Cyclohexane	330	U	330	150	ug/L			03/02/16 16:01	333.33
1,2-Dibromo-3-Chloropropane	330	U	330	270	ug/L			03/02/16 16:01	333.33
1,2-Dibromoethane	330	U	330	110	ug/L			03/02/16 16:01	333.33
Dichlorodifluoromethane	330	U	330	110	ug/L			03/02/16 16:01	333.33
cis-1,2-Dichloroethene	**320**	**J**	330	87	ug/L			03/02/16 16:01	333.33
trans-1,2-Dichloroethene	330	U	330	100	ug/L			03/02/16 16:01	333.33
Isopropylbenzene	330	U	330	120	ug/L			03/02/16 16:01	333.33
Methyl acetate	3300	U	3300	760	ug/L			03/02/16 16:01	333.33
Methyl tert-butyl ether	330	U	330	67	ug/L			03/02/16 16:01	333.33
1,1,2-Trichloro-1,2,2-trifluoroethane	330	U	330	150	ug/L			03/02/16 16:01	333.33
1,2,4-Trichlorobenzene	330	U	330	110	ug/L			03/02/16 16:01	333.33
1,2-Dichlorobenzene	330	U	330	83	ug/L			03/02/16 16:01	333.33
1,3-Dichlorobenzene	330	U	330	63	ug/L			03/02/16 16:01	333.33
1,4-Dichlorobenzene	330	U	330	90	ug/L			03/02/16 16:01	333.33
Trichlorofluoromethane	330	U	330	160	ug/L			03/02/16 16:01	333.33
Dibromochloromethane	330	U	330	140	ug/L			03/02/16 16:01	333.33
Methylcyclohexane	330	U	330	140	ug/L			03/02/16 16:01	333.33

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		78 - 125		03/02/16 16:01	333.33
4-Bromofluorobenzene (Surr)	105		61 - 120		03/02/16 16:01	333.33
Toluene-d8 (Surr)	96		80 - 120		03/02/16 16:01	333.33
Dibromofluoromethane (Surr)	91		79 - 120		03/02/16 16:01	333.33

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

Client Sample ID: TB-17303-022316-CB-040
Date Collected: 02/23/16 00:00
Date Received: 02/25/16 09:40

Lab Sample ID: 240-61363-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			03/01/16 18:38	1
Benzene	1.0	U	1.0	0.35	ug/L			03/01/16 18:38	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/01/16 18:38	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/01/16 18:38	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/01/16 18:38	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/01/16 18:38	1
Carbon disulfide	**11**		5.0	0.38	ug/L			03/01/16 18:38	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/01/16 18:38	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/01/16 18:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/01/16 18:38	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/01/16 18:38	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/01/16 18:38	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/01/16 18:38	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/01/16 18:38	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/01/16 18:38	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/01/16 18:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/01/16 18:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/01/16 18:38	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/01/16 18:38	1
2-Hexanone	10	U	10	0.48	ug/L			03/01/16 18:38	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/01/16 18:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/01/16 18:38	1
Styrene	1.0	U	1.0	0.45	ug/L			03/01/16 18:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/01/16 18:38	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/01/16 18:38	1
Toluene	1.0	U	1.0	0.23	ug/L			03/01/16 18:38	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/01/16 18:38	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/01/16 18:38	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/01/16 18:38	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/01/16 18:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/01/16 18:38	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/01/16 18:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/01/16 18:38	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/01/16 18:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/01/16 18:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/01/16 18:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/01/16 18:38	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/01/16 18:38	1
Methyl acetate	10	U	10	2.3	ug/L			03/01/16 18:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/01/16 18:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/01/16 18:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/01/16 18:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/01/16 18:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/01/16 18:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/01/16 18:38	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/01/16 18:38	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/01/16 18:38	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/01/16 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		78 - 125		03/01/16 18:38	1
4-Bromofluorobenzene (Surr)	100		61 - 120		03/01/16 18:38	1
Toluene-d8 (Surr)	100		80 - 120		03/01/16 18:38	1
Dibromofluoromethane (Surr)	99		79 - 120		03/01/16 18:38	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61363-1

GC/MS VOA

Analysis Batch: 219641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61363-1	GW-17303-022316-CB-035	Total/NA	Water	8260B	
240-61363-2	GW-17303-022316-CB-036	Total/NA	Water	8260B	
240-61363-3	GW-17303-022316-CB-037	Total/NA	Water	8260B	
240-61363-4	GW-17303-022316-CB-038	Total/NA	Water	8260B	
240-61363-6	TB-17303-022316-CB-040	Total/NA	Water	8260B	
LCS 240-219641/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-219641/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 219899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61363-5	GW-17303-022316-CB-039	Total/NA	Water	8260B	
LCS 240-219899/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-219899/6	Method Blank	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-219641/6
Matrix: Water
Analysis Batch: 219641

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	0.94	ug/L			03/01/16 12:03	1
Benzene	1.0	U	1.0	0.35	ug/L			03/01/16 12:03	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/01/16 12:03	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/01/16 12:03	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/01/16 12:03	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/01/16 12:03	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/01/16 12:03	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/01/16 12:03	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/01/16 12:03	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/01/16 12:03	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/01/16 12:03	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/01/16 12:03	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/01/16 12:03	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/01/16 12:03	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/01/16 12:03	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/01/16 12:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/01/16 12:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/01/16 12:03	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/01/16 12:03	1
2-Hexanone	10	U	10	0.48	ug/L			03/01/16 12:03	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/01/16 12:03	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/01/16 12:03	1
Styrene	1.0	U	1.0	0.45	ug/L			03/01/16 12:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/01/16 12:03	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/01/16 12:03	1
Toluene	1.0	U	1.0	0.23	ug/L			03/01/16 12:03	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/01/16 12:03	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/01/16 12:03	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/01/16 12:03	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/01/16 12:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/01/16 12:03	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/01/16 12:03	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/01/16 12:03	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/01/16 12:03	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/01/16 12:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/01/16 12:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/01/16 12:03	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/01/16 12:03	1
Methyl acetate	10	U	10	2.3	ug/L			03/01/16 12:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/01/16 12:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/01/16 12:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/01/16 12:03	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/01/16 12:03	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/01/16 12:03	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/01/16 12:03	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/01/16 12:03	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/01/16 12:03	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/01/16 12:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*03/01/16 12:03*	*1*
4-Bromofluorobenzene (Surr)	*103*		*61 - 120*		*03/01/16 12:03*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*03/01/16 12:03*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 120*		*03/01/16 12:03*	*1*

Lab Sample ID: LCS 240-219641/4
Matrix: Water
Analysis Batch: 219641

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	15.8		ug/L		79	34 - 148
Benzene	10.0	10.4		ug/L		104	80 - 120
Bromodichloromethane	10.0	10.4		ug/L		104	80 - 120
Bromoform	10.0	11.1		ug/L		111	56 - 122
Bromomethane	10.0	7.23		ug/L		72	38 - 132
2-Butanone (MEK)	20.0	19.7		ug/L		98	56 - 138
Carbon disulfide	10.0	10.6		ug/L		106	65 - 144
Carbon tetrachloride	10.0	10.9		ug/L		109	77 - 131
Chlorobenzene	10.0	9.85		ug/L		99	80 - 120
Chloroethane	10.0	5.64		ug/L		56	36 - 126
Chloroform	10.0	10.7		ug/L		107	80 - 120
Chloromethane	10.0	9.67		ug/L		97	48 - 133
1,1-Dichloroethane	10.0	10.5		ug/L		105	79 - 125
1,2-Dichloroethane	10.0	10.6		ug/L		106	80 - 120
1,1-Dichloroethene	10.0	10.9		ug/L		109	76 - 124
1,2-Dichloropropane	10.0	10.5		ug/L		105	78 - 124
cis-1,3-Dichloropropene	10.0	10.7		ug/L		107	74 - 126
trans-1,3-Dichloropropene	10.0	9.66		ug/L		97	75 - 131
Ethylbenzene	10.0	9.97		ug/L		100	80 - 120
2-Hexanone	20.0	19.5		ug/L		97	55 - 141
Methylene Chloride	10.0	10.6		ug/L		106	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	23.3		ug/L		117	64 - 135
Styrene	10.0	10.3		ug/L		103	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.0		ug/L		100	71 - 123
Tetrachloroethene	10.0	9.97		ug/L		100	78 - 121
Toluene	10.0	9.84		ug/L		98	80 - 120
Trichloroethene	10.0	10.9		ug/L		109	80 - 121
Vinyl chloride	10.0	10.5		ug/L		105	52 - 121
Xylenes, Total	20.0	20.1		ug/L		101	80 - 120
1,1,1-Trichloroethane	10.0	10.7		ug/L		107	77 - 123
1,1,2-Trichloroethane	10.0	9.80		ug/L		98	80 - 120
Cyclohexane	10.0	11.0		ug/L		110	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	10.6		ug/L		106	50 - 132
1,2-Dibromoethane	10.0	10.5		ug/L		105	80 - 120
Dichlorodifluoromethane	10.0	9.89		ug/L		99	23 - 136
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	79 - 120
trans-1,2-Dichloroethene	10.0	11.0		ug/L		110	80 - 124
Isopropylbenzene	10.0	10.4		ug/L		104	77 - 120
Methyl acetate	50.0	54.4		ug/L		109	67 - 131
Methyl tert-butyl ether	10.0	11.3		ug/L		113	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.0		ug/L		110	67 - 138
1,2,4-Trichlorobenzene	10.0	9.60		ug/L		96	61 - 120
1,2-Dichlorobenzene	10.0	9.73		ug/L		97	79 - 120

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

Lab Sample ID: LCS 240-219641/4
Matrix: Water
Analysis Batch: 219641

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	9.57		ug/L		96	79 - 120
1,4-Dichlorobenzene	10.0	9.52		ug/L		95	79 - 120
Trichlorofluoromethane	10.0	9.79		ug/L		98	61 - 133
Dibromochloromethane	10.0	10.0		ug/L		100	74 - 120
Methylcyclohexane	10.0	10.9		ug/L		109	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*78 - 125*
4-Bromofluorobenzene (Surr)	*105*		*61 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*79 - 120*

Lab Sample ID: MB 240-219899/6
Matrix: Water
Analysis Batch: 219899

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	0.94	ug/L			03/02/16 15:17	1
Benzene	1.0	U	1.0	0.35	ug/L			03/02/16 15:17	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/02/16 15:17	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/02/16 15:17	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/02/16 15:17	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/02/16 15:17	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/02/16 15:17	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/02/16 15:17	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/02/16 15:17	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/02/16 15:17	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/02/16 15:17	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/02/16 15:17	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/02/16 15:17	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/02/16 15:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/02/16 15:17	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
2-Hexanone	10	U	10	0.48	ug/L			03/02/16 15:17	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/02/16 15:17	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/02/16 15:17	1
Styrene	1.0	U	1.0	0.45	ug/L			03/02/16 15:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/02/16 15:17	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/02/16 15:17	1
Toluene	1.0	U	1.0	0.23	ug/L			03/02/16 15:17	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/02/16 15:17	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/02/16 15:17	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/02/16 15:17	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/02/16 15:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/02/16 15:17	1

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

Lab Sample ID: MB 240-219899/6
Matrix: Water
Analysis Batch: 219899

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	0.45	ug/L			03/02/16 15:17	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/02/16 15:17	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/02/16 15:17	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/02/16 15:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/02/16 15:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/02/16 15:17	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/02/16 15:17	1
Methyl acetate	10	U	10	2.3	ug/L			03/02/16 15:17	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/02/16 15:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/02/16 15:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/02/16 15:17	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/02/16 15:17	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/02/16 15:17	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/02/16 15:17	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/02/16 15:17	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/02/16 15:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*03/02/16 15:17*	*1*
4-Bromofluorobenzene (Surr)	*103*		*61 - 120*		*03/02/16 15:17*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/02/16 15:17*	*1*
Dibromofluoromethane (Surr)	*96*		*79 - 120*		*03/02/16 15:17*	*1*

Lab Sample ID: LCS 240-219899/4
Matrix: Water
Analysis Batch: 219899

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	16.5		ug/L		82	34 - 148
Benzene	10.0	9.78		ug/L		98	80 - 120
Bromodichloromethane	10.0	9.78		ug/L		98	80 - 120
Bromoform	10.0	11.8		ug/L		118	56 - 122
Bromomethane	10.0	14.0	*	ug/L		140	38 - 132
2-Butanone (MEK)	20.0	20.3		ug/L		101	56 - 138
Carbon disulfide	10.0	9.67		ug/L		97	65 - 144
Carbon tetrachloride	10.0	9.67		ug/L		97	77 - 131
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120
Chloroethane	10.0	15.0	*	ug/L		150	36 - 126
Chloroform	10.0	9.87		ug/L		99	80 - 120
Chloromethane	10.0	9.95		ug/L		99	48 - 133
1,1-Dichloroethane	10.0	9.74		ug/L		97	79 - 125
1,2-Dichloroethane	10.0	10.2		ug/L		102	80 - 120
1,1-Dichloroethene	10.0	10.3		ug/L		103	76 - 124
1,2-Dichloropropane	10.0	9.79		ug/L		98	78 - 124
cis-1,3-Dichloropropene	10.0	9.67		ug/L		97	74 - 126
trans-1,3-Dichloropropene	10.0	10.2		ug/L		102	75 - 131
Ethylbenzene	10.0	10.2		ug/L		102	80 - 120

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

Lab Sample ID: LCS 240-219899/4
Matrix: Water
Analysis Batch: 219899

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	21.6		ug/L		108	55 - 141
Methylene Chloride	10.0	9.79		ug/L		98	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	22.3		ug/L		112	64 - 135
Styrene	10.0	10.4		ug/L		104	76 - 122
1,1,2,2-Tetrachloroethane	10.0	11.7		ug/L		117	71 - 123
Tetrachloroethene	10.0	10.3		ug/L		103	78 - 121
Toluene	10.0	10.4		ug/L		104	80 - 120
Trichloroethene	10.0	10.1		ug/L		101	80 - 121
Vinyl chloride	10.0	10.0		ug/L		100	52 - 121
Xylenes, Total	20.0	20.6		ug/L		103	80 - 120
1,1,1-Trichloroethane	10.0	9.62		ug/L		96	77 - 123
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	80 - 120
Cyclohexane	10.0	10.4		ug/L		104	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	11.2		ug/L		112	50 - 132
1,2-Dibromoethane	10.0	10.9		ug/L		109	80 - 120
Dichlorodifluoromethane	10.0	9.06		ug/L		91	23 - 136
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	79 - 120
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	80 - 124
Isopropylbenzene	10.0	10.5		ug/L		105	77 - 120
Methyl acetate	50.0	55.5		ug/L		111	67 - 131
Methyl tert-butyl ether	10.0	10.5		ug/L		105	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.1		ug/L		101	67 - 138
1,2,4-Trichlorobenzene	10.0	9.12		ug/L		91	61 - 120
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	79 - 120
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	79 - 120
1,4-Dichlorobenzene	10.0	10.2		ug/L		102	79 - 120
Trichlorofluoromethane	10.0	7.91		ug/L		79	61 - 133
Dibromochloromethane	10.0	10.8		ug/L		108	74 - 120
Methylcyclohexane	10.0	10.1		ug/L		101	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*78 - 125*
4-Bromofluorobenzene (Surr)	*106*		*61 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*79 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61363-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-61363-1	GW-17303-022316-CB-035	91	99	102	94
240-61363-2	GW-17303-022316-CB-036	97	104	101	97
240-61363-3	GW-17303-022316-CB-037	99	104	100	95
240-61363-4	GW-17303-022316-CB-038	95	108	99	97
240-61363-5	GW-17303-022316-CB-039	89	105	96	91
240-61363-6	TB-17303-022316-CB-040	93	100	100	99
LCS 240-219641/4	Lab Control Sample	99	105	98	103
LCS 240-219899/4	Lab Control Sample	95	106	102	95
MB 240-219641/6	Method Blank	103	103	95	105
MB 240-219899/6	Method Blank	94	103	98	96

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61363-1

Client Sample ID: GW-17303-022316-CB-035 — Lab Sample ID: 240-61363-1

Date Collected: 02/23/16 11:25 — **Matrix: Water**
Date Received: 02/25/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	219641	03/01/16 16:46	LEE	TAL CAN

Client Sample ID: GW-17303-022316-CB-036 — Lab Sample ID: 240-61363-2

Date Collected: 02/23/16 13:10 — **Matrix: Water**
Date Received: 02/25/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		16.67	219641	03/01/16 17:09	LEE	TAL CAN

Client Sample ID: GW-17303-022316-CB-037 — Lab Sample ID: 240-61363-3

Date Collected: 02/23/16 14:20 — **Matrix: Water**
Date Received: 02/25/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	219641	03/01/16 17:31	LEE	TAL CAN

Client Sample ID: GW-17303-022316-CB-038 — Lab Sample ID: 240-61363-4

Date Collected: 02/23/16 15:10 — **Matrix: Water**
Date Received: 02/25/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219641	03/01/16 17:53	LEE	TAL CAN

Client Sample ID: GW-17303-022316-CB-039 — Lab Sample ID: 240-61363-5

Date Collected: 02/23/16 16:00 — **Matrix: Water**
Date Received: 02/25/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		333.33	219899	03/02/16 16:01	LEE	TAL CAN

Client Sample ID: TB-17303-022316-CB-040 — Lab Sample ID: 240-61363-6

Date Collected: 02/23/16 00:00 — **Matrix: Water**
Date Received: 02/25/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219641	03/01/16 18:38	LEE	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61363-1

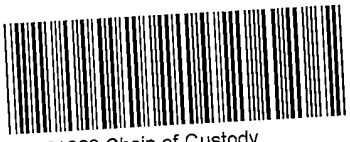
Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

2.6 => 2.1

Chain of Custody Record

122766

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/23/2016	COC No: 009
Company Name: GHD	Tel/Fax: 734-453-5123	Lab Contact: D. Hechler	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 734-453-5123	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: 017303	☐ 2 days			Job / SDG No.:
PO# SSOW# 17303-033	☐ 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 VOCs	Sample Specific Notes:
GW-17303-022316-CB-035	2/23/16	1125	G	WG	3	N	N	X	
-036		1310			3			X	
-037		1420			3			X	
-038		1510			3			X	
-039		1600			3			X	
-040		—	—	WGQ	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:
Tracking #: 6209 0763 2764

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:
C. Bondy	GHD	2/24/16 1500		TA	2-25-16 940
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 # :** 61363
Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 2-25-16 Opened on 2-25-16

FedEx: 1st Grd Exp UPS FAS Stetson 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# 48 (CF **-1.9** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# 36 (CF **-1.5** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# I8 (CF **-0.5** °C) Observed Cooler Temp. 2.6 °C Corrected Cooler Temp. 2.1 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
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 sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC559158
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials?	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

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): _____

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: 240-61416-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
3/10/2016 10:59:03 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: 240-61416-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-61416-1

Comments
No additional comments.

Receipt
The samples were received on 2/26/2016 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 219899 recovered outside control limits for the following analytes: Chloroethane, 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: The laboratory control sample (LCS) for 220016 recovered outside control limits for the following analytes: Chloroethane, Bromomethane. 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 VOA
No analytical or quality issues were noted, other than those described 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.

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.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
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.

General Chemistry

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-61416-1	GW-17303-022416-CB-041	Water	02/24/16 15:30	02/26/16 09:20
240-61416-2	GW-17303-022416-CB-042	Water	02/24/16 16:05	02/26/16 09:20
240-61416-3	GW-17303-022416-CB-043	Water	02/24/16 16:20	02/26/16 09:20
240-61416-4	GW-17303-022416-CB-044	Water	02/24/16 17:00	02/26/16 09:20
240-61416-5	GW-17303-022516-CB-045	Water	02/25/16 10:30	02/26/16 09:20
240-61416-6	GW-17303-022516-CB-046	Water	02/25/16 12:15	02/26/16 09:20
240-61416-7	GW-17303-022516-CB-047	Water	02/25/16 13:45	02/26/16 09:20
240-61416-8	GW-17303-022516-CB-048	Water	02/25/16 14:50	02/26/16 09:20
240-61416-9	TB-17303-022516-CB-049	Water	02/25/16 00:00	02/26/16 09:20

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Client Sample ID: GW-17303-022416-CB-041 — Lab Sample ID: 240-61416-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	690		25	7.3	ug/L	25		8260B	Total/NA
cis-1,2-Dichloroethene	490		25	6.5	ug/L	25		8260B	Total/NA
trans-1,2-Dichloroethene	31		25	7.5	ug/L	25		8260B	Total/NA

Client Sample ID: GW-17303-022416-CB-042 — Lab Sample ID: 240-61416-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	91	J	560	52	ug/L	55.56		8260B	Total/NA
Vinyl chloride	1000		56	16	ug/L	55.56		8260B	Total/NA
cis-1,2-Dichloroethene	1000		56	14	ug/L	55.56		8260B	Total/NA
trans-1,2-Dichloroethene	52	J	56	17	ug/L	55.56		8260B	Total/NA

Client Sample ID: GW-17303-022416-CB-043 — Lab Sample ID: 240-61416-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	62	J	500	47	ug/L	50		8260B	Total/NA
Vinyl chloride	1000		50	15	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	1000		50	13	ug/L	50		8260B	Total/NA
trans-1,2-Dichloroethene	53		50	15	ug/L	50		8260B	Total/NA

Client Sample ID: GW-17303-022416-CB-044 — Lab Sample ID: 240-61416-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1300		40	12	ug/L	40		8260B	Total/NA
cis-1,2-Dichloroethene	1100		40	10	ug/L	40		8260B	Total/NA
trans-1,2-Dichloroethene	57		40	12	ug/L	40		8260B	Total/NA

Client Sample ID: GW-17303-022516-CB-045 — Lab Sample ID: 240-61416-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.3	J	10	0.94	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.36	J	1.0	0.30	ug/L	1		8260B	Total/NA
1,2-Dichloropropane	0.52	J	1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	3.6		1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	0.93	J	1.0	0.29	ug/L	1		8260B	Total/NA
Methane	16		0.50	0.080	ug/L	1		RSK-175	Total/NA
Iron	1200	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	410	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	960	B	100	13	ug/L	1		6010B	Dissolved
Manganese	420	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	440		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	530		10	4.1	mg/L	10		300.0	Total/NA
Nitrate as N	2.0		0.10	0.035	mg/L	1		300.0	Total/NA
Sulfate	110		1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	0.75	J	1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: GW-17303-022516-CB-046 — Lab Sample ID: 240-61416-6

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample ID: GW-17303-022516-CB-046 (Continued) — Lab Sample ID: 240-61416-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	62	J	560	52	ug/L	55.56		8260B	Total/NA
Trichloroethene	14	J	56	12	ug/L	55.56		8260B	Total/NA
Vinyl chloride	1700		56	16	ug/L	55.56		8260B	Total/NA
cis-1,2-Dichloroethene	1300		56	14	ug/L	55.56		8260B	Total/NA
trans-1,2-Dichloroethene	82		56	17	ug/L	55.56		8260B	Total/NA
Methane	160		0.50	0.080	ug/L	1		RSK-175	Total/NA
Ethane	1.6		0.50	0.14	ug/L	1		RSK-175	Total/NA
Ethylene	23		0.50	0.13	ug/L	1		RSK-175	Total/NA
Iron	1600	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	820	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	1300	B	100	13	ug/L	1		6010B	Dissolved
Manganese	810	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	370		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	93		1.0	0.41	mg/L	1		300.0	Total/NA
Sulfate	34		1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	3.3		1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: GW-17303-022516-CB-047 — Lab Sample ID: 240-61416-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	160		67	15	ug/L	66.67		8260B	Total/NA
Vinyl chloride	2200		67	19	ug/L	66.67		8260B	Total/NA
cis-1,2-Dichloroethene	1500		67	17	ug/L	66.67		8260B	Total/NA
trans-1,2-Dichloroethene	47	J	67	20	ug/L	66.67		8260B	Total/NA
Methane	200		0.50	0.080	ug/L	1		RSK-175	Total/NA
Ethane	3.0		0.50	0.14	ug/L	1		RSK-175	Total/NA
Ethylene	250		0.50	0.13	ug/L	1		RSK-175	Total/NA
Iron	1700	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	280	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	1600	B	100	13	ug/L	1		6010B	Dissolved
Manganese	260	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	300		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	39		1.0	0.41	mg/L	1		300.0	Total/NA
Sulfate	33		1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	2.3		1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: GW-17303-022516-CB-048 — Lab Sample ID: 240-61416-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15	J B	100	9.4	ug/L	10		8260B	Total/NA
Benzene	3.7	J	10	3.5	ug/L	10		8260B	Total/NA
1,2-Dichloroethane	2.4	J	10	2.3	ug/L	10		8260B	Total/NA
Trichloroethene	23		10	2.2	ug/L	10		8260B	Total/NA
Vinyl chloride	300		10	2.9	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	160		10	2.6	ug/L	10		8260B	Total/NA
trans-1,2-Dichloroethene	15		10	3.0	ug/L	10		8260B	Total/NA
Methane	160		0.50	0.080	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17303-022516-CB-048 (Continued) — Lab Sample ID: 240-61416-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethane	0.73		0.50	0.14	ug/L	1		RSK-175	Total/NA
Ethylene	300		0.50	0.13	ug/L	1		RSK-175	Total/NA
Iron	470	B	100	13	ug/L	1		6010B	Total Recoverable
Manganese	730	B	15	0.46	ug/L	1		6010B	Total Recoverable
Iron	290	B	100	13	ug/L	1		6010B	Dissolved
Manganese	720	B	15	0.46	ug/L	1		6010B	Dissolved
Alkalinity	510		5.0	1.9	mg/L	1		2320B-1997	Total/NA
Chloride	28		1.0	0.41	mg/L	1		300.0	Total/NA
Nitrate as N	0.33		0.10	0.035	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.13	mg/L	1		300.0	Total/NA
Total Organic Carbon	2.5		1.0	0.080	mg/L	1		9060	Total/NA

Client Sample ID: TB-17303-022516-CB-049 — Lab Sample ID: 240-61416-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.30	J	1.0	0.26	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
RSK-175	Dissolved Gases (GC)	RSK	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
2320B-1997	Alkalinity, Total	SM	TAL CAN
300.0	Anions, Ion Chromatography	MCAWW	TAL CAN
9060	Organic Carbon, Total (TOC)	SW846	TAL CAN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

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: GW-17303-022416-CB-041
Date Collected: 02/24/16 15:30
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	250	U	250	24	ug/L			03/02/16 16:46	25
Benzene	25	U	25	8.8	ug/L			03/02/16 16:46	25
Bromodichloromethane	25	U	25	7.3	ug/L			03/02/16 16:46	25
Bromoform	25	U	25	14	ug/L			03/02/16 16:46	25
Bromomethane	25	U *	25	11	ug/L			03/02/16 16:46	25
2-Butanone (MEK)	250	U	250	13	ug/L			03/02/16 16:46	25
Carbon disulfide	130	U	130	9.5	ug/L			03/02/16 16:46	25
Carbon tetrachloride	25	U	25	11	ug/L			03/02/16 16:46	25
Chlorobenzene	25	U	25	6.3	ug/L			03/02/16 16:46	25
Chloroethane	25	U *	25	8.0	ug/L			03/02/16 16:46	25
Chloroform	25	U	25	6.3	ug/L			03/02/16 16:46	25
Chloromethane	25	U	25	11	ug/L			03/02/16 16:46	25
1,1-Dichloroethane	25	U	25	7.5	ug/L			03/02/16 16:46	25
1,2-Dichloroethane	25	U	25	5.8	ug/L			03/02/16 16:46	25
1,1-Dichloroethene	25	U	25	11	ug/L			03/02/16 16:46	25
1,2-Dichloropropane	25	U	25	6.3	ug/L			03/02/16 16:46	25
cis-1,3-Dichloropropene	25	U	25	12	ug/L			03/02/16 16:46	25
trans-1,3-Dichloropropene	25	U	25	14	ug/L			03/02/16 16:46	25
Ethylbenzene	25	U	25	6.3	ug/L			03/02/16 16:46	25
2-Hexanone	250	U	250	12	ug/L			03/02/16 16:46	25
Methylene Chloride	130	U	130	8.3	ug/L			03/02/16 16:46	25
4-Methyl-2-pentanone (MIBK)	250	U	250	25	ug/L			03/02/16 16:46	25
Styrene	25	U	25	11	ug/L			03/02/16 16:46	25
1,1,2,2-Tetrachloroethane	25	U	25	5.5	ug/L			03/02/16 16:46	25
Tetrachloroethene	25	U	25	7.8	ug/L			03/02/16 16:46	25
Toluene	25	U	25	5.8	ug/L			03/02/16 16:46	25
Trichloroethene	25	U	25	5.5	ug/L			03/02/16 16:46	25
Vinyl chloride	**690**		25	7.3	ug/L			03/02/16 16:46	25
Xylenes, Total	50	U	50	13	ug/L			03/02/16 16:46	25
1,1,1-Trichloroethane	25	U	25	11	ug/L			03/02/16 16:46	25
1,1,2-Trichloroethane	25	U	25	6.0	ug/L			03/02/16 16:46	25
Cyclohexane	25	U	25	11	ug/L			03/02/16 16:46	25
1,2-Dibromo-3-Chloropropane	25	U	25	21	ug/L			03/02/16 16:46	25
1,2-Dibromoethane	25	U	25	8.0	ug/L			03/02/16 16:46	25
Dichlorodifluoromethane	25	U	25	8.0	ug/L			03/02/16 16:46	25
cis-1,2-Dichloroethene	**490**		25	6.5	ug/L			03/02/16 16:46	25
trans-1,2-Dichloroethene	**31**		25	7.5	ug/L			03/02/16 16:46	25
Isopropylbenzene	25	U	25	8.8	ug/L			03/02/16 16:46	25
Methyl acetate	250	U	250	57	ug/L			03/02/16 16:46	25
Methyl tert-butyl ether	25	U	25	5.0	ug/L			03/02/16 16:46	25
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	25	11	ug/L			03/02/16 16:46	25
1,2,4-Trichlorobenzene	25	U	25	8.0	ug/L			03/02/16 16:46	25
1,2-Dichlorobenzene	25	U	25	6.3	ug/L			03/02/16 16:46	25
1,3-Dichlorobenzene	25	U	25	4.8	ug/L			03/02/16 16:46	25
1,4-Dichlorobenzene	25	U	25	6.8	ug/L			03/02/16 16:46	25
Trichlorofluoromethane	25	U	25	12	ug/L			03/02/16 16:46	25
Dibromochloromethane	25	U	25	11	ug/L			03/02/16 16:46	25
Methylcyclohexane	25	U	25	11	ug/L			03/02/16 16:46	25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		03/02/16 16:46	25
4-Bromofluorobenzene (Surr)	103		61 - 120		03/02/16 16:46	25
Toluene-d8 (Surr)	102		80 - 120		03/02/16 16:46	25
Dibromofluoromethane (Surr)	96		79 - 120		03/02/16 16:46	25

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

Client Sample ID: GW-17303-022416-CB-042
Date Collected: 02/24/16 16:05
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**91**	**J**	560	52	ug/L			03/02/16 17:08	55.56
Benzene	56	U	56	19	ug/L			03/02/16 17:08	55.56
Bromodichloromethane	56	U	56	16	ug/L			03/02/16 17:08	55.56
Bromoform	56	U	56	31	ug/L			03/02/16 17:08	55.56
Bromomethane	56	U *	56	24	ug/L			03/02/16 17:08	55.56
2-Butanone (MEK)	560	U	560	29	ug/L			03/02/16 17:08	55.56
Carbon disulfide	280	U	280	21	ug/L			03/02/16 17:08	55.56
Carbon tetrachloride	56	U	56	24	ug/L			03/02/16 17:08	55.56
Chlorobenzene	56	U	56	14	ug/L			03/02/16 17:08	55.56
Chloroethane	56	U *	56	18	ug/L			03/02/16 17:08	55.56
Chloroform	56	U	56	14	ug/L			03/02/16 17:08	55.56
Chloromethane	56	U	56	24	ug/L			03/02/16 17:08	55.56
1,1-Dichloroethane	56	U	56	17	ug/L			03/02/16 17:08	55.56
1,2-Dichloroethane	56	U	56	13	ug/L			03/02/16 17:08	55.56
1,1-Dichloroethene	56	U	56	25	ug/L			03/02/16 17:08	55.56
1,2-Dichloropropane	56	U	56	14	ug/L			03/02/16 17:08	55.56
cis-1,3-Dichloropropene	56	U	56	26	ug/L			03/02/16 17:08	55.56
trans-1,3-Dichloropropene	56	U	56	31	ug/L			03/02/16 17:08	55.56
Ethylbenzene	56	U	56	14	ug/L			03/02/16 17:08	55.56
2-Hexanone	560	U	560	27	ug/L			03/02/16 17:08	55.56
Methylene Chloride	280	U	280	18	ug/L			03/02/16 17:08	55.56
4-Methyl-2-pentanone (MIBK)	560	U	560	55	ug/L			03/02/16 17:08	55.56
Styrene	56	U	56	25	ug/L			03/02/16 17:08	55.56
1,1,2,2-Tetrachloroethane	56	U	56	12	ug/L			03/02/16 17:08	55.56
Tetrachloroethene	56	U	56	17	ug/L			03/02/16 17:08	55.56
Toluene	56	U	56	13	ug/L			03/02/16 17:08	55.56
Trichloroethene	56	U	56	12	ug/L			03/02/16 17:08	55.56
Vinyl chloride	**1000**		56	16	ug/L			03/02/16 17:08	55.56
Xylenes, Total	110	U	110	29	ug/L			03/02/16 17:08	55.56
1,1,1-Trichloroethane	56	U	56	24	ug/L			03/02/16 17:08	55.56
1,1,2-Trichloroethane	56	U	56	13	ug/L			03/02/16 17:08	55.56
Cyclohexane	56	U	56	25	ug/L			03/02/16 17:08	55.56
1,2-Dibromo-3-Chloropropane	56	U	56	46	ug/L			03/02/16 17:08	55.56
1,2-Dibromoethane	56	U	56	18	ug/L			03/02/16 17:08	55.56
Dichlorodifluoromethane	56	U	56	18	ug/L			03/02/16 17:08	55.56
cis-1,2-Dichloroethene	**1000**		56	14	ug/L			03/02/16 17:08	55.56
trans-1,2-Dichloroethene	**52**	**J**	56	17	ug/L			03/02/16 17:08	55.56
Isopropylbenzene	56	U	56	19	ug/L			03/02/16 17:08	55.56
Methyl acetate	560	U	560	130	ug/L			03/02/16 17:08	55.56
Methyl tert-butyl ether	56	U	56	11	ug/L			03/02/16 17:08	55.56
1,1,2-Trichloro-1,2,2-trifluoroethane	56	U	56	25	ug/L			03/02/16 17:08	55.56
1,2,4-Trichlorobenzene	56	U	56	18	ug/L			03/02/16 17:08	55.56
1,2-Dichlorobenzene	56	U	56	14	ug/L			03/02/16 17:08	55.56
1,3-Dichlorobenzene	56	U	56	11	ug/L			03/02/16 17:08	55.56
1,4-Dichlorobenzene	56	U	56	15	ug/L			03/02/16 17:08	55.56
Trichlorofluoromethane	56	U	56	27	ug/L			03/02/16 17:08	55.56
Dibromochloromethane	56	U	56	24	ug/L			03/02/16 17:08	55.56
Methylcyclohexane	56	U	56	24	ug/L			03/02/16 17:08	55.56

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		78 - 125		03/02/16 17:08	55.56
4-Bromofluorobenzene (Surr)	106		61 - 120		03/02/16 17:08	55.56
Toluene-d8 (Surr)	99		80 - 120		03/02/16 17:08	55.56
Dibromofluoromethane (Surr)	96		79 - 120		03/02/16 17:08	55.56

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

Client Sample ID: GW-17303-022416-CB-043
Date Collected: 02/24/16 16:20
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**62**	**J**	500	47	ug/L			03/02/16 17:30	50
Benzene	50	U	50	18	ug/L			03/02/16 17:30	50
Bromodichloromethane	50	U	50	15	ug/L			03/02/16 17:30	50
Bromoform	50	U	50	28	ug/L			03/02/16 17:30	50
Bromomethane	50	U *	50	22	ug/L			03/02/16 17:30	50
2-Butanone (MEK)	500	U	500	27	ug/L			03/02/16 17:30	50
Carbon disulfide	250	U	250	19	ug/L			03/02/16 17:30	50
Carbon tetrachloride	50	U	50	22	ug/L			03/02/16 17:30	50
Chlorobenzene	50	U	50	13	ug/L			03/02/16 17:30	50
Chloroethane	50	U *	50	16	ug/L			03/02/16 17:30	50
Chloroform	50	U	50	13	ug/L			03/02/16 17:30	50
Chloromethane	50	U	50	22	ug/L			03/02/16 17:30	50
1,1-Dichloroethane	50	U	50	15	ug/L			03/02/16 17:30	50
1,2-Dichloroethane	50	U	50	12	ug/L			03/02/16 17:30	50
1,1-Dichloroethene	50	U	50	23	ug/L			03/02/16 17:30	50
1,2-Dichloropropane	50	U	50	13	ug/L			03/02/16 17:30	50
cis-1,3-Dichloropropene	50	U	50	23	ug/L			03/02/16 17:30	50
trans-1,3-Dichloropropene	50	U	50	28	ug/L			03/02/16 17:30	50
Ethylbenzene	50	U	50	13	ug/L			03/02/16 17:30	50
2-Hexanone	500	U	500	24	ug/L			03/02/16 17:30	50
Methylene Chloride	250	U	250	17	ug/L			03/02/16 17:30	50
4-Methyl-2-pentanone (MIBK)	500	U	500	50	ug/L			03/02/16 17:30	50
Styrene	50	U	50	23	ug/L			03/02/16 17:30	50
1,1,2,2-Tetrachloroethane	50	U	50	11	ug/L			03/02/16 17:30	50
Tetrachloroethene	50	U	50	16	ug/L			03/02/16 17:30	50
Toluene	50	U	50	12	ug/L			03/02/16 17:30	50
Trichloroethene	50	U	50	11	ug/L			03/02/16 17:30	50
Vinyl chloride	**1000**		50	15	ug/L			03/02/16 17:30	50
Xylenes, Total	100	U	100	26	ug/L			03/02/16 17:30	50
1,1,1-Trichloroethane	50	U	50	22	ug/L			03/02/16 17:30	50
1,1,2-Trichloroethane	50	U	50	12	ug/L			03/02/16 17:30	50
Cyclohexane	50	U	50	23	ug/L			03/02/16 17:30	50
1,2-Dibromo-3-Chloropropane	50	U	50	41	ug/L			03/02/16 17:30	50
1,2-Dibromoethane	50	U	50	16	ug/L			03/02/16 17:30	50
Dichlorodifluoromethane	50	U	50	16	ug/L			03/02/16 17:30	50
cis-1,2-Dichloroethene	**1000**		50	13	ug/L			03/02/16 17:30	50
trans-1,2-Dichloroethene	**53**		50	15	ug/L			03/02/16 17:30	50
Isopropylbenzene	50	U	50	18	ug/L			03/02/16 17:30	50
Methyl acetate	500	U	500	110	ug/L			03/02/16 17:30	50
Methyl tert-butyl ether	50	U	50	10	ug/L			03/02/16 17:30	50
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	50	23	ug/L			03/02/16 17:30	50
1,2,4-Trichlorobenzene	50	U	50	16	ug/L			03/02/16 17:30	50
1,2-Dichlorobenzene	50	U	50	13	ug/L			03/02/16 17:30	50
1,3-Dichlorobenzene	50	U	50	9.5	ug/L			03/02/16 17:30	50
1,4-Dichlorobenzene	50	U	50	14	ug/L			03/02/16 17:30	50
Trichlorofluoromethane	50	U	50	25	ug/L			03/02/16 17:30	50
Dibromochloromethane	50	U	50	22	ug/L			03/02/16 17:30	50
Methylcyclohexane	50	U	50	22	ug/L			03/02/16 17:30	50

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		78 - 125		03/02/16 17:30	50
4-Bromofluorobenzene (Surr)	101		61 - 120		03/02/16 17:30	50
Toluene-d8 (Surr)	100		80 - 120		03/02/16 17:30	50
Dibromofluoromethane (Surr)	95		79 - 120		03/02/16 17:30	50

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

Client Sample ID: GW-17303-022416-CB-044
Date Collected: 02/24/16 17:00
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	400	U	400	38	ug/L			03/02/16 17:53	40
Benzene	40	U	40	14	ug/L			03/02/16 17:53	40
Bromodichloromethane	40	U	40	12	ug/L			03/02/16 17:53	40
Bromoform	40	U	40	22	ug/L			03/02/16 17:53	40
Bromomethane	40	U *	40	18	ug/L			03/02/16 17:53	40
2-Butanone (MEK)	400	U	400	21	ug/L			03/02/16 17:53	40
Carbon disulfide	200	U	200	15	ug/L			03/02/16 17:53	40
Carbon tetrachloride	40	U	40	17	ug/L			03/02/16 17:53	40
Chlorobenzene	40	U	40	10	ug/L			03/02/16 17:53	40
Chloroethane	40	U *	40	13	ug/L			03/02/16 17:53	40
Chloroform	40	U	40	10	ug/L			03/02/16 17:53	40
Chloromethane	40	U	40	18	ug/L			03/02/16 17:53	40
1,1-Dichloroethane	40	U	40	12	ug/L			03/02/16 17:53	40
1,2-Dichloroethane	40	U	40	9.2	ug/L			03/02/16 17:53	40
1,1-Dichloroethene	40	U	40	18	ug/L			03/02/16 17:53	40
1,2-Dichloropropane	40	U	40	10	ug/L			03/02/16 17:53	40
cis-1,3-Dichloropropene	40	U	40	18	ug/L			03/02/16 17:53	40
trans-1,3-Dichloropropene	40	U	40	22	ug/L			03/02/16 17:53	40
Ethylbenzene	40	U	40	10	ug/L			03/02/16 17:53	40
2-Hexanone	400	U	400	19	ug/L			03/02/16 17:53	40
Methylene Chloride	200	U	200	13	ug/L			03/02/16 17:53	40
4-Methyl-2-pentanone (MIBK)	400	U	400	40	ug/L			03/02/16 17:53	40
Styrene	40	U	40	18	ug/L			03/02/16 17:53	40
1,1,2,2-Tetrachloroethane	40	U	40	8.8	ug/L			03/02/16 17:53	40
Tetrachloroethene	40	U	40	12	ug/L			03/02/16 17:53	40
Toluene	40	U	40	9.2	ug/L			03/02/16 17:53	40
Trichloroethene	40	U	40	8.8	ug/L			03/02/16 17:53	40
Vinyl chloride	**1300**		40	12	ug/L			03/02/16 17:53	40
Xylenes, Total	80	U	80	21	ug/L			03/02/16 17:53	40
1,1,1-Trichloroethane	40	U	40	18	ug/L			03/02/16 17:53	40
1,1,2-Trichloroethane	40	U	40	9.6	ug/L			03/02/16 17:53	40
Cyclohexane	40	U	40	18	ug/L			03/02/16 17:53	40
1,2-Dibromo-3-Chloropropane	40	U	40	33	ug/L			03/02/16 17:53	40
1,2-Dibromoethane	40	U	40	13	ug/L			03/02/16 17:53	40
Dichlorodifluoromethane	40	U	40	13	ug/L			03/02/16 17:53	40
cis-1,2-Dichloroethene	**1100**		40	10	ug/L			03/02/16 17:53	40
trans-1,2-Dichloroethene	**57**		40	12	ug/L			03/02/16 17:53	40
Isopropylbenzene	40	U	40	14	ug/L			03/02/16 17:53	40
Methyl acetate	400	U	400	91	ug/L			03/02/16 17:53	40
Methyl tert-butyl ether	40	U	40	8.0	ug/L			03/02/16 17:53	40
1,1,2-Trichloro-1,2,2-trifluoroethane	40	U	40	18	ug/L			03/02/16 17:53	40
1,2,4-Trichlorobenzene	40	U	40	13	ug/L			03/02/16 17:53	40
1,2-Dichlorobenzene	40	U	40	10	ug/L			03/02/16 17:53	40
1,3-Dichlorobenzene	40	U	40	7.6	ug/L			03/02/16 17:53	40
1,4-Dichlorobenzene	40	U	40	11	ug/L			03/02/16 17:53	40
Trichlorofluoromethane	40	U	40	20	ug/L			03/02/16 17:53	40
Dibromochloromethane	40	U	40	17	ug/L			03/02/16 17:53	40
Methylcyclohexane	40	U	40	17	ug/L			03/02/16 17:53	40

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		03/02/16 17:53	40
4-Bromofluorobenzene (Surr)	101		61 - 120		03/02/16 17:53	40
Toluene-d8 (Surr)	102		80 - 120		03/02/16 17:53	40
Dibromofluoromethane (Surr)	94		79 - 120		03/02/16 17:53	40

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

Client Sample ID: GW-17303-022516-CB-045
Date Collected: 02/25/16 10:30
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.3**	**J**	10	0.94	ug/L			03/02/16 18:15	1
Benzene	1.0	U	1.0	0.35	ug/L			03/02/16 18:15	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/02/16 18:15	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/02/16 18:15	1
Bromomethane	1.0	U *	1.0	0.44	ug/L			03/02/16 18:15	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/02/16 18:15	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/02/16 18:15	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/02/16 18:15	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/02/16 18:15	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			03/02/16 18:15	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/02/16 18:15	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/02/16 18:15	1
1,1-Dichloroethane	**0.36**	**J**	1.0	0.30	ug/L			03/02/16 18:15	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/02/16 18:15	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/02/16 18:15	1
1,2-Dichloropropane	**0.52**	**J**	1.0	0.25	ug/L			03/02/16 18:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/02/16 18:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/02/16 18:15	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/02/16 18:15	1
2-Hexanone	10	U	10	0.48	ug/L			03/02/16 18:15	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/02/16 18:15	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/02/16 18:15	1
Styrene	1.0	U	1.0	0.45	ug/L			03/02/16 18:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/02/16 18:15	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/02/16 18:15	1
Toluene	1.0	U	1.0	0.23	ug/L			03/02/16 18:15	1
Trichloroethene	**3.6**		1.0	0.22	ug/L			03/02/16 18:15	1
Vinyl chloride	**0.93**	**J**	1.0	0.29	ug/L			03/02/16 18:15	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/02/16 18:15	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/02/16 18:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/02/16 18:15	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/02/16 18:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/02/16 18:15	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/02/16 18:15	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/02/16 18:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/02/16 18:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/02/16 18:15	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/02/16 18:15	1
Methyl acetate	10	U	10	2.3	ug/L			03/02/16 18:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/02/16 18:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/02/16 18:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/02/16 18:15	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/02/16 18:15	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/02/16 18:15	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/02/16 18:15	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/02/16 18:15	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/02/16 18:15	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/02/16 18:15	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		78 - 125		03/02/16 18:15	1
4-Bromofluorobenzene (Surr)	105		61 - 120		03/02/16 18:15	1
Toluene-d8 (Surr)	99		80 - 120		03/02/16 18:15	1
Dibromofluoromethane (Surr)	95		79 - 120		03/02/16 18:15	1

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

Client Sample ID: GW-17303-022516-CB-046
Date Collected: 02/25/16 12:15
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**62**	**J**	560	52	ug/L			03/02/16 18:38	55.56
Benzene	56	U	56	19	ug/L			03/02/16 18:38	55.56
Bromodichloromethane	56	U	56	16	ug/L			03/02/16 18:38	55.56
Bromoform	56	U	56	31	ug/L			03/02/16 18:38	55.56
Bromomethane	56	U *	56	24	ug/L			03/02/16 18:38	55.56
2-Butanone (MEK)	560	U	560	29	ug/L			03/02/16 18:38	55.56
Carbon disulfide	280	U	280	21	ug/L			03/02/16 18:38	55.56
Carbon tetrachloride	56	U	56	24	ug/L			03/02/16 18:38	55.56
Chlorobenzene	56	U	56	14	ug/L			03/02/16 18:38	55.56
Chloroethane	56	U *	56	18	ug/L			03/02/16 18:38	55.56
Chloroform	56	U	56	14	ug/L			03/02/16 18:38	55.56
Chloromethane	56	U	56	24	ug/L			03/02/16 18:38	55.56
1,1-Dichloroethane	56	U	56	17	ug/L			03/02/16 18:38	55.56
1,2-Dichloroethane	56	U	56	13	ug/L			03/02/16 18:38	55.56
1,1-Dichloroethene	56	U	56	25	ug/L			03/02/16 18:38	55.56
1,2-Dichloropropane	56	U	56	14	ug/L			03/02/16 18:38	55.56
cis-1,3-Dichloropropene	56	U	56	26	ug/L			03/02/16 18:38	55.56
trans-1,3-Dichloropropene	56	U	56	31	ug/L			03/02/16 18:38	55.56
Ethylbenzene	56	U	56	14	ug/L			03/02/16 18:38	55.56
2-Hexanone	560	U	560	27	ug/L			03/02/16 18:38	55.56
Methylene Chloride	280	U	280	18	ug/L			03/02/16 18:38	55.56
4-Methyl-2-pentanone (MIBK)	560	U	560	55	ug/L			03/02/16 18:38	55.56
Styrene	56	U	56	25	ug/L			03/02/16 18:38	55.56
1,1,2,2-Tetrachloroethane	56	U	56	12	ug/L			03/02/16 18:38	55.56
Tetrachloroethene	56	U	56	17	ug/L			03/02/16 18:38	55.56
Toluene	56	U	56	13	ug/L			03/02/16 18:38	55.56
Trichloroethene	**14**	**J**	56	12	ug/L			03/02/16 18:38	55.56
Vinyl chloride	**1700**		56	16	ug/L			03/02/16 18:38	55.56
Xylenes, Total	110	U	110	29	ug/L			03/02/16 18:38	55.56
1,1,1-Trichloroethane	56	U	56	24	ug/L			03/02/16 18:38	55.56
1,1,2-Trichloroethane	56	U	56	13	ug/L			03/02/16 18:38	55.56
Cyclohexane	56	U	56	25	ug/L			03/02/16 18:38	55.56
1,2-Dibromo-3-Chloropropane	56	U	56	46	ug/L			03/02/16 18:38	55.56
1,2-Dibromoethane	56	U	56	18	ug/L			03/02/16 18:38	55.56
Dichlorodifluoromethane	56	U	56	18	ug/L			03/02/16 18:38	55.56
cis-1,2-Dichloroethene	**1300**		56	14	ug/L			03/02/16 18:38	55.56
trans-1,2-Dichloroethene	**82**		56	17	ug/L			03/02/16 18:38	55.56
Isopropylbenzene	56	U	56	19	ug/L			03/02/16 18:38	55.56
Methyl acetate	560	U	560	130	ug/L			03/02/16 18:38	55.56
Methyl tert-butyl ether	56	U	56	11	ug/L			03/02/16 18:38	55.56
1,1,2-Trichloro-1,2,2-trifluoroethane	56	U	56	25	ug/L			03/02/16 18:38	55.56
1,2,4-Trichlorobenzene	56	U	56	18	ug/L			03/02/16 18:38	55.56
1,2-Dichlorobenzene	56	U	56	14	ug/L			03/02/16 18:38	55.56
1,3-Dichlorobenzene	56	U	56	11	ug/L			03/02/16 18:38	55.56
1,4-Dichlorobenzene	56	U	56	15	ug/L			03/02/16 18:38	55.56
Trichlorofluoromethane	56	U	56	27	ug/L			03/02/16 18:38	55.56
Dibromochloromethane	56	U	56	24	ug/L			03/02/16 18:38	55.56
Methylcyclohexane	56	U	56	24	ug/L			03/02/16 18:38	55.56

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		78 - 125		03/02/16 18:38	55.56
4-Bromofluorobenzene (Surr)	102		61 - 120		03/02/16 18:38	55.56
Toluene-d8 (Surr)	101		80 - 120		03/02/16 18:38	55.56
Dibromofluoromethane (Surr)	96		79 - 120		03/02/16 18:38	55.56

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

Client Sample ID: GW-17303-022516-CB-047
Date Collected: 02/25/16 13:45
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U	670	63	ug/L			03/02/16 19:00	66.67
Benzene	67	U	67	23	ug/L			03/02/16 19:00	66.67
Bromodichloromethane	67	U	67	19	ug/L			03/02/16 19:00	66.67
Bromoform	67	U	67	37	ug/L			03/02/16 19:00	66.67
Bromomethane	67	U *	67	29	ug/L			03/02/16 19:00	66.67
2-Butanone (MEK)	670	U	670	35	ug/L			03/02/16 19:00	66.67
Carbon disulfide	330	U	330	25	ug/L			03/02/16 19:00	66.67
Carbon tetrachloride	67	U	67	29	ug/L			03/02/16 19:00	66.67
Chlorobenzene	67	U	67	17	ug/L			03/02/16 19:00	66.67
Chloroethane	67	U *	67	21	ug/L			03/02/16 19:00	66.67
Chloroform	67	U	67	17	ug/L			03/02/16 19:00	66.67
Chloromethane	67	U	67	29	ug/L			03/02/16 19:00	66.67
1,1-Dichloroethane	67	U	67	20	ug/L			03/02/16 19:00	66.67
1,2-Dichloroethane	67	U	67	15	ug/L			03/02/16 19:00	66.67
1,1-Dichloroethene	67	U	67	30	ug/L			03/02/16 19:00	66.67
1,2-Dichloropropane	67	U	67	17	ug/L			03/02/16 19:00	66.67
cis-1,3-Dichloropropene	67	U	67	31	ug/L			03/02/16 19:00	66.67
trans-1,3-Dichloropropene	67	U	67	37	ug/L			03/02/16 19:00	66.67
Ethylbenzene	67	U	67	17	ug/L			03/02/16 19:00	66.67
2-Hexanone	670	U	670	32	ug/L			03/02/16 19:00	66.67
Methylene Chloride	330	U	330	22	ug/L			03/02/16 19:00	66.67
4-Methyl-2-pentanone (MIBK)	670	U	670	66	ug/L			03/02/16 19:00	66.67
Styrene	67	U	67	30	ug/L			03/02/16 19:00	66.67
1,1,2,2-Tetrachloroethane	67	U	67	15	ug/L			03/02/16 19:00	66.67
Tetrachloroethene	67	U	67	21	ug/L			03/02/16 19:00	66.67
Toluene	67	U	67	15	ug/L			03/02/16 19:00	66.67
Trichloroethene	**160**		67	15	ug/L			03/02/16 19:00	66.67
Vinyl chloride	**2200**		67	19	ug/L			03/02/16 19:00	66.67
Xylenes, Total	130	U	130	35	ug/L			03/02/16 19:00	66.67
1,1,1-Trichloroethane	67	U	67	29	ug/L			03/02/16 19:00	66.67
1,1,2-Trichloroethane	67	U	67	16	ug/L			03/02/16 19:00	66.67
Cyclohexane	67	U	67	30	ug/L			03/02/16 19:00	66.67
1,2-Dibromo-3-Chloropropane	67	U	67	55	ug/L			03/02/16 19:00	66.67
1,2-Dibromoethane	67	U	67	21	ug/L			03/02/16 19:00	66.67
Dichlorodifluoromethane	67	U	67	21	ug/L			03/02/16 19:00	66.67
cis-1,2-Dichloroethene	**1500**		67	17	ug/L			03/02/16 19:00	66.67
trans-1,2-Dichloroethene	**47**	**J**	67	20	ug/L			03/02/16 19:00	66.67
Isopropylbenzene	67	U	67	23	ug/L			03/02/16 19:00	66.67
Methyl acetate	670	U	670	150	ug/L			03/02/16 19:00	66.67
Methyl tert-butyl ether	67	U	67	13	ug/L			03/02/16 19:00	66.67
1,1,2-Trichloro-1,2,2-trifluoroethane	67	U	67	30	ug/L			03/02/16 19:00	66.67
1,2,4-Trichlorobenzene	67	U	67	21	ug/L			03/02/16 19:00	66.67
1,2-Dichlorobenzene	67	U	67	17	ug/L			03/02/16 19:00	66.67
1,3-Dichlorobenzene	67	U	67	13	ug/L			03/02/16 19:00	66.67
1,4-Dichlorobenzene	67	U	67	18	ug/L			03/02/16 19:00	66.67
Trichlorofluoromethane	67	U	67	33	ug/L			03/02/16 19:00	66.67
Dibromochloromethane	67	U	67	29	ug/L			03/02/16 19:00	66.67
Methylcyclohexane	67	U	67	29	ug/L			03/02/16 19:00	66.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		03/02/16 19:00	66.67
4-Bromofluorobenzene (Surr)	100		61 - 120		03/02/16 19:00	66.67
Toluene-d8 (Surr)	102		80 - 120		03/02/16 19:00	66.67
Dibromofluoromethane (Surr)	94		79 - 120		03/02/16 19:00	66.67

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

Client Sample ID: GW-17303-022516-CB-048
Date Collected: 02/25/16 14:50
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15**	**J B**	100	9.4	ug/L			03/03/16 18:22	10
Benzene	**3.7**	**J**	10	3.5	ug/L			03/03/16 18:22	10
Bromodichloromethane	10	U	10	2.9	ug/L			03/03/16 18:22	10
Bromoform	10	U	10	5.6	ug/L			03/03/16 18:22	10
Bromomethane	10	U F1 *	10	4.4	ug/L			03/03/16 18:22	10
2-Butanone (MEK)	100	U	100	5.3	ug/L			03/03/16 18:22	10
Carbon disulfide	50	U	50	3.8	ug/L			03/03/16 18:22	10
Carbon tetrachloride	10	U	10	4.3	ug/L			03/03/16 18:22	10
Chlorobenzene	10	U	10	2.5	ug/L			03/03/16 18:22	10
Chloroethane	10	U F1 *	10	3.2	ug/L			03/03/16 18:22	10
Chloroform	10	U	10	2.5	ug/L			03/03/16 18:22	10
Chloromethane	10	U	10	4.4	ug/L			03/03/16 18:22	10
1,1-Dichloroethane	10	U	10	3.0	ug/L			03/03/16 18:22	10
1,2-Dichloroethane	**2.4**	**J**	10	2.3	ug/L			03/03/16 18:22	10
1,1-Dichloroethene	10	U	10	4.5	ug/L			03/03/16 18:22	10
1,2-Dichloropropane	10	U	10	2.5	ug/L			03/03/16 18:22	10
cis-1,3-Dichloropropene	10	U	10	4.6	ug/L			03/03/16 18:22	10
trans-1,3-Dichloropropene	10	U	10	5.6	ug/L			03/03/16 18:22	10
Ethylbenzene	10	U	10	2.5	ug/L			03/03/16 18:22	10
2-Hexanone	100	U	100	4.8	ug/L			03/03/16 18:22	10
Methylene Chloride	50	U	50	3.3	ug/L			03/03/16 18:22	10
4-Methyl-2-pentanone (MIBK)	100	U	100	9.9	ug/L			03/03/16 18:22	10
Styrene	10	U	10	4.5	ug/L			03/03/16 18:22	10
1,1,2,2-Tetrachloroethane	10	U	10	2.2	ug/L			03/03/16 18:22	10
Tetrachloroethene	10	U	10	3.1	ug/L			03/03/16 18:22	10
Toluene	10	U	10	2.3	ug/L			03/03/16 18:22	10
Trichloroethene	**23**		10	2.2	ug/L			03/03/16 18:22	10
Vinyl chloride	**300**		10	2.9	ug/L			03/03/16 18:22	10
Xylenes, Total	20	U	20	5.2	ug/L			03/03/16 18:22	10
1,1,1-Trichloroethane	10	U	10	4.4	ug/L			03/03/16 18:22	10
1,1,2-Trichloroethane	10	U	10	2.4	ug/L			03/03/16 18:22	10
Cyclohexane	10	U	10	4.5	ug/L			03/03/16 18:22	10
1,2-Dibromo-3-Chloropropane	10	U	10	8.2	ug/L			03/03/16 18:22	10
1,2-Dibromoethane	10	U	10	3.2	ug/L			03/03/16 18:22	10
Dichlorodifluoromethane	10	U	10	3.2	ug/L			03/03/16 18:22	10
cis-1,2-Dichloroethene	**160**		10	2.6	ug/L			03/03/16 18:22	10
trans-1,2-Dichloroethene	**15**		10	3.0	ug/L			03/03/16 18:22	10
Isopropylbenzene	10	U	10	3.5	ug/L			03/03/16 18:22	10
Methyl acetate	100	U	100	23	ug/L			03/03/16 18:22	10
Methyl tert-butyl ether	10	U	10	2.0	ug/L			03/03/16 18:22	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	4.5	ug/L			03/03/16 18:22	10
1,2,4-Trichlorobenzene	10	U	10	3.2	ug/L			03/03/16 18:22	10
1,2-Dichlorobenzene	10	U	10	2.5	ug/L			03/03/16 18:22	10
1,3-Dichlorobenzene	10	U	10	1.9	ug/L			03/03/16 18:22	10
1,4-Dichlorobenzene	10	U	10	2.7	ug/L			03/03/16 18:22	10
Trichlorofluoromethane	10	U	10	4.9	ug/L			03/03/16 18:22	10
Dibromochloromethane	10	U	10	4.3	ug/L			03/03/16 18:22	10
Methylcyclohexane	10	U	10	4.3	ug/L			03/03/16 18:22	10

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		78 - 125		03/03/16 18:22	10
4-Bromofluorobenzene (Surr)	105		61 - 120		03/03/16 18:22	10
Toluene-d8 (Surr)	100		80 - 120		03/03/16 18:22	10
Dibromofluoromethane (Surr)	96		79 - 120		03/03/16 18:22	10

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

Client Sample ID: TB-17303-022516-CB-049
Date Collected: 02/25/16 00:00
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			03/02/16 19:44	1
Benzene	1.0	U	1.0	0.35	ug/L			03/02/16 19:44	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/02/16 19:44	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/02/16 19:44	1
Bromomethane	1.0	U *	1.0	0.44	ug/L			03/02/16 19:44	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/02/16 19:44	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/02/16 19:44	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/02/16 19:44	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/02/16 19:44	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			03/02/16 19:44	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/02/16 19:44	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/02/16 19:44	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/02/16 19:44	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/02/16 19:44	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/02/16 19:44	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/02/16 19:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/02/16 19:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/02/16 19:44	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/02/16 19:44	1
2-Hexanone	10	U	10	0.48	ug/L			03/02/16 19:44	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/02/16 19:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/02/16 19:44	1
Styrene	1.0	U	1.0	0.45	ug/L			03/02/16 19:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/02/16 19:44	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/02/16 19:44	1
Toluene	1.0	U	1.0	0.23	ug/L			03/02/16 19:44	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/02/16 19:44	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/02/16 19:44	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/02/16 19:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/02/16 19:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/02/16 19:44	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/02/16 19:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/02/16 19:44	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/02/16 19:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/02/16 19:44	1
cis-1,2-Dichloroethene	**0.30**	**J**	1.0	0.26	ug/L			03/02/16 19:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/02/16 19:44	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/02/16 19:44	1
Methyl acetate	10	U	10	2.3	ug/L			03/02/16 19:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/02/16 19:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/02/16 19:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/02/16 19:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/02/16 19:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/02/16 19:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/02/16 19:44	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/02/16 19:44	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/02/16 19:44	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/02/16 19:44	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		03/02/16 19:44	1
4-Bromofluorobenzene (Surr)	103		61 - 120		03/02/16 19:44	1
Toluene-d8 (Surr)	102		80 - 120		03/02/16 19:44	1
Dibromofluoromethane (Surr)	93		79 - 120		03/02/16 19:44	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-022516-CB-045
Date Collected: 02/25/16 10:30
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**16**		0.50	0.080	ug/L			03/09/16 20:01	1
Ethane	0.50	U	0.50	0.14	ug/L			03/09/16 20:01	1
Ethylene	0.50	U	0.50	0.13	ug/L			03/09/16 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*93*		*66 - 132*		*03/09/16 20:01*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-022516-CB-046
Date Collected: 02/25/16 12:15
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	160		0.50	0.080	ug/L			03/09/16 20:18	1
Ethane	1.6		0.50	0.14	ug/L			03/09/16 20:18	1
Ethylene	23		0.50	0.13	ug/L			03/09/16 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*92*		*66 - 132*		*03/09/16 20:18*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-022516-CB-047
Date Collected: 02/25/16 13:45
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	200		0.50	0.080	ug/L			03/09/16 20:35	1
Ethane	3.0		0.50	0.14	ug/L			03/09/16 20:35	1
Ethylene	250		0.50	0.13	ug/L			03/09/16 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*93*		*66 - 132*		*03/09/16 20:35*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: GW-17303-022516-CB-048
Date Collected: 02/25/16 14:50
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	160		0.50	0.080	ug/L			03/09/16 21:09	1
Ethane	0.73		0.50	0.14	ug/L			03/09/16 21:09	1
Ethylene	300		0.50	0.13	ug/L			03/09/16 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*92*		*66 - 132*		*03/09/16 21:09*	*1*

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-022516-CB-045
Date Collected: 02/25/16 10:30
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1200	B	100	13	ug/L		03/01/16 10:55	03/02/16 17:19	1
Manganese	410	B	15	0.46	ug/L		03/01/16 10:55	03/02/16 17:19	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-022516-CB-046
Date Collected: 02/25/16 12:15
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1600	B	100	13	ug/L		03/01/16 10:55	03/02/16 17:28	1
Manganese	820	B	15	0.46	ug/L		03/01/16 10:55	03/02/16 17:28	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-022516-CB-047
Date Collected: 02/25/16 13:45
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1700	B	100	13	ug/L		03/01/16 10:55	03/02/16 17:52	1
Manganese	280	B	15	0.46	ug/L		03/01/16 10:55	03/02/16 17:52	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17303-022516-CB-048
Date Collected: 02/25/16 14:50
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	470	B	100	13	ug/L		03/01/16 10:55	03/02/16 17:36	1
Manganese	730	B	15	0.46	ug/L		03/01/16 10:55	03/02/16 17:36	1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-022516-CB-045
Date Collected: 02/25/16 10:30
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	960	B	100	13	ug/L		03/01/16 10:55	03/02/16 17:24	1
Manganese	420	B	15	0.46	ug/L		03/01/16 10:55	03/02/16 17:24	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-022516-CB-046
Date Collected: 02/25/16 12:15
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1300	B	100	13	ug/L		03/01/16 10:55	03/02/16 17:32	1
Manganese	810	B	15	0.46	ug/L		03/01/16 10:55	03/02/16 17:32	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-022516-CB-047
Date Collected: 02/25/16 13:45
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1600	B	100	13	ug/L		03/01/16 10:55	03/02/16 17:56	1
Manganese	260	B	15	0.46	ug/L		03/01/16 10:55	03/02/16 17:56	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: GW-17303-022516-CB-048
Date Collected: 02/25/16 14:50
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	290	B	100	13	ug/L		03/01/16 10:55	03/02/16 17:48	1
Manganese	720	B	15	0.46	ug/L		03/01/16 10:55	03/02/16 17:48	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

General Chemistry

Client Sample ID: GW-17303-022516-CB-045
Date Collected: 02/25/16 10:30
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	440		5.0	1.9	mg/L			03/09/16 15:41	1
Chloride	530		10	4.1	mg/L			03/03/16 21:39	10
Nitrate as N	2.0		0.10	0.035	mg/L			02/26/16 21:56	1
Sulfate	110		1.0	0.13	mg/L			02/26/16 21:56	1
Total Organic Carbon	0.75	J	1.0	0.080	mg/L			03/07/16 11:22	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

General Chemistry

Client Sample ID: GW-17303-022516-CB-046
Date Collected: 02/25/16 12:15
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**370**		5.0	1.9	mg/L			03/09/16 15:53	1
Chloride	**93**		1.0	0.41	mg/L			02/26/16 22:12	1
Nitrate as N	0.10	U	0.10	0.035	mg/L			02/26/16 22:12	1
Sulfate	**34**		1.0	0.13	mg/L			02/26/16 22:12	1
Total Organic Carbon	**3.3**		1.0	0.080	mg/L			03/07/16 13:04	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

General Chemistry

Client Sample ID: GW-17303-022516-CB-047
Date Collected: 02/25/16 13:45
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**300**		5.0	1.9	mg/L			03/09/16 16:04	1
Chloride	**39**		1.0	0.41	mg/L			02/26/16 23:01	1
Nitrate as N	0.10	U	0.10	0.035	mg/L			02/26/16 23:01	1
Sulfate	**33**		1.0	0.13	mg/L			02/26/16 23:01	1
Total Organic Carbon	**2.3**		1.0	0.080	mg/L			03/07/16 14:12	1

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

General Chemistry

Client Sample ID: GW-17303-022516-CB-048
Date Collected: 02/25/16 14:50
Date Received: 02/26/16 09:20

Lab Sample ID: 240-61416-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	510		5.0	1.9	mg/L			03/09/16 16:16	1
Chloride	28		1.0	0.41	mg/L			02/26/16 23:18	1
Nitrate as N	0.33		0.10	0.035	mg/L			02/26/16 23:18	1
Sulfate	130		1.0	0.13	mg/L			02/26/16 23:18	1
Total Organic Carbon	2.5		1.0	0.080	mg/L			03/07/16 14:38	1

GC/MS VOA

Analysis Batch: 219899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-1	GW-17303-022416-CB-041	Total/NA	Water	8260B	
240-61416-2	GW-17303-022416-CB-042	Total/NA	Water	8260B	
240-61416-3	GW-17303-022416-CB-043	Total/NA	Water	8260B	
240-61416-4	GW-17303-022416-CB-044	Total/NA	Water	8260B	
240-61416-5	GW-17303-022516-CB-045	Total/NA	Water	8260B	
240-61416-6	GW-17303-022516-CB-046	Total/NA	Water	8260B	
240-61416-7	GW-17303-022516-CB-047	Total/NA	Water	8260B	
240-61416-9	TB-17303-022516-CB-049	Total/NA	Water	8260B	
LCS 240-219899/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-219899/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 220016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-8	GW-17303-022516-CB-048	Total/NA	Water	8260B	
240-61416-8 MS	GW-17303-022516-CB-048	Total/NA	Water	8260B	
240-61416-8 MSD	GW-17303-022516-CB-048	Total/NA	Water	8260B	
LCS 240-220016/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-220016/6	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 220777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-5	GW-17303-022516-CB-045	Total/NA	Water	RSK-175	
240-61416-6	GW-17303-022516-CB-046	Total/NA	Water	RSK-175	
240-61416-7	GW-17303-022516-CB-047	Total/NA	Water	RSK-175	
240-61416-8	GW-17303-022516-CB-048	Total/NA	Water	RSK-175	
LCS 240-220777/5	Lab Control Sample	Total/NA	Water	RSK-175	
MB 240-220777/4	Method Blank	Total/NA	Water	RSK-175	

Metals

Prep Batch: 219678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-5	GW-17303-022516-CB-045	Dissolved	Water	3005A	
240-61416-5	GW-17303-022516-CB-045	Total Recoverable	Water	3005A	
240-61416-6	GW-17303-022516-CB-046	Dissolved	Water	3005A	
240-61416-6	GW-17303-022516-CB-046	Total Recoverable	Water	3005A	
240-61416-7	GW-17303-022516-CB-047	Dissolved	Water	3005A	
240-61416-7	GW-17303-022516-CB-047	Total Recoverable	Water	3005A	
240-61416-8	GW-17303-022516-CB-048	Dissolved	Water	3005A	
240-61416-8	GW-17303-022516-CB-048	Total Recoverable	Water	3005A	
LCS 240-219678/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-219678/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 219928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-5	GW-17303-022516-CB-045	Dissolved	Water	6010B	219678
240-61416-5	GW-17303-022516-CB-045	Total Recoverable	Water	6010B	219678
240-61416-6	GW-17303-022516-CB-046	Dissolved	Water	6010B	219678

Metals (Continued)

Analysis Batch: 219928 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-6	GW-17303-022516-CB-046	Total Recoverable	Water	6010B	219678
240-61416-7	GW-17303-022516-CB-047	Dissolved	Water	6010B	219678
240-61416-7	GW-17303-022516-CB-047	Total Recoverable	Water	6010B	219678
240-61416-8	GW-17303-022516-CB-048	Dissolved	Water	6010B	219678
240-61416-8	GW-17303-022516-CB-048	Total Recoverable	Water	6010B	219678
LCS 240-219678/2-A	Lab Control Sample	Total Recoverable	Water	6010B	219678
MB 240-219678/1-A	Method Blank	Total Recoverable	Water	6010B	219678

General Chemistry

Analysis Batch: 219323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-5	GW-17303-022516-CB-045	Total/NA	Water	300.0	
240-61416-6	GW-17303-022516-CB-046	Total/NA	Water	300.0	
240-61416-6 MS	GW-17303-022516-CB-046	Total/NA	Water	300.0	
240-61416-6 MSD	GW-17303-022516-CB-046	Total/NA	Water	300.0	
240-61416-7	GW-17303-022516-CB-047	Total/NA	Water	300.0	
240-61416-8	GW-17303-022516-CB-048	Total/NA	Water	300.0	
LCS 240-219323/4	Lab Control Sample	Total/NA	Water	300.0	
MB 240-219323/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 219324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-5	GW-17303-022516-CB-045	Total/NA	Water	300.0	
240-61416-6	GW-17303-022516-CB-046	Total/NA	Water	300.0	
240-61416-6 MS	GW-17303-022516-CB-046	Total/NA	Water	300.0	
240-61416-6 MSD	GW-17303-022516-CB-046	Total/NA	Water	300.0	
240-61416-7	GW-17303-022516-CB-047	Total/NA	Water	300.0	
240-61416-8	GW-17303-022516-CB-048	Total/NA	Water	300.0	
LCS 240-219324/4	Lab Control Sample	Total/NA	Water	300.0	
MB 240-219324/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 220063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-5	GW-17303-022516-CB-045	Total/NA	Water	300.0	
LCS 240-220063/4	Lab Control Sample	Total/NA	Water	300.0	
MB 240-220063/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 220585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-5	GW-17303-022516-CB-045	Total/NA	Water	9060	
240-61416-5 MS	GW-17303-022516-CB-045	Total/NA	Water	9060	
240-61416-5 MSD	GW-17303-022516-CB-045	Total/NA	Water	9060	
240-61416-6	GW-17303-022516-CB-046	Total/NA	Water	9060	
240-61416-7	GW-17303-022516-CB-047	Total/NA	Water	9060	
240-61416-8	GW-17303-022516-CB-048	Total/NA	Water	9060	
LCS 240-220585/6	Lab Control Sample	Total/NA	Water	9060	
LLCS 240-220585/5	Lab Control Sample	Total/NA	Water	9060	
MB 240-220585/4	Method Blank	Total/NA	Water	9060	

General Chemistry (Continued)

Analysis Batch: 220822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61416-5	GW-17303-022516-CB-045	Total/NA	Water	2320B-1997	
240-61416-6	GW-17303-022516-CB-046	Total/NA	Water	2320B-1997	
240-61416-7	GW-17303-022516-CB-047	Total/NA	Water	2320B-1997	
240-61416-8	GW-17303-022516-CB-048	Total/NA	Water	2320B-1997	
LCS 240-220822/3	Lab Control Sample	Total/NA	Water	2320B-1997	
MB 240-220822/2	Method Blank	Total/NA	Water	2320B-1997	

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

Lab Sample ID: MB 240-219899/6
Matrix: Water
Analysis Batch: 219899

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	0.94	ug/L			03/02/16 15:17	1
Benzene	1.0	U	1.0	0.35	ug/L			03/02/16 15:17	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/02/16 15:17	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/02/16 15:17	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/02/16 15:17	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/02/16 15:17	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/02/16 15:17	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/02/16 15:17	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/02/16 15:17	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/02/16 15:17	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/02/16 15:17	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/02/16 15:17	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/02/16 15:17	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/02/16 15:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/02/16 15:17	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
2-Hexanone	10	U	10	0.48	ug/L			03/02/16 15:17	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/02/16 15:17	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/02/16 15:17	1
Styrene	1.0	U	1.0	0.45	ug/L			03/02/16 15:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/02/16 15:17	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/02/16 15:17	1
Toluene	1.0	U	1.0	0.23	ug/L			03/02/16 15:17	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/02/16 15:17	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/02/16 15:17	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/02/16 15:17	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/02/16 15:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/02/16 15:17	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/02/16 15:17	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/02/16 15:17	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/02/16 15:17	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/02/16 15:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/02/16 15:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/02/16 15:17	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/02/16 15:17	1
Methyl acetate	10	U	10	2.3	ug/L			03/02/16 15:17	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/02/16 15:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/02/16 15:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/02/16 15:17	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/02/16 15:17	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/02/16 15:17	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/02/16 15:17	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/02/16 15:17	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/02/16 15:17	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/02/16 15:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		03/02/16 15:17	1
4-Bromofluorobenzene (Surr)	103		61 - 120		03/02/16 15:17	1
Toluene-d8 (Surr)	98		80 - 120		03/02/16 15:17	1
Dibromofluoromethane (Surr)	96		79 - 120		03/02/16 15:17	1

Lab Sample ID: LCS 240-219899/4
Matrix: Water
Analysis Batch: 219899

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	16.5		ug/L		82	34 - 148
Benzene	10.0	9.78		ug/L		98	80 - 120
Bromodichloromethane	10.0	9.78		ug/L		98	80 - 120
Bromoform	10.0	11.8		ug/L		118	56 - 122
Bromomethane	10.0	14.0	*	ug/L		140	38 - 132
2-Butanone (MEK)	20.0	20.3		ug/L		101	56 - 138
Carbon disulfide	10.0	9.67		ug/L		97	65 - 144
Carbon tetrachloride	10.0	9.67		ug/L		97	77 - 131
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120
Chloroethane	10.0	15.0	*	ug/L		150	36 - 126
Chloroform	10.0	9.87		ug/L		99	80 - 120
Chloromethane	10.0	9.95		ug/L		99	48 - 133
1,1-Dichloroethane	10.0	9.74		ug/L		97	79 - 125
1,2-Dichloroethane	10.0	10.2		ug/L		102	80 - 120
1,1-Dichloroethene	10.0	10.3		ug/L		103	76 - 124
1,2-Dichloropropane	10.0	9.79		ug/L		98	78 - 124
cis-1,3-Dichloropropene	10.0	9.67		ug/L		97	74 - 126
trans-1,3-Dichloropropene	10.0	10.2		ug/L		102	75 - 131
Ethylbenzene	10.0	10.2		ug/L		102	80 - 120
2-Hexanone	20.0	21.6		ug/L		108	55 - 141
Methylene Chloride	10.0	9.79		ug/L		98	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	22.3		ug/L		112	64 - 135
Styrene	10.0	10.4		ug/L		104	76 - 122
1,1,2,2-Tetrachloroethane	10.0	11.7		ug/L		117	71 - 123
Tetrachloroethene	10.0	10.3		ug/L		103	78 - 121
Toluene	10.0	10.4		ug/L		104	80 - 120
Trichloroethene	10.0	10.1		ug/L		101	80 - 121
Vinyl chloride	10.0	10.0		ug/L		100	52 - 121
Xylenes, Total	20.0	20.6		ug/L		103	80 - 120
1,1,1-Trichloroethane	10.0	9.62		ug/L		96	77 - 123
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	80 - 120
Cyclohexane	10.0	10.4		ug/L		104	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	11.2		ug/L		112	50 - 132
1,2-Dibromoethane	10.0	10.9		ug/L		109	80 - 120
Dichlorodifluoromethane	10.0	9.06		ug/L		91	23 - 136
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	79 - 120
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	80 - 124
Isopropylbenzene	10.0	10.5		ug/L		105	77 - 120
Methyl acetate	50.0	55.5		ug/L		111	67 - 131
Methyl tert-butyl ether	10.0	10.5		ug/L		105	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.1		ug/L		101	67 - 138
1,2,4-Trichlorobenzene	10.0	9.12		ug/L		91	61 - 120
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	79 - 120

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

Lab Sample ID: LCS 240-219899/4
Matrix: Water
Analysis Batch: 219899

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	79 - 120
1,4-Dichlorobenzene	10.0	10.2		ug/L		102	79 - 120
Trichlorofluoromethane	10.0	7.91		ug/L		79	61 - 133
Dibromochloromethane	10.0	10.8		ug/L		108	74 - 120
Methylcyclohexane	10.0	10.1		ug/L		101	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*78 - 125*
4-Bromofluorobenzene (Surr)	*106*		*61 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*79 - 120*

Lab Sample ID: MB 240-220016/6
Matrix: Water
Analysis Batch: 220016

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.14	J	10	0.94	ug/L			03/03/16 13:14	1
Benzene	1.0	U	1.0	0.35	ug/L			03/03/16 13:14	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/03/16 13:14	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/03/16 13:14	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/03/16 13:14	1
2-Butanone (MEK)	0.590	J	10	0.53	ug/L			03/03/16 13:14	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/03/16 13:14	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/03/16 13:14	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/03/16 13:14	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/03/16 13:14	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/03/16 13:14	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/03/16 13:14	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/03/16 13:14	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/03/16 13:14	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/03/16 13:14	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/03/16 13:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/03/16 13:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/03/16 13:14	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/03/16 13:14	1
2-Hexanone	10	U	10	0.48	ug/L			03/03/16 13:14	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/03/16 13:14	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/03/16 13:14	1
Styrene	1.0	U	1.0	0.45	ug/L			03/03/16 13:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/03/16 13:14	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/03/16 13:14	1
Toluene	1.0	U	1.0	0.23	ug/L			03/03/16 13:14	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/03/16 13:14	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/03/16 13:14	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/03/16 13:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/03/16 13:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/03/16 13:14	1

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

Lab Sample ID: MB 240-220016/6
Matrix: Water
Analysis Batch: 220016

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	0.45	ug/L			03/03/16 13:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/03/16 13:14	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/03/16 13:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/03/16 13:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/03/16 13:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/03/16 13:14	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/03/16 13:14	1
Methyl acetate	10	U	10	2.3	ug/L			03/03/16 13:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/03/16 13:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/03/16 13:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/03/16 13:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/03/16 13:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/03/16 13:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/03/16 13:14	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/03/16 13:14	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/03/16 13:14	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/03/16 13:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*78 - 125*		*03/03/16 13:14*	*1*
4-Bromofluorobenzene (Surr)	*106*		*61 - 120*		*03/03/16 13:14*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/03/16 13:14*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*03/03/16 13:14*	*1*

Lab Sample ID: LCS 240-220016/4
Matrix: Water
Analysis Batch: 220016

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	16.3		ug/L		82	34 - 148
Benzene	10.0	9.85		ug/L		98	80 - 120
Bromodichloromethane	10.0	10.0		ug/L		100	80 - 120
Bromoform	10.0	11.7		ug/L		117	56 - 122
Bromomethane	10.0	14.0	*	ug/L		140	38 - 132
2-Butanone (MEK)	20.0	21.0		ug/L		105	56 - 138
Carbon disulfide	10.0	9.54		ug/L		95	65 - 144
Carbon tetrachloride	10.0	9.81		ug/L		98	77 - 131
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120
Chloroethane	10.0	14.3	*	ug/L		143	36 - 126
Chloroform	10.0	9.94		ug/L		99	80 - 120
Chloromethane	10.0	9.99		ug/L		100	48 - 133
1,1-Dichloroethane	10.0	9.69		ug/L		97	79 - 125
1,2-Dichloroethane	10.0	10.3		ug/L		103	80 - 120
1,1-Dichloroethene	10.0	10.2		ug/L		102	76 - 124
1,2-Dichloropropane	10.0	9.99		ug/L		100	78 - 124
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	74 - 126
trans-1,3-Dichloropropene	10.0	10.2		ug/L		102	75 - 131
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120

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

Lab Sample ID: LCS 240-220016/4
Matrix: Water
Analysis Batch: 220016

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	21.4		ug/L		107	55 - 141
Methylene Chloride	10.0	9.82		ug/L		98	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	23.4		ug/L		117	64 - 135
Styrene	10.0	10.6		ug/L		106	76 - 122
1,1,2,2-Tetrachloroethane	10.0	11.0		ug/L		110	71 - 123
Tetrachloroethene	10.0	10.1		ug/L		101	78 - 121
Toluene	10.0	10.3		ug/L		103	80 - 120
Trichloroethene	10.0	10.1		ug/L		101	80 - 121
Vinyl chloride	10.0	10.2		ug/L		102	52 - 121
Xylenes, Total	20.0	20.7		ug/L		104	80 - 120
1,1,1-Trichloroethane	10.0	9.48		ug/L		95	77 - 123
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	80 - 120
Cyclohexane	10.0	10.3		ug/L		103	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	11.2		ug/L		112	50 - 132
1,2-Dibromoethane	10.0	10.9		ug/L		109	80 - 120
Dichlorodifluoromethane	10.0	8.53		ug/L		85	23 - 136
cis-1,2-Dichloroethene	10.0	9.76		ug/L		98	79 - 120
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	80 - 124
Isopropylbenzene	10.0	10.7		ug/L		107	77 - 120
Methyl acetate	50.0	56.0		ug/L		112	67 - 131
Methyl tert-butyl ether	10.0	10.2		ug/L		102	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.4		ug/L		104	67 - 138
1,2,4-Trichlorobenzene	10.0	9.93		ug/L		99	61 - 120
1,2-Dichlorobenzene	10.0	10.4		ug/L		104	79 - 120
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	79 - 120
1,4-Dichlorobenzene	10.0	10.1		ug/L		101	79 - 120
Trichlorofluoromethane	10.0	9.11		ug/L		91	61 - 133
Dibromochloromethane	10.0	10.7		ug/L		107	74 - 120
Methylcyclohexane	10.0	10.1		ug/L		101	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 125*
4-Bromofluorobenzene (Surr)	*108*		*61 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*79 - 120*

Lab Sample ID: 240-61416-8 MS
Matrix: Water
Analysis Batch: 220016

Client Sample ID: GW-17303-022516-CB-048
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	15	J B	200	158		ug/L		72	32 - 126
Benzene	3.7	J	100	99.3		ug/L		96	73 - 121
Bromodichloromethane	10	U	100	98.6		ug/L		99	72 - 120
Bromoform	10	U	100	112		ug/L		112	45 - 121
Bromomethane	10	U F1 *	100	135		ug/L		135	26 - 136
2-Butanone (MEK)	100	U	200	188		ug/L		94	49 - 132

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

Lab Sample ID: 240-61416-8 MS
Matrix: Water
Analysis Batch: 220016

Client Sample ID: GW-17303-022516-CB-048
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	50	U	100	88.4		ug/L		88	54 - 144
Carbon tetrachloride	10	U	100	87.7		ug/L		88	65 - 129
Chlorobenzene	10	U	100	94.3		ug/L		94	72 - 120
Chloroethane	10	U F1 *	100	140	F1	ug/L		140	27 - 131
Chloroform	10	U	100	99.1		ug/L		99	73 - 121
Chloromethane	10	U	100	96.2		ug/L		96	39 - 134
1,1-Dichloroethane	10	U	100	95.5		ug/L		95	73 - 124
1,2-Dichloroethane	2.4	J	100	105		ug/L		103	74 - 125
1,1-Dichloroethene	10	U	100	93.4		ug/L		93	67 - 124
1,2-Dichloropropane	10	U	100	98.8		ug/L		99	73 - 122
cis-1,3-Dichloropropene	10	U	100	89.9		ug/L		90	60 - 120
trans-1,3-Dichloropropene	10	U	100	93.8		ug/L		94	58 - 132
Ethylbenzene	10	U	100	92.5		ug/L		92	68 - 121
2-Hexanone	100	U	200	190		ug/L		95	49 - 142
Methylene Chloride	50	U	100	97.0		ug/L		97	70 - 124
4-Methyl-2-pentanone (MIBK)	100	U	200	208		ug/L		104	58 - 136
Styrene	10	U	100	98.9		ug/L		99	64 - 126
1,1,2,2-Tetrachloroethane	10	U	100	108		ug/L		108	61 - 130
Tetrachloroethene	10	U	100	86.1		ug/L		86	59 - 125
Toluene	10	U	100	96.8		ug/L		97	72 - 122
Trichloroethene	23		100	114		ug/L		91	61 - 129
Vinyl chloride	300		100	386		ug/L		91	44 - 122
Xylenes, Total	20	U	200	190		ug/L		95	67 - 122
1,1,1-Trichloroethane	10	U	100	89.2		ug/L		89	69 - 122
1,1,2-Trichloroethane	10	U	100	102		ug/L		102	72 - 125
Cyclohexane	10	U	100	78.9		ug/L		79	41 - 137
1,2-Dibromo-3-Chloropropane	10	U	100	95.8		ug/L		96	42 - 130
1,2-Dibromoethane	10	U	100	105		ug/L		105	69 - 125
Dichlorodifluoromethane	10	U	100	67.9		ug/L		68	14 - 137
cis-1,2-Dichloroethene	160		100	261		ug/L		101	66 - 124
trans-1,2-Dichloroethene	15		100	110		ug/L		96	72 - 125
Isopropylbenzene	10	U	100	93.8		ug/L		94	61 - 122
Methyl acetate	100	U	500	538		ug/L		108	64 - 124
Methyl tert-butyl ether	10	U	100	95.2		ug/L		95	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	100	78.8		ug/L		79	44 - 140
1,2,4-Trichlorobenzene	10	U	100	82.8		ug/L		83	48 - 120
1,2-Dichlorobenzene	10	U	100	93.2		ug/L		93	67 - 118
1,3-Dichlorobenzene	10	U	100	90.1		ug/L		90	65 - 120
1,4-Dichlorobenzene	10	U	100	91.3		ug/L		91	66 - 120
Trichlorofluoromethane	10	U	100	89.4		ug/L		89	49 - 133
Dibromochloromethane	10	U	100	102		ug/L		102	62 - 122
Methylcyclohexane	10	U	100	75.3		ug/L		75	39 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 125*
4-Bromofluorobenzene (Surr)	*110*		*61 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: 240-61416-8 MS
Matrix: Water
Analysis Batch: 220016

Client Sample ID: GW-17303-022516-CB-048
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	95		79 - 120

Lab Sample ID: 240-61416-8 MSD
Matrix: Water
Analysis Batch: 220016

Client Sample ID: GW-17303-022516-CB-048
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	15	J B	200	134		ug/L		59	32 - 126	17	28
Benzene	3.7	J	100	89.0		ug/L		85	73 - 121	11	13
Bromodichloromethane	10	U	100	87.9		ug/L		88	72 - 120	11	19
Bromoform	10	U	100	100		ug/L		100	45 - 121	11	19
Bromomethane	10	U F1 *	100	139	F1	ug/L		139	26 - 136	3	35
2-Butanone (MEK)	100	U	200	164		ug/L		82	49 - 132	14	19
Carbon disulfide	50	U	100	85.6		ug/L		86	54 - 144	3	34
Carbon tetrachloride	10	U	100	84.5		ug/L		84	65 - 129	4	20
Chlorobenzene	10	U	100	85.3		ug/L		85	72 - 120	10	15
Chloroethane	10	U F1 *	100	148	F1	ug/L		148	27 - 131	6	35
Chloroform	10	U	100	90.3		ug/L		90	73 - 121	9	17
Chloromethane	10	U	100	102		ug/L		102	39 - 134	6	20
1,1-Dichloroethane	10	U	100	87.3		ug/L		87	73 - 124	9	14
1,2-Dichloroethane	2.4	J	100	91.1		ug/L		89	74 - 125	14	24
1,1-Dichloroethene	10	U	100	90.3		ug/L		90	67 - 124	3	24
1,2-Dichloropropane	10	U	100	87.0		ug/L		87	73 - 122	13	15
cis-1,3-Dichloropropene	10	U	100	78.4		ug/L		78	60 - 120	14	21
trans-1,3-Dichloropropene	10	U	100	80.4		ug/L		80	58 - 132	15	22
Ethylbenzene	10	U	100	87.2		ug/L		87	68 - 121	6	16
2-Hexanone	100	U	200	163		ug/L		82	49 - 142	15	27
Methylene Chloride	50	U	100	89.6		ug/L		90	70 - 124	8	14
4-Methyl-2-pentanone (MIBK)	100	U	200	176		ug/L		88	58 - 136	17	32
Styrene	10	U	100	90.7		ug/L		91	64 - 126	9	15
1,1,2,2-Tetrachloroethane	10	U	100	95.1		ug/L		95	61 - 130	13	18
Tetrachloroethene	10	U	100	79.7		ug/L		80	59 - 125	8	20
Toluene	10	U	100	86.1		ug/L		86	72 - 122	12	15
Trichloroethene	23		100	107		ug/L		84	61 - 129	6	14
Vinyl chloride	300		100	399		ug/L		104	44 - 122	3	35
Xylenes, Total	20	U	200	176		ug/L		88	67 - 122	8	14
1,1,1-Trichloroethane	10	U	100	84.1		ug/L		84	69 - 122	6	14
1,1,2-Trichloroethane	10	U	100	88.4		ug/L		88	72 - 125	14	19
Cyclohexane	10	U	100	83.1		ug/L		83	41 - 137	5	35
1,2-Dibromo-3-Chloropropane	10	U	100	89.7		ug/L		90	42 - 130	7	24
1,2-Dibromoethane	10	U	100	91.9		ug/L		92	69 - 125	13	24
Dichlorodifluoromethane	10	U	100	73.5		ug/L		73	14 - 137	8	34
cis-1,2-Dichloroethene	160		100	256		ug/L		96	66 - 124	2	22
trans-1,2-Dichloroethene	15		100	105		ug/L		90	72 - 125	5	25
Isopropylbenzene	10	U	100	89.6		ug/L		90	61 - 122	5	20
Methyl acetate	100	U	500	475		ug/L		95	64 - 124	12	12
Methyl tert-butyl ether	10	U	100	86.6		ug/L		87	61 - 121	9	12

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

Lab Sample ID: 240-61416-8 MSD
Matrix: Water
Analysis Batch: 220016

Client Sample ID: GW-17303-022516-CB-048
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	10	U	100	80.7		ug/L		81	44 - 140	2	35
1,2,4-Trichlorobenzene	10	U	100	78.6		ug/L		79	48 - 120	5	28
1,2-Dichlorobenzene	10	U	100	85.2		ug/L		85	67 - 118	9	15
1,3-Dichlorobenzene	10	U	100	82.9		ug/L		83	65 - 120	8	15
1,4-Dichlorobenzene	10	U	100	84.4		ug/L		84	66 - 120	8	16
Trichlorofluoromethane	10	U	100	99.3		ug/L		99	49 - 133	10	25
Dibromochloromethane	10	U	100	90.1		ug/L		90	62 - 122	12	19
Methylcyclohexane	10	U	100	78.3		ug/L		78	39 - 135	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 125*
4-Bromofluorobenzene (Surr)	*112*		*61 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*79 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-220777/4
Matrix: Water
Analysis Batch: 220777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.50	U	0.50	0.080	ug/L			03/09/16 14:50	1
Ethane	0.50	U	0.50	0.14	ug/L			03/09/16 14:50	1
Ethylene	0.50	U	0.50	0.13	ug/L			03/09/16 14:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*109*		*66 - 132*		*03/09/16 14:50*	*1*

Lab Sample ID: LCS 240-220777/5
Matrix: Water
Analysis Batch: 220777

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			199	176		ug/L		88	76 - 120		
Ethane			374	340		ug/L		91	80 - 120		
Ethylene			349	319		ug/L		91	81 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*110*		*66 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-219678/1-A
Matrix: Water
Analysis Batch: 219928

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 219678

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	23.5	J	100	13	ug/L		03/01/16 10:55	03/02/16 15:55	1
Manganese	0.999	J	15	0.46	ug/L		03/01/16 10:55	03/02/16 15:55	1

Lab Sample ID: LCS 240-219678/2-A
Matrix: Water
Analysis Batch: 219928

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 219678

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	996		ug/L		100	80 - 120
Manganese	500	482		ug/L		96	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-220822/2
Matrix: Water
Analysis Batch: 220822

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	1.9	mg/L			03/09/16 11:31	1

Lab Sample ID: LCS 240-220822/3
Matrix: Water
Analysis Batch: 220822

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	284	285		mg/L		100	90 - 127

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-219323/3
Matrix: Water
Analysis Batch: 219323

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.41	mg/L			02/26/16 18:06	1
Sulfate	1.0	U	1.0	0.13	mg/L			02/26/16 18:06	1

Lab Sample ID: LCS 240-219323/4
Matrix: Water
Analysis Batch: 219323

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	53.7		mg/L		107	90 - 110
Sulfate	50.0	50.4		mg/L		101	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-61416-6 MS
Matrix: Water
Analysis Batch: 219323

Client Sample ID: GW-17303-022516-CB-046
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	93		50.0	152		mg/L		118	80 - 120
Sulfate	34		50.0	94.0		mg/L		119	80 - 120

Lab Sample ID: 240-61416-6 MSD
Matrix: Water
Analysis Batch: 219323

Client Sample ID: GW-17303-022516-CB-046
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	93		50.0	152		mg/L		119	80 - 120	0	15
Sulfate	34		50.0	93.4		mg/L		118	80 - 120	1	15

Lab Sample ID: MB 240-219324/3
Matrix: Water
Analysis Batch: 219324

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.035	mg/L			02/26/16 18:06	1

Lab Sample ID: LCS 240-219324/4
Matrix: Water
Analysis Batch: 219324

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.50	2.53		mg/L		101	90 - 110

Lab Sample ID: 240-61416-6 MS
Matrix: Water
Analysis Batch: 219324

Client Sample ID: GW-17303-022516-CB-046
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.10	U	2.50	2.54		mg/L		101	80 - 120

Lab Sample ID: 240-61416-6 MSD
Matrix: Water
Analysis Batch: 219324

Client Sample ID: GW-17303-022516-CB-046
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.10	U	2.50	2.51		mg/L		100	80 - 120	1	15

Lab Sample ID: MB 240-220063/3
Matrix: Water
Analysis Batch: 220063

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.41	mg/L			03/03/16 15:59	1
Sulfate	0.198	J	1.0	0.13	mg/L			03/03/16 15:59	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-220063/4
Matrix: Water
Analysis Batch: 220063

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	54.5		mg/L		109	90 - 110		
Sulfate			50.0	53.7		mg/L		107	90 - 110		

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 240-220585/4
Matrix: Water
Analysis Batch: 220585

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.080	mg/L			03/07/16 10:58	1

Lab Sample ID: LCS 240-220585/6
Matrix: Water
Analysis Batch: 220585

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			69.3	68.8		mg/L		99	88 - 115		

Lab Sample ID: LLCS 240-220585/5
Matrix: Water
Analysis Batch: 220585

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			6.93	6.76		mg/L		98	88 - 115		

Lab Sample ID: 240-61416-5 MS
Matrix: Water
Analysis Batch: 220585

Client Sample ID: GW-17303-022516-CB-045
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	0.75	J	25.0	27.0		mg/L		105	72 - 136		

Lab Sample ID: 240-61416-5 MSD
Matrix: Water
Analysis Batch: 220585

Client Sample ID: GW-17303-022516-CB-045
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	0.75	J	25.0	27.9		mg/L		109	72 - 136	3	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (78-125)	BFB (61-120)	TOL (80-120)	DBFM (79-120)
240-61416-1	GW-17303-022416-CB-041	94	103	102	96
240-61416-2	GW-17303-022416-CB-042	100	106	99	96
240-61416-3	GW-17303-022416-CB-043	99	101	100	95
240-61416-4	GW-17303-022416-CB-044	94	101	102	94
240-61416-5	GW-17303-022516-CB-045	100	105	99	95
240-61416-6	GW-17303-022516-CB-046	99	102	101	96
240-61416-7	GW-17303-022516-CB-047	94	100	102	94
240-61416-8	GW-17303-022516-CB-048	98	105	100	96
240-61416-8 MS	GW-17303-022516-CB-048	98	110	102	95
240-61416-8 MSD	GW-17303-022516-CB-048	97	112	98	97
240-61416-9	TB-17303-022516-CB-049	94	103	102	93
LCS 240-219899/4	Lab Control Sample	95	106	102	95
LCS 240-220016/4	Lab Control Sample	98	108	101	94
MB 240-219899/6	Method Blank	94	103	98	96
MB 240-220016/6	Method Blank	91	106	103	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: RSK-175 - Dissolved Gases (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	rifluoroet (66-132)
240-61416-5	GW-17303-022516-CB-045	93
240-61416-6	GW-17303-022516-CB-046	92
240-61416-7	GW-17303-022516-CB-047	93
240-61416-8	GW-17303-022516-CB-048	92
LCS 240-220777/5	Lab Control Sample	110
MB 240-220777/4	Method Blank	109

Surrogate Legend

1,1,1-Trifluoroethane = 1,1,1-Trifluoroethane

Client Sample ID: GW-17303-022416-CB-041 — Lab Sample ID: 240-61416-1

Date Collected: 02/24/16 15:30 — **Matrix: Water**
Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	219899	03/02/16 16:46	LEE	TAL CAN

Client Sample ID: GW-17303-022416-CB-042 — Lab Sample ID: 240-61416-2

Date Collected: 02/24/16 16:05 — **Matrix: Water**
Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		55.56	219899	03/02/16 17:08	LEE	TAL CAN

Client Sample ID: GW-17303-022416-CB-043 — Lab Sample ID: 240-61416-3

Date Collected: 02/24/16 16:20 — **Matrix: Water**
Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	219899	03/02/16 17:30	LEE	TAL CAN

Client Sample ID: GW-17303-022416-CB-044 — Lab Sample ID: 240-61416-4

Date Collected: 02/24/16 17:00 — **Matrix: Water**
Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	219899	03/02/16 17:53	LEE	TAL CAN

Client Sample ID: GW-17303-022516-CB-045 — Lab Sample ID: 240-61416-5

Date Collected: 02/25/16 10:30 — **Matrix: Water**
Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219899	03/02/16 18:15	LEE	TAL CAN
Total/NA	Analysis	RSK-175		1	220777	03/09/16 20:01	BPM	TAL CAN
Dissolved	Prep	3005A			219678	03/01/16 10:55	WKD	TAL CAN
Dissolved	Analysis	6010B		1	219928	03/02/16 17:24	RKT	TAL CAN
Total Recoverable	Prep	3005A			219678	03/01/16 10:55	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	219928	03/02/16 17:19	RKT	TAL CAN
Total/NA	Analysis	2320B-1997		1	220822	03/09/16 15:41	JWW	TAL CAN
Total/NA	Analysis	300.0		1	219323	02/26/16 21:56	LKG	TAL CAN
Total/NA	Analysis	300.0		1	219324	02/26/16 21:56	LKG	TAL CAN
Total/NA	Analysis	300.0		10	220063	03/03/16 21:39	LKG	TAL CAN
Total/NA	Analysis	9060		1	220585	03/07/16 11:22	TPH	TAL CAN

Client Sample ID: GW-17303-022516-CB-046

Lab Sample ID: 240-61416-6

Date Collected: 02/25/16 12:15

Matrix: Water

Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		55.56	219899	03/02/16 18:38	LEE	TAL CAN
Total/NA	Analysis	RSK-175		1	220777	03/09/16 20:18	BPM	TAL CAN
Dissolved	Prep	3005A			219678	03/01/16 10:55	WKD	TAL CAN
Dissolved	Analysis	6010B		1	219928	03/02/16 17:32	RKT	TAL CAN
Total Recoverable	Prep	3005A			219678	03/01/16 10:55	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	219928	03/02/16 17:28	RKT	TAL CAN
Total/NA	Analysis	2320B-1997		1	220822	03/09/16 15:53	JWW	TAL CAN
Total/NA	Analysis	300.0		1	219323	02/26/16 22:12	LKG	TAL CAN
Total/NA	Analysis	300.0		1	219324	02/26/16 22:12	LKG	TAL CAN
Total/NA	Analysis	9060		1	220585	03/07/16 13:04	TPH	TAL CAN

Client Sample ID: GW-17303-022516-CB-047

Lab Sample ID: 240-61416-7

Date Collected: 02/25/16 13:45

Matrix: Water

Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		66.67	219899	03/02/16 19:00	LEE	TAL CAN
Total/NA	Analysis	RSK-175		1	220777	03/09/16 20:35	BPM	TAL CAN
Dissolved	Prep	3005A			219678	03/01/16 10:55	WKD	TAL CAN
Dissolved	Analysis	6010B		1	219928	03/02/16 17:56	RKT	TAL CAN
Total Recoverable	Prep	3005A			219678	03/01/16 10:55	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	219928	03/02/16 17:52	RKT	TAL CAN
Total/NA	Analysis	2320B-1997		1	220822	03/09/16 16:04	JWW	TAL CAN
Total/NA	Analysis	300.0		1	219323	02/26/16 23:01	LKG	TAL CAN
Total/NA	Analysis	300.0		1	219324	02/26/16 23:01	LKG	TAL CAN
Total/NA	Analysis	9060		1	220585	03/07/16 14:12	TPH	TAL CAN

Client Sample ID: GW-17303-022516-CB-048

Lab Sample ID: 240-61416-8

Date Collected: 02/25/16 14:50

Matrix: Water

Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	220016	03/03/16 18:22	LEE	TAL CAN
Total/NA	Analysis	RSK-175		1	220777	03/09/16 21:09	BPM	TAL CAN
Dissolved	Prep	3005A			219678	03/01/16 10:55	WKD	TAL CAN
Dissolved	Analysis	6010B		1	219928	03/02/16 17:48	RKT	TAL CAN
Total Recoverable	Prep	3005A			219678	03/01/16 10:55	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	219928	03/02/16 17:36	RKT	TAL CAN
Total/NA	Analysis	2320B-1997		1	220822	03/09/16 16:16	JWW	TAL CAN
Total/NA	Analysis	300.0		1	219323	02/26/16 23:18	LKG	TAL CAN
Total/NA	Analysis	300.0		1	219324	02/26/16 23:18	LKG	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

Client Sample ID: GW-17303-022516-CB-048

Lab Sample ID: 240-61416-8

Date Collected: 02/25/16 14:50
Matrix: Water
Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060		1	220585	03/07/16 14:38	TPH	TAL CAN

Client Sample ID: TB-17303-022516-CB-049

Lab Sample ID: 240-61416-9

Date Collected: 02/25/16 00:00
Matrix: Water
Date Received: 02/26/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219899	03/02/16 19:44	LEE	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61416-1

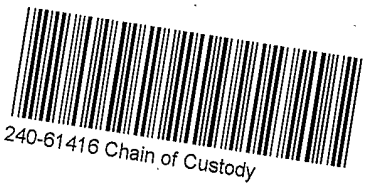
Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

20/C1,5

Chain of Custody Record

122886

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/25/2016	COC No: 010
Company Name: GHD	Tel/Fax: 734-453-5123	Lab Contact: D. Herbster	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 734-453-5123	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			Job / SDG No.:
Site: #017303	☐ 2 days			
PO # SSOW# 17303-033	☐ 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 VOCs	Nitrate	Sulfate	Chloride	Total Fe + Mn	Dissolved Fe + Mn *	Methane/Ethane/Ethene	Alkalinity	Total organic carbon
GW-17303-022416-CB-041	2/24/16	1530	G	WG	3	N	N	X								
-042		1605			3			X								
-043		1620			3			X								
-044	↓	1700	↓	↓	3			X								
-022516- -045	2/25/16	1030			12			X	X	X	X	X	X	X	X	X
-046		1215			12			X	X	X	X	X	X	X	X	X
-047		~~1450~~ 1345			12			X	X	X	X	X	X	X	X	X
-048		1450	↓	↓	12			X	X	X	X	X	X	X	X	X
TB- -049	↓	—	—	WQ	1			X								

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Sample Specific Notes:

Michigan X-1190

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:
Tracking # 6209 0763 2731

* Diss Fe + Mn was field filtered.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by: C. Bondy	Company: GHD	Date/Time: 2/25/16 1600	Received by: Gerry Burns	Company: TA Can	Date/Time: 2/26/16 0920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

10/10/2013

TestAmerica Canton Sample Receipt Form/Narrative Login # : 601416
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: Terry Burns

Cooler Received on 2/26/16 Opened on 2/26/16

FedEx: 1st Grd Exp UPS FAS Stetson 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# 48 (CF -1.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# I8 (CF -0.5 °C) Observed Cooler Temp. 2.0 °C Corrected Cooler Temp. 1.5 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
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 sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC559158
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials?	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

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): _____

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI-NC-099X-011816 Cooler Receipt Form.doc djl

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
GW-17303-022516-CB-045	240-61416-K-5	Plastic 500ml - with Nitric Acid	<2		
GW-17303-022516-CB-045	240-61416-L-5	Plastic 500ml - w/ Nitric - Dis.	<2		
GW-17303-022516-CB-046	240-61416-K-6	Plastic 500ml - with Nitric Acid	<2		
GW-17303-022516-CB-046	240-61416-L-6	Plastic 500ml - w/ Nitric - Dis.	<2		
GW-17303-022516-CB-047	240-61416-K-7	Plastic 500ml - with Nitric Acid	<2		
GW-17303-022516-CB-047	240-61416-L-7	Plastic 500ml - w/ Nitric - Dis.	<2		
GW-17303-022516-CB-048	240-61416-K-8	Plastic 500ml - with Nitric Acid	<2		
GW-17303-022516-CB-048	240-61416-L-8	Plastic 500ml - w/ Nitric - Dis.	<2		

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: 240-61481-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
3/8/2016 11:49:19 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: 240-61481-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-61481-1

Comments
No additional comments.

Receipt
The samples were received on 2/27/2016 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 220197 recovered outside control limits for the following analytes: Chloroethane, Bromomethane. 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.

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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

Qualifiers

GC/MS VOA

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.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-61481-1	GW-17303-022616-CB-050	Water	02/26/16 11:30	02/27/16 09:35
240-61481-2	GW-17303-022616-CB-051	Water	02/26/16 13:25	02/27/16 09:35
240-61481-3	GW-17303-022616-CB-052	Water	02/26/16 14:40	02/27/16 09:35
240-61481-4	TB-17303-022616-CB-053	Water	02/26/16 00:00	02/27/16 09:35

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

Client Sample ID: GW-17303-022616-CB-050 — Lab Sample ID: 240-61481-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15	J B	100	9.4	ug/L	10		8260B	Total/NA
Benzene	8.6	J	10	3.5	ug/L	10		8260B	Total/NA
Toluene	13		10	2.3	ug/L	10		8260B	Total/NA
Trichloroethene	34		10	2.2	ug/L	10		8260B	Total/NA
Vinyl chloride	350		10	2.9	ug/L	10		8260B	Total/NA
Xylenes, Total	38		20	5.2	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	96		10	2.6	ug/L	10		8260B	Total/NA
trans-1,2-Dichloroethene	8.7	J	10	3.0	ug/L	10		8260B	Total/NA

Client Sample ID: GW-17303-022616-CB-051 — Lab Sample ID: 240-61481-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	99	J B	830	78	ug/L	83.33		8260B	Total/NA
Ethylbenzene	38	J	83	21	ug/L	83.33		8260B	Total/NA
Toluene	110		83	19	ug/L	83.33		8260B	Total/NA
Vinyl chloride	1300		83	24	ug/L	83.33		8260B	Total/NA
Xylenes, Total	120	J	170	43	ug/L	83.33		8260B	Total/NA
cis-1,2-Dichloroethene	2500		83	22	ug/L	83.33		8260B	Total/NA
trans-1,2-Dichloroethene	34	J	83	25	ug/L	83.33		8260B	Total/NA

Client Sample ID: GW-17303-022616-CB-052 — Lab Sample ID: 240-61481-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	32		25	8.8	ug/L	25		8260B	Total/NA
Ethylbenzene	120	F1	25	6.3	ug/L	25		8260B	Total/NA
Toluene	43		25	5.8	ug/L	25		8260B	Total/NA
Trichloroethene	210	F1	25	5.5	ug/L	25		8260B	Total/NA
Vinyl chloride	270		25	7.3	ug/L	25		8260B	Total/NA
Xylenes, Total	220	F1	50	13	ug/L	25		8260B	Total/NA
Cyclohexane	50		25	11	ug/L	25		8260B	Total/NA
cis-1,2-Dichloroethene	790	F1	25	6.5	ug/L	25		8260B	Total/NA
trans-1,2-Dichloroethene	8.4	J	25	7.5	ug/L	25		8260B	Total/NA
Isopropylbenzene	49		25	8.8	ug/L	25		8260B	Total/NA

Client Sample ID: TB-17303-022616-CB-053 — Lab Sample ID: 240-61481-4

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: GW-17303-022616-CB-050
Date Collected: 02/26/16 11:30
Date Received: 02/27/16 09:35

Lab Sample ID: 240-61481-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15**	**J B**	100	9.4	ug/L			03/04/16 15:02	10
Benzene	**8.6**	**J**	10	3.5	ug/L			03/04/16 15:02	10
Bromodichloromethane	10	U	10	2.9	ug/L			03/04/16 15:02	10
Bromoform	10	U	10	5.6	ug/L			03/04/16 15:02	10
Bromomethane	10	U F1 *	10	4.4	ug/L			03/04/16 15:02	10
2-Butanone (MEK)	100	U	100	5.3	ug/L			03/04/16 15:02	10
Carbon disulfide	50	U	50	3.8	ug/L			03/04/16 15:02	10
Carbon tetrachloride	10	U	10	4.3	ug/L			03/04/16 15:02	10
Chlorobenzene	10	U	10	2.5	ug/L			03/04/16 15:02	10
Chloroethane	10	U F1 *	10	3.2	ug/L			03/04/16 15:02	10
Chloroform	10	U	10	2.5	ug/L			03/04/16 15:02	10
Chloromethane	10	U	10	4.4	ug/L			03/04/16 15:02	10
1,1-Dichloroethane	10	U	10	3.0	ug/L			03/04/16 15:02	10
1,2-Dichloroethane	10	U	10	2.3	ug/L			03/04/16 15:02	10
1,1-Dichloroethene	10	U	10	4.5	ug/L			03/04/16 15:02	10
1,2-Dichloropropane	10	U	10	2.5	ug/L			03/04/16 15:02	10
cis-1,3-Dichloropropene	10	U	10	4.6	ug/L			03/04/16 15:02	10
trans-1,3-Dichloropropene	10	U	10	5.6	ug/L			03/04/16 15:02	10
Ethylbenzene	10	U	10	2.5	ug/L			03/04/16 15:02	10
2-Hexanone	100	U	100	4.8	ug/L			03/04/16 15:02	10
Methylene Chloride	50	U	50	3.3	ug/L			03/04/16 15:02	10
4-Methyl-2-pentanone (MIBK)	100	U	100	9.9	ug/L			03/04/16 15:02	10
Styrene	10	U	10	4.5	ug/L			03/04/16 15:02	10
1,1,2,2-Tetrachloroethane	10	U	10	2.2	ug/L			03/04/16 15:02	10
Tetrachloroethene	10	U	10	3.1	ug/L			03/04/16 15:02	10
Toluene	**13**		10	2.3	ug/L			03/04/16 15:02	10
Trichloroethene	**34**		10	2.2	ug/L			03/04/16 15:02	10
Vinyl chloride	**350**		10	2.9	ug/L			03/04/16 15:02	10
Xylenes, Total	**38**		20	5.2	ug/L			03/04/16 15:02	10
1,1,1-Trichloroethane	10	U	10	4.4	ug/L			03/04/16 15:02	10
1,1,2-Trichloroethane	10	U	10	2.4	ug/L			03/04/16 15:02	10
Cyclohexane	10	U	10	4.5	ug/L			03/04/16 15:02	10
1,2-Dibromo-3-Chloropropane	10	U	10	8.2	ug/L			03/04/16 15:02	10
1,2-Dibromoethane	10	U	10	3.2	ug/L			03/04/16 15:02	10
Dichlorodifluoromethane	10	U	10	3.2	ug/L			03/04/16 15:02	10
cis-1,2-Dichloroethene	**96**		10	2.6	ug/L			03/04/16 15:02	10
trans-1,2-Dichloroethene	**8.7**	**J**	10	3.0	ug/L			03/04/16 15:02	10
Isopropylbenzene	10	U	10	3.5	ug/L			03/04/16 15:02	10
Methyl acetate	100	U	100	23	ug/L			03/04/16 15:02	10
Methyl tert-butyl ether	10	U	10	2.0	ug/L			03/04/16 15:02	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	4.5	ug/L			03/04/16 15:02	10
1,2,4-Trichlorobenzene	10	U	10	3.2	ug/L			03/04/16 15:02	10
1,2-Dichlorobenzene	10	U	10	2.5	ug/L			03/04/16 15:02	10
1,3-Dichlorobenzene	10	U	10	1.9	ug/L			03/04/16 15:02	10
1,4-Dichlorobenzene	10	U	10	2.7	ug/L			03/04/16 15:02	10
Trichlorofluoromethane	10	U	10	4.9	ug/L			03/04/16 15:02	10
Dibromochloromethane	10	U	10	4.3	ug/L			03/04/16 15:02	10
Methylcyclohexane	10	U	10	4.3	ug/L			03/04/16 15:02	10

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		78 - 125		03/04/16 15:02	10
4-Bromofluorobenzene (Surr)	107		61 - 120		03/04/16 15:02	10
Toluene-d8 (Surr)	97		80 - 120		03/04/16 15:02	10
Dibromofluoromethane (Surr)	97		79 - 120		03/04/16 15:02	10

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

Client Sample ID: GW-17303-022616-CB-051
Date Collected: 02/26/16 13:25
Date Received: 02/27/16 09:35

Lab Sample ID: 240-61481-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**99**	**J B**	830	78	ug/L			03/04/16 15:25	83.33
Benzene	83	U	83	29	ug/L			03/04/16 15:25	83.33
Bromodichloromethane	83	U	83	24	ug/L			03/04/16 15:25	83.33
Bromoform	83	U	83	47	ug/L			03/04/16 15:25	83.33
Bromomethane	83	U *	83	37	ug/L			03/04/16 15:25	83.33
2-Butanone (MEK)	830	U	830	44	ug/L			03/04/16 15:25	83.33
Carbon disulfide	420	U	420	32	ug/L			03/04/16 15:25	83.33
Carbon tetrachloride	83	U	83	36	ug/L			03/04/16 15:25	83.33
Chlorobenzene	83	U	83	21	ug/L			03/04/16 15:25	83.33
Chloroethane	83	U *	83	27	ug/L			03/04/16 15:25	83.33
Chloroform	83	U	83	21	ug/L			03/04/16 15:25	83.33
Chloromethane	83	U	83	37	ug/L			03/04/16 15:25	83.33
1,1-Dichloroethane	83	U	83	25	ug/L			03/04/16 15:25	83.33
1,2-Dichloroethane	83	U	83	19	ug/L			03/04/16 15:25	83.33
1,1-Dichloroethene	83	U	83	37	ug/L			03/04/16 15:25	83.33
1,2-Dichloropropane	83	U	83	21	ug/L			03/04/16 15:25	83.33
cis-1,3-Dichloropropene	83	U	83	38	ug/L			03/04/16 15:25	83.33
trans-1,3-Dichloropropene	83	U	83	47	ug/L			03/04/16 15:25	83.33
Ethylbenzene	**38**	**J**	83	21	ug/L			03/04/16 15:25	83.33
2-Hexanone	830	U	830	40	ug/L			03/04/16 15:25	83.33
Methylene Chloride	420	U	420	27	ug/L			03/04/16 15:25	83.33
4-Methyl-2-pentanone (MIBK)	830	U	830	82	ug/L			03/04/16 15:25	83.33
Styrene	83	U	83	37	ug/L			03/04/16 15:25	83.33
1,1,2,2-Tetrachloroethane	83	U	83	18	ug/L			03/04/16 15:25	83.33
Tetrachloroethene	83	U	83	26	ug/L			03/04/16 15:25	83.33
Toluene	**110**		83	19	ug/L			03/04/16 15:25	83.33
Trichloroethene	83	U	83	18	ug/L			03/04/16 15:25	83.33
Vinyl chloride	**1300**		83	24	ug/L			03/04/16 15:25	83.33
Xylenes, Total	**120**	**J**	170	43	ug/L			03/04/16 15:25	83.33
1,1,1-Trichloroethane	83	U	83	37	ug/L			03/04/16 15:25	83.33
1,1,2-Trichloroethane	83	U	83	20	ug/L			03/04/16 15:25	83.33
Cyclohexane	83	U	83	37	ug/L			03/04/16 15:25	83.33
1,2-Dibromo-3-Chloropropane	83	U	83	68	ug/L			03/04/16 15:25	83.33
1,2-Dibromoethane	83	U	83	27	ug/L			03/04/16 15:25	83.33
Dichlorodifluoromethane	83	U	83	27	ug/L			03/04/16 15:25	83.33
cis-1,2-Dichloroethene	**2500**		83	22	ug/L			03/04/16 15:25	83.33
trans-1,2-Dichloroethene	**34**	**J**	83	25	ug/L			03/04/16 15:25	83.33
Isopropylbenzene	83	U	83	29	ug/L			03/04/16 15:25	83.33
Methyl acetate	830	U	830	190	ug/L			03/04/16 15:25	83.33
Methyl tert-butyl ether	83	U	83	17	ug/L			03/04/16 15:25	83.33
1,1,2-Trichloro-1,2,2-trifluoroethane	83	U	83	37	ug/L			03/04/16 15:25	83.33
1,2,4-Trichlorobenzene	83	U	83	27	ug/L			03/04/16 15:25	83.33
1,2-Dichlorobenzene	83	U	83	21	ug/L			03/04/16 15:25	83.33
1,3-Dichlorobenzene	83	U	83	16	ug/L			03/04/16 15:25	83.33
1,4-Dichlorobenzene	83	U	83	22	ug/L			03/04/16 15:25	83.33
Trichlorofluoromethane	83	U	83	41	ug/L			03/04/16 15:25	83.33
Dibromochloromethane	83	U	83	36	ug/L			03/04/16 15:25	83.33
Methylcyclohexane	83	U	83	36	ug/L			03/04/16 15:25	83.33

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		78 - 125		03/04/16 15:25	83.33
4-Bromofluorobenzene (Surr)	108		61 - 120		03/04/16 15:25	83.33
Toluene-d8 (Surr)	98		80 - 120		03/04/16 15:25	83.33
Dibromofluoromethane (Surr)	97		79 - 120		03/04/16 15:25	83.33

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

Client Sample ID: GW-17303-022616-CB-052
Date Collected: 02/26/16 14:40
Date Received: 02/27/16 09:35

Lab Sample ID: 240-61481-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	250	U	250	24	ug/L			03/03/16 08:50	25
Benzene	**32**		25	8.8	ug/L			03/03/16 08:50	25
Bromodichloromethane	25	U	25	7.3	ug/L			03/03/16 08:50	25
Bromoform	25	U	25	14	ug/L			03/03/16 08:50	25
Bromomethane	25	U	25	11	ug/L			03/03/16 08:50	25
2-Butanone (MEK)	250	U	250	13	ug/L			03/03/16 08:50	25
Carbon disulfide	130	U	130	9.5	ug/L			03/03/16 08:50	25
Carbon tetrachloride	25	U	25	11	ug/L			03/03/16 08:50	25
Chlorobenzene	25	U	25	6.3	ug/L			03/03/16 08:50	25
Chloroethane	25	U	25	8.0	ug/L			03/03/16 08:50	25
Chloroform	25	U	25	6.3	ug/L			03/03/16 08:50	25
Chloromethane	25	U	25	11	ug/L			03/03/16 08:50	25
1,1-Dichloroethane	25	U	25	7.5	ug/L			03/03/16 08:50	25
1,2-Dichloroethane	25	U	25	5.8	ug/L			03/03/16 08:50	25
1,1-Dichloroethene	25	U	25	11	ug/L			03/03/16 08:50	25
1,2-Dichloropropane	25	U	25	6.3	ug/L			03/03/16 08:50	25
cis-1,3-Dichloropropene	25	U	25	12	ug/L			03/03/16 08:50	25
trans-1,3-Dichloropropene	25	U	25	14	ug/L			03/03/16 08:50	25
Ethylbenzene	**120**	**F1**	25	6.3	ug/L			03/03/16 08:50	25
2-Hexanone	250	U	250	12	ug/L			03/03/16 08:50	25
Methylene Chloride	130	U	130	8.3	ug/L			03/03/16 08:50	25
4-Methyl-2-pentanone (MIBK)	250	U	250	25	ug/L			03/03/16 08:50	25
Styrene	25	U	25	11	ug/L			03/03/16 08:50	25
1,1,2,2-Tetrachloroethane	25	U	25	5.5	ug/L			03/03/16 08:50	25
Tetrachloroethene	25	U	25	7.8	ug/L			03/03/16 08:50	25
Toluene	**43**		25	5.8	ug/L			03/03/16 08:50	25
Trichloroethene	**210**	**F1**	25	5.5	ug/L			03/03/16 08:50	25
Vinyl chloride	**270**		25	7.3	ug/L			03/03/16 08:50	25
Xylenes, Total	**220**	**F1**	50	13	ug/L			03/03/16 08:50	25
1,1,1-Trichloroethane	25	U	25	11	ug/L			03/03/16 08:50	25
1,1,2-Trichloroethane	25	U	25	6.0	ug/L			03/03/16 08:50	25
Cyclohexane	**50**		25	11	ug/L			03/03/16 08:50	25
1,2-Dibromo-3-Chloropropane	25	U	25	21	ug/L			03/03/16 08:50	25
1,2-Dibromoethane	25	U	25	8.0	ug/L			03/03/16 08:50	25
Dichlorodifluoromethane	25	U	25	8.0	ug/L			03/03/16 08:50	25
cis-1,2-Dichloroethene	**790**	**F1**	25	6.5	ug/L			03/03/16 08:50	25
trans-1,2-Dichloroethene	**8.4**	**J**	25	7.5	ug/L			03/03/16 08:50	25
Isopropylbenzene	**49**		25	8.8	ug/L			03/03/16 08:50	25
Methyl acetate	250	U	250	57	ug/L			03/03/16 08:50	25
Methyl tert-butyl ether	25	U	25	5.0	ug/L			03/03/16 08:50	25
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	25	11	ug/L			03/03/16 08:50	25
1,2,4-Trichlorobenzene	25	U F2	25	8.0	ug/L			03/03/16 08:50	25
1,2-Dichlorobenzene	25	U	25	6.3	ug/L			03/03/16 08:50	25
1,3-Dichlorobenzene	25	U	25	4.8	ug/L			03/03/16 08:50	25
1,4-Dichlorobenzene	25	U F1	25	6.8	ug/L			03/03/16 08:50	25
Trichlorofluoromethane	25	U	25	12	ug/L			03/03/16 08:50	25
Dibromochloromethane	25	U	25	11	ug/L			03/03/16 08:50	25
Methylcyclohexane	25	U	25	11	ug/L			03/03/16 08:50	25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		78 - 125		03/03/16 08:50	25
4-Bromofluorobenzene (Surr)	104		61 - 120		03/03/16 08:50	25
Toluene-d8 (Surr)	101		80 - 120		03/03/16 08:50	25
Dibromofluoromethane (Surr)	107		79 - 120		03/03/16 08:50	25

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

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

Client Sample ID: TB-17303-022616-CB-053
Date Collected: 02/26/16 00:00
Date Received: 02/27/16 09:35

Lab Sample ID: 240-61481-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			03/03/16 07:44	1
Benzene	1.0	U	1.0	0.35	ug/L			03/03/16 07:44	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/03/16 07:44	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/03/16 07:44	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/03/16 07:44	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/03/16 07:44	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/03/16 07:44	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/03/16 07:44	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/03/16 07:44	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/03/16 07:44	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/03/16 07:44	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/03/16 07:44	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/03/16 07:44	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/03/16 07:44	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/03/16 07:44	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/03/16 07:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/03/16 07:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/03/16 07:44	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/03/16 07:44	1
2-Hexanone	10	U	10	0.48	ug/L			03/03/16 07:44	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/03/16 07:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/03/16 07:44	1
Styrene	1.0	U	1.0	0.45	ug/L			03/03/16 07:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/03/16 07:44	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/03/16 07:44	1
Toluene	1.0	U	1.0	0.23	ug/L			03/03/16 07:44	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/03/16 07:44	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/03/16 07:44	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/03/16 07:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/03/16 07:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/03/16 07:44	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/03/16 07:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/03/16 07:44	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/03/16 07:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/03/16 07:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/03/16 07:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/03/16 07:44	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/03/16 07:44	1
Methyl acetate	10	U	10	2.3	ug/L			03/03/16 07:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/03/16 07:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/03/16 07:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/03/16 07:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/03/16 07:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/03/16 07:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/03/16 07:44	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/03/16 07:44	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/03/16 07:44	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/03/16 07:44	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		78 - 125		03/03/16 07:44	1
4-Bromofluorobenzene (Surr)	89		61 - 120		03/03/16 07:44	1
Toluene-d8 (Surr)	98		80 - 120		03/03/16 07:44	1
Dibromofluoromethane (Surr)	104		79 - 120		03/03/16 07:44	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

GC/MS VOA

Analysis Batch: 219879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61481-3	GW-17303-022616-CB-052	Total/NA	Water	8260B	
240-61481-3 MS	GW-17303-022616-CB-052	Total/NA	Water	8260B	
240-61481-3 MSD	GW-17303-022616-CB-052	Total/NA	Water	8260B	
240-61481-4	TB-17303-022616-CB-053	Total/NA	Water	8260B	
LCS 240-219879/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-219879/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 220197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61481-1	GW-17303-022616-CB-050	Total/NA	Water	8260B	
240-61481-1 MS	GW-17303-022616-CB-050	Total/NA	Water	8260B	
240-61481-1 MSD	GW-17303-022616-CB-050	Total/NA	Water	8260B	
240-61481-2	GW-17303-022616-CB-051	Total/NA	Water	8260B	
LCS 240-220197/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-220197/6	Method Blank	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-219879/6
Matrix: Water
Analysis Batch: 219879

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	0.94	ug/L			03/03/16 01:32	1
Benzene	1.0	U	1.0	0.35	ug/L			03/03/16 01:32	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/03/16 01:32	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/03/16 01:32	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/03/16 01:32	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/03/16 01:32	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/03/16 01:32	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/03/16 01:32	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/03/16 01:32	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/03/16 01:32	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/03/16 01:32	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/03/16 01:32	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/03/16 01:32	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/03/16 01:32	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/03/16 01:32	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/03/16 01:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/03/16 01:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/03/16 01:32	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/03/16 01:32	1
2-Hexanone	10	U	10	0.48	ug/L			03/03/16 01:32	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/03/16 01:32	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/03/16 01:32	1
Styrene	1.0	U	1.0	0.45	ug/L			03/03/16 01:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/03/16 01:32	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/03/16 01:32	1
Toluene	1.0	U	1.0	0.23	ug/L			03/03/16 01:32	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/03/16 01:32	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/03/16 01:32	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/03/16 01:32	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/03/16 01:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/03/16 01:32	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/03/16 01:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/03/16 01:32	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/03/16 01:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/03/16 01:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/03/16 01:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/03/16 01:32	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/03/16 01:32	1
Methyl acetate	10	U	10	2.3	ug/L			03/03/16 01:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/03/16 01:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/03/16 01:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/03/16 01:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/03/16 01:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/03/16 01:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/03/16 01:32	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/03/16 01:32	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/03/16 01:32	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/03/16 01:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*03/03/16 01:32*	*1*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*		*03/03/16 01:32*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/03/16 01:32*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 120*		*03/03/16 01:32*	*1*

Lab Sample ID: LCS 240-219879/4
Matrix: Water
Analysis Batch: 219879

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	16.1		ug/L		81	34 - 148
Benzene	10.0	9.34		ug/L		93	80 - 120
Bromodichloromethane	10.0	9.27		ug/L		93	80 - 120
Bromoform	10.0	7.69		ug/L		77	56 - 122
Bromomethane	10.0	9.89		ug/L		99	38 - 132
2-Butanone (MEK)	20.0	16.6		ug/L		83	56 - 138
Carbon disulfide	10.0	9.53		ug/L		95	65 - 144
Carbon tetrachloride	10.0	9.85		ug/L		98	77 - 131
Chlorobenzene	10.0	8.80		ug/L		88	80 - 120
Chloroethane	10.0	9.92		ug/L		99	36 - 126
Chloroform	10.0	9.52		ug/L		95	80 - 120
Chloromethane	10.0	9.22		ug/L		92	48 - 133
1,1-Dichloroethane	10.0	9.50		ug/L		95	79 - 125
1,2-Dichloroethane	10.0	9.54		ug/L		95	80 - 120
1,1-Dichloroethene	10.0	9.15		ug/L		91	76 - 124
1,2-Dichloropropane	10.0	9.66		ug/L		97	78 - 124
cis-1,3-Dichloropropene	10.0	9.61		ug/L		96	74 - 126
trans-1,3-Dichloropropene	10.0	8.08		ug/L		81	75 - 131
Ethylbenzene	10.0	8.76		ug/L		88	80 - 120
2-Hexanone	20.0	16.6		ug/L		83	55 - 141
Methylene Chloride	10.0	9.95		ug/L		99	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	18.2		ug/L		91	64 - 135
Styrene	10.0	9.39		ug/L		94	76 - 122
1,1,2,2-Tetrachloroethane	10.0	7.59		ug/L		76	71 - 123
Tetrachloroethene	10.0	8.81		ug/L		88	78 - 121
Toluene	10.0	8.86		ug/L		89	80 - 120
Trichloroethene	10.0	9.11		ug/L		91	80 - 121
Vinyl chloride	10.0	9.40		ug/L		94	52 - 121
Xylenes, Total	20.0	18.6		ug/L		93	80 - 120
1,1,1-Trichloroethane	10.0	9.84		ug/L		98	77 - 123
1,1,2-Trichloroethane	10.0	8.97		ug/L		90	80 - 120
Cyclohexane	10.0	8.91		ug/L		89	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.28		ug/L		83	50 - 132
1,2-Dibromoethane	10.0	9.07		ug/L		91	80 - 120
Dichlorodifluoromethane	10.0	7.83		ug/L		78	23 - 136
cis-1,2-Dichloroethene	10.0	9.77		ug/L		98	79 - 120
trans-1,2-Dichloroethene	10.0	9.69		ug/L		97	80 - 124
Isopropylbenzene	10.0	9.69		ug/L		97	77 - 120
Methyl acetate	50.0	44.4		ug/L		89	67 - 131
Methyl tert-butyl ether	10.0	9.74		ug/L		97	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.79		ug/L		88	67 - 138
1,2,4-Trichlorobenzene	10.0	8.57		ug/L		86	61 - 120
1,2-Dichlorobenzene	10.0	8.82		ug/L		88	79 - 120

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

Lab Sample ID: LCS 240-219879/4
Matrix: Water
Analysis Batch: 219879

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	8.38		ug/L		84	79 - 120
1,4-Dichlorobenzene	10.0	8.46		ug/L		85	79 - 120
Trichlorofluoromethane	10.0	10.4		ug/L		104	61 - 133
Dibromochloromethane	10.0	9.04		ug/L		90	74 - 120
Methylcyclohexane	10.0	9.12		ug/L		91	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 125*
4-Bromofluorobenzene (Surr)	*111*		*61 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*79 - 120*

Lab Sample ID: 240-61481-3 MS
Matrix: Water
Analysis Batch: 219879

Client Sample ID: GW-17303-022616-CB-052
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	U	500	350		ug/L		70	32 - 126
Benzene	32		250	226		ug/L		77	73 - 121
Bromodichloromethane	25	U	250	201		ug/L		80	72 - 120
Bromoform	25	U	250	165		ug/L		66	45 - 121
Bromomethane	25	U	250	209		ug/L		83	26 - 136
2-Butanone (MEK)	250	U	500	344		ug/L		69	49 - 132
Carbon disulfide	130	U	250	200		ug/L		80	54 - 144
Carbon tetrachloride	25	U	250	205		ug/L		82	65 - 129
Chlorobenzene	25	U	250	180		ug/L		72	72 - 120
Chloroethane	25	U	250	228		ug/L		91	27 - 131
Chloroform	25	U	250	211		ug/L		84	73 - 121
Chloromethane	25	U	250	238		ug/L		95	39 - 134
1,1-Dichloroethane	25	U	250	207		ug/L		83	73 - 124
1,2-Dichloroethane	25	U	250	211		ug/L		85	74 - 125
1,1-Dichloroethene	25	U	250	208		ug/L		83	67 - 124
1,2-Dichloropropane	25	U	250	204		ug/L		81	73 - 122
cis-1,3-Dichloropropene	25	U	250	178		ug/L		71	60 - 120
trans-1,3-Dichloropropene	25	U	250	172		ug/L		69	58 - 132
Ethylbenzene	120	F1	250	279	F1	ug/L		62	68 - 121
2-Hexanone	250	U	500	384		ug/L		77	49 - 142
Methylene Chloride	130	U	250	224		ug/L		90	70 - 124
4-Methyl-2-pentanone (MIBK)	250	U	500	406		ug/L		81	58 - 136
Styrene	25	U	250	188		ug/L		75	64 - 126
1,1,2,2-Tetrachloroethane	25	U	250	190		ug/L		76	61 - 130
Tetrachloroethene	25	U	250	169		ug/L		68	59 - 125
Toluene	43		250	225		ug/L		73	72 - 122
Trichloroethene	210	F1	250	344	F1	ug/L		53	61 - 129
Vinyl chloride	270		250	457		ug/L		73	44 - 122
Xylenes, Total	220	F1	500	548	F1	ug/L		66	67 - 122
1,1,1-Trichloroethane	25	U	250	208		ug/L		83	69 - 122
1,1,2-Trichloroethane	25	U	250	208		ug/L		83	72 - 125

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

Lab Sample ID: 240-61481-3 MS
Matrix: Water
Analysis Batch: 219879

Client Sample ID: GW-17303-022616-CB-052
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	50		250	225		ug/L		70	41 - 137
1,2-Dibromo-3-Chloropropane	25	U	250	157		ug/L		63	42 - 130
1,2-Dibromoethane	25	U	250	204		ug/L		82	69 - 125
Dichlorodifluoromethane	25	U	250	204		ug/L		82	14 - 137
cis-1,2-Dichloroethene	790	F1	250	881	F1	ug/L		35	66 - 124
trans-1,2-Dichloroethene	8.4	J	250	215		ug/L		83	72 - 125
Isopropylbenzene	49		250	213		ug/L		66	61 - 122
Methyl acetate	250	U	1250	1040		ug/L		83	64 - 124
Methyl tert-butyl ether	25	U	250	208		ug/L		83	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	250	202		ug/L		81	44 - 140
1,2,4-Trichlorobenzene	25	U F2	250	122		ug/L		49	48 - 120
1,2-Dichlorobenzene	25	U	250	169		ug/L		68	67 - 118
1,3-Dichlorobenzene	25	U	250	162		ug/L		65	65 - 120
1,4-Dichlorobenzene	25	U F1	250	163	F1	ug/L		65	66 - 120
Trichlorofluoromethane	25	U	250	256		ug/L		102	49 - 133
Dibromochloromethane	25	U	250	195		ug/L		78	62 - 122
Methylcyclohexane	25	U	250	179		ug/L		72	39 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 125*
4-Bromofluorobenzene (Surr)	*107*		*61 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*79 - 120*

Lab Sample ID: 240-61481-3 MSD
Matrix: Water
Analysis Batch: 219879

Client Sample ID: GW-17303-022616-CB-052
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	250	U	500	397		ug/L		79	32 - 126	13	28
Benzene	32		250	235		ug/L		81	73 - 121	4	13
Bromodichloromethane	25	U	250	210		ug/L		84	72 - 120	4	19
Bromoform	25	U	250	182		ug/L		73	45 - 121	9	19
Bromomethane	25	U	250	254		ug/L		102	26 - 136	20	35
2-Butanone (MEK)	250	U	500	379		ug/L		76	49 - 132	10	19
Carbon disulfide	130	U	250	207		ug/L		83	54 - 144	3	34
Carbon tetrachloride	25	U	250	214		ug/L		86	65 - 129	5	20
Chlorobenzene	25	U	250	190		ug/L		76	72 - 120	5	15
Chloroethane	25	U	250	233		ug/L		93	27 - 131	2	35
Chloroform	25	U	250	217		ug/L		87	73 - 121	3	17
Chloromethane	25	U	250	224		ug/L		90	39 - 134	6	20
1,1-Dichloroethane	25	U	250	217		ug/L		87	73 - 124	4	14
1,2-Dichloroethane	25	U	250	221		ug/L		88	74 - 125	4	24
1,1-Dichloroethene	25	U	250	209		ug/L		84	67 - 124	0	24
1,2-Dichloropropane	25	U	250	221		ug/L		88	73 - 122	8	15
cis-1,3-Dichloropropene	25	U	250	192		ug/L		77	60 - 120	7	21
trans-1,3-Dichloropropene	25	U	250	176		ug/L		70	58 - 132	3	22

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

Lab Sample ID: 240-61481-3 MSD
Matrix: Water
Analysis Batch: 219879

Client Sample ID: GW-17303-022616-CB-052
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	120	F1	250	296		ug/L		69	68 - 121	6	16
2-Hexanone	250	U	500	397		ug/L		79	49 - 142	3	27
Methylene Chloride	130	U	250	234		ug/L		94	70 - 124	4	14
4-Methyl-2-pentanone (MIBK)	250	U	500	438		ug/L		88	58 - 136	7	32
Styrene	25	U	250	204		ug/L		81	64 - 126	8	15
1,1,2,2-Tetrachloroethane	25	U	250	182		ug/L		73	61 - 130	4	18
Tetrachloroethene	25	U	250	178		ug/L		71	59 - 125	5	20
Toluene	43		250	231		ug/L		75	72 - 122	3	15
Trichloroethene	210	F1	250	365		ug/L		61	61 - 129	6	14
Vinyl chloride	270		250	444		ug/L		68	44 - 122	3	35
Xylenes, Total	220	F1	500	596		ug/L		76	67 - 122	8	14
1,1,1-Trichloroethane	25	U	250	219		ug/L		88	69 - 122	5	14
1,1,2-Trichloroethane	25	U	250	209		ug/L		84	72 - 125	1	19
Cyclohexane	50		250	241		ug/L		77	41 - 137	7	35
1,2-Dibromo-3-Chloropropane	25	U	250	189		ug/L		76	42 - 130	18	24
1,2-Dibromoethane	25	U	250	211		ug/L		84	69 - 125	4	24
Dichlorodifluoromethane	25	U	250	200		ug/L		80	14 - 137	2	34
cis-1,2-Dichloroethene	790	F1	250	911	F1	ug/L		47	66 - 124	3	22
trans-1,2-Dichloroethene	8.4	J	250	225		ug/L		87	72 - 125	5	25
Isopropylbenzene	49		250	247		ug/L		79	61 - 122	15	20
Methyl acetate	250	U	1250	1110		ug/L		88	64 - 124	6	12
Methyl tert-butyl ether	25	U	250	221		ug/L		89	61 - 121	6	12
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	250	202		ug/L		81	44 - 140	0	35
1,2,4-Trichlorobenzene	25	U F2	250	170	F2	ug/L		68	48 - 120	33	28
1,2-Dichlorobenzene	25	U	250	188		ug/L		75	67 - 118	11	15
1,3-Dichlorobenzene	25	U	250	173		ug/L		69	65 - 120	7	15
1,4-Dichlorobenzene	25	U F1	250	175		ug/L		70	66 - 120	7	16
Trichlorofluoromethane	25	U	250	253		ug/L		101	49 - 133	1	25
Dibromochloromethane	25	U	250	204		ug/L		82	62 - 122	5	19
Methylcyclohexane	25	U	250	200		ug/L		80	39 - 135	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*
4-Bromofluorobenzene (Surr)	*111*		*61 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*79 - 120*

Lab Sample ID: MB 240-220197/6
Matrix: Water
Analysis Batch: 220197

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.48	J	10	0.94	ug/L			03/04/16 11:34	1
Benzene	1.0	U	1.0	0.35	ug/L			03/04/16 11:34	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/04/16 11:34	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/04/16 11:34	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/04/16 11:34	1

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

Lab Sample ID: MB 240-220197/6
Matrix: Water
Analysis Batch: 220197

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/04/16 11:34	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/04/16 11:34	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/04/16 11:34	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/04/16 11:34	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/04/16 11:34	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/04/16 11:34	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/04/16 11:34	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/04/16 11:34	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/04/16 11:34	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/04/16 11:34	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/04/16 11:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/04/16 11:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/04/16 11:34	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/04/16 11:34	1
2-Hexanone	10	U	10	0.48	ug/L			03/04/16 11:34	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/04/16 11:34	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/04/16 11:34	1
Styrene	1.0	U	1.0	0.45	ug/L			03/04/16 11:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/04/16 11:34	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/04/16 11:34	1
Toluene	1.0	U	1.0	0.23	ug/L			03/04/16 11:34	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/04/16 11:34	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/04/16 11:34	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/04/16 11:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/04/16 11:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/04/16 11:34	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/04/16 11:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/04/16 11:34	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/04/16 11:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/04/16 11:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/04/16 11:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/04/16 11:34	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/04/16 11:34	1
Methyl acetate	10	U	10	2.3	ug/L			03/04/16 11:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/04/16 11:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/04/16 11:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/04/16 11:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/04/16 11:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/04/16 11:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/04/16 11:34	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/04/16 11:34	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/04/16 11:34	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/04/16 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*78 - 125*		*03/04/16 11:34*	*1*
4-Bromofluorobenzene (Surr)	*105*		*61 - 120*		*03/04/16 11:34*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/04/16 11:34*	*1*

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

Lab Sample ID: MB 240-220197/6
Matrix: Water
Analysis Batch: 220197

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	96		79 - 120		03/04/16 11:34	1

Lab Sample ID: LCS 240-220197/4
Matrix: Water
Analysis Batch: 220197

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	16.4		ug/L		82	34 - 148
Benzene	10.0	9.64		ug/L		96	80 - 120
Bromodichloromethane	10.0	9.73		ug/L		97	80 - 120
Bromoform	10.0	11.4		ug/L		114	56 - 122
Bromomethane	10.0	13.6	*	ug/L		136	38 - 132
2-Butanone (MEK)	20.0	19.4		ug/L		97	56 - 138
Carbon disulfide	10.0	9.52		ug/L		95	65 - 144
Carbon tetrachloride	10.0	9.87		ug/L		99	77 - 131
Chlorobenzene	10.0	9.95		ug/L		100	80 - 120
Chloroethane	10.0	14.1	*	ug/L		141	36 - 126
Chloroform	10.0	9.88		ug/L		99	80 - 120
Chloromethane	10.0	9.61		ug/L		96	48 - 133
1,1-Dichloroethane	10.0	9.56		ug/L		96	79 - 125
1,2-Dichloroethane	10.0	10.1		ug/L		101	80 - 120
1,1-Dichloroethene	10.0	9.85		ug/L		98	76 - 124
1,2-Dichloropropane	10.0	9.73		ug/L		97	78 - 124
cis-1,3-Dichloropropene	10.0	9.59		ug/L		96	74 - 126
trans-1,3-Dichloropropene	10.0	9.73		ug/L		97	75 - 131
Ethylbenzene	10.0	10.1		ug/L		101	80 - 120
2-Hexanone	20.0	19.9		ug/L		100	55 - 141
Methylene Chloride	10.0	9.65		ug/L		96	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	21.0		ug/L		105	64 - 135
Styrene	10.0	10.4		ug/L		104	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.6		ug/L		106	71 - 123
Tetrachloroethene	10.0	9.80		ug/L		98	78 - 121
Toluene	10.0	10.1		ug/L		101	80 - 120
Trichloroethene	10.0	9.87		ug/L		99	80 - 121
Vinyl chloride	10.0	10.1		ug/L		101	52 - 121
Xylenes, Total	20.0	20.7		ug/L		104	80 - 120
1,1,1-Trichloroethane	10.0	9.40		ug/L		94	77 - 123
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	80 - 120
Cyclohexane	10.0	10.2		ug/L		102	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	10.0		ug/L		100	50 - 132
1,2-Dibromoethane	10.0	10.5		ug/L		105	80 - 120
Dichlorodifluoromethane	10.0	7.70		ug/L		77	23 - 136
cis-1,2-Dichloroethene	10.0	9.80		ug/L		98	79 - 120
trans-1,2-Dichloroethene	10.0	9.86		ug/L		99	80 - 124
Isopropylbenzene	10.0	10.7		ug/L		107	77 - 120
Methyl acetate	50.0	53.5		ug/L		107	67 - 131
Methyl tert-butyl ether	10.0	9.54		ug/L		95	69 - 121

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

Lab Sample ID: LCS 240-220197/4
Matrix: Water
Analysis Batch: 220197

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.0		ug/L		100	67 - 138
1,2,4-Trichlorobenzene	10.0	9.43		ug/L		94	61 - 120
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	79 - 120
1,3-Dichlorobenzene	10.0	9.92		ug/L		99	79 - 120
1,4-Dichlorobenzene	10.0	9.92		ug/L		99	79 - 120
Trichlorofluoromethane	10.0	10.1		ug/L		101	61 - 133
Dibromochloromethane	10.0	10.2		ug/L		102	74 - 120
Methylcyclohexane	10.0	9.98		ug/L		100	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 125*
4-Bromofluorobenzene (Surr)	*110*		*61 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*79 - 120*

Lab Sample ID: 240-61481-1 MS
Matrix: Water
Analysis Batch: 220197

Client Sample ID: GW-17303-022616-CB-050
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	15	J B	200	148		ug/L		66	32 - 126
Benzene	8.6	J	100	107		ug/L		98	73 - 121
Bromodichloromethane	10	U	100	97.4		ug/L		97	72 - 120
Bromoform	10	U	100	110		ug/L		110	45 - 121
Bromomethane	10	U F1 *	100	135		ug/L		135	26 - 136
2-Butanone (MEK)	100	U	200	186		ug/L		93	49 - 132
Carbon disulfide	50	U	100	97.1		ug/L		97	54 - 144
Carbon tetrachloride	10	U	100	96.4		ug/L		96	65 - 129
Chlorobenzene	10	U	100	101		ug/L		101	72 - 120
Chloroethane	10	U F1 *	100	135	F1	ug/L		135	27 - 131
Chloroform	10	U	100	100		ug/L		100	73 - 121
Chloromethane	10	U	100	91.9		ug/L		92	39 - 134
1,1-Dichloroethane	10	U	100	97.2		ug/L		97	73 - 124
1,2-Dichloroethane	10	U	100	103		ug/L		103	74 - 125
1,1-Dichloroethene	10	U	100	98.0		ug/L		98	67 - 124
1,2-Dichloropropane	10	U	100	98.2		ug/L		98	73 - 122
cis-1,3-Dichloropropene	10	U	100	92.4		ug/L		92	60 - 120
trans-1,3-Dichloropropene	10	U	100	93.9		ug/L		94	58 - 132
Ethylbenzene	10	U	100	104		ug/L		104	68 - 121
2-Hexanone	100	U	200	187		ug/L		94	49 - 142
Methylene Chloride	50	U	100	97.6		ug/L		98	70 - 124
4-Methyl-2-pentanone (MIBK)	100	U	200	207		ug/L		104	58 - 136
Styrene	10	U	100	105		ug/L		105	64 - 126
1,1,2,2-Tetrachloroethane	10	U	100	107		ug/L		107	61 - 130
Tetrachloroethene	10	U	100	96.2		ug/L		96	59 - 125
Toluene	13		100	115		ug/L		102	72 - 122
Trichloroethene	34		100	132		ug/L		98	61 - 129

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

Lab Sample ID: 240-61481-1 MS
Matrix: Water
Analysis Batch: 220197

Client Sample ID: GW-17303-022616-CB-050
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	350		100	417	E	ug/L		67	44 - 122
Xylenes, Total	38		200	249		ug/L		106	67 - 122
1,1,1-Trichloroethane	10	U	100	94.7		ug/L		95	69 - 122
1,1,2-Trichloroethane	10	U	100	100		ug/L		100	72 - 125
Cyclohexane	10	U	100	93.3		ug/L		93	41 - 137
1,2-Dibromo-3-Chloropropane	10	U	100	102		ug/L		102	42 - 130
1,2-Dibromoethane	10	U	100	103		ug/L		103	69 - 125
Dichlorodifluoromethane	10	U	100	61.8		ug/L		62	14 - 137
cis-1,2-Dichloroethene	96		100	195		ug/L		99	66 - 124
trans-1,2-Dichloroethene	8.7	J	100	108		ug/L		100	72 - 125
Isopropylbenzene	10	U	100	106		ug/L		106	61 - 122
Methyl acetate	100	U	500	520		ug/L		104	64 - 124
Methyl tert-butyl ether	10	U	100	93.5		ug/L		94	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	100	88.2		ug/L		88	44 - 140
1,2,4-Trichlorobenzene	10	U	100	95.5		ug/L		96	48 - 120
1,2-Dichlorobenzene	10	U	100	101		ug/L		101	67 - 118
1,3-Dichlorobenzene	10	U	100	99.8		ug/L		100	65 - 120
1,4-Dichlorobenzene	10	U	100	99.9		ug/L		100	66 - 120
Trichlorofluoromethane	10	U	100	89.8		ug/L		90	49 - 133
Dibromochloromethane	10	U	100	102		ug/L		102	62 - 122
Methylcyclohexane	10	U	100	89.1		ug/L		89	39 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*
4-Bromofluorobenzene (Surr)	*107*		*61 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*79 - 120*

Lab Sample ID: 240-61481-1 MSD
Matrix: Water
Analysis Batch: 220197

Client Sample ID: GW-17303-022616-CB-050
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	15	J B	200	143		ug/L		64	32 - 126	3	28
Benzene	8.6	J	100	107		ug/L		98	73 - 121	0	13
Bromodichloromethane	10	U	100	98.8		ug/L		99	72 - 120	1	19
Bromoform	10	U	100	111		ug/L		111	45 - 121	1	19
Bromomethane	10	U F1 *	100	145	F1	ug/L		145	26 - 136	7	35
2-Butanone (MEK)	100	U	200	183		ug/L		91	49 - 132	2	19
Carbon disulfide	50	U	100	100		ug/L		100	54 - 144	3	34
Carbon tetrachloride	10	U	100	99.7		ug/L		100	65 - 129	3	20
Chlorobenzene	10	U	100	101		ug/L		101	72 - 120	0	15
Chloroethane	10	U F1 *	100	146	F1	ug/L		146	27 - 131	8	35
Chloroform	10	U	100	101		ug/L		101	73 - 121	1	17
Chloromethane	10	U	100	96.9		ug/L		97	39 - 134	5	20
1,1-Dichloroethane	10	U	100	99.5		ug/L		100	73 - 124	2	14
1,2-Dichloroethane	10	U	100	101		ug/L		101	74 - 125	1	24

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

Lab Sample ID: 240-61481-1 MSD
Matrix: Water
Analysis Batch: 220197

Client Sample ID: GW-17303-022616-CB-050
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	10	U	100	101		ug/L		101	67 - 124	3	24
1,2-Dichloropropane	10	U	100	97.9		ug/L		98	73 - 122	0	15
cis-1,3-Dichloropropene	10	U	100	93.4		ug/L		93	60 - 120	1	21
trans-1,3-Dichloropropene	10	U	100	93.3		ug/L		93	58 - 132	1	22
Ethylbenzene	10	U	100	105		ug/L		105	68 - 121	1	16
2-Hexanone	100	U	200	187		ug/L		93	49 - 142	1	27
Methylene Chloride	50	U	100	102		ug/L		102	70 - 124	4	14
4-Methyl-2-pentanone (MIBK)	100	U	200	208		ug/L		104	58 - 136	0	32
Styrene	10	U	100	107		ug/L		107	64 - 126	2	15
1,1,2,2-Tetrachloroethane	10	U	100	107		ug/L		107	61 - 130	0	18
Tetrachloroethene	10	U	100	94.9		ug/L		95	59 - 125	1	20
Toluene	13		100	114		ug/L		101	72 - 122	1	15
Trichloroethene	34		100	134		ug/L		100	61 - 129	1	14
Vinyl chloride	350		100	427	E	ug/L		77	44 - 122	2	35
Xylenes, Total	38		200	251		ug/L		107	67 - 122	1	14
1,1,1-Trichloroethane	10	U	100	97.6		ug/L		98	69 - 122	3	14
1,1,2-Trichloroethane	10	U	100	101		ug/L		101	72 - 125	1	19
Cyclohexane	10	U	100	97.3		ug/L		97	41 - 137	4	35
1,2-Dibromo-3-Chloropropane	10	U	100	103		ug/L		103	42 - 130	1	24
1,2-Dibromoethane	10	U	100	105		ug/L		105	69 - 125	2	24
Dichlorodifluoromethane	10	U	100	68.1		ug/L		68	14 - 137	10	34
cis-1,2-Dichloroethene	96		100	198		ug/L		102	66 - 124	2	22
trans-1,2-Dichloroethene	8.7	J	100	110		ug/L		102	72 - 125	2	25
Isopropylbenzene	10	U	100	107		ug/L		107	61 - 122	1	20
Methyl acetate	100	U	500	527		ug/L		105	64 - 124	1	12
Methyl tert-butyl ether	10	U	100	97.3		ug/L		97	61 - 121	4	12
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	100	95.4		ug/L		95	44 - 140	8	35
1,2,4-Trichlorobenzene	10	U	100	93.6		ug/L		94	48 - 120	2	28
1,2-Dichlorobenzene	10	U	100	101		ug/L		101	67 - 118	0	15
1,3-Dichlorobenzene	10	U	100	100		ug/L		100	65 - 120	0	15
1,4-Dichlorobenzene	10	U	100	99.9		ug/L		100	66 - 120	0	16
Trichlorofluoromethane	10	U	100	96.9		ug/L		97	49 - 133	8	25
Dibromochloromethane	10	U	100	103		ug/L		103	62 - 122	0	19
Methylcyclohexane	10	U	100	92.6		ug/L		93	39 - 135	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 125*
4-Bromofluorobenzene (Surr)	*110*		*61 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*79 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-61481-1	GW-17303-022616-CB-050	100	107	97	97
240-61481-1 MS	GW-17303-022616-CB-050	96	107	99	95
240-61481-1 MSD	GW-17303-022616-CB-050	97	110	99	95
240-61481-2	GW-17303-022616-CB-051	101	108	98	97
240-61481-3	GW-17303-022616-CB-052	110	104	101	107
240-61481-3 MS	GW-17303-022616-CB-052	105	107	106	102
240-61481-3 MSD	GW-17303-022616-CB-052	101	111	103	101
240-61481-4	TB-17303-022616-CB-053	108	89	98	104
LCS 240-219879/4	Lab Control Sample	98	111	101	101
LCS 240-220197/4	Lab Control Sample	97	110	99	96
MB 240-219879/6	Method Blank	103	98	98	100
MB 240-220197/6	Method Blank	100	105	97	96

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

Client Sample ID: GW-17303-022616-CB-050

Lab Sample ID: 240-61481-1
Date Collected: 02/26/16 11:30
Matrix: Water
Date Received: 02/27/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	220197	03/04/16 15:02	LEE	TAL CAN

Client Sample ID: GW-17303-022616-CB-051

Lab Sample ID: 240-61481-2
Date Collected: 02/26/16 13:25
Matrix: Water
Date Received: 02/27/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		83.33	220197	03/04/16 15:25	LEE	TAL CAN

Client Sample ID: GW-17303-022616-CB-052

Lab Sample ID: 240-61481-3
Date Collected: 02/26/16 14:40
Matrix: Water
Date Received: 02/27/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	219879	03/03/16 08:50	LRW	TAL CAN

Client Sample ID: TB-17303-022616-CB-053

Lab Sample ID: 240-61481-4
Date Collected: 02/26/16 00:00
Matrix: Water
Date Received: 02/27/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	219879	03/03/16 07:44	LRW	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61481-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

240-61481 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

2.8/C2,3

Chain of Custody Record

132892

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/26/2016	COC No: 011
Company Name: GHD	Tel/Fax: 734-453-5123	Lab Contact: D. Heikler	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd. Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 734-453-5123	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			Job / SDG No.:
Site: #017303	☐ 2 days			
P O # SSOW#17303-033	☐ 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 VOCs	Sample Specific Notes:
GW-17303-022616-CB-050	2/26/16	1130	G	WG	3	N	N	X	
↓ -051	↓	1325	↓	↓	3	↓	↓	X	
↓ -052	↓	1440	↓	↓	9	↓	Y	X	
DB -053	↓	—	—	WBQ	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:
Tracking # 6209 0763 2745

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:
C. Bondy C Bondy	GHD	2/26/16 @ 1600			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Joaquelyn Jesse	Company: TANC	Date/Time: 2/27/16 935

Page 31 of 32

2/8/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 61481
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: J. Serrel

Cooler Received on 2/27/16 Opened on 2/27/16

FedEx: 1st Grd Exp UPS FAS Stetson 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# 48 (CF **-1.9** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN# 36 (CF **-1.5** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN# I8 (CF **-0.5** °C) Observed Cooler Temp. 2.8 °C Corrected Cooler Temp. 2.3 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____ Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
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 sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC559158**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B531501VB Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

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): _____.

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI-NC-099X-011816 Cooler Receipt Form.doc djl

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: 240-61543-1
Client Project/Site: 17303-033, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
3/9/2016 9:33:12 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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

Job ID: 240-61543-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-61543-1

Comments
No additional comments.

Receipt
The samples were received on 3/1/2016 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
Method(s) 8260B: The laboratory control sample (LCS) for 220470 recovered outside control limits for the following analytes: Chloroethane. 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.

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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-61543-1	GW-17303-022916-CB-054	Water	02/29/16 10:40	03/01/16 09:40
240-61543-2	GW-17303-022916-CB-055	Water	02/29/16 11:45	03/01/16 09:40
240-61543-3	GW-17303-022916-CB-056	Water	02/29/16 13:25	03/01/16 09:40
240-61543-4	TB-17303-022916-CB-057	Water	02/29/16 00:00	03/01/16 09:40

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

Client Sample ID: GW-17303-022916-CB-054 — Lab Sample ID: 240-61543-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	900	J B	8300	550	ug/L	1666.67		8260B	Total/NA
Vinyl chloride	57000		1700	480	ug/L	1666.67		8260B	Total/NA
cis-1,2-Dichloroethene	4000		1700	430	ug/L	1666.67		8260B	Total/NA

Client Sample ID: GW-17303-022916-CB-055 — Lab Sample ID: 240-61543-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	6200		250	73	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	1800		250	65	ug/L	250		8260B	Total/NA

Client Sample ID: GW-17303-022916-CB-056 — Lab Sample ID: 240-61543-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	490	J	5000	470	ug/L	500		8260B	Total/NA
Vinyl chloride	11000		500	150	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene	1100		500	130	ug/L	500		8260B	Total/NA
trans-1,2-Dichloroethene	150	J	500	150	ug/L	500		8260B	Total/NA

Client Sample ID: TB-17303-022916-CB-057 — Lab Sample ID: 240-61543-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.9	J	10	0.94	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: GW-17303-022916-CB-054
Date Collected: 02/29/16 10:40
Date Received: 03/01/16 09:40

Lab Sample ID: 240-61543-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	17000	U	17000	1600	ug/L			03/07/16 13:27	1666.67
Benzene	1700	U	1700	580	ug/L			03/07/16 13:27	1666.67
Bromodichloromethane	1700	U	1700	480	ug/L			03/07/16 13:27	1666.67
Bromoform	1700	U	1700	930	ug/L			03/07/16 13:27	1666.67
Bromomethane	1700	U	1700	730	ug/L			03/07/16 13:27	1666.67
2-Butanone (MEK)	17000	U	17000	880	ug/L			03/07/16 13:27	1666.67
Carbon disulfide	8300	U	8300	630	ug/L			03/07/16 13:27	1666.67
Carbon tetrachloride	1700	U	1700	720	ug/L			03/07/16 13:27	1666.67
Chlorobenzene	1700	U	1700	420	ug/L			03/07/16 13:27	1666.67
Chloroethane	1700	U *	1700	530	ug/L			03/07/16 13:27	1666.67
Chloroform	1700	U	1700	420	ug/L			03/07/16 13:27	1666.67
Chloromethane	1700	U	1700	730	ug/L			03/07/16 13:27	1666.67
1,1-Dichloroethane	1700	U	1700	500	ug/L			03/07/16 13:27	1666.67
1,2-Dichloroethane	1700	U	1700	380	ug/L			03/07/16 13:27	1666.67
1,1-Dichloroethene	1700	U	1700	750	ug/L			03/07/16 13:27	1666.67
1,2-Dichloropropane	1700	U	1700	420	ug/L			03/07/16 13:27	1666.67
cis-1,3-Dichloropropene	1700	U	1700	770	ug/L			03/07/16 13:27	1666.67
trans-1,3-Dichloropropene	1700	U	1700	930	ug/L			03/07/16 13:27	1666.67
Ethylbenzene	1700	U	1700	420	ug/L			03/07/16 13:27	1666.67
2-Hexanone	17000	U	17000	800	ug/L			03/07/16 13:27	1666.67
Methylene Chloride	**900**	**J B**	8300	550	ug/L			03/07/16 13:27	1666.67
4-Methyl-2-pentanone (MIBK)	17000	U	17000	1700	ug/L			03/07/16 13:27	1666.67
Styrene	1700	U	1700	750	ug/L			03/07/16 13:27	1666.67
1,1,2,2-Tetrachloroethane	1700	U	1700	370	ug/L			03/07/16 13:27	1666.67
Tetrachloroethene	1700	U	1700	520	ug/L			03/07/16 13:27	1666.67
Toluene	1700	U	1700	380	ug/L			03/07/16 13:27	1666.67
Trichloroethene	1700	U	1700	370	ug/L			03/07/16 13:27	1666.67
Vinyl chloride	**57000**		1700	480	ug/L			03/07/16 13:27	1666.67
Xylenes, Total	3300	U	3300	870	ug/L			03/07/16 13:27	1666.67
1,1,1-Trichloroethane	1700	U	1700	730	ug/L			03/07/16 13:27	1666.67
1,1,2-Trichloroethane	1700	U	1700	400	ug/L			03/07/16 13:27	1666.67
Cyclohexane	1700	U	1700	750	ug/L			03/07/16 13:27	1666.67
1,2-Dibromo-3-Chloropropane	1700	U	1700	1400	ug/L			03/07/16 13:27	1666.67
1,2-Dibromoethane	1700	U	1700	530	ug/L			03/07/16 13:27	1666.67
Dichlorodifluoromethane	1700	U	1700	530	ug/L			03/07/16 13:27	1666.67
cis-1,2-Dichloroethene	**4000**		1700	430	ug/L			03/07/16 13:27	1666.67
trans-1,2-Dichloroethene	1700	U	1700	500	ug/L			03/07/16 13:27	1666.67
Isopropylbenzene	1700	U	1700	580	ug/L			03/07/16 13:27	1666.67
Methyl acetate	17000	U	17000	3800	ug/L			03/07/16 13:27	1666.67
Methyl tert-butyl ether	1700	U	1700	330	ug/L			03/07/16 13:27	1666.67
1,1,2-Trichloro-1,2,2-trifluoroethane	1700	U	1700	750	ug/L			03/07/16 13:27	1666.67
1,2,4-Trichlorobenzene	1700	U	1700	530	ug/L			03/07/16 13:27	1666.67
1,2-Dichlorobenzene	1700	U	1700	420	ug/L			03/07/16 13:27	1666.67
1,3-Dichlorobenzene	1700	U	1700	320	ug/L			03/07/16 13:27	1666.67
1,4-Dichlorobenzene	1700	U	1700	450	ug/L			03/07/16 13:27	1666.67
Trichlorofluoromethane	1700	U	1700	820	ug/L			03/07/16 13:27	1666.67
Dibromochloromethane	1700	U	1700	720	ug/L			03/07/16 13:27	1666.67
Methylcyclohexane	1700	U	1700	720	ug/L			03/07/16 13:27	1666.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		78 - 125		03/07/16 13:27	1666.67
4-Bromofluorobenzene (Surr)	107		61 - 120		03/07/16 13:27	1666.67
Toluene-d8 (Surr)	96		80 - 120		03/07/16 13:27	1666.67
Dibromofluoromethane (Surr)	100		79 - 120		03/07/16 13:27	1666.67

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

Client Sample ID: GW-17303-022916-CB-055
Date Collected: 02/29/16 11:45
Date Received: 03/01/16 09:40

Lab Sample ID: 240-61543-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2500	U	2500	240	ug/L			03/07/16 21:16	250
Benzene	250	U	250	88	ug/L			03/07/16 21:16	250
Bromodichloromethane	250	U	250	73	ug/L			03/07/16 21:16	250
Bromoform	250	U	250	140	ug/L			03/07/16 21:16	250
Bromomethane	250	U	250	110	ug/L			03/07/16 21:16	250
2-Butanone (MEK)	2500	U	2500	130	ug/L			03/07/16 21:16	250
Carbon disulfide	1300	U	1300	95	ug/L			03/07/16 21:16	250
Carbon tetrachloride	250	U	250	110	ug/L			03/07/16 21:16	250
Chlorobenzene	250	U	250	63	ug/L			03/07/16 21:16	250
Chloroethane	250	U *	250	80	ug/L			03/07/16 21:16	250
Chloroform	250	U	250	63	ug/L			03/07/16 21:16	250
Chloromethane	250	U	250	110	ug/L			03/07/16 21:16	250
1,1-Dichloroethane	250	U	250	75	ug/L			03/07/16 21:16	250
1,2-Dichloroethane	250	U	250	58	ug/L			03/07/16 21:16	250
1,1-Dichloroethene	250	U	250	110	ug/L			03/07/16 21:16	250
1,2-Dichloropropane	250	U	250	63	ug/L			03/07/16 21:16	250
cis-1,3-Dichloropropene	250	U	250	120	ug/L			03/07/16 21:16	250
trans-1,3-Dichloropropene	250	U	250	140	ug/L			03/07/16 21:16	250
Ethylbenzene	250	U	250	63	ug/L			03/07/16 21:16	250
2-Hexanone	2500	U	2500	120	ug/L			03/07/16 21:16	250
Methylene Chloride	1300	U	1300	83	ug/L			03/07/16 21:16	250
4-Methyl-2-pentanone (MIBK)	2500	U	2500	250	ug/L			03/07/16 21:16	250
Styrene	250	U	250	110	ug/L			03/07/16 21:16	250
1,1,2,2-Tetrachloroethane	250	U	250	55	ug/L			03/07/16 21:16	250
Tetrachloroethene	250	U	250	78	ug/L			03/07/16 21:16	250
Toluene	250	U	250	58	ug/L			03/07/16 21:16	250
Trichloroethene	250	U	250	55	ug/L			03/07/16 21:16	250
Vinyl chloride	**6200**		250	73	ug/L			03/07/16 21:16	250
Xylenes, Total	500	U	500	130	ug/L			03/07/16 21:16	250
1,1,1-Trichloroethane	250	U	250	110	ug/L			03/07/16 21:16	250
1,1,2-Trichloroethane	250	U	250	60	ug/L			03/07/16 21:16	250
Cyclohexane	250	U	250	110	ug/L			03/07/16 21:16	250
1,2-Dibromo-3-Chloropropane	250	U	250	210	ug/L			03/07/16 21:16	250
1,2-Dibromoethane	250	U	250	80	ug/L			03/07/16 21:16	250
Dichlorodifluoromethane	250	U	250	80	ug/L			03/07/16 21:16	250
cis-1,2-Dichloroethene	**1800**		250	65	ug/L			03/07/16 21:16	250
trans-1,2-Dichloroethene	250	U	250	75	ug/L			03/07/16 21:16	250
Isopropylbenzene	250	U	250	88	ug/L			03/07/16 21:16	250
Methyl acetate	2500	U	2500	570	ug/L			03/07/16 21:16	250
Methyl tert-butyl ether	250	U	250	50	ug/L			03/07/16 21:16	250
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	110	ug/L			03/07/16 21:16	250
1,2,4-Trichlorobenzene	250	U	250	80	ug/L			03/07/16 21:16	250
1,2-Dichlorobenzene	250	U	250	63	ug/L			03/07/16 21:16	250
1,3-Dichlorobenzene	250	U	250	48	ug/L			03/07/16 21:16	250
1,4-Dichlorobenzene	250	U	250	68	ug/L			03/07/16 21:16	250
Trichlorofluoromethane	250	U	250	120	ug/L			03/07/16 21:16	250
Dibromochloromethane	250	U	250	110	ug/L			03/07/16 21:16	250
Methylcyclohexane	250	U	250	110	ug/L			03/07/16 21:16	250

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		78 - 125		03/07/16 21:16	250
4-Bromofluorobenzene (Surr)	105		61 - 120		03/07/16 21:16	250
Toluene-d8 (Surr)	99		80 - 120		03/07/16 21:16	250
Dibromofluoromethane (Surr)	96		79 - 120		03/07/16 21:16	250

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

Client Sample ID: GW-17303-022916-CB-056
Date Collected: 02/29/16 13:25
Date Received: 03/01/16 09:40

Lab Sample ID: 240-61543-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**490**	**J**	5000	470	ug/L			03/07/16 21:39	500
Benzene	500	U	500	180	ug/L			03/07/16 21:39	500
Bromodichloromethane	500	U	500	150	ug/L			03/07/16 21:39	500
Bromoform	500	U	500	280	ug/L			03/07/16 21:39	500
Bromomethane	500	U	500	220	ug/L			03/07/16 21:39	500
2-Butanone (MEK)	5000	U	5000	270	ug/L			03/07/16 21:39	500
Carbon disulfide	2500	U	2500	190	ug/L			03/07/16 21:39	500
Carbon tetrachloride	500	U	500	220	ug/L			03/07/16 21:39	500
Chlorobenzene	500	U	500	130	ug/L			03/07/16 21:39	500
Chloroethane	500	U *	500	160	ug/L			03/07/16 21:39	500
Chloroform	500	U	500	130	ug/L			03/07/16 21:39	500
Chloromethane	500	U	500	220	ug/L			03/07/16 21:39	500
1,1-Dichloroethane	500	U	500	150	ug/L			03/07/16 21:39	500
1,2-Dichloroethane	500	U	500	120	ug/L			03/07/16 21:39	500
1,1-Dichloroethene	500	U	500	230	ug/L			03/07/16 21:39	500
1,2-Dichloropropane	500	U	500	130	ug/L			03/07/16 21:39	500
cis-1,3-Dichloropropene	500	U	500	230	ug/L			03/07/16 21:39	500
trans-1,3-Dichloropropene	500	U	500	280	ug/L			03/07/16 21:39	500
Ethylbenzene	500	U	500	130	ug/L			03/07/16 21:39	500
2-Hexanone	5000	U	5000	240	ug/L			03/07/16 21:39	500
Methylene Chloride	2500	U	2500	170	ug/L			03/07/16 21:39	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	500	ug/L			03/07/16 21:39	500
Styrene	500	U	500	230	ug/L			03/07/16 21:39	500
1,1,2,2-Tetrachloroethane	500	U	500	110	ug/L			03/07/16 21:39	500
Tetrachloroethene	500	U	500	160	ug/L			03/07/16 21:39	500
Toluene	500	U	500	120	ug/L			03/07/16 21:39	500
Trichloroethene	500	U	500	110	ug/L			03/07/16 21:39	500
Vinyl chloride	**11000**		500	150	ug/L			03/07/16 21:39	500
Xylenes, Total	1000	U	1000	260	ug/L			03/07/16 21:39	500
1,1,1-Trichloroethane	500	U	500	220	ug/L			03/07/16 21:39	500
1,1,2-Trichloroethane	500	U	500	120	ug/L			03/07/16 21:39	500
Cyclohexane	500	U	500	230	ug/L			03/07/16 21:39	500
1,2-Dibromo-3-Chloropropane	500	U	500	410	ug/L			03/07/16 21:39	500
1,2-Dibromoethane	500	U	500	160	ug/L			03/07/16 21:39	500
Dichlorodifluoromethane	500	U	500	160	ug/L			03/07/16 21:39	500
cis-1,2-Dichloroethene	**1100**		500	130	ug/L			03/07/16 21:39	500
trans-1,2-Dichloroethene	**150**	**J**	500	150	ug/L			03/07/16 21:39	500
Isopropylbenzene	500	U	500	180	ug/L			03/07/16 21:39	500
Methyl acetate	5000	U	5000	1100	ug/L			03/07/16 21:39	500
Methyl tert-butyl ether	500	U	500	100	ug/L			03/07/16 21:39	500
1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	230	ug/L			03/07/16 21:39	500
1,2,4-Trichlorobenzene	500	U	500	160	ug/L			03/07/16 21:39	500
1,2-Dichlorobenzene	500	U	500	130	ug/L			03/07/16 21:39	500
1,3-Dichlorobenzene	500	U	500	95	ug/L			03/07/16 21:39	500
1,4-Dichlorobenzene	500	U	500	140	ug/L			03/07/16 21:39	500
Trichlorofluoromethane	500	U	500	250	ug/L			03/07/16 21:39	500
Dibromochloromethane	500	U	500	220	ug/L			03/07/16 21:39	500
Methylcyclohexane	500	U	500	220	ug/L			03/07/16 21:39	500

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		78 - 125		03/07/16 21:39	500
4-Bromofluorobenzene (Surr)	106		61 - 120		03/07/16 21:39	500
Toluene-d8 (Surr)	97		80 - 120		03/07/16 21:39	500
Dibromofluoromethane (Surr)	98		79 - 120		03/07/16 21:39	500

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

Client Sample ID: TB-17303-022916-CB-057
Date Collected: 02/29/16 00:00
Date Received: 03/01/16 09:40

Lab Sample ID: 240-61543-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.9**	**J**	10	0.94	ug/L			03/07/16 14:34	1
Benzene	1.0	U	1.0	0.35	ug/L			03/07/16 14:34	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/07/16 14:34	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/07/16 14:34	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/07/16 14:34	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/07/16 14:34	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/07/16 14:34	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/07/16 14:34	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/07/16 14:34	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			03/07/16 14:34	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/07/16 14:34	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/07/16 14:34	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/07/16 14:34	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/07/16 14:34	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/07/16 14:34	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/07/16 14:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/07/16 14:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/07/16 14:34	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/07/16 14:34	1
2-Hexanone	10	U	10	0.48	ug/L			03/07/16 14:34	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			03/07/16 14:34	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/07/16 14:34	1
Styrene	1.0	U	1.0	0.45	ug/L			03/07/16 14:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/07/16 14:34	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/07/16 14:34	1
Toluene	1.0	U	1.0	0.23	ug/L			03/07/16 14:34	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/07/16 14:34	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/07/16 14:34	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/07/16 14:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/07/16 14:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/07/16 14:34	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/07/16 14:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/07/16 14:34	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/07/16 14:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/07/16 14:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/07/16 14:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/07/16 14:34	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/07/16 14:34	1
Methyl acetate	10	U	10	2.3	ug/L			03/07/16 14:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/07/16 14:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/07/16 14:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/07/16 14:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/07/16 14:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/07/16 14:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/07/16 14:34	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/07/16 14:34	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/07/16 14:34	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/07/16 14:34	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		78 - 125		03/07/16 14:34	1
4-Bromofluorobenzene (Surr)	105		61 - 120		03/07/16 14:34	1
Toluene-d8 (Surr)	97		80 - 120		03/07/16 14:34	1
Dibromofluoromethane (Surr)	100		79 - 120		03/07/16 14:34	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

GC/MS VOA

Analysis Batch: 220470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-61543-1	GW-17303-022916-CB-054	Total/NA	Water	8260B	
240-61543-2	GW-17303-022916-CB-055	Total/NA	Water	8260B	
240-61543-3	GW-17303-022916-CB-056	Total/NA	Water	8260B	
240-61543-4	TB-17303-022916-CB-057	Total/NA	Water	8260B	
LCS 240-220470/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-220470/6	Method Blank	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-220470/6
Matrix: Water
Analysis Batch: 220470

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	0.94	ug/L			03/07/16 12:19	1
Benzene	1.0	U	1.0	0.35	ug/L			03/07/16 12:19	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			03/07/16 12:19	1
Bromoform	1.0	U	1.0	0.56	ug/L			03/07/16 12:19	1
Bromomethane	1.0	U	1.0	0.44	ug/L			03/07/16 12:19	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			03/07/16 12:19	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			03/07/16 12:19	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			03/07/16 12:19	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			03/07/16 12:19	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/07/16 12:19	1
Chloroform	1.0	U	1.0	0.25	ug/L			03/07/16 12:19	1
Chloromethane	1.0	U	1.0	0.44	ug/L			03/07/16 12:19	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			03/07/16 12:19	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			03/07/16 12:19	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			03/07/16 12:19	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			03/07/16 12:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/07/16 12:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			03/07/16 12:19	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			03/07/16 12:19	1
2-Hexanone	10	U	10	0.48	ug/L			03/07/16 12:19	1
Methylene Chloride	0.512	J	5.0	0.33	ug/L			03/07/16 12:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			03/07/16 12:19	1
Styrene	1.0	U	1.0	0.45	ug/L			03/07/16 12:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			03/07/16 12:19	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			03/07/16 12:19	1
Toluene	1.0	U	1.0	0.23	ug/L			03/07/16 12:19	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			03/07/16 12:19	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			03/07/16 12:19	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			03/07/16 12:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			03/07/16 12:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/07/16 12:19	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			03/07/16 12:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			03/07/16 12:19	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			03/07/16 12:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			03/07/16 12:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			03/07/16 12:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/07/16 12:19	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			03/07/16 12:19	1
Methyl acetate	10	U	10	2.3	ug/L			03/07/16 12:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			03/07/16 12:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			03/07/16 12:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			03/07/16 12:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			03/07/16 12:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			03/07/16 12:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			03/07/16 12:19	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			03/07/16 12:19	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			03/07/16 12:19	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			03/07/16 12:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		78 - 125		03/07/16 12:19	1
4-Bromofluorobenzene (Surr)	106		61 - 120		03/07/16 12:19	1
Toluene-d8 (Surr)	96		80 - 120		03/07/16 12:19	1
Dibromofluoromethane (Surr)	100		79 - 120		03/07/16 12:19	1

Lab Sample ID: LCS 240-220470/4
Matrix: Water
Analysis Batch: 220470

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	15.9		ug/L		80	34 - 148
Benzene	10.0	9.83		ug/L		98	80 - 120
Bromodichloromethane	10.0	10.1		ug/L		101	80 - 120
Bromoform	10.0	11.8		ug/L		118	56 - 122
Bromomethane	10.0	12.5		ug/L		125	38 - 132
2-Butanone (MEK)	20.0	19.2		ug/L		96	56 - 138
Carbon disulfide	10.0	9.83		ug/L		98	65 - 144
Carbon tetrachloride	10.0	10.2		ug/L		102	77 - 131
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
Chloroethane	10.0	13.6	*	ug/L		136	36 - 126
Chloroform	10.0	10.1		ug/L		101	80 - 120
Chloromethane	10.0	10.9		ug/L		109	48 - 133
1,1-Dichloroethane	10.0	9.77		ug/L		98	79 - 125
1,2-Dichloroethane	10.0	10.4		ug/L		104	80 - 120
1,1-Dichloroethene	10.0	10.3		ug/L		103	76 - 124
1,2-Dichloropropane	10.0	9.74		ug/L		97	78 - 124
cis-1,3-Dichloropropene	10.0	9.85		ug/L		99	74 - 126
trans-1,3-Dichloropropene	10.0	9.83		ug/L		98	75 - 131
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120
2-Hexanone	20.0	20.0		ug/L		100	55 - 141
Methylene Chloride	10.0	10.6		ug/L		106	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	21.5		ug/L		108	64 - 135
Styrene	10.0	10.7		ug/L		107	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	71 - 123
Tetrachloroethene	10.0	10.2		ug/L		102	78 - 121
Toluene	10.0	10.1		ug/L		101	80 - 120
Trichloroethene	10.0	10.1		ug/L		101	80 - 121
Vinyl chloride	10.0	10.8		ug/L		108	52 - 121
Xylenes, Total	20.0	21.0		ug/L		105	80 - 120
1,1,1-Trichloroethane	10.0	9.78		ug/L		98	77 - 123
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	80 - 120
Cyclohexane	10.0	10.4		ug/L		104	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	10.4		ug/L		104	50 - 132
1,2-Dibromoethane	10.0	10.6		ug/L		106	80 - 120
Dichlorodifluoromethane	10.0	9.80		ug/L		98	23 - 136
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	79 - 120
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	80 - 124
Isopropylbenzene	10.0	10.9		ug/L		109	77 - 120
Methyl acetate	50.0	53.8		ug/L		108	67 - 131
Methyl tert-butyl ether	10.0	9.84		ug/L		98	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.7		ug/L		107	67 - 138
1,2,4-Trichlorobenzene	10.0	9.43		ug/L		94	61 - 120
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	79 - 120

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

Lab Sample ID: LCS 240-220470/4
Matrix: Water
Analysis Batch: 220470

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	10.0		ug/L		100	79 - 120		
1,4-Dichlorobenzene			10.0	10.1		ug/L		101	79 - 120		
Trichlorofluoromethane			10.0	10.2		ug/L		102	61 - 133		
Dibromochloromethane			10.0	10.5		ug/L		105	74 - 120		
Methylcyclohexane			10.0	10.1		ug/L		101	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 125*
4-Bromofluorobenzene (Surr)	*111*		*61 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*79 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-61543-1	GW-17303-022916-CB-054	100	107	96	100
240-61543-2	GW-17303-022916-CB-055	100	105	99	96
240-61543-3	GW-17303-022916-CB-056	102	106	97	98
240-61543-4	TB-17303-022916-CB-057	102	105	97	100
LCS 240-220470/4	Lab Control Sample	97	111	98	97
MB 240-220470/6	Method Blank	101	106	96	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

Client Sample ID: GW-17303-022916-CB-054
Lab Sample ID: 240-61543-1
Date Collected: 02/29/16 10:40
Matrix: Water
Date Received: 03/01/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1666.67	220470	03/07/16 13:27	LEE	TAL CAN

Client Sample ID: GW-17303-022916-CB-055
Lab Sample ID: 240-61543-2
Date Collected: 02/29/16 11:45
Matrix: Water
Date Received: 03/01/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	220470	03/07/16 21:16	LEE	TAL CAN

Client Sample ID: GW-17303-022916-CB-056
Lab Sample ID: 240-61543-3
Date Collected: 02/29/16 13:25
Matrix: Water
Date Received: 03/01/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	220470	03/07/16 21:39	LEE	TAL CAN

Client Sample ID: TB-17303-022916-CB-057
Lab Sample ID: 240-61543-4
Date Collected: 02/29/16 00:00
Matrix: Water
Date Received: 03/01/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	220470	03/07/16 14:34	LEE	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-033, RACER CVO

TestAmerica Job ID: 240-61543-1

Laboratory: TestAmerica Canton

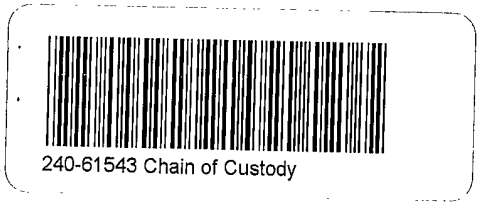
All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

2-22-17
~~2-21-17~~

Chain of Custody Record

132893

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Beth Landale	Site Contact: C. Bondy	Date: 2/29/2016 (2/26/2016)	COC No: 012
Company Name: GHD	Tel/Fax: 734-453-5123	Lab Contact: D. Hoekstra	Carrier: FedEx	1 of 1 COCs
Address: 14496 Sheldon Rd, Suite 200	Analysis Turnaround Time			Sampler: C. Bondy
City/State/Zip: Plymouth, MI, 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 734-453-5123	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO	☐ 1 week			
Site: #017303	☐ 2 days			Job / SDG No.:
PO# SSOW#17303-033	☐ 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 VOCs	Sample Specific Notes:
GW-17303-022916-CB-054	2/29/16	1040	G	WG	3	N	N	X	
-055		1145			3			X	
-056		1325			3			X	
FB-057		—	—	WQ	1	—	—	X	

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Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 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:
Tracking # 8088 9523 5005
BATCH COMPLETE

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:
C. Bondy	GHD	2/29/16 1500			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Jacquelyn Jewell	Company: TANC	Date/Time: 3/1/16 940

3/9/2016

TestAmerica Canton Sample Receipt Form/Narrative Login # : 61543
Canton Facility

Client GHD Site Name

Cooler unpacked by:

Cooler Received on 3-1-16 Opened on 3-1-16

FedEx: 1st Grd Exp UPS FAS Stetson 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# 48 (CF -1.9 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN# 36 (CF -1.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN# I8 (CF -0.5 °C) Observed Cooler Temp. 2.2 °C Corrected Cooler Temp. 1.7 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity Yes (No)
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No (NA)
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
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 sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC559158
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? 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)

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):

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: 240-66136-1
Client Project/Site: 17303-035, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
6/29/2016 8:46:37 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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Chain of Custody 50

Job ID: 240-66136-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-66136-1

Comments
No additional comments.

Receipt
The samples were received on 6/17/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for preparation batch 240-235169 and analytical batch 240-236103 recovered outside control limits for chloroethane. This analyte was biased high in the LCS and was 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 240-235169 and analytical batch 240-236103.

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-17303-061516-DR-001 (240-66136-1) and SO-17303-061516-DR-002 (240-66136-2). 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) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-061516-DR-001 (240-66136-1), SO-17303-061516-DR-002 (240-66136-2), (240-66136-C-2-C MS) and (240-66136-C-2-D MSD). 2540199, 2103100, 2283703.

Method(s) 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: SO-17303-061516-DR-001 (240-66136-1). Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

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-17303-061516-DR-001 (240-66136-1) and SO-17303-061516-DR-002 (240-66136-2). 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-17303-061516-DR-001 (240-66136-1) and SO-17303-061516-DR-002 (240-66136-2). 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.

Job ID: 240-66136-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

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.
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.

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.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-66136-1	SO-17303-061516-DR-001	Solid	06/15/16 11:30	06/17/16 09:00
240-66136-2	SO-17303-061516-DR-002	Solid	06/15/16 13:30	06/17/16 09:00
240-66136-3	TB-17303-061516	Solid	06/15/16 00:00	06/17/16 09:00

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Client Sample ID: SO-17303-061516-DR-001 — Lab Sample ID: 240-66136-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	290		53	12	ug/Kg	1	☼	8260B	Total/NA
Toluene	27	J B	110	13	ug/Kg	1	☼	8260B	Total/NA
Vinyl chloride	280		42	22	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	63	J	160	42	ug/Kg	1	☼	8260B	Total/NA
Isopropylbenzene	27	J	260	17	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	150	J	1300	72	ug/Kg	1	☼	8260B	Total/NA
1,2,4-Trichlorobenzene	130	J	260	40	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	160	J	1300	50	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	76	J	1200	2.3	ug/Kg	4	☼	8270C	Total/NA
Anthracene	30	J	1200	3.6	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]anthracene	48	J	1200	2.9	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]pyrene	62	J	1200	3.0	ug/Kg	4	☼	8270C	Total/NA
Benzo[b]fluoranthene	91	J	1200	2.7	ug/Kg	4	☼	8270C	Total/NA
Benzo[k]fluoranthene	32	J	1200	3.2	ug/Kg	4	☼	8270C	Total/NA
Chrysene	80	J	1200	5.1	ug/Kg	4	☼	8270C	Total/NA
Fluoranthene	130	J	1200	2.6	ug/Kg	4	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	56	J	1200	1.6	ug/Kg	4	☼	8270C	Total/NA
Phenanthrene	160	J	1200	3.4	ug/Kg	4	☼	8270C	Total/NA
Pyrene	100	J	1200	2.1	ug/Kg	4	☼	8270C	Total/NA
Aroclor-1242	61		38	13	ug/Kg	1	☼	8082	Total/NA
Aroclor-1254	66		38	16	ug/Kg	1	☼	8082	Total/NA
Barium	66		0.84	0.43	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.17	0.027	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.62		0.084	0.022	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.7		0.42	0.049	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.84	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	19		0.84	0.24	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.84	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	23		0.84	0.084	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.84	0.21	mg/Kg	1	☼	6010B	Total/NA
Zinc	61		2.1	0.58	mg/Kg	1	☼	6010B	Total/NA
Lead	31	F1	0.25	0.21	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.49	F1	0.33	0.015	mg/Kg	2	☼	6020	Total/NA
Arsenic	6.5		0.17	0.027	mg/Kg	2	☼	6020	Total/NA
Selenium	1.3		0.33	0.042	mg/Kg	2	☼	6020	Total/NA
Thallium	0.34		0.17	0.020	mg/Kg	2	☼	6020	Total/NA
Silver	0.11	J	0.17	0.0015	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: SO-17303-061516-DR-002 — Lab Sample ID: 240-66136-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	18	J B	110	13	ug/Kg	1	☼	8260B	Total/NA
Vinyl chloride	71		42	22	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	130	J	1300	73	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	110	J	1300	50	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	82	J	750	1.4	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]anthracene	24	J	750	1.8	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]pyrene	27	J	750	1.8	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[b]fluoranthene	42	J	750	1.7	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[g,h,i]perylene	31	J	750	1.0	ug/Kg	2.5	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Client Sample ID: SO-17303-061516-DR-002 (Continued) — Lab Sample ID: 240-66136-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	34	J	750	3.1	ug/Kg	2.5	☼	8270C	Total/NA
Fluoranthene	57	J	750	1.6	ug/Kg	2.5	☼	8270C	Total/NA
Phenanthrene	110	J	750	2.1	ug/Kg	2.5	☼	8270C	Total/NA
Pyrene	58	J	750	1.3	ug/Kg	2.5	☼	8270C	Total/NA
Barium	63		0.74	0.38	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.15	0.024	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31		0.074	0.019	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.2		0.37	0.043	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.74	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.74	0.21	mg/Kg	1	☼	6010B	Total/NA
Manganese	360	B	0.74	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.74	0.074	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.74	0.18	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.8	0.52	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.22	0.18	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.18	J	0.29	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	7.8		0.15	0.024	mg/Kg	2	☼	6020	Total/NA
Selenium	1.4		0.29	0.037	mg/Kg	2	☼	6020	Total/NA
Thallium	0.35		0.15	0.017	mg/Kg	2	☼	6020	Total/NA
Silver	0.045	J	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: TB-17303-061516 — Lab Sample ID: 240-66136-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082	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: SO-17303-061516-DR-001
Date Collected: 06/15/16 11:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-1
Matrix: Solid
Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	790	U	790	300	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Benzene	**290**		53	12	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Bromodichloromethane	110	U	110	50	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Bromoform	110	U	110	80	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Bromomethane	260	U	260	67	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
2-Butanone (MEK)	790	U	790	96	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Carbon disulfide	260	U	260	74	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Carbon tetrachloride	53	U	53	24	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Chlorobenzene	53	U	53	17	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Chloroethane	260	U *	260	67	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Chloroform	53	U	53	47	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Chloromethane	260	U	260	63	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,1-Dichloroethane	53	U	53	46	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,2-Dichloroethane	53	U	53	13	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,1-Dichloroethene	53	U	53	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,2-Dichloropropane	53	U	53	42	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
cis-1,3-Dichloropropene	53	U	53	29	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
trans-1,3-Dichloropropene	53	U	53	34	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Ethylbenzene	53	U	53	46	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Methylene Chloride	260	U	260	110	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	74	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Styrene	53	U	53	36	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,1,2,2-Tetrachloroethane	53	U	53	33	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Tetrachloroethene	53	U	53	36	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Toluene	**27**	**J B**	110	13	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Trichloroethene	53	U	53	51	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Vinyl chloride	**280**		42	22	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Xylenes, Total	**63**	**J**	160	42	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,1,1-Trichloroethane	53	U	53	36	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,1,2-Trichloroethane	53	U	53	25	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Cyclohexane	1300	U	1300	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,2-Dibromo-3-Chloropropane	260	U	260	94	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,2-Dibromoethane	260	U	260	42	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Dichlorodifluoromethane	110	U	110	80	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
cis-1,2-Dichloroethene	53	U	53	50	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
trans-1,2-Dichloroethene	53	U	53	34	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Isopropylbenzene	**27**	**J**	260	17	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Methyl acetate	**150**	**J**	1300	72	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Methyl tert-butyl ether	260	U	260	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	55	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,2,4-Trichlorobenzene	**130**	**J**	260	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,3-Dichlorobenzene	110	U	110	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
1,4-Dichlorobenzene	110	U	110	54	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Trichlorofluoromethane	110	U	110	46	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Dibromochloromethane	53	U	53	26	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1
Methylcyclohexane	**160**	**J**	1300	50	ug/Kg	☼	06/20/16 10:50	06/27/16 15:01	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		39 - 128	06/20/16 10:50	06/27/16 15:01	1
4-Bromofluorobenzene (Surr)	98		26 - 141	06/20/16 10:50	06/27/16 15:01	1
Toluene-d8 (Surr)	96		33 - 134	06/20/16 10:50	06/27/16 15:01	1
Dibromofluoromethane (Surr)	104		30 - 122	06/20/16 10:50	06/27/16 15:01	1

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

Client Sample ID: SO-17303-061516-DR-002
Date Collected: 06/15/16 13:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	790	U	790	300	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Benzene	53	U	53	12	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Bromodichloromethane	110	U	110	50	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Bromoform	110	U	110	81	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Bromomethane	260	U	260	67	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
2-Butanone (MEK)	790	U	790	97	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Carbon disulfide	260	U	260	74	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Carbon tetrachloride	53	U	53	24	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Chlorobenzene	53	U	53	17	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Chloroethane	260	U *	260	67	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Chloroform	53	U	53	48	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Chloromethane	260	U	260	63	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,1-Dichloroethane	53	U	53	46	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,2-Dichloroethane	53	U	53	13	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,1-Dichloroethene	53	U	53	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,2-Dichloropropane	53	U	53	42	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
cis-1,3-Dichloropropene	53	U	53	29	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
trans-1,3-Dichloropropene	53	U	53	34	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Ethylbenzene	53	U	53	46	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
2-Hexanone	2600	U	2600	110	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Methylene Chloride	260	U	260	110	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
4-Methyl-2-pentanone (MIBK)	2600	U	2600	74	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Styrene	53	U	53	36	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,1,2,2-Tetrachloroethane	53	U	53	33	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Tetrachloroethene	53	U	53	36	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Toluene	**18**	**J B**	110	13	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Trichloroethene	53	U	53	52	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Vinyl chloride	**71**		42	22	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Xylenes, Total	160	U	160	42	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,1,1-Trichloroethane	53	U	53	36	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,1,2-Trichloroethane	53	U	53	25	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Cyclohexane	1300	U	1300	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,2-Dibromo-3-Chloropropane	260	U	260	94	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,2-Dibromoethane	260	U	260	42	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Dichlorodifluoromethane	110	U	110	81	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
cis-1,2-Dichloroethene	53	U	53	50	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
trans-1,2-Dichloroethene	53	U	53	34	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Isopropylbenzene	260	U	260	17	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Methyl acetate	**130**	**J**	1300	73	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Methyl tert-butyl ether	260	U	260	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	260	U	260	56	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,2,4-Trichlorobenzene	260	U	260	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,2-Dichlorobenzene	110	U	110	25	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,3-Dichlorobenzene	110	U	110	40	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
1,4-Dichlorobenzene	110	U	110	54	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Trichlorofluoromethane	110	U	110	46	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Dibromochloromethane	53	U	53	26	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1
Methylcyclohexane	**110**	**J**	1300	50	ug/Kg	☼	06/20/16 10:50	06/27/16 15:26	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		39 - 128	06/20/16 10:50	06/27/16 15:26	1
4-Bromofluorobenzene (Surr)	97		26 - 141	06/20/16 10:50	06/27/16 15:26	1
Toluene-d8 (Surr)	101		33 - 134	06/20/16 10:50	06/27/16 15:26	1
Dibromofluoromethane (Surr)	110		30 - 122	06/20/16 10:50	06/27/16 15:26	1

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

Client Sample ID: TB-17303-061516
Date Collected: 06/15/16 00:00
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	230	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Benzene	40	U	40	9.0	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Bromodichloromethane	80	U	80	38	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Bromoform	80	U	80	61	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Bromomethane	200	U	200	51	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
2-Butanone (MEK)	600	U	600	73	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Carbon disulfide	200	U	200	56	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Carbon tetrachloride	40	U	40	18	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Chlorobenzene	40	U	40	13	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Chloroethane	200	U *	200	51	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Chloroform	40	U	40	36	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Chloromethane	200	U	200	48	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,1-Dichloroethane	40	U	40	35	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,1-Dichloroethene	40	U	40	30	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,2-Dichloropropane	40	U	40	32	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
cis-1,3-Dichloropropene	40	U	40	22	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
trans-1,3-Dichloropropene	40	U	40	26	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Ethylbenzene	40	U	40	35	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
2-Hexanone	2000	U	2000	84	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Methylene Chloride	200	U	200	85	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	56	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Styrene	40	U	40	27	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,1,2,2-Tetrachloroethane	40	U	40	25	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Tetrachloroethene	40	U	40	27	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Toluene	80	U	80	10	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Trichloroethene	40	U	40	39	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Vinyl chloride	32	U	32	17	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Xylenes, Total	120	U	120	32	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,1,1-Trichloroethane	40	U	40	27	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,1,2-Trichloroethane	40	U	40	19	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Cyclohexane	960	U	960	30	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,2-Dibromo-3-Chloropropane	200	U	200	71	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,2-Dibromoethane	200	U	200	32	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Dichlorodifluoromethane	80	U	80	61	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
cis-1,2-Dichloroethene	40	U	40	38	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
trans-1,2-Dichloroethene	40	U	40	26	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Isopropylbenzene	200	U	200	13	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Methyl acetate	960	U	960	55	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Methyl tert-butyl ether	200	U	200	30	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	42	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,2,4-Trichlorobenzene	200	U	200	30	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,2-Dichlorobenzene	80	U	80	19	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,3-Dichlorobenzene	80	U	80	30	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
1,4-Dichlorobenzene	80	U	80	41	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Trichlorofluoromethane	80	U	80	35	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Dibromochloromethane	40	U	40	20	ug/Kg		06/20/16 10:50	06/27/16 15:51	1
Methylcyclohexane	960	U	960	38	ug/Kg		06/20/16 10:50	06/27/16 15:51	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		39 - 128	06/20/16 10:50	06/27/16 15:51	1
4-Bromofluorobenzene (Surr)	113		26 - 141	06/20/16 10:50	06/27/16 15:51	1
Toluene-d8 (Surr)	115		33 - 134	06/20/16 10:50	06/27/16 15:51	1
Dibromofluoromethane (Surr)	113		30 - 122	06/20/16 10:50	06/27/16 15:51	1

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

Client Sample ID: SO-17303-061516-DR-001
Date Collected: 06/15/16 11:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-1
Matrix: Solid
Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1200	U	1200	16	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2,2'-oxybis[1-chloropropane]	1200	U	1200	44	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2,4,5-Trichlorophenol	1200	U	1200	120	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2,4,6-Trichlorophenol	1200	U	1200	41	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2,4-Dichlorophenol	1200	U	1200	93	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2,4-Dimethylphenol	1200	U	1200	93	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2,4-Dinitrophenol	700	U	700	98	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2,4-Dinitrotoluene	1200	U	1200	79	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2,6-Dinitrotoluene	1200	U	1200	98	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2-Chloronaphthalene	1200	U	1200	2.1	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2-Chlorophenol	1200	U	1200	38	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2-Methylnaphthalene	**76**	**J**	1200	2.3	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2-Methylphenol	1200	U	1200	51	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2-Nitroaniline	930	U	930	42	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
2-Nitrophenol	1200	U	1200	39	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
3,3'-Dichlorobenzidine	1200	U	1200	84	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
3-Nitroaniline	930	U	930	75	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
4,6-Dinitro-2-methylphenol	930	U	930	43	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
4-Bromophenyl phenyl ether	700	U	700	61	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
4-Chloro-3-methylphenol	1200	U	1200	98	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
4-Chloroaniline	1200	U	1200	79	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
4-Chlorophenyl phenyl ether	930	U	930	61	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
4-Nitroaniline	930	U	930	120	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
4-Nitrophenol	1500	U	1500	79	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Acenaphthene	1200	U	1200	3.5	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Acenaphthylene	1200	U	1200	1.6	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Acetophenone	1200	U	1200	43	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Anthracene	**30**	**J**	1200	3.6	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Atrazine	190	U	190	42	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Benzaldehyde	1200	U	1200	56	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Benzo[a]anthracene	**48**	**J**	1200	2.9	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Benzo[a]pyrene	**62**	**J**	1200	3.0	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Benzo[b]fluoranthene	**91**	**J**	1200	2.7	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Benzo[g,h,i]perylene	1200	U	1200	1.6	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Benzo[k]fluoranthene	**32**	**J**	1200	3.2	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Bis(2-chloroethoxy)methane	1200	U	1200	100	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Bis(2-chloroethyl)ether	370	U	370	9.3	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Bis(2-ethylhexyl) phthalate	1200	U	1200	89	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Butyl benzyl phthalate	1200	U	1200	47	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Caprolactam	1200	U	1200	170	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Carbazole	1200	U	1200	130	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Chrysene	**80**	**J**	1200	5.1	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Dibenz(a,h)anthracene	1200	U	1200	3.1	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Dibenzofuran	1200	U	1200	3.1	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Diethyl phthalate	1200	U	1200	75	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Dimethyl phthalate	1200	U	1200	79	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Di-n-butyl phthalate	1200	U	1200	70	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Di-n-octyl phthalate	1200	U	1200	37	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Fluoranthene	**130**	**J**	1200	2.6	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4

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

Client Sample ID: SO-17303-061516-DR-001
Date Collected: 06/15/16 11:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-1
Matrix: Solid
Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	1200	U	1200	2.5	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Hexachlorobenzene	1200	U	1200	9.8	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Hexachlorobutadiene	190	U	190	26	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Hexachlorocyclopentadiene	1200	U F1	1200	38	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Hexachloroethane	1200	U	1200	42	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Indeno[1,2,3-cd]pyrene	**56**	**J**	1200	1.6	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Isophorone	1200	U	1200	61	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Naphthalene	1200	U	1200	3.8	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Nitrobenzene	1200	U	1200	10	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
N-Nitrosodi-n-propylamine	1200	U	1200	29	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
N-Nitrosodiphenylamine	1200	U	1200	98	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Pentachlorophenol	700	U	700	42	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Phenol	1200	U	1200	34	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Phenanthrene	**160**	**J**	1200	3.4	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
Pyrene	**100**	**J**	1200	2.1	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4
3 & 4 Methylphenol	1200	U	1200	93	ug/Kg	☼	06/20/16 07:25	06/23/16 13:06	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*39 - 120*	*06/20/16 07:25*	*06/23/16 13:06*	*4*
2-Fluorophenol (Surr)	*60*		*33 - 120*	*06/20/16 07:25*	*06/23/16 13:06*	*4*
2,4,6-Tribromophenol (Surr)	*44*		*10 - 120*	*06/20/16 07:25*	*06/23/16 13:06*	*4*
Nitrobenzene-d5 (Surr)	*57*		*32 - 120*	*06/20/16 07:25*	*06/23/16 13:06*	*4*
Phenol-d5 (Surr)	*60*		*32 - 120*	*06/20/16 07:25*	*06/23/16 13:06*	*4*
Terphenyl-d14 (Surr)	*74*		*47 - 120*	*06/20/16 07:25*	*06/23/16 13:06*	*4*

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

Client Sample ID: SO-17303-061516-DR-002
Date Collected: 06/15/16 13:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	750	U	750	10	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2,2'-oxybis[1-chloropropane]	750	U	750	27	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2,4,5-Trichlorophenol	750	U	750	71	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2,4,6-Trichlorophenol	750	U	750	25	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2,4-Dichlorophenol	750	U	750	57	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2,4-Dimethylphenol	750	U	750	57	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2,4-Dinitrophenol	430	U	430	60	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2,4-Dinitrotoluene	750	U	750	48	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2,6-Dinitrotoluene	750	U	750	60	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2-Chloronaphthalene	750	U	750	1.3	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2-Chlorophenol	750	U	750	23	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2-Methylnaphthalene	**82**	**J**	750	1.4	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2-Methylphenol	750	U	750	31	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2-Nitroaniline	570	U	570	26	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
2-Nitrophenol	750	U	750	24	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
3,3'-Dichlorobenzidine	750	U	750	51	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
3-Nitroaniline	570	U	570	46	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
4,6-Dinitro-2-methylphenol	570	U	570	26	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
4-Bromophenyl phenyl ether	430	U	430	37	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
4-Chloro-3-methylphenol	750	U	750	60	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
4-Chloroaniline	750	U	750	48	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
4-Chlorophenyl phenyl ether	570	U	570	37	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
4-Nitroaniline	570	U	570	74	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
4-Nitrophenol	940	U	940	48	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Acenaphthene	750	U	750	2.2	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Acenaphthylene	750	U	750	1.0	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Acetophenone	750	U	750	26	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Anthracene	750	U	750	2.2	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Atrazine	110	U	110	26	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Benzaldehyde	750	U	750	34	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Benzo[a]anthracene	**24**	**J**	750	1.8	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Benzo[a]pyrene	**27**	**J**	750	1.8	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Benzo[b]fluoranthene	**42**	**J**	750	1.7	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Benzo[g,h,i]perylene	**31**	**J**	750	1.0	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Benzo[k]fluoranthene	750	U	750	1.9	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Bis(2-chloroethoxy)methane	750	U	750	63	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Bis(2-chloroethyl)ether	230	U	230	5.7	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Bis(2-ethylhexyl) phthalate	750	U	750	54	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Butyl benzyl phthalate	750	U	750	29	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Caprolactam	750	U	750	110	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Carbazole	750	U	750	77	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Chrysene	**34**	**J**	750	3.1	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Dibenz(a,h)anthracene	750	U	750	1.9	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Dibenzofuran	750	U	750	1.9	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Diethyl phthalate	750	U	750	46	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Dimethyl phthalate	750	U	750	48	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Di-n-butyl phthalate	750	U	750	43	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Di-n-octyl phthalate	750	U	750	23	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Fluoranthene	**57**	**J**	750	1.6	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5

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

Client Sample ID: SO-17303-061516-DR-002
Date Collected: 06/15/16 13:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	750	U	750	1.5	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Hexachlorobenzene	750	U	750	6.0	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Hexachlorobutadiene	110	U	110	16	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Hexachlorocyclopentadiene	750	U	750	23	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Hexachloroethane	750	U	750	26	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Indeno[1,2,3-cd]pyrene	750	U	750	1.0	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Isophorone	750	U	750	37	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Naphthalene	750	U	750	2.3	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Nitrobenzene	750	U	750	6.3	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
N-Nitrosodi-n-propylamine	750	U	750	18	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
N-Nitrosodiphenylamine	750	U	750	60	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Pentachlorophenol	430	U	430	26	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Phenol	750	U	750	21	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Phenanthrene	**110**	**J**	750	2.1	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
Pyrene	**58**	**J**	750	1.3	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5
3 & 4 Methylphenol	750	U	750	57	ug/Kg	☼	06/20/16 07:25	06/23/16 12:41	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*39 - 120*	*06/20/16 07:25*	*06/23/16 12:41*	*2.5*
2-Fluorophenol (Surr)	*59*		*33 - 120*	*06/20/16 07:25*	*06/23/16 12:41*	*2.5*
2,4,6-Tribromophenol (Surr)	*39*		*10 - 120*	*06/20/16 07:25*	*06/23/16 12:41*	*2.5*
Nitrobenzene-d5 (Surr)	*59*		*32 - 120*	*06/20/16 07:25*	*06/23/16 12:41*	*2.5*
Phenol-d5 (Surr)	*59*		*32 - 120*	*06/20/16 07:25*	*06/23/16 12:41*	*2.5*
Terphenyl-d14 (Surr)	*78*		*47 - 120*	*06/20/16 07:25*	*06/23/16 12:41*	*2.5*

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

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

Client Sample ID: SO-17303-061516-DR-001
Date Collected: 06/15/16 11:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-1
Matrix: Solid
Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	38	U	38	14	ug/Kg	☼	06/20/16 08:47	06/23/16 11:47	1
Aroclor-1221	38	U	38	18	ug/Kg	☼	06/20/16 08:47	06/23/16 11:47	1
Aroclor-1232	38	U	38	23	ug/Kg	☼	06/20/16 08:47	06/23/16 11:47	1
Aroclor-1242	**61**		38	13	ug/Kg	☼	06/20/16 08:47	06/23/16 11:47	1
Aroclor-1248	38	U	38	9.2	ug/Kg	☼	06/20/16 08:47	06/23/16 11:47	1
Aroclor-1254	**66**		38	16	ug/Kg	☼	06/20/16 08:47	06/23/16 11:47	1
Aroclor-1260	38	U	38	10	ug/Kg	☼	06/20/16 08:47	06/23/16 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*47*		*14 - 128*	*06/20/16 08:47*	*06/23/16 11:47*	*1*
DCB Decachlorobiphenyl	*60*		*10 - 132*	*06/20/16 08:47*	*06/23/16 11:47*	*1*

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

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

Client Sample ID: SO-17303-061516-DR-002
Date Collected: 06/15/16 13:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	38	U	38	14	ug/Kg	☼	06/20/16 08:47	06/23/16 10:54	1
Aroclor-1221	38	U	38	19	ug/Kg	☼	06/20/16 08:47	06/23/16 10:54	1
Aroclor-1232	38	U	38	23	ug/Kg	☼	06/20/16 08:47	06/23/16 10:54	1
Aroclor-1242	38	U	38	13	ug/Kg	☼	06/20/16 08:47	06/23/16 10:54	1
Aroclor-1248	38	U	38	9.3	ug/Kg	☼	06/20/16 08:47	06/23/16 10:54	1
Aroclor-1254	38	U	38	16	ug/Kg	☼	06/20/16 08:47	06/23/16 10:54	1
Aroclor-1260	38	U	38	10	ug/Kg	☼	06/20/16 08:47	06/23/16 10:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*14 - 128*	*06/20/16 08:47*	*06/23/16 10:54*	*1*
DCB Decachlorobiphenyl	*62*		*10 - 132*	*06/20/16 08:47*	*06/23/16 10:54*	*1*

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-061516-DR-001
Date Collected: 06/15/16 11:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-1
Matrix: Solid
Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	66		0.84	0.43	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Beryllium	0.40		0.17	0.027	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Cadmium	0.62		0.084	0.022	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Cobalt	7.7		0.42	0.049	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Chromium	15		0.84	0.078	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Copper	19		0.84	0.24	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Manganese	300	B	0.84	0.088	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Nickel	23		0.84	0.084	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Vanadium	19		0.84	0.21	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Zinc	61		2.1	0.58	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1
Lead	31	F1	0.25	0.21	mg/Kg	☼	06/21/16 10:49	06/23/16 20:21	1

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Method: 6010B - Metals (ICP)

Client Sample ID: SO-17303-061516-DR-002
Date Collected: 06/15/16 13:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	63		0.74	0.38	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Beryllium	0.40		0.15	0.024	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Cadmium	0.31		0.074	0.019	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Cobalt	9.2		0.37	0.043	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Chromium	13		0.74	0.069	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Copper	18		0.74	0.21	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Manganese	360	B	0.74	0.077	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Nickel	26		0.74	0.074	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Vanadium	17		0.74	0.18	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Zinc	55		1.8	0.52	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1
Lead	10		0.22	0.18	mg/Kg	☼	06/21/16 10:49	06/23/16 21:55	1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-061516-DR-001
Date Collected: 06/15/16 11:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-1
Matrix: Solid
Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	F1	0.33	0.015	mg/Kg	☼	06/21/16 10:49	06/22/16 16:57	2
Arsenic	6.5		0.17	0.027	mg/Kg	☼	06/21/16 10:49	06/22/16 16:57	2
Selenium	1.3		0.33	0.042	mg/Kg	☼	06/21/16 10:49	06/22/16 16:57	2
Thallium	0.34		0.17	0.020	mg/Kg	☼	06/21/16 10:49	06/22/16 16:57	2
Silver	0.11	J	0.17	0.0015	mg/Kg	☼	06/21/16 10:49	06/22/16 16:57	2

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Method: 6020 - Metals (ICP/MS)

Client Sample ID: SO-17303-061516-DR-002
Date Collected: 06/15/16 13:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.18	J	0.29	0.013	mg/Kg	☼	06/21/16 10:49	06/22/16 17:17	2
Arsenic	7.8		0.15	0.024	mg/Kg	☼	06/21/16 10:49	06/22/16 17:17	2
Selenium	1.4		0.29	0.037	mg/Kg	☼	06/21/16 10:49	06/22/16 17:17	2
Thallium	0.35		0.15	0.017	mg/Kg	☼	06/21/16 10:49	06/22/16 17:17	2
Silver	0.045	J	0.15	0.0013	mg/Kg	☼	06/21/16 10:49	06/22/16 17:17	2

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-061516-DR-001
Date Collected: 06/15/16 11:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-1
Matrix: Solid
Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046	U	0.046	0.016	mg/Kg	☼	06/21/16 16:00	06/22/16 10:21	1

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: SO-17303-061516-DR-002
Date Collected: 06/15/16 13:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051	U	0.051	0.018	mg/Kg	☼	06/21/16 16:00	06/22/16 10:27	1

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

General Chemistry

Client Sample ID: SO-17303-061516-DR-001
Date Collected: 06/15/16 11:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-1
Matrix: Solid
Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.3		0.1	0.1	%			06/21/16 14:47	1
Percent Moisture	13.7		0.1	0.1	%			06/21/16 14:47	1

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

General Chemistry

Client Sample ID: SO-17303-061516-DR-002
Date Collected: 06/15/16 13:30
Date Received: 06/17/16 09:00

Lab Sample ID: 240-66136-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.2		0.1	0.1	%			06/21/16 14:47	1
Percent Moisture	13.8		0.1	0.1	%			06/21/16 14:47	1

GC/MS VOA

Prep Batch: 235169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	5035	
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	5035	
240-66136-3	TB-17303-061516	Total/NA	Solid	5035	
LCS 240-235169/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 240-235169/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 236103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	8260B	235169
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	8260B	235169
240-66136-3	TB-17303-061516	Total/NA	Solid	8260B	235169
LCS 240-235169/2-A	Lab Control Sample	Total/NA	Solid	8260B	235169
MB 240-235169/1-A	Method Blank	Total/NA	Solid	8260B	235169

GC/MS Semi VOA

Prep Batch: 235120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	3540C	
240-66136-1 MS	SO-17303-061516-DR-001	Total/NA	Solid	3540C	
240-66136-1 MSD	SO-17303-061516-DR-001	Total/NA	Solid	3540C	
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	3540C	
LCS 240-235120/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-235120/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 235636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	8270C	235120
240-66136-1 MS	SO-17303-061516-DR-001	Total/NA	Solid	8270C	235120
240-66136-1 MSD	SO-17303-061516-DR-001	Total/NA	Solid	8270C	235120
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	8270C	235120
LCS 240-235120/24-A	Lab Control Sample	Total/NA	Solid	8270C	235120
MB 240-235120/23-A	Method Blank	Total/NA	Solid	8270C	235120

GC Semi VOA

Prep Batch: 235132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	3540C	
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	3540C	
240-66136-2 MS	SO-17303-061516-DR-002	Total/NA	Solid	3540C	
240-66136-2 MSD	SO-17303-061516-DR-002	Total/NA	Solid	3540C	
LCS 240-235132/23-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-235132/22-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 235522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-235132/23-A	Lab Control Sample	Total/NA	Solid	8082	235132
MB 240-235132/22-A	Method Blank	Total/NA	Solid	8082	235132

GC Semi VOA (Continued)

Analysis Batch: 235624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	8082	235132
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	8082	235132
240-66136-2 MS	SO-17303-061516-DR-002	Total/NA	Solid	8082	235132
240-66136-2 MSD	SO-17303-061516-DR-002	Total/NA	Solid	8082	235132

Metals

Prep Batch: 235336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	3050B	
240-66136-1 MS	SO-17303-061516-DR-001	Total/NA	Solid	3050B	
240-66136-1 MS	SO-17303-061516-DR-001	Total/NA	Solid	3050B	
240-66136-1 MSD	SO-17303-061516-DR-001	Total/NA	Solid	3050B	
240-66136-1 MSD	SO-17303-061516-DR-001	Total/NA	Solid	3050B	
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	3050B	
LCS 240-235336/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-235336/3-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-235336/1-A	Method Blank	Total/NA	Solid	3050B	
MB 240-235336/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 235352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	7471A	
240-66136-1 MS	SO-17303-061516-DR-001	Total/NA	Solid	7471A	
240-66136-1 MSD	SO-17303-061516-DR-001	Total/NA	Solid	7471A	
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	7471A	
LCS 240-235352/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-235352/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 235584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	7471A	235352
240-66136-1 MS	SO-17303-061516-DR-001	Total/NA	Solid	7471A	235352
240-66136-1 MSD	SO-17303-061516-DR-001	Total/NA	Solid	7471A	235352
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	7471A	235352
LCS 240-235352/2-A	Lab Control Sample	Total/NA	Solid	7471A	235352
MB 240-235352/1-A	Method Blank	Total/NA	Solid	7471A	235352

Analysis Batch: 235664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	6020	235336
240-66136-1 MS	SO-17303-061516-DR-001	Total/NA	Solid	6020	235336
240-66136-1 MSD	SO-17303-061516-DR-001	Total/NA	Solid	6020	235336
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	6020	235336
LCS 240-235336/3-A ^2	Lab Control Sample	Total/NA	Solid	6020	235336
MB 240-235336/1-A ^2	Method Blank	Total/NA	Solid	6020	235336

Analysis Batch: 235829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	6010B	235336

Metals (Continued)

Analysis Batch: 235829 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1 MS	SO-17303-061516-DR-001	Total/NA	Solid	6010B	235336
240-66136-1 MSD	SO-17303-061516-DR-001	Total/NA	Solid	6010B	235336
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	6010B	235336
LCS 240-235336/2-A	Lab Control Sample	Total/NA	Solid	6010B	235336
MB 240-235336/1-A	Method Blank	Total/NA	Solid	6010B	235336

General Chemistry

Analysis Batch: 235408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66136-1	SO-17303-061516-DR-001	Total/NA	Solid	Moisture	
240-66136-2	SO-17303-061516-DR-002	Total/NA	Solid	Moisture	

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

Lab Sample ID: MB 240-235169/1-A
Matrix: Solid
Analysis Batch: 236103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	230	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Benzene	40	U	40	9.0	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Bromodichloromethane	80	U	80	38	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Bromoform	80	U	80	61	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Bromomethane	200	U	200	51	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
2-Butanone (MEK)	600	U	600	73	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Carbon disulfide	200	U	200	56	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Carbon tetrachloride	40	U	40	18	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Chlorobenzene	40	U	40	13	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Chloroethane	200	U	200	51	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Chloroform	40	U	40	36	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Chloromethane	200	U	200	48	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,1-Dichloroethane	40	U	40	35	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,1-Dichloroethene	40	U	40	30	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,2-Dichloropropane	40	U	40	32	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
cis-1,3-Dichloropropene	40	U	40	22	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
trans-1,3-Dichloropropene	40	U	40	26	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Ethylbenzene	40	U	40	35	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
2-Hexanone	2000	U	2000	84	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Methylene Chloride	200	U	200	85	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	56	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Styrene	40	U	40	27	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,1,2,2-Tetrachloroethane	40	U	40	25	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Tetrachloroethene	40	U	40	27	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Toluene	10.3	J	80	10	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Trichloroethene	40	U	40	39	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Vinyl chloride	32	U	32	17	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Xylenes, Total	120	U	120	32	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,1,1-Trichloroethane	40	U	40	27	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,1,2-Trichloroethane	40	U	40	19	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Cyclohexane	960	U	960	30	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,2-Dibromo-3-Chloropropane	200	U	200	71	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,2-Dibromoethane	200	U	200	32	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Dichlorodifluoromethane	80	U	80	61	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
cis-1,2-Dichloroethene	40	U	40	38	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
trans-1,2-Dichloroethene	40	U	40	26	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Isopropylbenzene	200	U	200	13	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Methyl acetate	960	U	960	55	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Methyl tert-butyl ether	200	U	200	30	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	42	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,2,4-Trichlorobenzene	200	U	200	30	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,2-Dichlorobenzene	80	U	80	19	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,3-Dichlorobenzene	80	U	80	30	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
1,4-Dichlorobenzene	80	U	80	41	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Trichlorofluoromethane	80	U	80	35	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Dibromochloromethane	40	U	40	20	ug/Kg		06/20/16 10:50	06/27/16 14:12	1
Methylcyclohexane	960	U	960	38	ug/Kg		06/20/16 10:50	06/27/16 14:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		39 - 128	06/20/16 10:50	06/27/16 14:12	1
4-Bromofluorobenzene (Surr)	101		26 - 141	06/20/16 10:50	06/27/16 14:12	1
Toluene-d8 (Surr)	100		33 - 134	06/20/16 10:50	06/27/16 14:12	1
Dibromofluoromethane (Surr)	101		30 - 122	06/20/16 10:50	06/27/16 14:12	1

Lab Sample ID: LCS 240-235169/2-A
Matrix: Solid
Analysis Batch: 236103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	1750		ug/Kg		88	16 - 156
Benzene	1000	972		ug/Kg		97	70 - 120
Bromodichloromethane	1000	815		ug/Kg		82	28 - 123
Bromoform	1000	954		ug/Kg		95	10 - 120
Bromomethane	1000	1180		ug/Kg		118	10 - 120
2-Butanone (MEK)	2000	2190		ug/Kg		109	10 - 199
Carbon disulfide	1000	966		ug/Kg		97	10 - 132
Carbon tetrachloride	1000	816		ug/Kg		82	29 - 120
Chlorobenzene	1000	1020		ug/Kg		102	71 - 120
Chloroethane	1000	1460	*	ug/Kg		146	10 - 120
Chloroform	1000	1010		ug/Kg		101	63 - 120
Chloromethane	1000	707		ug/Kg		71	25 - 120
1,1-Dichloroethane	1000	960		ug/Kg		96	63 - 120
1,2-Dichloroethane	1000	943		ug/Kg		94	68 - 120
1,1-Dichloroethene	1000	1020		ug/Kg		102	44 - 143
1,2-Dichloropropane	1000	948		ug/Kg		95	73 - 120
cis-1,3-Dichloropropene	1000	910		ug/Kg		91	25 - 120
trans-1,3-Dichloropropene	1000	702		ug/Kg		70	22 - 122
Ethylbenzene	1000	965		ug/Kg		97	66 - 120
2-Hexanone	2000	1920	J	ug/Kg		96	43 - 130
Methylene Chloride	1000	1060		ug/Kg		106	27 - 172
4-Methyl-2-pentanone (MIBK)	2000	1950	J	ug/Kg		98	49 - 121
Styrene	1000	1020		ug/Kg		102	60 - 120
1,1,2,2-Tetrachloroethane	1000	825		ug/Kg		83	54 - 121
Tetrachloroethene	1000	1120		ug/Kg		112	58 - 131
Toluene	1000	1050		ug/Kg		105	66 - 123
Trichloroethene	1000	1060		ug/Kg		106	59 - 124
Vinyl chloride	1000	805		ug/Kg		80	33 - 120
Xylenes, Total	2000	2010		ug/Kg		100	68 - 120
1,1,1-Trichloroethane	1000	1020		ug/Kg		102	38 - 122
1,1,2-Trichloroethane	1000	959		ug/Kg		96	74 - 120
Cyclohexane	1000	1060		ug/Kg		106	40 - 120
1,2-Dibromo-3-Chloropropane	1000	682		ug/Kg		68	10 - 129
1,2-Dibromoethane	1000	855		ug/Kg		86	47 - 123
Dichlorodifluoromethane	1000	548		ug/Kg		55	10 - 120
cis-1,2-Dichloroethene	1000	930		ug/Kg		93	60 - 125
trans-1,2-Dichloroethene	1000	1010		ug/Kg		101	58 - 121
Isopropylbenzene	1000	1030		ug/Kg		103	61 - 123
Methyl acetate	5000	5060		ug/Kg		101	44 - 173
Methyl tert-butyl ether	1000	1020		ug/Kg		102	34 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	1140		ug/Kg		114	48 - 151
1,2,4-Trichlorobenzene	1000	1030		ug/Kg		103	41 - 135
1,2-Dichlorobenzene	1000	984		ug/Kg		98	68 - 120

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

Lab Sample ID: LCS 240-235169/2-A
Matrix: Solid
Analysis Batch: 236103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	1000	999		ug/Kg		100	66 - 121
1,4-Dichlorobenzene	1000	1020		ug/Kg		102	65 - 120
Trichlorofluoromethane	1000	1070		ug/Kg		107	17 - 145
Dibromochloromethane	1000	781		ug/Kg		78	22 - 120
Methylcyclohexane	1000	1060		ug/Kg		106	41 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*39 - 128*
4-Bromofluorobenzene (Surr)	*91*		*26 - 141*
Toluene-d8 (Surr)	*88*		*33 - 134*
Dibromofluoromethane (Surr)	*92*		*30 - 122*

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

Lab Sample ID: MB 240-235120/23-A
Matrix: Solid
Analysis Batch: 235636

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235120

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	3.5	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2,4,6-Trichlorophenol	260	U	260	8.9	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2,4-Dichlorophenol	260	U	260	20	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2,4-Dinitrophenol	150	U	150	21	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2,4-Dinitrotoluene	260	U	260	17	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2-Chloronaphthalene	260	U	260	0.45	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2-Chlorophenol	260	U	260	8.2	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2-Methylnaphthalene	260	U	260	0.50	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2-Methylphenol	260	U	260	11	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
2-Nitrophenol	260	U	260	8.3	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
3,3'-Dichlorobenzidine	260	U	260	18	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
3-Nitroaniline	200	U	200	16	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
4,6-Dinitro-2-methylphenol	200	U	200	9.2	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
4-Bromophenyl phenyl ether	150	U	150	13	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
4-Chloroaniline	260	U	260	17	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
4-Chlorophenyl phenyl ether	200	U	200	13	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
4-Nitroaniline	200	U	200	26	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
4-Nitrophenol	330	U	330	17	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Acenaphthene	260	U	260	0.76	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Acenaphthylene	260	U	260	0.35	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Acetophenone	260	U	260	9.2	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Anthracene	260	U	260	0.78	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Atrazine	40	U	40	9.1	ug/Kg		06/20/16 07:25	06/23/16 08:38	1

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

Lab Sample ID: MB 240-235120/23-A
Matrix: Solid
Analysis Batch: 235636

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235120

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	260	U	260	12	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Benzo[a]anthracene	260	U	260	0.63	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Benzo[a]pyrene	260	U	260	0.64	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Benzo[b]fluoranthene	260	U	260	0.59	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Benzo[g,h,i]perylene	260	U	260	0.35	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Benzo[k]fluoranthene	260	U	260	0.68	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Bis(2-ethylhexyl) phthalate	260	U	260	19	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Caprolactam	260	U	260	37	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Carbazole	260	U	260	27	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Chrysene	260	U	260	1.1	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Dibenz(a,h)anthracene	260	U	260	0.66	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Dibenzofuran	260	U	260	0.66	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Diethyl phthalate	260	U	260	16	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Dimethyl phthalate	260	U	260	17	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Di-n-butyl phthalate	28.2	J	260	15	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Di-n-octyl phthalate	260	U	260	7.9	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Fluoranthene	260	U	260	0.55	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Fluorene	260	U	260	0.53	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Hexachlorobutadiene	40	U	40	5.6	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Hexachlorocyclopentadiene	260	U	260	8.1	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Hexachloroethane	260	U	260	9.0	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Indeno[1,2,3-cd]pyrene	260	U	260	0.35	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Isophorone	260	U	260	13	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Naphthalene	260	U	260	0.82	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Nitrobenzene	260	U	260	2.2	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
N-Nitrosodi-n-propylamine	260	U	260	6.3	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Phenol	260	U	260	7.3	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Phenanthrene	260	U	260	0.73	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
Pyrene	260	U	260	0.44	ug/Kg		06/20/16 07:25	06/23/16 08:38	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		06/20/16 07:25	06/23/16 08:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*39 - 120*	*06/20/16 07:25*	*06/23/16 08:38*	*1*
2-Fluorophenol (Surr)	*55*		*33 - 120*	*06/20/16 07:25*	*06/23/16 08:38*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*10 - 120*	*06/20/16 07:25*	*06/23/16 08:38*	*1*
Nitrobenzene-d5 (Surr)	*70*		*32 - 120*	*06/20/16 07:25*	*06/23/16 08:38*	*1*
Phenol-d5 (Surr)	*64*		*32 - 120*	*06/20/16 07:25*	*06/23/16 08:38*	*1*
Terphenyl-d14 (Surr)	*72*		*47 - 120*	*06/20/16 07:25*	*06/23/16 08:38*	*1*

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

Lab Sample ID: LCS 240-235120/24-A
Matrix: Solid
Analysis Batch: 235636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	411		ug/Kg		62	54 - 120
2,2'-oxybis[1-chloropropane]	667	476		ug/Kg		71	34 - 120
2,4,5-Trichlorophenol	667	323		ug/Kg		48	31 - 120
2,4,6-Trichlorophenol	667	276		ug/Kg		41	18 - 120
2,4-Dichlorophenol	667	500		ug/Kg		75	51 - 120
2,4-Dimethylphenol	667	344		ug/Kg		52	34 - 120
2,4-Dinitrophenol	1330	638		ug/Kg		48	10 - 120
2,4-Dinitrotoluene	667	585		ug/Kg		88	57 - 120
2,6-Dinitrotoluene	667	459		ug/Kg		69	61 - 120
2-Chloronaphthalene	667	411		ug/Kg		62	54 - 120
2-Chlorophenol	667	509		ug/Kg		76	50 - 120
2-Methylnaphthalene	667	455		ug/Kg		68	53 - 120
2-Methylphenol	667	482		ug/Kg		72	48 - 120
2-Nitroaniline	667	548		ug/Kg		82	50 - 120
2-Nitrophenol	667	576		ug/Kg		86	49 - 120
3,3'-Dichlorobenzidine	1330	845		ug/Kg		63	39 - 120
3-Nitroaniline	667	538		ug/Kg		81	51 - 120
4,6-Dinitro-2-methylphenol	1330	962		ug/Kg		72	23 - 120
4-Bromophenyl phenyl ether	667	624		ug/Kg		94	48 - 120
4-Chloro-3-methylphenol	667	415		ug/Kg		62	52 - 120
4-Chloroaniline	667	383		ug/Kg		57	41 - 120
4-Chlorophenyl phenyl ether	667	572		ug/Kg		86	56 - 120
4-Nitroaniline	667	613		ug/Kg		92	52 - 120
4-Nitrophenol	1330	863		ug/Kg		65	37 - 120
Acenaphthene	667	528		ug/Kg		79	55 - 120
Acenaphthylene	667	429		ug/Kg		64	54 - 120
Acetophenone	667	490		ug/Kg		73	49 - 120
Anthracene	667	583		ug/Kg		88	59 - 120
Atrazine	1330	1220		ug/Kg		92	56 - 120
Benzaldehyde	1330	1020		ug/Kg		76	48 - 120
Benzo[a]anthracene	667	577		ug/Kg		87	60 - 120
Benzo[a]pyrene	667	630		ug/Kg		94	61 - 120
Benzo[b]fluoranthene	667	642		ug/Kg		96	60 - 120
Benzo[g,h,i]perylene	667	684		ug/Kg		103	60 - 120
Benzo[k]fluoranthene	667	656		ug/Kg		98	61 - 120
Bis(2-chloroethoxy)methane	667	547		ug/Kg		82	53 - 120
Bis(2-chloroethyl)ether	667	489		ug/Kg		73	45 - 120
Bis(2-ethylhexyl) phthalate	667	653		ug/Kg		98	57 - 120
Butyl benzyl phthalate	667	584		ug/Kg		88	58 - 120
Caprolactam	1330	1460		ug/Kg		110	56 - 120
Carbazole	667	567		ug/Kg		85	56 - 120
Chrysene	667	574		ug/Kg		86	62 - 120
Dibenz(a,h)anthracene	667	592		ug/Kg		89	59 - 120
Dibenzofuran	667	544		ug/Kg		82	57 - 120
Diethyl phthalate	667	535		ug/Kg		80	58 - 120
Dimethyl phthalate	667	463		ug/Kg		69	59 - 120
Di-n-butyl phthalate	667	600		ug/Kg		90	54 - 120
Di-n-octyl phthalate	667	641		ug/Kg		96	54 - 120

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

Lab Sample ID: LCS 240-235120/24-A
Matrix: Solid
Analysis Batch: 235636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	667	603		ug/Kg		91	57 - 120
Fluorene	667	576		ug/Kg		86	56 - 120
Hexachlorobenzene	667	576		ug/Kg		86	43 - 120
Hexachlorobutadiene	667	581		ug/Kg		87	48 - 120
Hexachlorocyclopentadiene	667	210	J	ug/Kg		32	23 - 120
Hexachloroethane	667	538		ug/Kg		81	46 - 120
Indeno[1,2,3-cd]pyrene	667	586		ug/Kg		88	62 - 120
Isophorone	667	562		ug/Kg		84	54 - 120
Naphthalene	667	531		ug/Kg		80	53 - 120
Nitrobenzene	667	616		ug/Kg		92	50 - 120
N-Nitrosodi-n-propylamine	667	506		ug/Kg		76	49 - 120
N-Nitrosodiphenylamine	667	658		ug/Kg		99	52 - 120
Pentachlorophenol	1330	524		ug/Kg		39	23 - 120
Phenol	667	486		ug/Kg		73	49 - 120
Phenanthrene	667	532		ug/Kg		80	58 - 120
Pyrene	667	568		ug/Kg		85	57 - 120
3 & 4 Methylphenol	667	490		ug/Kg		74	49 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*65*		*39 - 120*
2-Fluorophenol (Surr)	*86*		*33 - 120*
2,4,6-Tribromophenol (Surr)	*43*		*10 - 120*
Nitrobenzene-d5 (Surr)	*100*		*32 - 120*
Phenol-d5 (Surr)	*82*		*32 - 120*
Terphenyl-d14 (Surr)	*99*		*47 - 120*

Lab Sample ID: 240-66136-1 MS
Matrix: Solid
Analysis Batch: 235636

Client Sample ID: SO-17303-061516-DR-001
Prep Type: Total/NA
Prep Batch: 235120

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	1200	U	784	517	J	ug/Kg	☼	66	42 - 120
2,2'-oxybis[1-chloropropane]	1200	U	784	433	J	ug/Kg	☼	55	26 - 120
2,4,5-Trichlorophenol	1200	U	784	460	J	ug/Kg	☼	59	19 - 120
2,4,6-Trichlorophenol	1200	U	784	394	J	ug/Kg	☼	50	14 - 120
2,4-Dichlorophenol	1200	U	784	495	J	ug/Kg	☼	63	40 - 120
2,4-Dimethylphenol	1200	U	784	458	J	ug/Kg	☼	58	21 - 120
2,4-Dinitrophenol	700	U	1570	1020		ug/Kg	☼	65	10 - 120
2,4-Dinitrotoluene	1200	U	784	607	J	ug/Kg	☼	77	49 - 120
2,6-Dinitrotoluene	1200	U	784	627	J	ug/Kg	☼	80	51 - 120
2-Chloronaphthalene	1200	U	784	507	J	ug/Kg	☼	65	42 - 120
2-Chlorophenol	1200	U	784	491	J	ug/Kg	☼	63	35 - 120
2-Methylnaphthalene	76	J	784	560	J	ug/Kg	☼	62	29 - 120
2-Methylphenol	1200	U	784	498	J	ug/Kg	☼	64	29 - 120
2-Nitroaniline	930	U	784	573	J	ug/Kg	☼	73	43 - 120
2-Nitrophenol	1200	U	784	463	J	ug/Kg	☼	59	31 - 120
3,3'-Dichlorobenzidine	1200	U	1570	996	J	ug/Kg	☼	64	10 - 120
3-Nitroaniline	930	U	784	585	J	ug/Kg	☼	75	11 - 120

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

Lab Sample ID: 240-66136-1 MS | **Client Sample ID: SO-17303-061516-DR-001**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 235636 | **Prep Batch: 235120**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	930	U	1570	779	J	ug/Kg	☼	50	10 - 120
4-Bromophenyl phenyl ether	700	U	784	671	J	ug/Kg	☼	86	41 - 120
4-Chloro-3-methylphenol	1200	U	784	470	J	ug/Kg	☼	60	24 - 120
4-Chloroaniline	1200	U	784	406	J	ug/Kg	☼	52	11 - 120
4-Chlorophenyl phenyl ether	930	U	784	620	J	ug/Kg	☼	79	49 - 120
4-Nitroaniline	930	U	784	573	J	ug/Kg	☼	73	21 - 121
4-Nitrophenol	1500	U	1570	777	J	ug/Kg	☼	50	29 - 120
Acenaphthene	1200	U	784	615	J	ug/Kg	☼	78	42 - 120
Acenaphthylene	1200	U	784	611	J	ug/Kg	☼	78	43 - 120
Acetophenone	1200	U	784	517	J	ug/Kg	☼	66	37 - 120
Anthracene	30	J	784	652	J	ug/Kg	☼	79	39 - 120
Atrazine	190	U	1570	1290		ug/Kg	☼	82	51 - 120
Benzaldehyde	1200	U	1570	975	J	ug/Kg	☼	62	37 - 120
Benzo[a]anthracene	48	J	784	683	J	ug/Kg	☼	81	33 - 122
Benzo[a]pyrene	62	J	784	703	J	ug/Kg	☼	82	33 - 124
Benzo[b]fluoranthene	91	J	784	772	J	ug/Kg	☼	87	35 - 125
Benzo[g,h,i]perylene	1200	U	784	806	J	ug/Kg	☼	103	10 - 135
Benzo[k]fluoranthene	32	J	784	693	J	ug/Kg	☼	84	33 - 128
Bis(2-chloroethoxy)methane	1200	U	784	464	J	ug/Kg	☼	59	40 - 120
Bis(2-chloroethyl)ether	370	U	784	489		ug/Kg	☼	62	26 - 120
Bis(2-ethylhexyl) phthalate	1200	U	784	685	J	ug/Kg	☼	87	43 - 123
Butyl benzyl phthalate	1200	U	784	554	J	ug/Kg	☼	71	44 - 120
Caprolactam	1200	U	1570	1530		ug/Kg	☼	97	52 - 120
Carbazole	1200	U	784	703	J	ug/Kg	☼	90	42 - 120
Chrysene	80	J	784	704	J	ug/Kg	☼	80	30 - 128
Dibenz(a,h)anthracene	1200	U	784	720	J	ug/Kg	☼	92	29 - 121
Dibenzofuran	1200	U	784	609	J	ug/Kg	☼	78	47 - 120
Diethyl phthalate	1200	U	784	536	J	ug/Kg	☼	68	51 - 120
Dimethyl phthalate	1200	U	784	621	J	ug/Kg	☼	79	51 - 120
Di-n-butyl phthalate	1200	U	784	708	J	ug/Kg	☼	90	47 - 120
Di-n-octyl phthalate	1200	U	784	829	J	ug/Kg	☼	106	27 - 143
Fluoranthene	130	J	784	914	J	ug/Kg	☼	100	35 - 125
Fluorene	1200	U	784	563	J	ug/Kg	☼	72	45 - 120
Hexachlorobenzene	1200	U	784	760	J	ug/Kg	☼	97	37 - 120
Hexachlorobutadiene	190	U	784	504		ug/Kg	☼	64	33 - 120
Hexachlorocyclopentadiene	1200	U F1	784	1200	U F1	ug/Kg	☼	0	10 - 120
Hexachloroethane	1200	U	784	352	J	ug/Kg	☼	45	23 - 120
Indeno[1,2,3-cd]pyrene	56	J	784	736	J	ug/Kg	☼	87	20 - 128
Isophorone	1200	U	784	524	J	ug/Kg	☼	67	39 - 120
Naphthalene	1200	U	784	508	J	ug/Kg	☼	65	32 - 120
Nitrobenzene	1200	U	784	495	J	ug/Kg	☼	63	38 - 120
N-Nitrosodi-n-propylamine	1200	U	784	527	J	ug/Kg	☼	67	38 - 120
N-Nitrosodiphenylamine	1200	U	784	659	J	ug/Kg	☼	84	45 - 120
Pentachlorophenol	700	U	1570	727		ug/Kg	☼	46	10 - 120
Phenol	1200	U	784	450	J	ug/Kg	☼	57	30 - 120
Phenanthrene	160	J	784	819	J	ug/Kg	☼	84	43 - 120
Pyrene	100	J	784	740	J	ug/Kg	☼	81	41 - 122
3 & 4 Methylphenol	1200	U	784	494	J	ug/Kg	☼	63	35 - 120

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

Lab Sample ID: 240-66136-1 MS
Matrix: Solid
Analysis Batch: 235636

Client Sample ID: SO-17303-061516-DR-001
Prep Type: Total/NA
Prep Batch: 235120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*69*		*39 - 120*
2-Fluorophenol (Surr)	*65*		*33 - 120*
2,4,6-Tribromophenol (Surr)	*53*		*10 - 120*
Nitrobenzene-d5 (Surr)	*68*		*32 - 120*
Phenol-d5 (Surr)	*64*		*32 - 120*
Terphenyl-d14 (Surr)	*88*		*47 - 120*

Lab Sample ID: 240-66136-1 MSD
Matrix: Solid
Analysis Batch: 235636

Client Sample ID: SO-17303-061516-DR-001
Prep Type: Total/NA
Prep Batch: 235120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	1200	U	769	546	J	ug/Kg	☼	71	42 - 120	5	36
2,2'-oxybis[1-chloropropane]	1200	U	769	455	J	ug/Kg	☼	59	26 - 120	5	40
2,4,5-Trichlorophenol	1200	U	769	451	J	ug/Kg	☼	59	19 - 120	2	40
2,4,6-Trichlorophenol	1200	U	769	395	J	ug/Kg	☼	51	14 - 120	0	40
2,4-Dichlorophenol	1200	U	769	529	J	ug/Kg	☼	69	40 - 120	7	37
2,4-Dimethylphenol	1200	U	769	480	J	ug/Kg	☼	62	21 - 120	5	37
2,4-Dinitrophenol	700	U	1540	993		ug/Kg	☼	65	10 - 120	2	40
2,4-Dinitrotoluene	1200	U	769	583	J	ug/Kg	☼	76	49 - 120	4	28
2,6-Dinitrotoluene	1200	U	769	631	J	ug/Kg	☼	82	51 - 120	1	30
2-Chloronaphthalene	1200	U	769	518	J	ug/Kg	☼	67	42 - 120	2	36
2-Chlorophenol	1200	U	769	474	J	ug/Kg	☼	62	35 - 120	4	40
2-Methylnaphthalene	76	J	769	650	J	ug/Kg	☼	75	29 - 120	15	40
2-Methylphenol	1200	U	769	613	J	ug/Kg	☼	80	29 - 120	21	40
2-Nitroaniline	930	U	769	567	J	ug/Kg	☼	74	43 - 120	1	33
2-Nitrophenol	1200	U	769	472	J	ug/Kg	☼	61	31 - 120	2	40
3,3'-Dichlorobenzidine	1200	U	1540	874	J	ug/Kg	☼	57	10 - 120	13	40
3-Nitroaniline	930	U	769	588	J	ug/Kg	☼	76	11 - 120	0	40
4,6-Dinitro-2-methylphenol	930	U	1540	719	J	ug/Kg	☼	47	10 - 120	8	40
4-Bromophenyl phenyl ether	700	U	769	635	J	ug/Kg	☼	83	41 - 120	5	25
4-Chloro-3-methylphenol	1200	U	769	526	J	ug/Kg	☼	68	24 - 120	11	40
4-Chloroaniline	1200	U	769	434	J	ug/Kg	☼	56	11 - 120	7	40
4-Chlorophenyl phenyl ether	930	U	769	653	J	ug/Kg	☼	85	49 - 120	5	27
4-Nitroaniline	930	U	769	656	J	ug/Kg	☼	85	21 - 121	13	36
4-Nitrophenol	1500	U	1540	753	J	ug/Kg	☼	49	29 - 120	3	40
Acenaphthene	1200	U	769	617	J	ug/Kg	☼	80	42 - 120	0	40
Acenaphthylene	1200	U	769	589	J	ug/Kg	☼	77	43 - 120	4	31
Acetophenone	1200	U	769	547	J	ug/Kg	☼	71	37 - 120	6	40
Anthracene	30	J	769	655	J	ug/Kg	☼	81	39 - 120	0	40
Atrazine	190	U	1540	1310		ug/Kg	☼	85	51 - 120	2	25
Benzaldehyde	1200	U	1540	1000	J	ug/Kg	☼	65	37 - 120	3	40
Benzo[a]anthracene	48	J	769	704	J	ug/Kg	☼	85	33 - 122	3	40
Benzo[a]pyrene	62	J	769	795	J	ug/Kg	☼	95	33 - 124	12	40
Benzo[b]fluoranthene	91	J	769	877	J	ug/Kg	☼	102	35 - 125	13	40
Benzo[g,h,i]perylene	1200	U	769	627	J	ug/Kg	☼	82	10 - 135	25	40
Benzo[k]fluoranthene	32	J	769	750	J	ug/Kg	☼	93	33 - 128	8	38
Bis(2-chloroethoxy)methane	1200	U	769	484	J	ug/Kg	☼	63	40 - 120	4	40

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

Lab Sample ID: 240-66136-1 MSD
Matrix: Solid
Analysis Batch: 235636

Client Sample ID: SO-17303-061516-DR-001
Prep Type: Total/NA
Prep Batch: 235120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	370	U	769	425		ug/Kg	☼	55	26 - 120	14	40
Bis(2-ethylhexyl) phthalate	1200	U	769	666	J	ug/Kg	☼	87	43 - 123	3	27
Butyl benzyl phthalate	1200	U	769	618	J	ug/Kg	☼	80	44 - 120	11	25
Caprolactam	1200	U	1540	1750		ug/Kg	☼	114	52 - 120	14	28
Carbazole	1200	U	769	647	J	ug/Kg	☼	84	42 - 120	8	38
Chrysene	80	J	769	752	J	ug/Kg	☼	87	30 - 128	7	40
Dibenz(a,h)anthracene	1200	U	769	545	J	ug/Kg	☼	71	29 - 121	28	39
Dibenzofuran	1200	U	769	635	J	ug/Kg	☼	83	47 - 120	4	35
Diethyl phthalate	1200	U	769	618	J	ug/Kg	☼	80	51 - 120	14	26
Dimethyl phthalate	1200	U	769	642	J	ug/Kg	☼	83	51 - 120	3	29
Di-n-butyl phthalate	1200	U	769	640	J	ug/Kg	☼	83	47 - 120	10	24
Di-n-octyl phthalate	1200	U	769	667	J	ug/Kg	☼	87	27 - 143	22	29
Fluoranthene	130	J	769	975	J	ug/Kg	☼	110	35 - 125	6	36
Fluorene	1200	U	769	654	J	ug/Kg	☼	85	45 - 120	15	39
Hexachlorobenzene	1200	U	769	719	J	ug/Kg	☼	93	37 - 120	6	25
Hexachlorobutadiene	190	U	769	530		ug/Kg	☼	69	33 - 120	5	40
Hexachlorocyclopentadiene	1200	U F1	769	1200	U F1	ug/Kg	☼	0	10 - 120	NC	40
Hexachloroethane	1200	U	769	320	J	ug/Kg	☼	42	23 - 120	10	40
Indeno[1,2,3-cd]pyrene	56	J	769	595	J	ug/Kg	☼	70	20 - 128	21	36
Isophorone	1200	U	769	493	J	ug/Kg	☼	64	39 - 120	6	40
Naphthalene	1200	U	769	568	J	ug/Kg	☼	74	32 - 120	11	40
Nitrobenzene	1200	U	769	448	J	ug/Kg	☼	58	38 - 120	10	40
N-Nitrosodi-n-propylamine	1200	U	769	549	J	ug/Kg	☼	71	38 - 120	4	40
N-Nitrosodiphenylamine	1200	U	769	710	J	ug/Kg	☼	92	45 - 120	8	24
Pentachlorophenol	700	U	1540	667	J	ug/Kg	☼	43	10 - 120	9	40
Phenol	1200	U	769	450	J	ug/Kg	☼	59	30 - 120	0	40
Phenanthrene	160	J	769	833	J	ug/Kg	☼	88	43 - 120	2	34
Pyrene	100	J	769	831	J	ug/Kg	☼	95	41 - 122	12	35
3 & 4 Methylphenol	1200	U	769	562	J	ug/Kg	☼	73	35 - 120	13	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*39 - 120*
2-Fluorophenol (Surr)	*70*		*33 - 120*
2,4,6-Tribromophenol (Surr)	*60*		*10 - 120*
Nitrobenzene-d5 (Surr)	*62*		*32 - 120*
Phenol-d5 (Surr)	*66*		*32 - 120*
Terphenyl-d14 (Surr)	*86*		*47 - 120*

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

Lab Sample ID: MB 240-235132/22-A
Matrix: Solid
Analysis Batch: 235522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	33	U	33	12	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1221	33	U	33	16	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1232	33	U	33	20	ug/Kg		06/20/16 08:47	06/22/16 22:00	1

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

Lab Sample ID: MB 240-235132/22-A
Matrix: Solid
Analysis Batch: 235522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1242	33	U	33	11	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1248	33	U	33	8.0	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1254	33	U	33	14	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1260	33	U	33	9.0	ug/Kg		06/20/16 08:47	06/22/16 22:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*14 - 128*	*06/20/16 08:47*	*06/22/16 22:00*	*1*
DCB Decachlorobiphenyl	*91*		*10 - 132*	*06/20/16 08:47*	*06/22/16 22:00*	*1*

Lab Sample ID: LCS 240-235132/23-A
Matrix: Solid
Analysis Batch: 235522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	258		ug/Kg		77	47 - 120
Aroclor-1260	333	264		ug/Kg		79	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*14 - 128*
DCB Decachlorobiphenyl	*90*		*10 - 132*

Lab Sample ID: 240-66136-2 MS
Matrix: Solid
Analysis Batch: 235624

Client Sample ID: SO-17303-061516-DR-002
Prep Type: Total/NA
Prep Batch: 235132

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	38	U	390	175		ug/Kg	☼	45	31 - 120
Aroclor-1260	38	U	390	164		ug/Kg	☼	42	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*44*		*14 - 128*
DCB Decachlorobiphenyl	*50*		*10 - 132*

Lab Sample ID: 240-66136-2 MSD
Matrix: Solid
Analysis Batch: 235624

Client Sample ID: SO-17303-061516-DR-002
Prep Type: Total/NA
Prep Batch: 235132

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	38	U	385	175		ug/Kg	☼	45	31 - 120	0	30
Aroclor-1260	38	U	385	173		ug/Kg	☼	45	21 - 122	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*45*		*14 - 128*
DCB Decachlorobiphenyl	*57*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-235336/1-A
Matrix: Solid
Analysis Batch: 235829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235336

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80	U	0.80	0.41	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Beryllium	0.16	U	0.16	0.026	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Cadmium	0.080	U	0.080	0.021	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Cobalt	0.40	U	0.40	0.047	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Chromium	0.80	U	0.80	0.075	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Copper	0.80	U	0.80	0.23	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Manganese	0.0845	J	0.80	0.084	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Nickel	0.80	U	0.80	0.080	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Vanadium	0.80	U	0.80	0.20	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Zinc	2.0	U	2.0	0.56	mg/Kg		06/21/16 10:49	06/23/16 20:13	1
Lead	0.24	U	0.24	0.20	mg/Kg		06/21/16 10:49	06/23/16 20:13	1

Lab Sample ID: LCS 240-235336/2-A
Matrix: Solid
Analysis Batch: 235829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	191		mg/Kg		95	80 - 120
Beryllium	5.00	4.87		mg/Kg		97	80 - 120
Cadmium	5.00	5.07		mg/Kg		101	80 - 120
Cobalt	50.0	49.0		mg/Kg		98	80 - 120
Chromium	20.0	19.8		mg/Kg		99	80 - 120
Copper	25.0	25.0		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
Vanadium	50.0	50.2		mg/Kg		100	80 - 120
Zinc	50.0	50.8		mg/Kg		102	80 - 120
Lead	50.0	48.9		mg/Kg		98	80 - 120

Lab Sample ID: 240-66136-1 MS
Matrix: Solid
Analysis Batch: 235829

Client Sample ID: SO-17303-061516-DR-001
Prep Type: Total/NA
Prep Batch: 235336

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	66		205	239		mg/Kg	☼	84	75 - 125
Beryllium	0.40		5.13	4.74		mg/Kg	☼	85	75 - 125
Cadmium	0.62		5.13	5.11		mg/Kg	☼	87	75 - 125
Cobalt	7.7		51.3	56.9		mg/Kg	☼	96	75 - 125
Chromium	15		20.5	33.4		mg/Kg	☼	87	75 - 125
Copper	19		25.6	43.1		mg/Kg	☼	93	75 - 125
Manganese	300	B	51.3	376	4	mg/Kg	☼	152	75 - 125
Nickel	23		51.3	73.9		mg/Kg	☼	100	75 - 125
Vanadium	19		51.3	66.2		mg/Kg	☼	92	75 - 125
Zinc	61		51.3	117		mg/Kg	☼	109	75 - 125
Lead	31	F1	51.3	62.5	F1	mg/Kg	☼	62	75 - 125

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

Lab Sample ID: 240-66136-1 MSD — **Client Sample ID: SO-17303-061516-DR-001**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235829 — **Prep Batch: 235336**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	66		205	244		mg/Kg	☼	87	75 - 125	2	20
Beryllium	0.40		5.13	4.85		mg/Kg	☼	87	75 - 125	2	20
Cadmium	0.62		5.13	5.34		mg/Kg	☼	92	75 - 125	4	20
Cobalt	7.7		51.3	57.9		mg/Kg	☼	98	75 - 125	2	20
Chromium	15		20.5	32.9		mg/Kg	☼	85	75 - 125	2	20
Copper	19		25.6	43.5		mg/Kg	☼	94	75 - 125	1	20
Manganese	300	B	51.3	423	4	mg/Kg	☼	245	75 - 125	12	20
Nickel	23		51.3	75.3		mg/Kg	☼	102	75 - 125	2	20
Vanadium	19		51.3	65.0		mg/Kg	☼	90	75 - 125	2	20
Zinc	61		51.3	112		mg/Kg	☼	100	75 - 125	4	20
Lead	31	F1	51.3	62.2	F1	mg/Kg	☼	62	75 - 125	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-235336/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235664 — **Prep Batch: 235336**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	U	0.32	0.014	mg/Kg		06/21/16 10:49	06/22/16 16:49	2
Arsenic	0.16	U	0.16	0.026	mg/Kg		06/21/16 10:49	06/22/16 16:49	2
Selenium	0.32	U	0.32	0.040	mg/Kg		06/21/16 10:49	06/22/16 16:49	2
Thallium	0.16	U	0.16	0.019	mg/Kg		06/21/16 10:49	06/22/16 16:49	2
Silver	0.16	U	0.16	0.0014	mg/Kg		06/21/16 10:49	06/22/16 16:49	2

Lab Sample ID: LCS 240-235336/3-A ^2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235664 — **Prep Batch: 235336**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	9.72		mg/Kg		97	68 - 113
Arsenic	100	97.1		mg/Kg		97	73 - 110
Selenium	100	90.5		mg/Kg		91	65 - 110
Thallium	25.0	26.8		mg/Kg		107	71 - 110
Silver	10.0	9.05		mg/Kg		90	60 - 114

Lab Sample ID: 240-66136-1 MS — **Client Sample ID: SO-17303-061516-DR-001**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235664 — **Prep Batch: 235336**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.49	F1	8.92	3.35	F1	mg/Kg	☼	32	75 - 125
Arsenic	6.5		89.2	91.1		mg/Kg	☼	95	75 - 125
Selenium	1.3		89.2	79.2		mg/Kg	☼	87	75 - 125
Thallium	0.34		22.3	18.2		mg/Kg	☼	80	75 - 125
Silver	0.11	J	8.92	7.74		mg/Kg	☼	86	75 - 125

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

Lab Sample ID: 240-66136-1 MSD — **Client Sample ID: SO-17303-061516-DR-001**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235664 — **Prep Batch: 235336**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.49	F1	8.92	3.26	F1	mg/Kg	☼	31	75 - 125	3	20
Arsenic	6.5		89.2	94.5		mg/Kg	☼	99	75 - 125	4	20
Selenium	1.3		89.2	80.8		mg/Kg	☼	89	75 - 125	2	20
Thallium	0.34		22.3	18.5		mg/Kg	☼	81	75 - 125	1	20
Silver	0.11	J	8.92	8.01		mg/Kg	☼	89	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-235352/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235584 — **Prep Batch: 235352**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.014	mg/Kg		06/21/16 16:00	06/22/16 10:12	1

Lab Sample ID: LCS 240-235352/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235584 — **Prep Batch: 235352**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.883		mg/Kg		106	80 - 120

Lab Sample ID: 240-66136-1 MS — **Client Sample ID: SO-17303-061516-DR-001**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235584 — **Prep Batch: 235352**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.046	U	0.211	0.239		mg/Kg	☼	114	80 - 120

Lab Sample ID: 240-66136-1 MSD — **Client Sample ID: SO-17303-061516-DR-001**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 235584 — **Prep Batch: 235352**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.046	U	0.211	0.235		mg/Kg	☼	112	80 - 120	2	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(39-128)	(26-141)	(33-134)	(30-122)
240-66136-1	SO-17303-061516-DR-001	96	98	96	104
240-66136-2	SO-17303-061516-DR-002	103	97	101	110
240-66136-3	TB-17303-061516	109	113	115	113
LCS 240-235169/2-A	Lab Control Sample	89	91	88	92
MB 240-235169/1-A	Method Blank	93	101	100	101

Surrogate Legend

12DCE = 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	TPH
Lab Sample ID	Client Sample ID	(39-120)	(33-120)	(10-120)	(32-120)	(32-120)	(47-120)
240-66136-1	SO-17303-061516-DR-001	66	60	44	57	60	74
240-66136-1 MS	SO-17303-061516-DR-001	69	65	53	68	64	88
240-66136-1 MSD	SO-17303-061516-DR-001	72	70	60	62	66	86
240-66136-2	SO-17303-061516-DR-002	67	59	39	59	59	78
LCS 240-235120/24-A	Lab Control Sample	65	86	43	100	82	99
MB 240-235120/23-A	Method Blank	73	55	22	70	64	72

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCB2
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
240-66136-1	SO-17303-061516-DR-001	47	60
240-66136-2	SO-17303-061516-DR-002	51	62
240-66136-2 MS	SO-17303-061516-DR-002	44	50
240-66136-2 MSD	SO-17303-061516-DR-002	45	57
LCS 240-235132/23-A	Lab Control Sample	78	90
MB 240-235132/22-A	Method Blank	66	91

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Client Sample ID: SO-17303-061516-DR-001
Lab Sample ID: 240-66136-1
Date Collected: 06/15/16 11:30
Matrix: Solid
Date Received: 06/17/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	235408	06/21/16 14:47	DTN	TAL CAN

Client Sample ID: SO-17303-061516-DR-001
Lab Sample ID: 240-66136-1
Date Collected: 06/15/16 11:30
Matrix: Solid
Date Received: 06/17/16 09:00
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			235169	06/20/16 10:50	LAM	TAL CAN
Total/NA	Analysis	8260B		1	236103	06/27/16 15:01	TJL1	TAL CAN
Total/NA	Prep	3540C			235120	06/20/16 07:25	DT	TAL CAN
Total/NA	Analysis	8270C		4	235636	06/23/16 13:06	TMH	TAL CAN
Total/NA	Prep	3540C			235132	06/20/16 08:47	SDE	TAL CAN
Total/NA	Analysis	8082		1	235624	06/23/16 11:47	KMG	TAL CAN
Total/NA	Prep	3050B			235336	06/21/16 10:49	DEE	TAL CAN
Total/NA	Analysis	6010B		1	235829	06/23/16 20:21	RKT	TAL CAN
Total/NA	Prep	3050B			235336	06/21/16 10:49	DEE	TAL CAN
Total/NA	Analysis	6020		2	235664	06/22/16 16:57	AS1	TAL CAN
Total/NA	Prep	7471A			235352	06/21/16 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	235584	06/22/16 10:21	DSH	TAL CAN

Client Sample ID: SO-17303-061516-DR-002
Lab Sample ID: 240-66136-2
Date Collected: 06/15/16 13:30
Matrix: Solid
Date Received: 06/17/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	235408	06/21/16 14:47	DTN	TAL CAN

Client Sample ID: SO-17303-061516-DR-002
Lab Sample ID: 240-66136-2
Date Collected: 06/15/16 13:30
Matrix: Solid
Date Received: 06/17/16 09:00
Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			235169	06/20/16 10:50	LAM	TAL CAN
Total/NA	Analysis	8260B		1	236103	06/27/16 15:26	TJL1	TAL CAN
Total/NA	Prep	3540C			235120	06/20/16 07:25	DT	TAL CAN
Total/NA	Analysis	8270C		2.5	235636	06/23/16 12:41	TMH	TAL CAN
Total/NA	Prep	3540C			235132	06/20/16 08:47	SDE	TAL CAN
Total/NA	Analysis	8082		1	235624	06/23/16 10:54	KMG	TAL CAN
Total/NA	Prep	3050B			235336	06/21/16 10:49	DEE	TAL CAN
Total/NA	Analysis	6010B		1	235829	06/23/16 21:55	RKT	TAL CAN
Total/NA	Prep	3050B			235336	06/21/16 10:49	DEE	TAL CAN
Total/NA	Analysis	6020		2	235664	06/22/16 17:17	AS1	TAL CAN
Total/NA	Prep	7471A			235352	06/21/16 16:00	DEE	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Client Sample ID: SO-17303-061516-DR-002

Lab Sample ID: 240-66136-2

Date Collected: 06/15/16 13:30
Matrix: Solid
Date Received: 06/17/16 09:00
Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	235584	06/22/16 10:27	DSH	TAL CAN

Client Sample ID: TB-17303-061516

Lab Sample ID: 240-66136-3

Date Collected: 06/15/16 00:00
Matrix: Solid
Date Received: 06/17/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			235169	06/20/16 10:50	LAM	TAL CAN
Total/NA	Analysis	8260B		1	236103	06/27/16 15:51	TJL1	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66136-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-16 *
Illinois	NELAP	5	200004	07-31-16 *
Kansas	NELAP	7	E-10336	07-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16 *
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16 *
Texas	NELAP	6	T104704517-15-5	08-31-16 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16 *

* Certification renewal pending - certification considered valid.

CHAIN OF CUSTODY RECORD

COC NO.: 53711

GHD

Address: 14496 Sheldon Rd, Plymouth, MI 48170 PAGE 1 OF 1

Phone: (734) 453-5123 Fax:

Project No/ Phase/Task Code: 017303-TO5-02Y16	Laboratory Name: Test America	Lab Location: North Canton, OH	SSOW ID: 17303-035
Project Name: EVO - Willow Run	Lab Contact: D. Heckler		Cooler No:
Project Location: Ypsilanti, MI			Carrier: FED EX
GHD Chemistry Contact: R. Fleisher			Airbill No:
Sampler(s): D. Rivers			Total # of Containers: 5

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	TCL VOCs	TCL SVOCs	Total PCBs	SS TAL metals	Total Containers/sample	MS/MSD Request	Comments/ Special Instructions:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)												
1	SO-17303-061516-DR-001	6/15/16	1130	SO	G	N	X	X	X	X	2		
2	↓ ↓ ↓ ↓ -002	↓	1330	SO	G	N	X	X	X	X	2		
3	TB-17303-061516	↓	—	SQ	—	N	X				1		
4													
5													
6													
7													
8													
9													
10													
11													
12													

240-66136 Chain of Custody

Page 50 of 51

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. D. Rivers	GHD	6/16/16	1500	1.	TA	6-17-16	920
2.				2.			
3.				3.			

6/20/2016

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

GHD Form: COC-10B (20110804)

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 46136
Canton Facility

Client GHD Site Name

Cooler Received on 6-17-16 Opened on 6-17-16

Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS Stetson 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 +1.3 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN #36 (CF +1.0°C) Observed Cooler Temp. 1.5 °C Corrected Cooler Temp. 2.5 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   ~~-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?~~ ~~Yes No~~
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 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC574756
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No
15. Was a LL Hg or Me Hg trip blank present? Yes No

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. 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)

~~**16. SAMPLE PRESERVATION**~~

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-061316 Cooler Receipt Form.doc djl

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: 240-66137-1
Client Project/Site: 17303-035, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
6/27/2016 4:08:39 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: 240-66137-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-66137-1

Comments
No additional comments.

Receipt
The sample was received on 6/17/2016 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.5º 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) 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SO-17303-061616-DR-003 (240-66137-1). 2540199, 2103100, 2283703.

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.
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.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-66137-1	SO-17303-061616-DR-003	Solid	06/16/16 10:00	06/17/16 09:20

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

Client Sample ID: SO-17303-061616-DR-003

Lab Sample ID: 240-66137-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.026		0.025	0.0085	mg/L	1		8260B	TCLP
Aroclor-1248	950		240	57	ug/Kg	5	☼	8082	Total/NA
Aroclor-1260	1200		240	65	ug/Kg	5	☼	8082	Total/NA
Arsenic	0.011	J B	0.050	0.0033	mg/L	1		6010B	TCLP
Barium	1.3		0.50	0.0024	mg/L	1		6010B	TCLP
Cadmium	0.083		0.050	0.00029	mg/L	1		6010B	TCLP
Chromium	0.0040	J	0.050	0.00055	mg/L	1		6010B	TCLP
Lead	11		0.050	0.0019	mg/L	1		6010B	TCLP
Flashpoint	>200		1.00	1.00	Degrees F	1		1010	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1010	Ignitability, Pensky-Martens Closed-Cup Method	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: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

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

Client Sample ID: SO-17303-061616-DR-003
Date Collected: 06/16/16 10:00
Date Received: 06/17/16 09:20

Lab Sample ID: 240-66137-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			06/21/16 15:16	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			06/21/16 15:16	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			06/21/16 15:16	1
Benzene	0.025	U	0.025	0.0065	mg/L			06/21/16 15:16	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			06/21/16 15:16	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			06/21/16 15:16	1
Chloroform	0.025	U	0.025	0.0080	mg/L			06/21/16 15:16	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			06/21/16 15:16	1
Trichloroethene	**0.026**		0.025	0.0085	mg/L			06/21/16 15:16	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			06/21/16 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 121*		*06/21/16 15:16*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 124*		*06/21/16 15:16*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*06/21/16 15:16*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 128*		*06/21/16 15:16*	*1*

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

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

Client Sample ID: SO-17303-061616-DR-003
Date Collected: 06/16/16 10:00
Date Received: 06/17/16 09:20

Lab Sample ID: 240-66137-1
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		06/22/16 12:02	06/24/16 13:43	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		06/22/16 12:02	06/24/16 13:43	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		06/22/16 12:02	06/24/16 13:43	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		06/22/16 12:02	06/24/16 13:43	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		06/22/16 12:02	06/24/16 13:43	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		06/22/16 12:02	06/24/16 13:43	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		06/22/16 12:02	06/24/16 13:43	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		06/22/16 12:02	06/24/16 13:43	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		06/22/16 12:02	06/24/16 13:43	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		06/22/16 12:02	06/24/16 13:43	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		06/22/16 12:02	06/24/16 13:43	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		06/22/16 12:02	06/24/16 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*42 - 120*	*06/22/16 12:02*	*06/24/16 13:43*	*1*
2-Fluorophenol (Surr)	*67*		*10 - 120*	*06/22/16 12:02*	*06/24/16 13:43*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*35 - 125*	*06/22/16 12:02*	*06/24/16 13:43*	*1*
Nitrobenzene-d5 (Surr)	*84*		*36 - 120*	*06/22/16 12:02*	*06/24/16 13:43*	*1*
Phenol-d5 (Surr)	*52*		*10 - 120*	*06/22/16 12:02*	*06/24/16 13:43*	*1*
Terphenyl-d14 (Surr)	*89*		*17 - 120*	*06/22/16 12:02*	*06/24/16 13:43*	*1*

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

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

Client Sample ID: SO-17303-061616-DR-003
Date Collected: 06/16/16 10:00
Date Received: 06/17/16 09:20

Lab Sample ID: 240-66137-1
Matrix: Solid
Percent Solids: 69.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	240	U	240	86	ug/Kg	☼	06/20/16 08:47	06/22/16 21:42	5
Aroclor-1221	240	U	240	110	ug/Kg	☼	06/20/16 08:47	06/22/16 21:42	5
Aroclor-1232	240	U	240	140	ug/Kg	☼	06/20/16 08:47	06/22/16 21:42	5
Aroclor-1242	240	U	240	79	ug/Kg	☼	06/20/16 08:47	06/22/16 21:42	5
Aroclor-1248	**950**		240	57	ug/Kg	☼	06/20/16 08:47	06/22/16 21:42	5
Aroclor-1254	240	U	240	100	ug/Kg	☼	06/20/16 08:47	06/22/16 21:42	5
Aroclor-1260	**1200**		240	65	ug/Kg	☼	06/20/16 08:47	06/22/16 21:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*195*	*X*	*14 - 128*	*06/20/16 08:47*	*06/22/16 21:42*	*5*
DCB Decachlorobiphenyl	*223*	*X*	*10 - 132*	*06/20/16 08:47*	*06/22/16 21:42*	*5*

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

Method: 6010B - Metals (ICP) - TCLP

Client Sample ID: SO-17303-061616-DR-003
Date Collected: 06/16/16 10:00
Date Received: 06/17/16 09:20

Lab Sample ID: 240-66137-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.011**	**J B**	0.050	0.0033	mg/L		06/22/16 09:43	06/23/16 22:07	1
Barium	**1.3**		0.50	0.0024	mg/L		06/22/16 09:43	06/23/16 22:07	1
Cadmium	**0.083**		0.050	0.00029	mg/L		06/22/16 09:43	06/23/16 22:07	1
Chromium	**0.0040**	**J**	0.050	0.00055	mg/L		06/22/16 09:43	06/23/16 22:07	1
Lead	**11**		0.050	0.0019	mg/L		06/22/16 09:43	06/23/16 22:07	1
Selenium	0.050	U	0.050	0.0051	mg/L		06/22/16 09:43	06/23/16 22:07	1
Silver	0.050	U	0.050	0.00092	mg/L		06/22/16 09:43	06/23/16 22:07	1

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

Method: 7470A - Mercury (CVAA) - TCLP

Client Sample ID: SO-17303-061616-DR-003
Date Collected: 06/16/16 10:00
Date Received: 06/17/16 09:20

Lab Sample ID: 240-66137-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		06/22/16 12:00	06/23/16 09:24	1

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

General Chemistry

Client Sample ID: SO-17303-061616-DR-003
Date Collected: 06/16/16 10:00
Date Received: 06/17/16 09:20

Lab Sample ID: 240-66137-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>200		1.00	1.00	Degrees F			06/24/16 06:05	1
Percent Solids	69.0		0.1	0.1	%			06/21/16 14:47	1
Percent Moisture	31.0		0.1	0.1	%			06/21/16 14:47	1

GC/MS VOA

Leach Batch: 235289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	1311	
LB 240-235289/1-A MB	Method Blank	TCLP	Solid	1311	

Analysis Batch: 235313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	8260B	235289
LB 240-235289/1-A MB	Method Blank	TCLP	Solid	8260B	235289
LCS 240-235313/12	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 235423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	1311	

Prep Batch: 235544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	3510C	235423
LCS 240-235544/8-A	Lab Control Sample	Total/NA	Solid	3510C	
MB 240-235544/7-A	Method Blank	Total/NA	Solid	3510C	

Analysis Batch: 235845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	8270C	235544
LCS 240-235544/8-A	Lab Control Sample	Total/NA	Solid	8270C	235544
MB 240-235544/7-A	Method Blank	Total/NA	Solid	8270C	235544

GC Semi VOA

Prep Batch: 235132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	Total/NA	Solid	3540C	
LCS 240-235132/23-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-235132/22-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 235522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	Total/NA	Solid	8082	235132
LCS 240-235132/23-A	Lab Control Sample	Total/NA	Solid	8082	235132
MB 240-235132/22-A	Method Blank	Total/NA	Solid	8082	235132

Metals

Leach Batch: 235423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	1311	
LB 240-235423/1-B	Method Blank	TCLP	Solid	1311	
LB 240-235423/1-C	Method Blank	TCLP	Solid	1311	

Metals (Continued)

Prep Batch: 235501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	3010A	235423
LB 240-235423/1-B	Method Blank	TCLP	Solid	3010A	235423
LCS 240-235501/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 240-235501/2-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 235502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	7470A	235423
LB 240-235423/1-C	Method Blank	TCLP	Solid	7470A	235423
LCS 240-235502/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 240-235502/2-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 235686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	7470A	235502
LB 240-235423/1-C	Method Blank	TCLP	Solid	7470A	235502
LCS 240-235502/3-A	Lab Control Sample	Total/NA	Solid	7470A	235502
MB 240-235502/2-A	Method Blank	Total/NA	Solid	7470A	235502

Analysis Batch: 235829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	TCLP	Solid	6010B	235501
LB 240-235423/1-B	Method Blank	TCLP	Solid	6010B	235501
LCS 240-235501/3-A	Lab Control Sample	Total/NA	Solid	6010B	235501
MB 240-235501/2-A	Method Blank	Total/NA	Solid	6010B	235501

General Chemistry

Analysis Batch: 235408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	Total/NA	Solid	Moisture	

Analysis Batch: 235893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66137-1	SO-17303-061616-DR-003	Total/NA	Solid	1010	
LCS 240-235893/1	Lab Control Sample	Total/NA	Solid	1010	

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

Lab Sample ID: LCS 240-235313/12
Matrix: Solid
Analysis Batch: 235313

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	1.07		mg/L		107	71 - 133
1,2-Dichloroethane	1.00	0.923		mg/L		92	80 - 120
2-Butanone (MEK)	2.00	1.85		mg/L		93	49 - 120
Benzene	1.00	1.09		mg/L		109	80 - 120
Carbon tetrachloride	1.00	0.979		mg/L		98	54 - 122
Chlorobenzene	1.00	1.02		mg/L		102	80 - 120
Chloroform	1.00	1.01		mg/L		101	80 - 123
Tetrachloroethene	1.00	0.979		mg/L		98	79 - 134
Trichloroethene	1.00	1.01		mg/L		101	78 - 130
Vinyl chloride	1.00	0.992		mg/L		99	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*80 - 121*
4-Bromofluorobenzene (Surr)	*99*		*70 - 124*
Toluene-d8 (Surr)	*107*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 128*

Lab Sample ID: LB 240-235289/1-A MB
Matrix: Solid
Analysis Batch: 235313

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	0.0095	mg/L			06/21/16 13:46	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			06/21/16 13:46	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			06/21/16 13:46	1
Benzene	0.00818	J	0.025	0.0065	mg/L			06/21/16 13:46	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			06/21/16 13:46	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			06/21/16 13:46	1
Chloroform	0.025	U	0.025	0.0080	mg/L			06/21/16 13:46	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			06/21/16 13:46	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			06/21/16 13:46	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			06/21/16 13:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 121*		*06/21/16 13:46*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 124*		*06/21/16 13:46*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*06/21/16 13:46*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 128*		*06/21/16 13:46*	*1*

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

Lab Sample ID: MB 240-235544/7-A
Matrix: Solid
Analysis Batch: 235845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235544

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		06/22/16 12:02	06/24/16 11:00	1

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

Lab Sample ID: MB 240-235544/7-A
Matrix: Solid
Analysis Batch: 235845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235544

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		06/22/16 12:02	06/24/16 11:00	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		06/22/16 12:02	06/24/16 11:00	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		06/22/16 12:02	06/24/16 11:00	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		06/22/16 12:02	06/24/16 11:00	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		06/22/16 12:02	06/24/16 11:00	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		06/22/16 12:02	06/24/16 11:00	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		06/22/16 12:02	06/24/16 11:00	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		06/22/16 12:02	06/24/16 11:00	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		06/22/16 12:02	06/24/16 11:00	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		06/22/16 12:02	06/24/16 11:00	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		06/22/16 12:02	06/24/16 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*42 - 120*	*06/22/16 12:02*	*06/24/16 11:00*	*1*
2-Fluorophenol (Surr)	*60*		*10 - 120*	*06/22/16 12:02*	*06/24/16 11:00*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*35 - 125*	*06/22/16 12:02*	*06/24/16 11:00*	*1*
Nitrobenzene-d5 (Surr)	*73*		*36 - 120*	*06/22/16 12:02*	*06/24/16 11:00*	*1*
Phenol-d5 (Surr)	*48*		*10 - 120*	*06/22/16 12:02*	*06/24/16 11:00*	*1*
Terphenyl-d14 (Surr)	*76*		*17 - 120*	*06/22/16 12:02*	*06/24/16 11:00*	*1*

Lab Sample ID: LCS 240-235544/8-A
Matrix: Solid
Analysis Batch: 235845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235544

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0574		mg/L		72	48 - 120
2,4,5-Trichlorophenol	0.0800	0.0732		mg/L		92	57 - 120
2,4,6-Trichlorophenol	0.0800	0.0665		mg/L		83	60 - 120
2,4-Dinitrotoluene	0.0800	0.0683		mg/L		85	65 - 120
Hexachlorobenzene	0.0800	0.0635		mg/L		79	47 - 127
Hexachlorobutadiene	0.0800	0.0591		mg/L		74	50 - 120
Hexachloroethane	0.0800	0.0582		mg/L		73	50 - 120
3 & 4 Methylphenol	0.0800	0.0617		mg/L		77	46 - 120
2-Methylphenol	0.0800	0.0653		mg/L		82	52 - 120
Nitrobenzene	0.0800	0.0597		mg/L		75	58 - 120
Pentachlorophenol	0.160	0.126		mg/L		79	35 - 121
Pyridine	0.0800	0.0442		mg/L		55	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*81*		*42 - 120*
2-Fluorophenol (Surr)	*68*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*90*		*35 - 125*
Nitrobenzene-d5 (Surr)	*81*		*36 - 120*
Phenol-d5 (Surr)	*53*		*10 - 120*
Terphenyl-d14 (Surr)	*91*		*17 - 120*

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

Lab Sample ID: MB 240-235132/22-A
Matrix: Solid
Analysis Batch: 235522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	33	U	33	12	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1221	33	U	33	16	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1232	33	U	33	20	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1242	33	U	33	11	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1248	33	U	33	8.0	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1254	33	U	33	14	ug/Kg		06/20/16 08:47	06/22/16 22:00	1
Aroclor-1260	33	U	33	9.0	ug/Kg		06/20/16 08:47	06/22/16 22:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*14 - 128*	*06/20/16 08:47*	*06/22/16 22:00*	*1*
DCB Decachlorobiphenyl	*91*		*10 - 132*	*06/20/16 08:47*	*06/22/16 22:00*	*1*

Lab Sample ID: LCS 240-235132/23-A
Matrix: Solid
Analysis Batch: 235522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	258		ug/Kg		77	47 - 120
Aroclor-1260	333	264		ug/Kg		79	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*14 - 128*
DCB Decachlorobiphenyl	*90*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-235501/2-A
Matrix: Solid
Analysis Batch: 235829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235501

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0033	mg/L		06/22/16 09:43	06/23/16 13:47	1
Barium	0.50	U	0.50	0.0024	mg/L		06/22/16 09:43	06/23/16 13:47	1
Cadmium	0.050	U	0.050	0.00029	mg/L		06/22/16 09:43	06/23/16 13:47	1
Chromium	0.050	U	0.050	0.00055	mg/L		06/22/16 09:43	06/23/16 13:47	1
Lead	0.050	U	0.050	0.0019	mg/L		06/22/16 09:43	06/23/16 13:47	1
Selenium	0.050	U	0.050	0.0051	mg/L		06/22/16 09:43	06/23/16 13:47	1
Silver	0.050	U	0.050	0.00092	mg/L		06/22/16 09:43	06/23/16 13:47	1

Lab Sample ID: LCS 240-235501/3-A
Matrix: Solid
Analysis Batch: 235829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235501

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.23		mg/L		111	50 - 150
Barium	2.00	2.02		mg/L		101	50 - 150
Cadmium	0.0500	0.0540		mg/L		108	50 - 150

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

Lab Sample ID: LCS 240-235501/3-A
Matrix: Solid
Analysis Batch: 235829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235501

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.200	0.208		mg/L		104	50 - 150
Lead	0.500	0.477		mg/L		95	50 - 150
Selenium	2.00	2.28		mg/L		114	50 - 150
Silver	0.0500	0.0556		mg/L		111	50 - 150

Lab Sample ID: LB 240-235423/1-B
Matrix: Solid
Analysis Batch: 235829

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 235501

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00386	J	0.050	0.0033	mg/L		06/22/16 09:43	06/23/16 13:42	1
Barium	0.50	U	0.50	0.0024	mg/L		06/22/16 09:43	06/23/16 13:42	1
Cadmium	0.050	U	0.050	0.00029	mg/L		06/22/16 09:43	06/23/16 13:42	1
Chromium	0.050	U	0.050	0.00055	mg/L		06/22/16 09:43	06/23/16 13:42	1
Lead	0.050	U	0.050	0.0019	mg/L		06/22/16 09:43	06/23/16 13:42	1
Selenium	0.050	U	0.050	0.0051	mg/L		06/22/16 09:43	06/23/16 13:42	1
Silver	0.050	U	0.050	0.00092	mg/L		06/22/16 09:43	06/23/16 13:42	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-235502/2-A
Matrix: Solid
Analysis Batch: 235686

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		06/22/16 12:00	06/23/16 09:08	1

Lab Sample ID: LCS 240-235502/3-A
Matrix: Solid
Analysis Batch: 235686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00533		mg/L		107	80 - 120

Lab Sample ID: LB 240-235423/1-C
Matrix: Solid
Analysis Batch: 235686

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 235502

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		06/22/16 12:00	06/23/16 09:01	1

Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 240-235893/1
Matrix: Solid
Analysis Batch: 235893

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	81.00		Degrees F		100	97 - 103

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(80-121)	(70-124)	(80-120)	(80-128)
LCS 240-235313/12	Lab Control Sample	90	99	107	99

Surrogate Legend

12DCE = 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)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(80-121)	(70-124)	(80-120)	(80-128)
240-66137-1	SO-17303-061616-DR-003	94	97	110	98
LB 240-235289/1-A MB	Method Blank	94	96	106	98

Surrogate Legend

12DCE = 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	TPH
Lab Sample ID	Client Sample ID	(42-120)	(10-120)	(35-125)	(36-120)	(10-120)	(17-120)
LCS 240-235544/8-A	Lab Control Sample	81	68	90	81	53	91
MB 240-235544/7-A	Method Blank	67	60	72	73	48	76

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = 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	TPH
Lab Sample ID	Client Sample ID	(42-120)	(10-120)	(35-125)	(36-120)	(10-120)	(17-120)
240-66137-1	SO-17303-061616-DR-003	77	67	86	84	52	89

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX2	DCB2								
Lab Sample ID	Client Sample ID	(14-128)	(10-132)								
240-66137-1	SO-17303-061616-DR-003	195 X	223 X								
LCS 240-235132/23-A	Lab Control Sample	78	90								
MB 240-235132/22-A	Method Blank	66	91								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

Client Sample ID: SO-17303-061616-DR-003

Lab Sample ID: 240-66137-1

Date Collected: 06/16/16 10:00

Matrix: Solid

Date Received: 06/17/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			235289	06/20/16 16:55	DRJ	TAL CAN
TCLP	Analysis	8260B		1	235313	06/21/16 15:16	HMB	TAL CAN
TCLP	Leach	1311			235423	06/21/16 17:00	DRJ	TAL CAN
TCLP	Prep	3510C			235544	06/22/16 12:02	CS	TAL CAN
TCLP	Analysis	8270C		1	235845	06/24/16 13:43	JMG	TAL CAN
TCLP	Leach	1311			235423	06/21/16 17:00	DRJ	TAL CAN
TCLP	Prep	3010A			235501	06/22/16 09:43	AJC	TAL CAN
TCLP	Analysis	6010B		1	235829	06/23/16 22:07	RKT	TAL CAN
TCLP	Leach	1311			235423	06/21/16 17:00	DRJ	TAL CAN
TCLP	Prep	7470A			235502	06/22/16 12:00	AJC	TAL CAN
TCLP	Analysis	7470A		1	235686	06/23/16 09:24	WKD	TAL CAN
Total/NA	Analysis	1010		1	235893	06/24/16 06:05	TPH	TAL CAN
Total/NA	Analysis	Moisture		1	235408	06/21/16 14:47	DTN	TAL CAN

Client Sample ID: SO-17303-061616-DR-003

Lab Sample ID: 240-66137-1

Date Collected: 06/16/16 10:00

Matrix: Solid

Date Received: 06/17/16 09:20

Percent Solids: 69.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			235132	06/20/16 08:47	SDE	TAL CAN
Total/NA	Analysis	8082		5	235522	06/22/16 21:42	KMG	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66137-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-16 *
Illinois	NELAP	5	200004	07-31-16 *
Kansas	NELAP	7	E-10336	07-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16 *
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16 *
Texas	NELAP	6	T104704517-15-5	08-31-16 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16 *

* Certification renewal pending - certification considered valid.

15162.5

CHAIN OF CUSTODY RECORD

COC NO.: 53710

Address: 14496 Sheldon Rd, Plymouth, MI 48170 PAGE 1 OF 1
Phone: (734) 453-5123 Fax:

Project No/ Phase/Task Code:	17303-T05-02Y16
Project Name:	CVO-Willow Run
Project Location:	Ypsilanti, MI
GHD Chemistry Contact:	R. Fleisher
Sampler(s):	D. Rivers
Laboratory Name:	Test America
Lab Contact:	D. Heller
Lab Location:	North Canton, OH
SSOW ID:	17303-035
Cooler No:	
Carrier:	FED EX
Airbill No:	
Total # of Containers:	2

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	TCLP VOCs	TCLP SVOCs	TCLP Metals	Total PCBs	Ignitability	Total Containers/sample	MS/MSD Request	Comments/ Special Instructions:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)													
1	SO-17303-061616-DR-003	6/16/16	1000	SO	G	N	X	X	X	X	X			
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

240-66137 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. David Rivers	GHD	6/16/16	1500	1.	TA	6-17-16	920
2.				2.			
3.				3.			

6/27/2016

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

GHD Form: COC-10B (20110804)

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 46137
Canton Facility

Client GHD Site Name

Cooler unpacked by:

Cooler Received on 6-17-16 Opened on 6-17-16

FedEx: 1st Grd Exp UPS FAS Stetson 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 +1.3 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN #36 (CF +1.0°C) Observed Cooler Temp. 1.5 °C Corrected Cooler Temp. 2.5 °C

2.	Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
	-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were custody seals on the bottle(s) or bottle kits (LL-Hg/MeHg)?	Yes No
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 11-15 have been checked at the originating laboratory.	
11.	Were sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC574756
12.	Were VOAs on the COC?	Yes No
13.	Were air bubbles >6 mm in any VOA vials?	Yes No NA
14.	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes No
15.	Was a LL Hg or Me Hg trip blank present?	Yes No

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. 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)

16. 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: 240-66346-1
Client Project/Site: 17303-035, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
7/7/2016 9:17:18 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: 240-66346-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-66346-1

Comments
No additional comments.

Receipt
The samples were received on 6/23/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS VOA
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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-035, RACER CVO

TestAmerica Job ID: 240-66346-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-66346-1	TB-17303-062116	Water	06/21/16 00:00	06/23/16 09:00
240-66346-2	GW-17303-062116-JY-004	Water	06/21/16 12:45	06/23/16 09:00
240-66346-3	SW-17303-062116-JY-005	Water	06/21/16 13:15	06/23/16 09:00
240-66346-4	GW-17303-062116-JY-006	Water	06/21/16 14:00	06/23/16 09:00
240-66346-5	GW-17303-062216-JY-007	Water	06/22/16 09:50	06/23/16 09:00
240-66346-6	GW-17303-062216-JY-008	Water	06/22/16 09:55	06/23/16 09:00
240-66346-7	GW-17303-062216-JY-009	Water	06/22/16 10:15	06/23/16 09:00
240-66346-8	GW-17303-062216-JY-010	Water	06/22/16 11:00	06/23/16 09:00
240-66346-9	GW-17303-062216-JY-011	Water	06/22/16 11:45	06/23/16 09:00
240-66346-10	GW-17303-062216-JY-012	Water	06/22/16 12:15	06/23/16 09:00
240-66346-11	GW-17303-062216-JY-013	Water	06/22/16 14:15	06/23/16 09:00
240-66346-12	GW-17303-062216-JY-014	Water	06/22/16 13:20	06/23/16 09:00

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66346-1

Client Sample ID: TB-17303-062116 — Lab Sample ID: 240-66346-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	10	0.94	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-062116-JY-004 — Lab Sample ID: 240-66346-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.95	J	10	0.94	ug/L	1		8260B	Total/NA
Benzene	1.8		1.0	0.35	ug/L	1		8260B	Total/NA
Vinyl chloride	2.5		1.0	0.29	ug/L	1		8260B	Total/NA
Cyclohexane	1.3		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SW-17303-062116-JY-005 — Lab Sample ID: 240-66346-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.57	J	1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.45	J	1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-062116-JY-006 — Lab Sample ID: 240-66346-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	12		1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	19		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	22		1.0	0.26	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.40	J	1.0	0.30	ug/L	1		8260B	Total/NA
1,3-Dichlorobenzene	0.34	J	1.0	0.19	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.66	J	1.0	0.27	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-062216-JY-007 — Lab Sample ID: 240-66346-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.1	J	10	0.94	ug/L	1		8260B	Total/NA
Benzene	7.7		1.0	0.35	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	2.0	J	10	0.53	ug/L	1		8260B	Total/NA
Chloroform	0.51	J	1.0	0.25	ug/L	1		8260B	Total/NA
Toluene	0.28	J	1.0	0.23	ug/L	1		8260B	Total/NA
Trichloroethene	0.39	J	1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	1.8		1.0	0.29	ug/L	1		8260B	Total/NA
Cyclohexane	0.58	J	1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	7.5		1.0	0.26	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.46	J	1.0	0.30	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-062216-JY-008 — Lab Sample ID: 240-66346-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.1	J	10	0.94	ug/L	1		8260B	Total/NA
Benzene	7.6		1.0	0.35	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	2.3	J	10	0.53	ug/L	1		8260B	Total/NA
Chloroform	0.53	J	1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	0.27	J	1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	2.2		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	7.5		1.0	0.26	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17303-062216-JY-008 (Continued) — Lab Sample ID: 240-66346-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	0.42	J	1.0	0.30	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-062216-JY-009 — Lab Sample ID: 240-66346-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.1		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.42	J	1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-062216-JY-010 — Lab Sample ID: 240-66346-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0	J	2.0	0.70	ug/L	2		8260B	Total/NA
Vinyl chloride	99		2.0	0.58	ug/L	2		8260B	Total/NA
Xylenes, Total	1.0	J	4.0	1.0	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	17		2.0	0.52	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	0.66	J	2.0	0.60	ug/L	2		8260B	Total/NA

Client Sample ID: GW-17303-062216-JY-011 — Lab Sample ID: 240-66346-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0	0.35	ug/L	1		8260B	Total/NA
Vinyl chloride	2.6		1.0	0.29	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-062216-JY-012 — Lab Sample ID: 240-66346-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	7600		130	36	ug/L	125		8260B	Total/NA
cis-1,2-Dichloroethene	820		130	33	ug/L	125		8260B	Total/NA

Client Sample ID: GW-17303-062216-JY-013 — Lab Sample ID: 240-66346-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	5.6	J	10	2.2	ug/L	10		8260B	Total/NA
Vinyl chloride	82		10	2.9	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	200		10	2.6	ug/L	10		8260B	Total/NA
trans-1,2-Dichloroethene	27		10	3.0	ug/L	10		8260B	Total/NA

Client Sample ID: GW-17303-062216-JY-014 — Lab Sample ID: 240-66346-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11		10	0.94	ug/L	1		8260B	Total/NA
Trichloroethene	0.81	J	1.0	0.22	ug/L	1		8260B	Total/NA
Vinyl chloride	5.0		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.26	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.64	J	1.0	0.30	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66346-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: TB-17303-062116
Date Collected: 06/21/16 00:00
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.8**	**J**	10	0.94	ug/L			06/30/16 17:34	1
Benzene	1.0	U	1.0	0.35	ug/L			06/30/16 17:34	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 17:34	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 17:34	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 17:34	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			06/30/16 17:34	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 17:34	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 17:34	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 17:34	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 17:34	1
Chloroform	1.0	U	1.0	0.25	ug/L			06/30/16 17:34	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 17:34	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 17:34	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 17:34	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 17:34	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 17:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 17:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 17:34	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 17:34	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 17:34	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 17:34	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 17:34	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 17:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 17:34	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 17:34	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 17:34	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			06/30/16 17:34	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			06/30/16 17:34	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 17:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 17:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 17:34	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			06/30/16 17:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 17:34	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 17:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 17:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			06/30/16 17:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/30/16 17:34	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 17:34	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 17:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 17:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 17:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 17:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 17:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 17:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 17:34	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 17:34	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 17:34	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 17:34	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		78 - 125		06/30/16 17:34	1
4-Bromofluorobenzene (Surr)	88		61 - 120		06/30/16 17:34	1
Toluene-d8 (Surr)	93		80 - 120		06/30/16 17:34	1
Dibromofluoromethane (Surr)	95		79 - 120		06/30/16 17:34	1

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

Client Sample ID: GW-17303-062116-JY-004
Date Collected: 06/21/16 12:45
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.95**	**J**	10	0.94	ug/L			06/30/16 17:59	1
Benzene	**1.8**		1.0	0.35	ug/L			06/30/16 17:59	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 17:59	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 17:59	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 17:59	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			06/30/16 17:59	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 17:59	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 17:59	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 17:59	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 17:59	1
Chloroform	1.0	U	1.0	0.25	ug/L			06/30/16 17:59	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 17:59	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 17:59	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 17:59	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 17:59	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 17:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 17:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 17:59	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 17:59	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 17:59	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 17:59	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 17:59	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 17:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 17:59	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 17:59	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 17:59	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			06/30/16 17:59	1
Vinyl chloride	**2.5**		1.0	0.29	ug/L			06/30/16 17:59	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 17:59	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 17:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 17:59	1
Cyclohexane	**1.3**		1.0	0.45	ug/L			06/30/16 17:59	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 17:59	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 17:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 17:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			06/30/16 17:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/30/16 17:59	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 17:59	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 17:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 17:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 17:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 17:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 17:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 17:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 17:59	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 17:59	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 17:59	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 17:59	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		78 - 125		06/30/16 17:59	1
4-Bromofluorobenzene (Surr)	82		61 - 120		06/30/16 17:59	1
Toluene-d8 (Surr)	88		80 - 120		06/30/16 17:59	1
Dibromofluoromethane (Surr)	93		79 - 120		06/30/16 17:59	1

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

Client Sample ID: SW-17303-062116-JY-005
Date Collected: 06/21/16 13:15
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			06/30/16 18:24	1
Benzene	1.0	U	1.0	0.35	ug/L			06/30/16 18:24	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 18:24	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 18:24	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 18:24	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			06/30/16 18:24	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 18:24	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 18:24	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 18:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 18:24	1
Chloroform	1.0	U	1.0	0.25	ug/L			06/30/16 18:24	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 18:24	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 18:24	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 18:24	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 18:24	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 18:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 18:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 18:24	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 18:24	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 18:24	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 18:24	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 18:24	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 18:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 18:24	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 18:24	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 18:24	1
Trichloroethene	**0.57**	**J**	1.0	0.22	ug/L			06/30/16 18:24	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			06/30/16 18:24	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 18:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 18:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 18:24	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			06/30/16 18:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 18:24	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 18:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 18:24	1
cis-1,2-Dichloroethene	**0.45**	**J**	1.0	0.26	ug/L			06/30/16 18:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/30/16 18:24	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 18:24	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 18:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 18:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 18:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 18:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 18:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 18:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 18:24	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 18:24	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 18:24	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 18:24	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		78 - 125		06/30/16 18:24	1
4-Bromofluorobenzene (Surr)	88		61 - 120		06/30/16 18:24	1
Toluene-d8 (Surr)	91		80 - 120		06/30/16 18:24	1
Dibromofluoromethane (Surr)	100		79 - 120		06/30/16 18:24	1

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

Client Sample ID: GW-17303-062116-JY-006
Date Collected: 06/21/16 14:00
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			06/30/16 18:48	1
Benzene	1.0	U	1.0	0.35	ug/L			06/30/16 18:48	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 18:48	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 18:48	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 18:48	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			06/30/16 18:48	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 18:48	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 18:48	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 18:48	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 18:48	1
Chloroform	1.0	U	1.0	0.25	ug/L			06/30/16 18:48	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 18:48	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 18:48	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 18:48	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 18:48	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 18:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 18:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 18:48	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 18:48	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 18:48	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 18:48	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 18:48	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 18:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 18:48	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 18:48	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 18:48	1
Trichloroethene	**12**		1.0	0.22	ug/L			06/30/16 18:48	1
Vinyl chloride	**19**		1.0	0.29	ug/L			06/30/16 18:48	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 18:48	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 18:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 18:48	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			06/30/16 18:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 18:48	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 18:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 18:48	1
cis-1,2-Dichloroethene	**22**		1.0	0.26	ug/L			06/30/16 18:48	1
trans-1,2-Dichloroethene	**0.40**	**J**	1.0	0.30	ug/L			06/30/16 18:48	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 18:48	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 18:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 18:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 18:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 18:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 18:48	1
1,3-Dichlorobenzene	**0.34**	**J**	1.0	0.19	ug/L			06/30/16 18:48	1
1,4-Dichlorobenzene	**0.66**	**J**	1.0	0.27	ug/L			06/30/16 18:48	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 18:48	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 18:48	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 18:48	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		78 - 125		06/30/16 18:48	1
4-Bromofluorobenzene (Surr)	86		61 - 120		06/30/16 18:48	1
Toluene-d8 (Surr)	93		80 - 120		06/30/16 18:48	1
Dibromofluoromethane (Surr)	97		79 - 120		06/30/16 18:48	1

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

Client Sample ID: GW-17303-062216-JY-007
Date Collected: 06/22/16 09:50
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.1**	**J**	10	0.94	ug/L			06/30/16 19:13	1
Benzene	**7.7**		1.0	0.35	ug/L			06/30/16 19:13	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 19:13	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 19:13	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 19:13	1
2-Butanone (MEK)	**2.0**	**J**	10	0.53	ug/L			06/30/16 19:13	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 19:13	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 19:13	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 19:13	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 19:13	1
Chloroform	**0.51**	**J**	1.0	0.25	ug/L			06/30/16 19:13	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 19:13	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 19:13	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 19:13	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 19:13	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 19:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 19:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 19:13	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 19:13	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 19:13	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 19:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 19:13	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 19:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 19:13	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 19:13	1
Toluene	**0.28**	**J**	1.0	0.23	ug/L			06/30/16 19:13	1
Trichloroethene	**0.39**	**J**	1.0	0.22	ug/L			06/30/16 19:13	1
Vinyl chloride	**1.8**		1.0	0.29	ug/L			06/30/16 19:13	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 19:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 19:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 19:13	1
Cyclohexane	**0.58**	**J**	1.0	0.45	ug/L			06/30/16 19:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 19:13	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 19:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 19:13	1
cis-1,2-Dichloroethene	**7.5**		1.0	0.26	ug/L			06/30/16 19:13	1
trans-1,2-Dichloroethene	**0.46**	**J**	1.0	0.30	ug/L			06/30/16 19:13	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 19:13	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 19:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 19:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 19:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 19:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 19:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 19:13	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 19:13	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 19:13	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 19:13	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		78 - 125		06/30/16 19:13	1
4-Bromofluorobenzene (Surr)	86		61 - 120		06/30/16 19:13	1
Toluene-d8 (Surr)	93		80 - 120		06/30/16 19:13	1
Dibromofluoromethane (Surr)	97		79 - 120		06/30/16 19:13	1

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

Client Sample ID: GW-17303-062216-JY-008
Date Collected: 06/22/16 09:55
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.1**	**J**	10	0.94	ug/L			06/30/16 19:38	1
Benzene	**7.6**		1.0	0.35	ug/L			06/30/16 19:38	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 19:38	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 19:38	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 19:38	1
2-Butanone (MEK)	**2.3**	**J**	10	0.53	ug/L			06/30/16 19:38	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 19:38	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 19:38	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 19:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 19:38	1
Chloroform	**0.53**	**J**	1.0	0.25	ug/L			06/30/16 19:38	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 19:38	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 19:38	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 19:38	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 19:38	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 19:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 19:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 19:38	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 19:38	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 19:38	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 19:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 19:38	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 19:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 19:38	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 19:38	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 19:38	1
Trichloroethene	**0.27**	**J**	1.0	0.22	ug/L			06/30/16 19:38	1
Vinyl chloride	**2.2**		1.0	0.29	ug/L			06/30/16 19:38	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 19:38	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 19:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 19:38	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			06/30/16 19:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 19:38	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 19:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 19:38	1
cis-1,2-Dichloroethene	**7.5**		1.0	0.26	ug/L			06/30/16 19:38	1
trans-1,2-Dichloroethene	**0.42**	**J**	1.0	0.30	ug/L			06/30/16 19:38	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 19:38	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 19:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 19:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 19:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 19:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 19:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 19:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 19:38	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 19:38	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 19:38	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 19:38	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		78 - 125		06/30/16 19:38	1
4-Bromofluorobenzene (Surr)	73		61 - 120		06/30/16 19:38	1
Toluene-d8 (Surr)	83		80 - 120		06/30/16 19:38	1
Dibromofluoromethane (Surr)	91		79 - 120		06/30/16 19:38	1

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

Client Sample ID: GW-17303-062216-JY-009
Date Collected: 06/22/16 10:15
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			06/30/16 20:02	1
Benzene	1.0	U	1.0	0.35	ug/L			06/30/16 20:02	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 20:02	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 20:02	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 20:02	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			06/30/16 20:02	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 20:02	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 20:02	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 20:02	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 20:02	1
Chloroform	1.0	U	1.0	0.25	ug/L			06/30/16 20:02	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 20:02	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 20:02	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 20:02	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 20:02	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 20:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 20:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 20:02	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 20:02	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 20:02	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 20:02	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 20:02	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 20:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 20:02	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 20:02	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 20:02	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			06/30/16 20:02	1
Vinyl chloride	**1.1**		1.0	0.29	ug/L			06/30/16 20:02	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 20:02	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 20:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 20:02	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			06/30/16 20:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 20:02	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 20:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 20:02	1
cis-1,2-Dichloroethene	**0.42**	**J**	1.0	0.26	ug/L			06/30/16 20:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/30/16 20:02	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 20:02	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 20:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 20:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 20:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 20:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 20:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 20:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 20:02	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 20:02	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 20:02	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 20:02	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		78 - 125		06/30/16 20:02	1
4-Bromofluorobenzene (Surr)	80		61 - 120		06/30/16 20:02	1
Toluene-d8 (Surr)	86		80 - 120		06/30/16 20:02	1
Dibromofluoromethane (Surr)	92		79 - 120		06/30/16 20:02	1

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

Client Sample ID: GW-17303-062216-JY-010
Date Collected: 06/22/16 11:00
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U	20	1.9	ug/L			06/30/16 20:26	2
Benzene	**1.0**	**J**	2.0	0.70	ug/L			06/30/16 20:26	2
Bromodichloromethane	2.0	U	2.0	0.58	ug/L			06/30/16 20:26	2
Bromoform	2.0	U	2.0	1.1	ug/L			06/30/16 20:26	2
Bromomethane	2.0	U	2.0	0.88	ug/L			06/30/16 20:26	2
2-Butanone (MEK)	20	U	20	1.1	ug/L			06/30/16 20:26	2
Carbon disulfide	10	U	10	0.76	ug/L			06/30/16 20:26	2
Carbon tetrachloride	2.0	U	2.0	0.86	ug/L			06/30/16 20:26	2
Chlorobenzene	2.0	U	2.0	0.50	ug/L			06/30/16 20:26	2
Chloroethane	2.0	U	2.0	0.64	ug/L			06/30/16 20:26	2
Chloroform	2.0	U	2.0	0.50	ug/L			06/30/16 20:26	2
Chloromethane	2.0	U	2.0	0.88	ug/L			06/30/16 20:26	2
1,1-Dichloroethane	2.0	U	2.0	0.60	ug/L			06/30/16 20:26	2
1,2-Dichloroethane	2.0	U	2.0	0.46	ug/L			06/30/16 20:26	2
1,1-Dichloroethene	2.0	U	2.0	0.90	ug/L			06/30/16 20:26	2
1,2-Dichloropropane	2.0	U	2.0	0.50	ug/L			06/30/16 20:26	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.92	ug/L			06/30/16 20:26	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.1	ug/L			06/30/16 20:26	2
Ethylbenzene	2.0	U	2.0	0.50	ug/L			06/30/16 20:26	2
2-Hexanone	20	U	20	0.96	ug/L			06/30/16 20:26	2
Methylene Chloride	10	U	10	0.66	ug/L			06/30/16 20:26	2
4-Methyl-2-pentanone (MIBK)	20	U	20	2.0	ug/L			06/30/16 20:26	2
Styrene	2.0	U	2.0	0.90	ug/L			06/30/16 20:26	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.44	ug/L			06/30/16 20:26	2
Tetrachloroethene	2.0	U	2.0	0.62	ug/L			06/30/16 20:26	2
Toluene	2.0	U	2.0	0.46	ug/L			06/30/16 20:26	2
Trichloroethene	2.0	U	2.0	0.44	ug/L			06/30/16 20:26	2
Vinyl chloride	**99**		2.0	0.58	ug/L			06/30/16 20:26	2
Xylenes, Total	**1.0**	**J**	4.0	1.0	ug/L			06/30/16 20:26	2
1,1,1-Trichloroethane	2.0	U	2.0	0.88	ug/L			06/30/16 20:26	2
1,1,2-Trichloroethane	2.0	U	2.0	0.48	ug/L			06/30/16 20:26	2
Cyclohexane	2.0	U	2.0	0.90	ug/L			06/30/16 20:26	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	1.6	ug/L			06/30/16 20:26	2
1,2-Dibromoethane	2.0	U	2.0	0.64	ug/L			06/30/16 20:26	2
Dichlorodifluoromethane	2.0	U	2.0	0.64	ug/L			06/30/16 20:26	2
cis-1,2-Dichloroethene	**17**		2.0	0.52	ug/L			06/30/16 20:26	2
trans-1,2-Dichloroethene	**0.66**	**J**	2.0	0.60	ug/L			06/30/16 20:26	2
Isopropylbenzene	2.0	U	2.0	0.70	ug/L			06/30/16 20:26	2
Methyl acetate	20	U	20	4.5	ug/L			06/30/16 20:26	2
Methyl tert-butyl ether	2.0	U	2.0	0.40	ug/L			06/30/16 20:26	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.90	ug/L			06/30/16 20:26	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.64	ug/L			06/30/16 20:26	2
1,2-Dichlorobenzene	2.0	U	2.0	0.50	ug/L			06/30/16 20:26	2
1,3-Dichlorobenzene	2.0	U	2.0	0.38	ug/L			06/30/16 20:26	2
1,4-Dichlorobenzene	2.0	U	2.0	0.54	ug/L			06/30/16 20:26	2
Trichlorofluoromethane	2.0	U	2.0	0.98	ug/L			06/30/16 20:26	2
Dibromochloromethane	2.0	U	2.0	0.86	ug/L			06/30/16 20:26	2
Methylcyclohexane	2.0	U	2.0	0.86	ug/L			06/30/16 20:26	2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		78 - 125		06/30/16 20:26	2
4-Bromofluorobenzene (Surr)	78		61 - 120		06/30/16 20:26	2
Toluene-d8 (Surr)	87		80 - 120		06/30/16 20:26	2
Dibromofluoromethane (Surr)	108		79 - 120		06/30/16 20:26	2

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

Client Sample ID: GW-17303-062216-JY-011
Date Collected: 06/22/16 11:45
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			06/30/16 20:50	1
Benzene	**1.4**		1.0	0.35	ug/L			06/30/16 20:50	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 20:50	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 20:50	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 20:50	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			06/30/16 20:50	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 20:50	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 20:50	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 20:50	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 20:50	1
Chloroform	1.0	U	1.0	0.25	ug/L			06/30/16 20:50	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 20:50	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 20:50	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 20:50	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 20:50	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 20:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 20:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 20:50	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 20:50	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 20:50	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 20:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 20:50	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 20:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 20:50	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 20:50	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 20:50	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			06/30/16 20:50	1
Vinyl chloride	**2.6**		1.0	0.29	ug/L			06/30/16 20:50	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 20:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 20:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 20:50	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			06/30/16 20:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 20:50	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 20:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 20:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			06/30/16 20:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/30/16 20:50	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 20:50	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 20:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 20:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 20:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 20:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 20:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 20:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 20:50	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 20:50	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 20:50	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 20:50	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		78 - 125		06/30/16 20:50	1
4-Bromofluorobenzene (Surr)	84		61 - 120		06/30/16 20:50	1
Toluene-d8 (Surr)	89		80 - 120		06/30/16 20:50	1
Dibromofluoromethane (Surr)	96		79 - 120		06/30/16 20:50	1

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

Client Sample ID: GW-17303-062216-JY-012
Date Collected: 06/22/16 12:15
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1300	U	1300	120	ug/L			06/30/16 21:14	125
Benzene	130	U	130	44	ug/L			06/30/16 21:14	125
Bromodichloromethane	130	U	130	36	ug/L			06/30/16 21:14	125
Bromoform	130	U	130	70	ug/L			06/30/16 21:14	125
Bromomethane	130	U	130	55	ug/L			06/30/16 21:14	125
2-Butanone (MEK)	1300	U	1300	66	ug/L			06/30/16 21:14	125
Carbon disulfide	630	U	630	48	ug/L			06/30/16 21:14	125
Carbon tetrachloride	130	U	130	54	ug/L			06/30/16 21:14	125
Chlorobenzene	130	U	130	31	ug/L			06/30/16 21:14	125
Chloroethane	130	U	130	40	ug/L			06/30/16 21:14	125
Chloroform	130	U	130	31	ug/L			06/30/16 21:14	125
Chloromethane	130	U	130	55	ug/L			06/30/16 21:14	125
1,1-Dichloroethane	130	U	130	38	ug/L			06/30/16 21:14	125
1,2-Dichloroethane	130	U	130	29	ug/L			06/30/16 21:14	125
1,1-Dichloroethene	130	U	130	56	ug/L			06/30/16 21:14	125
1,2-Dichloropropane	130	U	130	31	ug/L			06/30/16 21:14	125
cis-1,3-Dichloropropene	130	U	130	58	ug/L			06/30/16 21:14	125
trans-1,3-Dichloropropene	130	U	130	70	ug/L			06/30/16 21:14	125
Ethylbenzene	130	U	130	31	ug/L			06/30/16 21:14	125
2-Hexanone	1300	U	1300	60	ug/L			06/30/16 21:14	125
Methylene Chloride	630	U	630	41	ug/L			06/30/16 21:14	125
4-Methyl-2-pentanone (MIBK)	1300	U	1300	120	ug/L			06/30/16 21:14	125
Styrene	130	U	130	56	ug/L			06/30/16 21:14	125
1,1,2,2-Tetrachloroethane	130	U	130	28	ug/L			06/30/16 21:14	125
Tetrachloroethene	130	U	130	39	ug/L			06/30/16 21:14	125
Toluene	130	U	130	29	ug/L			06/30/16 21:14	125
Trichloroethene	130	U	130	28	ug/L			06/30/16 21:14	125
Vinyl chloride	**7600**		130	36	ug/L			06/30/16 21:14	125
Xylenes, Total	250	U	250	65	ug/L			06/30/16 21:14	125
1,1,1-Trichloroethane	130	U	130	55	ug/L			06/30/16 21:14	125
1,1,2-Trichloroethane	130	U	130	30	ug/L			06/30/16 21:14	125
Cyclohexane	130	U	130	56	ug/L			06/30/16 21:14	125
1,2-Dibromo-3-Chloropropane	130	U	130	100	ug/L			06/30/16 21:14	125
1,2-Dibromoethane	130	U	130	40	ug/L			06/30/16 21:14	125
Dichlorodifluoromethane	130	U	130	40	ug/L			06/30/16 21:14	125
cis-1,2-Dichloroethene	**820**		130	33	ug/L			06/30/16 21:14	125
trans-1,2-Dichloroethene	130	U	130	38	ug/L			06/30/16 21:14	125
Isopropylbenzene	130	U	130	44	ug/L			06/30/16 21:14	125
Methyl acetate	1300	U	1300	280	ug/L			06/30/16 21:14	125
Methyl tert-butyl ether	130	U	130	25	ug/L			06/30/16 21:14	125
1,1,2-Trichloro-1,2,2-trifluoroethane	130	U	130	56	ug/L			06/30/16 21:14	125
1,2,4-Trichlorobenzene	130	U	130	40	ug/L			06/30/16 21:14	125
1,2-Dichlorobenzene	130	U	130	31	ug/L			06/30/16 21:14	125
1,3-Dichlorobenzene	130	U	130	24	ug/L			06/30/16 21:14	125
1,4-Dichlorobenzene	130	U	130	34	ug/L			06/30/16 21:14	125
Trichlorofluoromethane	130	U	130	61	ug/L			06/30/16 21:14	125
Dibromochloromethane	130	U	130	54	ug/L			06/30/16 21:14	125
Methylcyclohexane	130	U	130	54	ug/L			06/30/16 21:14	125

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		78 - 125		06/30/16 21:14	125
4-Bromofluorobenzene (Surr)	78		61 - 120		06/30/16 21:14	125
Toluene-d8 (Surr)	84		80 - 120		06/30/16 21:14	125
Dibromofluoromethane (Surr)	92		79 - 120		06/30/16 21:14	125

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

Client Sample ID: GW-17303-062216-JY-013
Date Collected: 06/22/16 14:15
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	100	U	100	9.4	ug/L			06/30/16 17:11	10
Benzene	10	U	10	3.5	ug/L			06/30/16 17:11	10
Bromodichloromethane	10	U	10	2.9	ug/L			06/30/16 17:11	10
Bromoform	10	U	10	5.6	ug/L			06/30/16 17:11	10
Bromomethane	10	U	10	4.4	ug/L			06/30/16 17:11	10
2-Butanone (MEK)	100	U	100	5.3	ug/L			06/30/16 17:11	10
Carbon disulfide	50	U	50	3.8	ug/L			06/30/16 17:11	10
Carbon tetrachloride	10	U	10	4.3	ug/L			06/30/16 17:11	10
Chlorobenzene	10	U	10	2.5	ug/L			06/30/16 17:11	10
Chloroethane	10	U	10	3.2	ug/L			06/30/16 17:11	10
Chloroform	10	U	10	2.5	ug/L			06/30/16 17:11	10
Chloromethane	10	U	10	4.4	ug/L			06/30/16 17:11	10
1,1-Dichloroethane	10	U	10	3.0	ug/L			06/30/16 17:11	10
1,2-Dichloroethane	10	U	10	2.3	ug/L			06/30/16 17:11	10
1,1-Dichloroethene	10	U	10	4.5	ug/L			06/30/16 17:11	10
1,2-Dichloropropane	10	U	10	2.5	ug/L			06/30/16 17:11	10
cis-1,3-Dichloropropene	10	U	10	4.6	ug/L			06/30/16 17:11	10
trans-1,3-Dichloropropene	10	U	10	5.6	ug/L			06/30/16 17:11	10
Ethylbenzene	10	U	10	2.5	ug/L			06/30/16 17:11	10
2-Hexanone	100	U	100	4.8	ug/L			06/30/16 17:11	10
Methylene Chloride	50	U	50	3.3	ug/L			06/30/16 17:11	10
4-Methyl-2-pentanone (MIBK)	100	U	100	9.9	ug/L			06/30/16 17:11	10
Styrene	10	U	10	4.5	ug/L			06/30/16 17:11	10
1,1,2,2-Tetrachloroethane	10	U	10	2.2	ug/L			06/30/16 17:11	10
Tetrachloroethene	10	U	10	3.1	ug/L			06/30/16 17:11	10
Toluene	10	U	10	2.3	ug/L			06/30/16 17:11	10
Trichloroethene	**5.6**	**J**	10	2.2	ug/L			06/30/16 17:11	10
Vinyl chloride	**82**		10	2.9	ug/L			06/30/16 17:11	10
Xylenes, Total	20	U	20	5.2	ug/L			06/30/16 17:11	10
1,1,1-Trichloroethane	10	U	10	4.4	ug/L			06/30/16 17:11	10
1,1,2-Trichloroethane	10	U	10	2.4	ug/L			06/30/16 17:11	10
Cyclohexane	10	U	10	4.5	ug/L			06/30/16 17:11	10
1,2-Dibromo-3-Chloropropane	10	U	10	8.2	ug/L			06/30/16 17:11	10
1,2-Dibromoethane	10	U	10	3.2	ug/L			06/30/16 17:11	10
Dichlorodifluoromethane	10	U	10	3.2	ug/L			06/30/16 17:11	10
cis-1,2-Dichloroethene	**200**		10	2.6	ug/L			06/30/16 17:11	10
trans-1,2-Dichloroethene	**27**		10	3.0	ug/L			06/30/16 17:11	10
Isopropylbenzene	10	U	10	3.5	ug/L			06/30/16 17:11	10
Methyl acetate	100	U	100	23	ug/L			06/30/16 17:11	10
Methyl tert-butyl ether	10	U	10	2.0	ug/L			06/30/16 17:11	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	4.5	ug/L			06/30/16 17:11	10
1,2,4-Trichlorobenzene	10	U	10	3.2	ug/L			06/30/16 17:11	10
1,2-Dichlorobenzene	10	U	10	2.5	ug/L			06/30/16 17:11	10
1,3-Dichlorobenzene	10	U	10	1.9	ug/L			06/30/16 17:11	10
1,4-Dichlorobenzene	10	U	10	2.7	ug/L			06/30/16 17:11	10
Trichlorofluoromethane	10	U	10	4.9	ug/L			06/30/16 17:11	10
Dibromochloromethane	10	U	10	4.3	ug/L			06/30/16 17:11	10
Methylcyclohexane	10	U	10	4.3	ug/L			06/30/16 17:11	10

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		78 - 125		06/30/16 17:11	10
4-Bromofluorobenzene (Surr)	84		61 - 120		06/30/16 17:11	10
Toluene-d8 (Surr)	86		80 - 120		06/30/16 17:11	10
Dibromofluoromethane (Surr)	89		79 - 120		06/30/16 17:11	10

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

Client Sample ID: GW-17303-062216-JY-014
Date Collected: 06/22/16 13:20
Date Received: 06/23/16 09:00

Lab Sample ID: 240-66346-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**11**		10	0.94	ug/L			06/30/16 21:39	1
Benzene	1.0	U	1.0	0.35	ug/L			06/30/16 21:39	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 21:39	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 21:39	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 21:39	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			06/30/16 21:39	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 21:39	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 21:39	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 21:39	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 21:39	1
Chloroform	1.0	U	1.0	0.25	ug/L			06/30/16 21:39	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 21:39	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 21:39	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 21:39	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 21:39	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 21:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 21:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 21:39	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 21:39	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 21:39	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 21:39	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 21:39	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 21:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 21:39	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 21:39	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 21:39	1
Trichloroethene	**0.81**	**J**	1.0	0.22	ug/L			06/30/16 21:39	1
Vinyl chloride	**5.0**		1.0	0.29	ug/L			06/30/16 21:39	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 21:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 21:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 21:39	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			06/30/16 21:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 21:39	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 21:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 21:39	1
cis-1,2-Dichloroethene	**11**		1.0	0.26	ug/L			06/30/16 21:39	1
trans-1,2-Dichloroethene	**0.64**	**J**	1.0	0.30	ug/L			06/30/16 21:39	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 21:39	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 21:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 21:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 21:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 21:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 21:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 21:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 21:39	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 21:39	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 21:39	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 21:39	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		78 - 125		06/30/16 21:39	1
4-Bromofluorobenzene (Surr)	81		61 - 120		06/30/16 21:39	1
Toluene-d8 (Surr)	87		80 - 120		06/30/16 21:39	1
Dibromofluoromethane (Surr)	88		79 - 120		06/30/16 21:39	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66346-1

GC/MS VOA

Analysis Batch: 236617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-66346-1	TB-17303-062116	Total/NA	Water	8260B	
240-66346-2	GW-17303-062116-JY-004	Total/NA	Water	8260B	
240-66346-3	SW-17303-062116-JY-005	Total/NA	Water	8260B	
240-66346-4	GW-17303-062116-JY-006	Total/NA	Water	8260B	
240-66346-5	GW-17303-062216-JY-007	Total/NA	Water	8260B	
240-66346-6	GW-17303-062216-JY-008	Total/NA	Water	8260B	
240-66346-7	GW-17303-062216-JY-009	Total/NA	Water	8260B	
240-66346-8	GW-17303-062216-JY-010	Total/NA	Water	8260B	
240-66346-9	GW-17303-062216-JY-011	Total/NA	Water	8260B	
240-66346-10	GW-17303-062216-JY-012	Total/NA	Water	8260B	
240-66346-11	GW-17303-062216-JY-013	Total/NA	Water	8260B	
240-66346-11 MS	GW-17303-062216-JY-013	Total/NA	Water	8260B	
240-66346-11 MSD	GW-17303-062216-JY-013	Total/NA	Water	8260B	
240-66346-12	GW-17303-062216-JY-014	Total/NA	Water	8260B	
LCS 240-236617/6	Lab Control Sample	Total/NA	Water	8260B	
MB 240-236617/7	Method Blank	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-236617/7
Matrix: Water
Analysis Batch: 236617

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	0.94	ug/L			06/30/16 13:07	1
Benzene	1.0	U	1.0	0.35	ug/L			06/30/16 13:07	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			06/30/16 13:07	1
Bromoform	1.0	U	1.0	0.56	ug/L			06/30/16 13:07	1
Bromomethane	1.0	U	1.0	0.44	ug/L			06/30/16 13:07	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			06/30/16 13:07	1
Carbon disulfide	5.0	U	5.0	0.38	ug/L			06/30/16 13:07	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			06/30/16 13:07	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 13:07	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/16 13:07	1
Chloroform	1.0	U	1.0	0.25	ug/L			06/30/16 13:07	1
Chloromethane	1.0	U	1.0	0.44	ug/L			06/30/16 13:07	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/30/16 13:07	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			06/30/16 13:07	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			06/30/16 13:07	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			06/30/16 13:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/30/16 13:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			06/30/16 13:07	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			06/30/16 13:07	1
2-Hexanone	10	U	10	0.48	ug/L			06/30/16 13:07	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			06/30/16 13:07	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			06/30/16 13:07	1
Styrene	1.0	U	1.0	0.45	ug/L			06/30/16 13:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			06/30/16 13:07	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			06/30/16 13:07	1
Toluene	1.0	U	1.0	0.23	ug/L			06/30/16 13:07	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			06/30/16 13:07	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			06/30/16 13:07	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			06/30/16 13:07	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			06/30/16 13:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/30/16 13:07	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			06/30/16 13:07	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.82	ug/L			06/30/16 13:07	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			06/30/16 13:07	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			06/30/16 13:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			06/30/16 13:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/30/16 13:07	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			06/30/16 13:07	1
Methyl acetate	10	U	10	2.3	ug/L			06/30/16 13:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			06/30/16 13:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			06/30/16 13:07	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			06/30/16 13:07	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			06/30/16 13:07	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			06/30/16 13:07	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			06/30/16 13:07	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			06/30/16 13:07	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			06/30/16 13:07	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			06/30/16 13:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*88*		*78 - 125*		*06/30/16 13:07*	*1*
4-Bromofluorobenzene (Surr)	*87*		*61 - 120*		*06/30/16 13:07*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/30/16 13:07*	*1*
Dibromofluoromethane (Surr)	*99*		*79 - 120*		*06/30/16 13:07*	*1*

Lab Sample ID: LCS 240-236617/6
Matrix: Water
Analysis Batch: 236617

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	30.1		ug/L		75	34 - 148
Benzene	20.0	21.6		ug/L		108	80 - 120
Bromodichloromethane	20.0	21.0		ug/L		105	80 - 120
Bromoform	20.0	24.3		ug/L		121	56 - 122
Bromomethane	20.0	20.7		ug/L		103	38 - 132
2-Butanone (MEK)	40.0	35.8		ug/L		90	56 - 138
Carbon disulfide	20.0	24.7		ug/L		124	65 - 144
Carbon tetrachloride	20.0	21.8		ug/L		109	77 - 131
Chlorobenzene	20.0	19.6		ug/L		98	80 - 120
Chloroethane	20.0	20.1		ug/L		101	36 - 126
Chloroform	20.0	21.2		ug/L		106	80 - 120
Chloromethane	20.0	18.4		ug/L		92	48 - 133
1,1-Dichloroethane	20.0	20.7		ug/L		104	79 - 125
1,2-Dichloroethane	20.0	19.6		ug/L		98	80 - 120
1,1-Dichloroethene	20.0	21.7		ug/L		108	76 - 124
1,2-Dichloropropane	20.0	20.0		ug/L		100	78 - 124
cis-1,3-Dichloropropene	20.0	21.3		ug/L		107	74 - 126
trans-1,3-Dichloropropene	20.0	15.7		ug/L		78	75 - 131
Ethylbenzene	20.0	18.7		ug/L		94	80 - 120
2-Hexanone	40.0	34.2		ug/L		86	55 - 141
Methylene Chloride	20.0	20.4		ug/L		102	77 - 129
4-Methyl-2-pentanone (MIBK)	40.0	37.9		ug/L		95	64 - 135
Styrene	20.0	19.8		ug/L		99	76 - 122
1,1,2,2-Tetrachloroethane	20.0	15.7		ug/L		78	71 - 123
Tetrachloroethene	20.0	22.3		ug/L		112	78 - 121
Toluene	20.0	20.7		ug/L		103	80 - 120
Trichloroethene	20.0	22.9		ug/L		115	80 - 121
Vinyl chloride	20.0	19.1		ug/L		96	52 - 121
Xylenes, Total	40.0	39.7		ug/L		99	80 - 120
1,1,1-Trichloroethane	20.0	24.5		ug/L		123	77 - 123
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	80 - 120
Cyclohexane	20.0	19.3		ug/L		97	60 - 140
1,2-Dibromo-3-Chloropropane	20.0	17.3		ug/L		87	50 - 132
1,2-Dibromoethane	20.0	19.6		ug/L		98	80 - 120
Dichlorodifluoromethane	20.0	13.5		ug/L		68	23 - 136
cis-1,2-Dichloroethene	20.0	20.6		ug/L		103	79 - 120
trans-1,2-Dichloroethene	20.0	21.2		ug/L		106	80 - 124
Isopropylbenzene	20.0	19.4		ug/L		97	77 - 120
Methyl acetate	100	94.1		ug/L		94	67 - 131
Methyl tert-butyl ether	20.0	19.3		ug/L		97	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.1		ug/L		111	67 - 138
1,2,4-Trichlorobenzene	20.0	19.0		ug/L		95	61 - 120
1,2-Dichlorobenzene	20.0	19.3		ug/L		97	79 - 120

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

Lab Sample ID: LCS 240-236617/6
Matrix: Water
Analysis Batch: 236617

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	20.0	19.2		ug/L		96	79 - 120
1,4-Dichlorobenzene	20.0	18.9		ug/L		95	79 - 120
Trichlorofluoromethane	20.0	19.7		ug/L		99	61 - 133
Dibromochloromethane	20.0	20.5		ug/L		102	74 - 120
Methylcyclohexane	20.0	18.2		ug/L		91	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*78 - 125*
4-Bromofluorobenzene (Surr)	*80*		*61 - 120*
Toluene-d8 (Surr)	*89*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*79 - 120*

Lab Sample ID: 240-66346-11 MS
Matrix: Water
Analysis Batch: 236617

Client Sample ID: GW-17303-062216-JY-013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	U	400	264		ug/L		66	32 - 126
Benzene	10	U	200	180		ug/L		90	73 - 121
Bromodichloromethane	10	U	200	154		ug/L		77	72 - 120
Bromoform	10	U	200	175		ug/L		87	45 - 121
Bromomethane	10	U	200	183		ug/L		92	26 - 136
2-Butanone (MEK)	100	U	400	318		ug/L		80	49 - 132
Carbon disulfide	50	U	200	210		ug/L		105	54 - 144
Carbon tetrachloride	10	U	200	150		ug/L		75	65 - 129
Chlorobenzene	10	U	200	180		ug/L		90	72 - 120
Chloroethane	10	U	200	193		ug/L		97	27 - 131
Chloroform	10	U	200	187		ug/L		93	73 - 121
Chloromethane	10	U	200	173		ug/L		87	39 - 134
1,1-Dichloroethane	10	U	200	186		ug/L		93	73 - 124
1,2-Dichloroethane	10	U	200	175		ug/L		88	74 - 125
1,1-Dichloroethene	10	U	200	197		ug/L		99	67 - 124
1,2-Dichloropropane	10	U	200	172		ug/L		86	73 - 122
cis-1,3-Dichloropropene	10	U	200	147		ug/L		73	60 - 120
trans-1,3-Dichloropropene	10	U	200	122		ug/L		61	58 - 132
Ethylbenzene	10	U	200	170		ug/L		85	68 - 121
2-Hexanone	100	U	400	306		ug/L		77	49 - 142
Methylene Chloride	50	U	200	190		ug/L		95	70 - 124
4-Methyl-2-pentanone (MIBK)	100	U	400	330		ug/L		83	58 - 136
Styrene	10	U	200	181		ug/L		91	64 - 126
1,1,2,2-Tetrachloroethane	10	U	200	146		ug/L		73	61 - 130
Tetrachloroethene	10	U	200	195		ug/L		98	59 - 125
Toluene	10	U	200	193		ug/L		96	72 - 122
Trichloroethene	5.6	J	200	215		ug/L		105	61 - 129
Vinyl chloride	82		200	254		ug/L		86	44 - 122
Xylenes, Total	20	U	400	351		ug/L		88	67 - 122
1,1,1-Trichloroethane	10	U	200	186		ug/L		93	69 - 122
1,1,2-Trichloroethane	10	U	200	176		ug/L		88	72 - 125

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

Lab Sample ID: 240-66346-11 MS
Matrix: Water
Analysis Batch: 236617

Client Sample ID: GW-17303-062216-JY-013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	10	U	200	187		ug/L		94	41 - 137
1,2-Dibromo-3-Chloropropane	10	U	200	110		ug/L		55	42 - 130
1,2-Dibromoethane	10	U	200	158		ug/L		79	69 - 125
Dichlorodifluoromethane	10	U	200	123		ug/L		62	14 - 137
cis-1,2-Dichloroethene	200		200	370		ug/L		85	66 - 124
trans-1,2-Dichloroethene	27		200	217		ug/L		95	72 - 125
Isopropylbenzene	10	U	200	177		ug/L		88	61 - 122
Methyl acetate	100	U	1000	829		ug/L		83	64 - 124
Methyl tert-butyl ether	10	U	200	169		ug/L		84	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	200	215		ug/L		108	44 - 140
1,2,4-Trichlorobenzene	10	U	200	164		ug/L		82	48 - 120
1,2-Dichlorobenzene	10	U	200	174		ug/L		87	67 - 118
1,3-Dichlorobenzene	10	U	200	170		ug/L		85	65 - 120
1,4-Dichlorobenzene	10	U	200	180		ug/L		90	66 - 120
Trichlorofluoromethane	10	U	200	175		ug/L		87	49 - 133
Dibromochloromethane	10	U	200	152		ug/L		76	62 - 122
Methylcyclohexane	10	U	200	178		ug/L		89	39 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*78 - 125*
4-Bromofluorobenzene (Surr)	*80*		*61 - 120*
Toluene-d8 (Surr)	*87*		*80 - 120*
Dibromofluoromethane (Surr)	*92*		*79 - 120*

Lab Sample ID: 240-66346-11 MSD
Matrix: Water
Analysis Batch: 236617

Client Sample ID: GW-17303-062216-JY-013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	U	400	263		ug/L		66	32 - 126	0	28
Benzene	10	U	200	188		ug/L		94	73 - 121	4	13
Bromodichloromethane	10	U	200	168		ug/L		84	72 - 120	9	19
Bromoform	10	U	200	159		ug/L		80	45 - 121	9	19
Bromomethane	10	U	200	175		ug/L		88	26 - 136	5	35
2-Butanone (MEK)	100	U	400	347		ug/L		87	49 - 132	9	19
Carbon disulfide	50	U	200	216		ug/L		108	54 - 144	3	34
Carbon tetrachloride	10	U	200	159		ug/L		79	65 - 129	6	20
Chlorobenzene	10	U	200	169		ug/L		85	72 - 120	6	15
Chloroethane	10	U	200	186		ug/L		93	27 - 131	4	35
Chloroform	10	U	200	184		ug/L		92	73 - 121	2	17
Chloromethane	10	U	200	166		ug/L		83	39 - 134	5	20
1,1-Dichloroethane	10	U	200	187		ug/L		93	73 - 124	0	14
1,2-Dichloroethane	10	U	200	176		ug/L		88	74 - 125	1	24
1,1-Dichloroethene	10	U	200	197		ug/L		99	67 - 124	0	24
1,2-Dichloropropane	10	U	200	181		ug/L		91	73 - 122	5	15
cis-1,3-Dichloropropene	10	U	200	160		ug/L		80	60 - 120	8	21
trans-1,3-Dichloropropene	10	U	200	116		ug/L		58	58 - 132	5	22

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

Lab Sample ID: 240-66346-11 MSD
Matrix: Water
Analysis Batch: 236617

Client Sample ID: GW-17303-062216-JY-013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	10	U	200	157		ug/L		78	68 - 121	8	16
2-Hexanone	100	U	400	309		ug/L		77	49 - 142	1	27
Methylene Chloride	50	U	200	187		ug/L		93	70 - 124	2	14
4-Methyl-2-pentanone (MIBK)	100	U	400	338		ug/L		84	58 - 136	2	32
Styrene	10	U	200	167		ug/L		83	64 - 126	8	15
1,1,2,2-Tetrachloroethane	10	U	200	149		ug/L		74	61 - 130	2	18
Tetrachloroethene	10	U	200	180		ug/L		90	59 - 125	8	20
Toluene	10	U	200	178		ug/L		89	72 - 122	8	15
Trichloroethene	5.6	J	200	205		ug/L		100	61 - 129	5	14
Vinyl chloride	82		200	266		ug/L		92	44 - 122	5	35
Xylenes, Total	20	U	400	322		ug/L		81	67 - 122	9	14
1,1,1-Trichloroethane	10	U	200	207		ug/L		103	69 - 122	10	14
1,1,2-Trichloroethane	10	U	200	170		ug/L		85	72 - 125	4	19
Cyclohexane	10	U	200	184		ug/L		92	41 - 137	2	35
1,2-Dibromo-3-Chloropropane	10	U	200	124		ug/L		62	42 - 130	12	24
1,2-Dibromoethane	10	U	200	158		ug/L		79	69 - 125	0	24
Dichlorodifluoromethane	10	U	200	127		ug/L		64	14 - 137	3	34
cis-1,2-Dichloroethene	200		200	364		ug/L		81	66 - 124	2	22
trans-1,2-Dichloroethene	27		200	219		ug/L		96	72 - 125	1	25
Isopropylbenzene	10	U	200	161		ug/L		81	61 - 122	9	20
Methyl acetate	100	U	1000	840		ug/L		84	64 - 124	1	12
Methyl tert-butyl ether	10	U	200	172		ug/L		86	61 - 121	2	12
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	200	210		ug/L		105	44 - 140	2	35
1,2,4-Trichlorobenzene	10	U	200	180		ug/L		90	48 - 120	9	28
1,2-Dichlorobenzene	10	U	200	166		ug/L		83	67 - 118	4	15
1,3-Dichlorobenzene	10	U	200	165		ug/L		82	65 - 120	3	15
1,4-Dichlorobenzene	10	U	200	171		ug/L		86	66 - 120	5	16
Trichlorofluoromethane	10	U	200	173		ug/L		86	49 - 133	1	25
Dibromochloromethane	10	U	200	146		ug/L		73	62 - 122	4	19
Methylcyclohexane	10	U	200	186		ug/L		93	39 - 135	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*78 - 125*
4-Bromofluorobenzene (Surr)	*81*		*61 - 120*
Toluene-d8 (Surr)	*88*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*79 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66346-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-66346-1	TB-17303-062116	88	88	93	95
240-66346-2	GW-17303-062116-JY-004	84	82	88	93
240-66346-3	SW-17303-062116-JY-005	91	88	91	100
240-66346-4	GW-17303-062116-JY-006	92	86	93	97
240-66346-5	GW-17303-062216-JY-007	90	86	93	97
240-66346-6	GW-17303-062216-JY-008	88	73	83	91
240-66346-7	GW-17303-062216-JY-009	90	80	86	92
240-66346-8	GW-17303-062216-JY-010	99	78	87	108
240-66346-9	GW-17303-062216-JY-011	86	84	89	96
240-66346-10	GW-17303-062216-JY-012	84	78	84	92
240-66346-11	GW-17303-062216-JY-013	85	84	86	89
240-66346-11 MS	GW-17303-062216-JY-013	87	80	87	92
240-66346-11 MSD	GW-17303-062216-JY-013	89	81	88	102
240-66346-12	GW-17303-062216-JY-014	88	81	87	88
LCS 240-236617/6	Lab Control Sample	90	80	89	107
MB 240-236617/7	Method Blank	88	87	90	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66346-1

Client Sample ID: TB-17303-062116
Lab Sample ID: 240-66346-1
Date Collected: 06/21/16 00:00
Matrix: Water
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 17:34	TJL1	TAL CAN

Client Sample ID: GW-17303-062116-JY-004
Lab Sample ID: 240-66346-2
Date Collected: 06/21/16 12:45
Matrix: Water
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 17:59	TJL1	TAL CAN

Client Sample ID: SW-17303-062116-JY-005
Lab Sample ID: 240-66346-3
Date Collected: 06/21/16 13:15
Matrix: Water
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 18:24	TJL1	TAL CAN

Client Sample ID: GW-17303-062116-JY-006
Lab Sample ID: 240-66346-4
Date Collected: 06/21/16 14:00
Matrix: Water
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 18:48	TJL1	TAL CAN

Client Sample ID: GW-17303-062216-JY-007
Lab Sample ID: 240-66346-5
Date Collected: 06/22/16 09:50
Matrix: Water
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 19:13	TJL1	TAL CAN

Client Sample ID: GW-17303-062216-JY-008
Lab Sample ID: 240-66346-6
Date Collected: 06/22/16 09:55
Matrix: Water
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 19:38	TJL1	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66346-1

Client Sample ID: GW-17303-062216-JY-009 — Lab Sample ID: 240-66346-7

Date Collected: 06/22/16 10:15 — **Matrix: Water**
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 20:02	TJL1	TAL CAN

Client Sample ID: GW-17303-062216-JY-010 — Lab Sample ID: 240-66346-8

Date Collected: 06/22/16 11:00 — **Matrix: Water**
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	236617	06/30/16 20:26	TJL1	TAL CAN

Client Sample ID: GW-17303-062216-JY-011 — Lab Sample ID: 240-66346-9

Date Collected: 06/22/16 11:45 — **Matrix: Water**
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 20:50	TJL1	TAL CAN

Client Sample ID: GW-17303-062216-JY-012 — Lab Sample ID: 240-66346-10

Date Collected: 06/22/16 12:15 — **Matrix: Water**
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		125	236617	06/30/16 21:14	TJL1	TAL CAN

Client Sample ID: GW-17303-062216-JY-013 — Lab Sample ID: 240-66346-11

Date Collected: 06/22/16 14:15 — **Matrix: Water**
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	236617	06/30/16 17:11	TJL1	TAL CAN

Client Sample ID: GW-17303-062216-JY-014 — Lab Sample ID: 240-66346-12

Date Collected: 06/22/16 13:20 — **Matrix: Water**
Date Received: 06/23/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	236617	06/30/16 21:39	TJL1	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-66346-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17
Illinois	NELAP	5	200004	07-31-16 *
Kansas	NELAP	7	E-10336	07-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16 *
New Jersey	NELAP	2	OH001	06-30-17
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16 *
Texas	NELAP	6	T104704517-15-5	08-31-16 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16 *
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16 *

* Certification renewal pending - certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1.1/C2.1

Chain of Custody Record

149101

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: Amandeep	Date: 6-22-16	COC No: 24006020
Company Name: GHD	Tel/Fax:	Lab Contact: Denise H	Carrier:	1 of 2 COCs
Address: 14496 N. Sheldon Rd Ste 200	Analysis Turnaround Time			Sampler: J. Tom
City/State/Zip: Plymouth, Mich 48170	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 734 453 5123	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: CVO (Rail)	☐ 1 week			
Site: 17303-035	☐ 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)	TCL VOC	Sample Specific Notes:
TB-17303-062116	6/21/16	—	G	WQ	1			X	
GW-17303-062116-JY-004		1245	G	WG	3			X	
SW- -005		1315	G		3			X	
GW- -006		1400	G		3			X	
GW-17303-062216-JY-007	6-22-16	0950	G		3			X	
-008		0955	G		3			X	
-009		1015	G		3			X	
-010		1100	G		3			X	
-011		1145	G		3			X	
-012		1215	G		3			X	
-013		1415	G		9	MY		X	
-014		1320	G					X	

240-66346 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.: _____

	Company	Date/Time		Company	Date/Time
Relinquished by:	GHD	6-22-16 1630	Received by:	TA	6/22/16 1628
Relinquished by:	TA	6/22/16 1637	Received by:	TA	6-23-16 900
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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7/7/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 603416

Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 6-23-16 Opened on 6-23-16

FedEx: 1st (Grd) Exp UPS FAS Stetson 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 +1.3 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C~~

IR GUN #36 (CF +1.0°C) Observed Cooler Temp. 1.1 °C Corrected Cooler Temp. 2.1 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No

-Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA

-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)

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 11-15 have been checked at the originating laboratory.

11. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC574756**

12. Were VOAs on the COC? (Yes) No

13. Were air bubbles >6 mm in any VOA vials? Yes (No) NA

14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ (Yes) No

15. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. 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)

16. 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: 240-69515-1
Client Project/Site: 17303-035, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
9/26/2016 12:40:32 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: 240-69515-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-69515-1

Comments
No additional comments.

Receipt
The sample was received on 9/15/2016 9:15 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º 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) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: WW-17303-091416-DC-001 (240-69515-1).2688697, 2103098, 2586316.

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 240-247212.

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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-69515-1	WW-17303-091416-DC-001	Water	09/14/16 07:40	09/15/16 09:15

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

Client Sample ID: WW-17303-091416-DC-001 — Lab Sample ID: 240-69515-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.040		0.025	0.011	mg/L	1		8260B	TCLP
Barium	0.055	J	0.50	0.0024	mg/L	1		6010B	TCLP
Chromium	0.0016	J B	0.050	0.00055	mg/L	1		6010B	TCLP
Lead	0.0020	J B	0.050	0.0019	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	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: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

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

Client Sample ID: WW-17303-091416-DC-001
Date Collected: 09/14/16 07:40
Date Received: 09/15/16 09:15

Lab Sample ID: 240-69515-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			09/21/16 21:56	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			09/21/16 21:56	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			09/21/16 21:56	1
Benzene	0.025	U	0.025	0.0065	mg/L			09/21/16 21:56	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			09/21/16 21:56	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			09/21/16 21:56	1
Chloroform	0.025	U	0.025	0.0080	mg/L			09/21/16 21:56	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			09/21/16 21:56	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			09/21/16 21:56	1
Vinyl chloride	**0.040**		0.025	0.011	mg/L			09/21/16 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*73 - 120*		*09/21/16 21:56*	*1*
4-Bromofluorobenzene (Surr)	*85*		*69 - 120*		*09/21/16 21:56*	*1*
Toluene-d8 (Surr)	*88*		*76 - 120*		*09/21/16 21:56*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/21/16 21:56*	*1*

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

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

Client Sample ID: WW-17303-091416-DC-001
Date Collected: 09/14/16 07:40
Date Received: 09/15/16 09:15

Lab Sample ID: 240-69515-1
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		09/21/16 13:16	09/23/16 12:11	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		09/21/16 13:16	09/23/16 12:11	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		09/21/16 13:16	09/23/16 12:11	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		09/21/16 13:16	09/23/16 12:11	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		09/21/16 13:16	09/23/16 12:11	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		09/21/16 13:16	09/23/16 12:11	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		09/21/16 13:16	09/23/16 12:11	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		09/21/16 13:16	09/23/16 12:11	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		09/21/16 13:16	09/23/16 12:11	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		09/21/16 13:16	09/23/16 12:11	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		09/21/16 13:16	09/23/16 12:11	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		09/21/16 13:16	09/23/16 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*42 - 120*	*09/21/16 13:16*	*09/23/16 12:11*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 120*	*09/21/16 13:16*	*09/23/16 12:11*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*35 - 125*	*09/21/16 13:16*	*09/23/16 12:11*	*1*
Nitrobenzene-d5 (Surr)	*69*		*36 - 120*	*09/21/16 13:16*	*09/23/16 12:11*	*1*
Phenol-d5 (Surr)	*48*		*10 - 120*	*09/21/16 13:16*	*09/23/16 12:11*	*1*
Terphenyl-d14 (Surr)	*86*		*17 - 120*	*09/21/16 13:16*	*09/23/16 12:11*	*1*

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

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

Client Sample ID: WW-17303-091416-DC-001
Date Collected: 09/14/16 07:40
Date Received: 09/15/16 09:15

Lab Sample ID: 240-69515-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.051	ug/L		09/16/16 14:43	09/19/16 12:01	1
Aroclor-1221	0.10	U	0.10	0.092	ug/L		09/16/16 14:43	09/19/16 12:01	1
Aroclor-1232	0.10	U	0.10	0.071	ug/L		09/16/16 14:43	09/19/16 12:01	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		09/16/16 14:43	09/19/16 12:01	1
Aroclor-1248	0.10	U	0.10	0.051	ug/L		09/16/16 14:43	09/19/16 12:01	1
Aroclor-1254	0.10	U	0.10	0.031	ug/L		09/16/16 14:43	09/19/16 12:01	1
Aroclor-1260	0.10	U	0.10	0.041	ug/L		09/16/16 14:43	09/19/16 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*21 - 120*	*09/16/16 14:43*	*09/19/16 12:01*	*1*
DCB Decachlorobiphenyl	*31*		*10 - 120*	*09/16/16 14:43*	*09/19/16 12:01*	*1*

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

Method: 6010B - Metals (ICP) - TCLP

Client Sample ID: WW-17303-091416-DC-001
Date Collected: 09/14/16 07:40
Date Received: 09/15/16 09:15

Lab Sample ID: 240-69515-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0033	mg/L		09/21/16 14:00	09/22/16 14:19	1
Barium	**0.055**	**J**	0.50	0.0024	mg/L		09/21/16 14:00	09/22/16 14:19	1
Cadmium	0.050	U	0.050	0.00029	mg/L		09/21/16 14:00	09/22/16 14:19	1
Chromium	**0.0016**	**J B**	0.050	0.00055	mg/L		09/21/16 14:00	09/22/16 14:19	1
Lead	**0.0020**	**J B**	0.050	0.0019	mg/L		09/21/16 14:00	09/22/16 14:19	1
Selenium	0.050	U	0.050	0.0051	mg/L		09/21/16 14:00	09/22/16 14:19	1
Silver	0.050	U	0.050	0.00092	mg/L		09/21/16 14:00	09/22/16 14:19	1

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

Method: 7470A - Mercury (CVAA) - TCLP

Client Sample ID: WW-17303-091416-DC-001
Date Collected: 09/14/16 07:40
Date Received: 09/15/16 09:15

Lab Sample ID: 240-69515-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		09/21/16 14:00	09/22/16 10:10	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

GC/MS VOA

Leach Batch: 247698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	1311	
LB 240-247698/1-A MB	Method Blank	TCLP	Water	1311	

Analysis Batch: 247879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	8260B	247698
LB 240-247698/1-A MB	Method Blank	TCLP	Water	8260B	247698
LCS 240-247879/11	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Leach Batch: 247695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	1311	

Prep Batch: 247835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	3510C	247695
MB 240-247835/14-A	Method Blank	Total/NA	Water	3510C	
LCS 240-247835/15-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 248104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	8270C	247835
MB 240-247835/14-A	Method Blank	Total/NA	Water	8270C	247835
LCS 240-247835/15-A	Lab Control Sample	Total/NA	Water	8270C	247835

GC Semi VOA

Prep Batch: 247212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	Total/NA	Water	3520C	
MB 240-247212/21-A	Method Blank	Total/NA	Water	3520C	
LCS 240-247212/22-A	Lab Control Sample	Total/NA	Water	3520C	

Analysis Batch: 247333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	Total/NA	Water	8082	247212
MB 240-247212/21-A	Method Blank	Total/NA	Water	8082	247212
LCS 240-247212/22-A	Lab Control Sample	Total/NA	Water	8082	247212

Metals

Leach Batch: 247695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	1311	
LB 240-247695/1-B	Method Blank	TCLP	Water	1311	
LB 240-247695/1-C	Method Blank	TCLP	Water	1311	

Metals (Continued)

Prep Batch: 247806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	3010A	247695
LB 240-247695/1-B	Method Blank	TCLP	Water	3010A	247695
MB 240-247806/2-A	Method Blank	Total/NA	Water	3010A	
LCS 240-247806/3-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 247808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	7470A	247695
LB 240-247695/1-C	Method Blank	TCLP	Water	7470A	247695
MB 240-247808/2-A	Method Blank	Total/NA	Water	7470A	
LCS 240-247808/3-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 247972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	7470A	247808
LB 240-247695/1-C	Method Blank	TCLP	Water	7470A	247808
MB 240-247808/2-A	Method Blank	Total/NA	Water	7470A	247808
LCS 240-247808/3-A	Lab Control Sample	Total/NA	Water	7470A	247808

Analysis Batch: 247979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69515-1	WW-17303-091416-DC-001	TCLP	Water	6010B	247806
LB 240-247695/1-B	Method Blank	TCLP	Water	6010B	247806
MB 240-247806/2-A	Method Blank	Total/NA	Water	6010B	247806
LCS 240-247806/3-A	Lab Control Sample	Total/NA	Water	6010B	247806

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

Lab Sample ID: LCS 240-247879/11
Matrix: Water
Analysis Batch: 247879

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	0.833		mg/L		83	76 - 143
1,2-Dichloroethane	1.00	0.976		mg/L		98	74 - 128
2-Butanone (MEK)	2.00	1.77		mg/L		88	57 - 122
Benzene	1.00	1.04		mg/L		104	80 - 122
Carbon tetrachloride	1.00	0.929		mg/L		93	60 - 154
Chlorobenzene	1.00	1.02		mg/L		102	80 - 120
Chloroform	1.00	1.04		mg/L		104	80 - 126
Tetrachloroethene	1.00	0.952		mg/L		95	80 - 122
Trichloroethene	1.00	1.00		mg/L		100	80 - 126
Vinyl chloride	1.00	0.906		mg/L		91	65 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*73 - 120*
4-Bromofluorobenzene (Surr)	*94*		*69 - 120*
Toluene-d8 (Surr)	*93*		*76 - 120*
Dibromofluoromethane (Surr)	*83*		*80 - 120*

Lab Sample ID: LB 240-247698/1-A MB
Matrix: Water
Analysis Batch: 247879

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	0.0095	mg/L			09/21/16 19:37	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			09/21/16 19:37	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			09/21/16 19:37	1
Benzene	0.025	U	0.025	0.0065	mg/L			09/21/16 19:37	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			09/21/16 19:37	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			09/21/16 19:37	1
Chloroform	0.025	U	0.025	0.0080	mg/L			09/21/16 19:37	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			09/21/16 19:37	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			09/21/16 19:37	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			09/21/16 19:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*73 - 120*		*09/21/16 19:37*	*1*
4-Bromofluorobenzene (Surr)	*84*		*69 - 120*		*09/21/16 19:37*	*1*
Toluene-d8 (Surr)	*88*		*76 - 120*		*09/21/16 19:37*	*1*
Dibromofluoromethane (Surr)	*88*		*80 - 120*		*09/21/16 19:37*	*1*

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

Lab Sample ID: MB 240-247835/14-A
Matrix: Water
Analysis Batch: 248104

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 247835

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		09/21/16 13:16	09/23/16 08:26	1

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

Lab Sample ID: MB 240-247835/14-A
Matrix: Water
Analysis Batch: 248104

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 247835

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		09/21/16 13:16	09/23/16 08:26	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		09/21/16 13:16	09/23/16 08:26	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		09/21/16 13:16	09/23/16 08:26	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		09/21/16 13:16	09/23/16 08:26	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		09/21/16 13:16	09/23/16 08:26	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		09/21/16 13:16	09/23/16 08:26	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		09/21/16 13:16	09/23/16 08:26	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		09/21/16 13:16	09/23/16 08:26	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		09/21/16 13:16	09/23/16 08:26	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		09/21/16 13:16	09/23/16 08:26	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		09/21/16 13:16	09/23/16 08:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*42 - 120*	*09/21/16 13:16*	*09/23/16 08:26*	*1*
2-Fluorophenol (Surr)	*68*		*10 - 120*	*09/21/16 13:16*	*09/23/16 08:26*	*1*
2,4,6-Tribromophenol (Surr)	*84*		*35 - 125*	*09/21/16 13:16*	*09/23/16 08:26*	*1*
Nitrobenzene-d5 (Surr)	*72*		*36 - 120*	*09/21/16 13:16*	*09/23/16 08:26*	*1*
Phenol-d5 (Surr)	*53*		*10 - 120*	*09/21/16 13:16*	*09/23/16 08:26*	*1*
Terphenyl-d14 (Surr)	*89*		*17 - 120*	*09/21/16 13:16*	*09/23/16 08:26*	*1*

Lab Sample ID: LCS 240-247835/15-A
Matrix: Water
Analysis Batch: 248104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 247835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0561		mg/L		70	48 - 120
2,4,5-Trichlorophenol	0.0800	0.0600		mg/L		75	57 - 120
2,4,6-Trichlorophenol	0.0800	0.0600		mg/L		75	60 - 120
2,4-Dinitrotoluene	0.0800	0.0600		mg/L		75	65 - 120
Hexachlorobenzene	0.0800	0.0555		mg/L		69	47 - 127
Hexachlorobutadiene	0.0800	0.0505		mg/L		63	50 - 120
Hexachloroethane	0.0800	0.0510		mg/L		64	50 - 120
3 & 4 Methylphenol	0.0800	0.0582		mg/L		73	46 - 120
2-Methylphenol	0.0800	0.0606		mg/L		76	52 - 120
Nitrobenzene	0.0800	0.0601		mg/L		75	58 - 120
Pentachlorophenol	0.160	0.102		mg/L		64	35 - 121
Pyridine	0.0800	0.0508		mg/L		64	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*75*		*42 - 120*
2-Fluorophenol (Surr)	*66*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*78*		*35 - 125*
Nitrobenzene-d5 (Surr)	*74*		*36 - 120*
Phenol-d5 (Surr)	*53*		*10 - 120*
Terphenyl-d14 (Surr)	*88*		*17 - 120*

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

Lab Sample ID: MB 240-247212/21-A
Matrix: Water
Analysis Batch: 247333

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 247212

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.050	ug/L		09/16/16 14:43	09/19/16 07:44	1
Aroclor-1221	0.10	U	0.10	0.090	ug/L		09/16/16 14:43	09/19/16 07:44	1
Aroclor-1232	0.10	U	0.10	0.070	ug/L		09/16/16 14:43	09/19/16 07:44	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		09/16/16 14:43	09/19/16 07:44	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		09/16/16 14:43	09/19/16 07:44	1
Aroclor-1254	0.10	U	0.10	0.030	ug/L		09/16/16 14:43	09/19/16 07:44	1
Aroclor-1260	0.10	U	0.10	0.040	ug/L		09/16/16 14:43	09/19/16 07:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*21 - 120*	*09/16/16 14:43*	*09/19/16 07:44*	*1*
DCB Decachlorobiphenyl	*75*		*10 - 120*	*09/16/16 14:43*	*09/19/16 07:44*	*1*

Lab Sample ID: LCS 240-247212/22-A
Matrix: Water
Analysis Batch: 247333

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 247212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2.50	2.19		ug/L		88	32 - 120
Aroclor-1260	2.50	2.72		ug/L		109	36 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*21 - 120*
DCB Decachlorobiphenyl	*69*		*10 - 120*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-247806/2-A
Matrix: Water
Analysis Batch: 247979

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 247806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	0.0033	mg/L		09/21/16 14:00	09/22/16 09:51	1
Barium	0.50	U	0.50	0.0024	mg/L		09/21/16 14:00	09/22/16 09:51	1
Cadmium	0.050	U	0.050	0.00029	mg/L		09/21/16 14:00	09/22/16 09:51	1
Chromium	0.050	U	0.050	0.00055	mg/L		09/21/16 14:00	09/22/16 09:51	1
Lead	0.00312	J	0.050	0.0019	mg/L		09/21/16 14:00	09/22/16 09:51	1
Selenium	0.050	U	0.050	0.0051	mg/L		09/21/16 14:00	09/22/16 09:51	1
Silver	0.050	U	0.050	0.00092	mg/L		09/21/16 14:00	09/22/16 09:51	1

Lab Sample ID: LCS 240-247806/3-A
Matrix: Water
Analysis Batch: 247979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 247806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.29		mg/L		115	50 - 150
Barium	2.00	2.00		mg/L		100	50 - 150
Cadmium	0.0500	0.0541		mg/L		108	50 - 150

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

Lab Sample ID: LCS 240-247806/3-A
Matrix: Water
Analysis Batch: 247979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 247806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.200	0.212		mg/L		106	50 - 150
Lead	0.500	0.480		mg/L		96	50 - 150
Selenium	2.00	2.31		mg/L		116	50 - 150
Silver	0.0500	0.0545		mg/L		109	50 - 150

Lab Sample ID: LB 240-247695/1-B
Matrix: Water
Analysis Batch: 247979

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 247806

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00409	J	0.050	0.0033	mg/L		09/21/16 14:00	09/22/16 09:46	1
Barium	0.50	U	0.50	0.0024	mg/L		09/21/16 14:00	09/22/16 09:46	1
Cadmium	0.050	U	0.050	0.00029	mg/L		09/21/16 14:00	09/22/16 09:46	1
Chromium	0.000685	J	0.050	0.00055	mg/L		09/21/16 14:00	09/22/16 09:46	1
Lead	0.050	U	0.050	0.0019	mg/L		09/21/16 14:00	09/22/16 09:46	1
Selenium	0.050	U	0.050	0.0051	mg/L		09/21/16 14:00	09/22/16 09:46	1
Silver	0.050	U	0.050	0.00092	mg/L		09/21/16 14:00	09/22/16 09:46	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-247808/2-A
Matrix: Water
Analysis Batch: 247972

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 247808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		09/21/16 14:00	09/22/16 09:37	1

Lab Sample ID: LCS 240-247808/3-A
Matrix: Water
Analysis Batch: 247972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 247808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00554		mg/L		111	80 - 120

Lab Sample ID: LB 240-247695/1-C
Matrix: Water
Analysis Batch: 247972

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 247808

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		09/21/16 14:00	09/22/16 09:31	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(73-120)	(69-120)	(76-120)	(80-120)
LCS 240-247879/11	Lab Control Sample	79	94	93	83

Surrogate Legend

12DCE = 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)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(73-120)	(69-120)	(76-120)	(80-120)
240-69515-1	WW-17303-091416-DC-001	88	85	88	96
LB 240-247698/1-A MB	Method Blank	83	84	88	88

Surrogate Legend

12DCE = 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	TPH
Lab Sample ID	Client Sample ID	(42-120)	(10-120)	(35-125)	(36-120)	(10-120)	(17-120)
LCS 240-247835/15-A	Lab Control Sample	75	66	78	74	53	88
MB 240-247835/14-A	Method Blank	76	68	84	72	53	89

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = 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	TPH
Lab Sample ID	Client Sample ID	(42-120)	(10-120)	(35-125)	(36-120)	(10-120)	(17-120)
240-69515-1	WW-17303-091416-DC-001	73	63	76	69	48	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX2 (21-120)	DCB2 (10-120)								
240-69515-1	WW-17303-091416-DC-001	63	31								
LCS 240-247212/22-A	Lab Control Sample	77	69								
MB 240-247212/21-A	Method Blank	89	75								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

Client Sample ID: WW-17303-091416-DC-001 — **Lab Sample ID: 240-69515-1**
Date Collected: 09/14/16 07:40 — **Matrix: Water**
Date Received: 09/15/16 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			247698	09/20/16 16:45	DRJ	TAL CAN
TCLP	Analysis	8260B		1	247879	09/21/16 21:56	TJL1	TAL CAN
TCLP	Leach	1311			247695	09/20/16 14:50	DRJ	TAL CAN
TCLP	Prep	3510C			247835	09/21/16 13:16	CS	TAL CAN
TCLP	Analysis	8270C		1	248104	09/23/16 12:11	MRU	TAL CAN
Total/NA	Prep	3520C			247212	09/16/16 14:43	JDR	TAL CAN
Total/NA	Analysis	8082		1	247333	09/19/16 12:01	LSH	TAL CAN
TCLP	Leach	1311			247695	09/20/16 14:50	DRJ	TAL CAN
TCLP	Prep	3010A			247806	09/21/16 14:00	AJC	TAL CAN
TCLP	Analysis	6010B		1	247979	09/22/16 14:19	KLC	TAL CAN
TCLP	Leach	1311			247695	09/20/16 14:50	DRJ	TAL CAN
TCLP	Prep	7470A			247808	09/21/16 14:00	AJC	TAL CAN
TCLP	Analysis	7470A		1	247972	09/22/16 10:10	WKD	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-035, RACER CVO

TestAmerica Job ID: 240-69515-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17
Illinois	NELAP	5	200004	07-31-17
Kansas	NELAP	7	E-10336	01-31-17
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16 *
Minnesota	NELAP	5	039-999-348	12-31-16 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17
Nevada	State Program	9	OH-000482008A	07-31-17
New Jersey	NELAP	2	OH001	06-30-17
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-17
Texas	NELAP	6	T104704517-15-5	08-31-17
USDA	Federal		P330-13-00319	11-26-16 *
Virginia	NELAP	3	460175	09-14-16 *
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17

* Certification renewal pending - certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1.4/C1.8

Chain of Custody Record

104884

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: B. Landahl	Site Contact: D. Canfield	Date: 9/14/16	COC No: 2016-9-14
Company Name: GHD Services Inc.	Tel/Fax: 734-453-5123	Lab Contact: R. Flesher	Carrier: Fed Ex	1 of 1 COCs
Address: 14496 Sheldon Rd Ste. 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Plymouth, MI 48170	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 734-453-5123	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: RACER CVO	☐ 1 week			
Site: Ypsi, MI	☐ 2 days			Job / SDG No.:
PO # 017303-035	☐ 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	PCBs	Sample Specific Notes:
MW-17303-091416-DR-001	9/14/16	7:40	G	GW	5			X	X	X	X	

240-69515 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.: _____

	Company:	Date/Time:		Company:	Date/Time:
Relinquished by:	GHD	9/14/16 11:30	Received by:	TAL	9/15/16 9:15
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 # :** 69515

Canton Facility

Client GHD Services Site Name _____ Cooler unpacked by: BM

Cooler Received on 9/15/16 Opened on 9/15/16

FedEx: 1st Grd Exp UPS FAS Stetson 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 **+0.4** °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.8 °C

IR GUN #36 (CF **+1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No

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 11-15 have been checked at the originating laboratory.

11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC574756**

12. Were VOAs on the COC? Yes No

13. Were air bubbles >6 mm in any VOA vials? Yes No NA

14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No

15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. 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)

16. 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: 240-71416-1
Client Project/Site: 17303-036, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
11/9/2016 8:30:01 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: 240-71416-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-71416-1

Comments
No additional comments.

Receipt
The samples were received on 10/28/2016 11:58 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-254245 recovered outside control limits for the following analyte: 2-Hexanone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-254412 recovered outside control limits for the following analyte: 2-Hexanone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

Method(s) 8260B: The following sample was diluted due to the abundance of non-target analytes: GW-17303-102716-JY-013 (240-71416-14). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-254586 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.

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.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-71416-1	TB-17303-102516	Water	10/25/16 00:00	10/28/16 11:58
240-71416-2	GW-17303-102516-JY-001	Water	10/25/16 09:00	10/28/16 11:58
240-71416-3	GW-17303-102516-JY-002	Water	10/25/16 09:50	10/28/16 11:58
240-71416-4	GW-17303-102516-JY-003	Water	10/25/16 09:55	10/28/16 11:58
240-71416-5	GW-17303-102516-JY-004	Water	10/25/16 10:50	10/28/16 11:58
240-71416-6	GW-17303-102516-JY-005	Water	10/25/16 11:50	10/28/16 11:58
240-71416-7	GW-17303-102516-JY-006	Water	10/25/16 12:45	10/28/16 11:58
240-71416-8	GW-17303-102516-JY-007	Water	10/25/16 14:00	10/28/16 11:58
240-71416-9	GW-17303-102616-JY-008	Water	10/26/16 10:00	10/28/16 11:58
240-71416-10	GW-17303-102616-JY-009	Water	10/26/16 12:25	10/28/16 11:58
240-71416-11	GW-17303-102616-JY-010	Water	10/26/16 09:50	10/28/16 11:58
240-71416-12	GW-17303-102616-JY-011	Water	10/26/16 10:45	10/28/16 11:58
240-71416-13	GW-17303-102616-JY-012	Water	10/26/16 11:40	10/28/16 11:58
240-71416-14	GW-17303-102716-JY-013	Water	10/27/16 09:20	10/28/16 11:58
240-71416-15	GW-17303-102716-JY-014	Water	10/27/16 10:10	10/28/16 11:58
240-71416-16	GW-17303-102716-JY-015	Water	10/27/16 11:20	10/28/16 11:58
240-71416-17	GW-17303-102716-JY-016	Water	10/27/16 12:10	10/28/16 11:58
240-71416-18	GW-17303-102716-JY-017	Water	10/27/16 12:15	10/28/16 11:58
240-71416-19	GW-17303-102716-JY-018	Water	10/27/16 13:05	10/28/16 11:58
240-71416-20	GW-17303-102716-JY-019	Water	10/27/16 14:00	10/28/16 11:58
240-71416-21	GW-17303-102716-JY-020	Water	10/27/16 15:00	10/28/16 11:58

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

Client Sample ID: TB-17303-102516 — Lab Sample ID: 240-71416-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.6	J	10	1.8	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-102516-JY-001 — Lab Sample ID: 240-71416-2

No Detections.

Client Sample ID: GW-17303-102516-JY-002 — Lab Sample ID: 240-71416-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	28		1.0	0.28	ug/L	1		8260B	Total/NA
Chlorobenzene	33		1.0	0.32	ug/L	1		8260B	Total/NA
Vinyl chloride	4.4		1.0	0.45	ug/L	1		8260B	Total/NA
Cyclohexane	3.3		1.0	0.44	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.32	J	1.0	0.30	ug/L	1		8260B	Total/NA
Isopropylbenzene	2.2		1.0	0.21	ug/L	1		8260B	Total/NA
Methylcyclohexane	6.0		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-102516-JY-003 — Lab Sample ID: 240-71416-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	28		1.0	0.28	ug/L	1		8260B	Total/NA
Chlorobenzene	32		1.0	0.32	ug/L	1		8260B	Total/NA
Vinyl chloride	4.5		1.0	0.45	ug/L	1		8260B	Total/NA
Cyclohexane	3.3		1.0	0.44	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.31	J	1.0	0.30	ug/L	1		8260B	Total/NA
Isopropylbenzene	2.1		1.0	0.21	ug/L	1		8260B	Total/NA
Methylcyclohexane	6.3		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-102516-JY-004 — Lab Sample ID: 240-71416-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	25		1.0	0.33	ug/L	1		8260B	Total/NA
Vinyl chloride	0.57	J	1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	4.1		1.0	0.30	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.58	J	1.0	0.29	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-102516-JY-005 — Lab Sample ID: 240-71416-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.0		1.0	0.30	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-102516-JY-006 — Lab Sample ID: 240-71416-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.32	J	1.0	0.25	ug/L	1		8260B	Total/NA
1,2-Dichloropropane	0.46	J	1.0	0.30	ug/L	1		8260B	Total/NA
Trichloroethene	4.1		1.0	0.33	ug/L	1		8260B	Total/NA
Vinyl chloride	0.77	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-102516-JY-007 — Lab Sample ID: 240-71416-8

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample ID: GW-17303-102516-JY-007 (Continued) — Lab Sample ID: 240-71416-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.73	J	2.5	0.68	ug/L	2.5		8260B	Total/NA
Trichloroethene	27		2.5	0.83	ug/L	2.5		8260B	Total/NA
Vinyl chloride	39		2.5	1.1	ug/L	2.5		8260B	Total/NA
cis-1,2-Dichloroethene	62		2.5	0.75	ug/L	2.5		8260B	Total/NA
trans-1,2-Dichloroethene	3.3		2.5	0.73	ug/L	2.5		8260B	Total/NA

Client Sample ID: GW-17303-102616-JY-008 — Lab Sample ID: 240-71416-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	220	J	250	80	ug/L	250		8260B	Total/NA
Ethylbenzene	74	J	250	65	ug/L	250		8260B	Total/NA
Vinyl chloride	5700		250	110	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	4300		250	75	ug/L	250		8260B	Total/NA

Client Sample ID: GW-17303-102616-JY-009 — Lab Sample ID: 240-71416-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	13000		500	230	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene	3500		500	150	ug/L	500		8260B	Total/NA

Client Sample ID: GW-17303-102616-JY-010 — Lab Sample ID: 240-71416-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	12000		250	110	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	1400		250	75	ug/L	250		8260B	Total/NA
trans-1,2-Dichloroethene	130	J	250	73	ug/L	250		8260B	Total/NA

Client Sample ID: GW-17303-102616-JY-011 — Lab Sample ID: 240-71416-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	4900		200	90	ug/L	200		8260B	Total/NA
cis-1,2-Dichloroethene	2100		200	60	ug/L	200		8260B	Total/NA
trans-1,2-Dichloroethene	75	J	200	58	ug/L	200		8260B	Total/NA

Client Sample ID: GW-17303-102616-JY-012 — Lab Sample ID: 240-71416-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	51000		5000	2300	ug/L	5000		8260B	Total/NA
cis-1,2-Dichloroethene	5600		5000	1500	ug/L	5000		8260B	Total/NA

Client Sample ID: GW-17303-102716-JY-013 — Lab Sample ID: 240-71416-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	10	J	25	7.0	ug/L	25		8260B	Total/NA
Ethylbenzene	32		25	6.5	ug/L	25		8260B	Total/NA
Toluene	62		25	5.8	ug/L	25		8260B	Total/NA
Trichloroethene	15	J	25	8.3	ug/L	25		8260B	Total/NA
Vinyl chloride	46		25	11	ug/L	25		8260B	Total/NA
Xylenes, Total	140		50	6.0	ug/L	25		8260B	Total/NA
cis-1,2-Dichloroethene	30		25	7.5	ug/L	25		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

Client Sample ID: GW-17303-102716-JY-014 — Lab Sample ID: 240-71416-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	70		29	9.4	ug/L	28.57		8260B	Total/NA
Vinyl chloride	300		29	13	ug/L	28.57		8260B	Total/NA
cis-1,2-Dichloroethene	130		29	8.6	ug/L	28.57		8260B	Total/NA
trans-1,2-Dichloroethene	9.4	J	29	8.3	ug/L	28.57		8260B	Total/NA

Client Sample ID: GW-17303-102716-JY-015 — Lab Sample ID: 240-71416-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	80000		17000	7500	ug/L	16666.67		8260B	Total/NA
cis-1,2-Dichloroethene	320000		17000	5000	ug/L	16666.67		8260B	Total/NA

Client Sample ID: GW-17303-102716-JY-016 — Lab Sample ID: 240-71416-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	110	J	140	47	ug/L	142.86		8260B	Total/NA
Vinyl chloride	2000		140	64	ug/L	142.86		8260B	Total/NA
cis-1,2-Dichloroethene	1000		140	43	ug/L	142.86		8260B	Total/NA
trans-1,2-Dichloroethene	59	J	140	41	ug/L	142.86		8260B	Total/NA

Client Sample ID: GW-17303-102716-JY-017 — Lab Sample ID: 240-71416-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	120	J	140	47	ug/L	142.86		8260B	Total/NA
Vinyl chloride	2100		140	64	ug/L	142.86		8260B	Total/NA
cis-1,2-Dichloroethene	1200		140	43	ug/L	142.86		8260B	Total/NA
trans-1,2-Dichloroethene	61	J	140	41	ug/L	142.86		8260B	Total/NA

Client Sample ID: GW-17303-102716-JY-018 — Lab Sample ID: 240-71416-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	50	J	130	35	ug/L	125		8260B	Total/NA
Ethylbenzene	210		130	33	ug/L	125		8260B	Total/NA
Toluene	670		130	29	ug/L	125		8260B	Total/NA
Vinyl chloride	2300		130	56	ug/L	125		8260B	Total/NA
Xylenes, Total	860		250	30	ug/L	125		8260B	Total/NA
Cyclohexane	61	J	130	55	ug/L	125		8260B	Total/NA
cis-1,2-Dichloroethene	760		130	38	ug/L	125		8260B	Total/NA
Isopropylbenzene	91	J	130	26	ug/L	125		8260B	Total/NA

Client Sample ID: GW-17303-102716-JY-019 — Lab Sample ID: 240-71416-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	27		5.0	1.4	ug/L	5		8260B	Total/NA
Ethylbenzene	140		5.0	1.3	ug/L	5		8260B	Total/NA
Toluene	31		5.0	1.2	ug/L	5		8260B	Total/NA
Trichloroethene	2.2	J	5.0	1.7	ug/L	5		8260B	Total/NA
Vinyl chloride	30		5.0	2.3	ug/L	5		8260B	Total/NA
Xylenes, Total	210		10	1.2	ug/L	5		8260B	Total/NA
Cyclohexane	54		5.0	2.2	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17303-102716-JY-019 (Continued) — Lab Sample ID: 240-71416-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	17		5.0	1.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	51		5.0	1.1	ug/L	5		8260B	Total/NA
Methylcyclohexane	7.2		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: GW-17303-102716-JY-020 — Lab Sample ID: 240-71416-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	33		17	5.5	ug/L	16.67		8260B	Total/NA
Vinyl chloride	160		17	7.5	ug/L	16.67		8260B	Total/NA
cis-1,2-Dichloroethene	140		17	5.0	ug/L	16.67		8260B	Total/NA
trans-1,2-Dichloroethene	15	J	17	4.8	ug/L	16.67		8260B	Total/NA

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: TB-17303-102516
Date Collected: 10/25/16 00:00
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**5.6**	**J**	10	1.8	ug/L			11/03/16 21:41	1
Benzene	1.0	U	1.0	0.28	ug/L			11/03/16 21:41	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/03/16 21:41	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/03/16 21:41	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/03/16 21:41	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/03/16 21:41	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/03/16 21:41	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/03/16 21:41	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 21:41	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/03/16 21:41	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/03/16 21:41	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/03/16 21:41	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/03/16 21:41	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/03/16 21:41	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/03/16 21:41	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/03/16 21:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/03/16 21:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/03/16 21:41	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/03/16 21:41	1
2-Hexanone	10	U *	10	1.2	ug/L			11/03/16 21:41	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/03/16 21:41	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/03/16 21:41	1
Styrene	1.0	U	1.0	0.23	ug/L			11/03/16 21:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/03/16 21:41	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 21:41	1
Toluene	1.0	U	1.0	0.23	ug/L			11/03/16 21:41	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/03/16 21:41	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/03/16 21:41	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/03/16 21:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/03/16 21:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 21:41	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/03/16 21:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/03/16 21:41	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/03/16 21:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 21:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 21:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/03/16 21:41	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 21:41	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 21:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/03/16 21:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/03/16 21:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/03/16 21:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/03/16 21:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 21:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 21:41	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 21:41	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/03/16 21:41	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/03/16 21:41	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		63 - 132		11/03/16 21:41	1
4-Bromofluorobenzene (Surr)	90		73 - 120		11/03/16 21:41	1
Toluene-d8 (Surr)	105		73 - 124		11/03/16 21:41	1
Dibromofluoromethane (Surr)	98		80 - 120		11/03/16 21:41	1

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

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

Client Sample ID: GW-17303-102516-JY-001
Date Collected: 10/25/16 09:00
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			11/03/16 22:03	1
Benzene	1.0	U	1.0	0.28	ug/L			11/03/16 22:03	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/03/16 22:03	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/03/16 22:03	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/03/16 22:03	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/03/16 22:03	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/03/16 22:03	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/03/16 22:03	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 22:03	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/03/16 22:03	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/03/16 22:03	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/03/16 22:03	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/03/16 22:03	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/03/16 22:03	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/03/16 22:03	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/03/16 22:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/03/16 22:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/03/16 22:03	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/03/16 22:03	1
2-Hexanone	10	U *	10	1.2	ug/L			11/03/16 22:03	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/03/16 22:03	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/03/16 22:03	1
Styrene	1.0	U	1.0	0.23	ug/L			11/03/16 22:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/03/16 22:03	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 22:03	1
Toluene	1.0	U	1.0	0.23	ug/L			11/03/16 22:03	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/03/16 22:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/03/16 22:03	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/03/16 22:03	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/03/16 22:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 22:03	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/03/16 22:03	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/03/16 22:03	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/03/16 22:03	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 22:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 22:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/03/16 22:03	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 22:03	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 22:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/03/16 22:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/03/16 22:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/03/16 22:03	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/03/16 22:03	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 22:03	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 22:03	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 22:03	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/03/16 22:03	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/03/16 22:03	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		63 - 132		11/03/16 22:03	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/03/16 22:03	1
Toluene-d8 (Surr)	104		73 - 124		11/03/16 22:03	1
Dibromofluoromethane (Surr)	100		80 - 120		11/03/16 22:03	1

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

Client Sample ID: GW-17303-102516-JY-002
Date Collected: 10/25/16 09:50
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			11/03/16 22:25	1
Benzene	**28**		1.0	0.28	ug/L			11/03/16 22:25	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/03/16 22:25	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/03/16 22:25	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/03/16 22:25	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/03/16 22:25	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/03/16 22:25	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/03/16 22:25	1
Chlorobenzene	**33**		1.0	0.32	ug/L			11/03/16 22:25	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/03/16 22:25	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/03/16 22:25	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/03/16 22:25	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/03/16 22:25	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/03/16 22:25	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/03/16 22:25	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/03/16 22:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/03/16 22:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/03/16 22:25	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/03/16 22:25	1
2-Hexanone	10	U *	10	1.2	ug/L			11/03/16 22:25	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/03/16 22:25	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/03/16 22:25	1
Styrene	1.0	U	1.0	0.23	ug/L			11/03/16 22:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/03/16 22:25	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 22:25	1
Toluene	1.0	U	1.0	0.23	ug/L			11/03/16 22:25	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/03/16 22:25	1
Vinyl chloride	**4.4**		1.0	0.45	ug/L			11/03/16 22:25	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/03/16 22:25	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/03/16 22:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 22:25	1
Cyclohexane	**3.3**		1.0	0.44	ug/L			11/03/16 22:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/03/16 22:25	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/03/16 22:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 22:25	1
cis-1,2-Dichloroethene	**0.32**	**J**	1.0	0.30	ug/L			11/03/16 22:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/03/16 22:25	1
Isopropylbenzene	**2.2**		1.0	0.21	ug/L			11/03/16 22:25	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 22:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/03/16 22:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/03/16 22:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/03/16 22:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/03/16 22:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 22:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 22:25	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 22:25	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/03/16 22:25	1
Methylcyclohexane	**6.0**		1.0	0.45	ug/L			11/03/16 22:25	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		63 - 132		11/03/16 22:25	1
4-Bromofluorobenzene (Surr)	94		73 - 120		11/03/16 22:25	1
Toluene-d8 (Surr)	109		73 - 124		11/03/16 22:25	1
Dibromofluoromethane (Surr)	94		80 - 120		11/03/16 22:25	1

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

Client Sample ID: GW-17303-102516-JY-003
Date Collected: 10/25/16 09:55
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			11/03/16 22:47	1
Benzene	**28**		1.0	0.28	ug/L			11/03/16 22:47	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/03/16 22:47	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/03/16 22:47	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/03/16 22:47	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/03/16 22:47	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/03/16 22:47	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/03/16 22:47	1
Chlorobenzene	**32**		1.0	0.32	ug/L			11/03/16 22:47	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/03/16 22:47	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/03/16 22:47	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/03/16 22:47	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/03/16 22:47	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/03/16 22:47	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/03/16 22:47	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/03/16 22:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/03/16 22:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/03/16 22:47	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/03/16 22:47	1
2-Hexanone	10	U *	10	1.2	ug/L			11/03/16 22:47	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/03/16 22:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/03/16 22:47	1
Styrene	1.0	U	1.0	0.23	ug/L			11/03/16 22:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/03/16 22:47	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 22:47	1
Toluene	1.0	U	1.0	0.23	ug/L			11/03/16 22:47	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/03/16 22:47	1
Vinyl chloride	**4.5**		1.0	0.45	ug/L			11/03/16 22:47	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/03/16 22:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/03/16 22:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 22:47	1
Cyclohexane	**3.3**		1.0	0.44	ug/L			11/03/16 22:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/03/16 22:47	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/03/16 22:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 22:47	1
cis-1,2-Dichloroethene	**0.31**	**J**	1.0	0.30	ug/L			11/03/16 22:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/03/16 22:47	1
Isopropylbenzene	**2.1**		1.0	0.21	ug/L			11/03/16 22:47	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 22:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/03/16 22:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/03/16 22:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/03/16 22:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/03/16 22:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 22:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 22:47	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 22:47	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/03/16 22:47	1
Methylcyclohexane	**6.3**		1.0	0.45	ug/L			11/03/16 22:47	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		63 - 132		11/03/16 22:47	1
4-Bromofluorobenzene (Surr)	94		73 - 120		11/03/16 22:47	1
Toluene-d8 (Surr)	104		73 - 124		11/03/16 22:47	1
Dibromofluoromethane (Surr)	95		80 - 120		11/03/16 22:47	1

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

Client Sample ID: GW-17303-102516-JY-004
Date Collected: 10/25/16 10:50
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			11/04/16 17:31	1
Benzene	1.0	U	1.0	0.28	ug/L			11/04/16 17:31	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/04/16 17:31	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/04/16 17:31	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/04/16 17:31	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/04/16 17:31	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/04/16 17:31	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/04/16 17:31	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 17:31	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/04/16 17:31	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/04/16 17:31	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/04/16 17:31	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/04/16 17:31	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/04/16 17:31	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/04/16 17:31	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/04/16 17:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/04/16 17:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/04/16 17:31	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/04/16 17:31	1
2-Hexanone	10	U *	10	1.2	ug/L			11/04/16 17:31	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/04/16 17:31	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/04/16 17:31	1
Styrene	1.0	U	1.0	0.23	ug/L			11/04/16 17:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/04/16 17:31	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 17:31	1
Toluene	1.0	U	1.0	0.23	ug/L			11/04/16 17:31	1
Trichloroethene	**25**		1.0	0.33	ug/L			11/04/16 17:31	1
Vinyl chloride	**0.57**	**J**	1.0	0.45	ug/L			11/04/16 17:31	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/04/16 17:31	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/04/16 17:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/04/16 17:31	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/04/16 17:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/04/16 17:31	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/04/16 17:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 17:31	1
cis-1,2-Dichloroethene	**4.1**		1.0	0.30	ug/L			11/04/16 17:31	1
trans-1,2-Dichloroethene	**0.58**	**J**	1.0	0.29	ug/L			11/04/16 17:31	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/04/16 17:31	1
Methyl acetate	10	U	10	1.4	ug/L			11/04/16 17:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/04/16 17:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/04/16 17:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/04/16 17:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/04/16 17:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 17:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/04/16 17:31	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 17:31	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/04/16 17:31	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/04/16 17:31	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		63 - 132		11/04/16 17:31	1
4-Bromofluorobenzene (Surr)	87		73 - 120		11/04/16 17:31	1
Toluene-d8 (Surr)	101		73 - 124		11/04/16 17:31	1
Dibromofluoromethane (Surr)	100		80 - 120		11/04/16 17:31	1

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

Client Sample ID: GW-17303-102516-JY-005
Date Collected: 10/25/16 11:50
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			11/04/16 17:53	1
Benzene	1.0	U	1.0	0.28	ug/L			11/04/16 17:53	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/04/16 17:53	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/04/16 17:53	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/04/16 17:53	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/04/16 17:53	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/04/16 17:53	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/04/16 17:53	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 17:53	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/04/16 17:53	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/04/16 17:53	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/04/16 17:53	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/04/16 17:53	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/04/16 17:53	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/04/16 17:53	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/04/16 17:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/04/16 17:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/04/16 17:53	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/04/16 17:53	1
2-Hexanone	10	U *	10	1.2	ug/L			11/04/16 17:53	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/04/16 17:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/04/16 17:53	1
Styrene	1.0	U	1.0	0.23	ug/L			11/04/16 17:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/04/16 17:53	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 17:53	1
Toluene	1.0	U	1.0	0.23	ug/L			11/04/16 17:53	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/04/16 17:53	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/04/16 17:53	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/04/16 17:53	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/04/16 17:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/04/16 17:53	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/04/16 17:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/04/16 17:53	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/04/16 17:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 17:53	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.30	ug/L			11/04/16 17:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/04/16 17:53	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/04/16 17:53	1
Methyl acetate	10	U	10	1.4	ug/L			11/04/16 17:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/04/16 17:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/04/16 17:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/04/16 17:53	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/04/16 17:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 17:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/04/16 17:53	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 17:53	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/04/16 17:53	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/04/16 17:53	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		63 - 132		11/04/16 17:53	1
4-Bromofluorobenzene (Surr)	90		73 - 120		11/04/16 17:53	1
Toluene-d8 (Surr)	102		73 - 124		11/04/16 17:53	1
Dibromofluoromethane (Surr)	100		80 - 120		11/04/16 17:53	1

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

Client Sample ID: GW-17303-102516-JY-006
Date Collected: 10/25/16 12:45
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			11/04/16 18:16	1
Benzene	1.0	U	1.0	0.28	ug/L			11/04/16 18:16	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/04/16 18:16	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/04/16 18:16	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/04/16 18:16	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/04/16 18:16	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/04/16 18:16	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/04/16 18:16	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 18:16	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/04/16 18:16	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/04/16 18:16	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/04/16 18:16	1
1,1-Dichloroethane	**0.32**	**J**	1.0	0.25	ug/L			11/04/16 18:16	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/04/16 18:16	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/04/16 18:16	1
1,2-Dichloropropane	**0.46**	**J**	1.0	0.30	ug/L			11/04/16 18:16	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/04/16 18:16	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/04/16 18:16	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/04/16 18:16	1
2-Hexanone	10	U *	10	1.2	ug/L			11/04/16 18:16	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/04/16 18:16	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/04/16 18:16	1
Styrene	1.0	U	1.0	0.23	ug/L			11/04/16 18:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/04/16 18:16	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 18:16	1
Toluene	1.0	U	1.0	0.23	ug/L			11/04/16 18:16	1
Trichloroethene	**4.1**		1.0	0.33	ug/L			11/04/16 18:16	1
Vinyl chloride	**0.77**	**J**	1.0	0.45	ug/L			11/04/16 18:16	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/04/16 18:16	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/04/16 18:16	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/04/16 18:16	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/04/16 18:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/04/16 18:16	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/04/16 18:16	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 18:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 18:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/04/16 18:16	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/04/16 18:16	1
Methyl acetate	10	U	10	1.4	ug/L			11/04/16 18:16	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/04/16 18:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/04/16 18:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/04/16 18:16	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/04/16 18:16	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 18:16	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/04/16 18:16	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 18:16	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/04/16 18:16	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/04/16 18:16	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		63 - 132		11/04/16 18:16	1
4-Bromofluorobenzene (Surr)	92		73 - 120		11/04/16 18:16	1
Toluene-d8 (Surr)	104		73 - 124		11/04/16 18:16	1
Dibromofluoromethane (Surr)	97		80 - 120		11/04/16 18:16	1

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

Client Sample ID: GW-17303-102516-JY-007
Date Collected: 10/25/16 14:00
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	4.4	ug/L			11/07/16 17:54	2.5
Benzene	2.5	U	2.5	0.70	ug/L			11/07/16 17:54	2.5
Bromodichloromethane	2.5	U	2.5	0.75	ug/L			11/07/16 17:54	2.5
Bromoform	2.5	U	2.5	1.1	ug/L			11/07/16 17:54	2.5
Bromomethane	2.5	U	2.5	1.1	ug/L			11/07/16 17:54	2.5
2-Butanone (MEK)	25	U *	25	2.6	ug/L			11/07/16 17:54	2.5
Carbon disulfide	13	U	13	0.85	ug/L			11/07/16 17:54	2.5
Carbon tetrachloride	2.5	U	2.5	0.88	ug/L			11/07/16 17:54	2.5
Chlorobenzene	2.5	U	2.5	0.80	ug/L			11/07/16 17:54	2.5
Chloroethane	2.5	U	2.5	1.0	ug/L			11/07/16 17:54	2.5
Chloroform	2.5	U	2.5	0.78	ug/L			11/07/16 17:54	2.5
Chloromethane	2.5	U	2.5	1.1	ug/L			11/07/16 17:54	2.5
1,1-Dichloroethane	2.5	U	2.5	0.63	ug/L			11/07/16 17:54	2.5
1,2-Dichloroethane	2.5	U	2.5	0.75	ug/L			11/07/16 17:54	2.5
1,1-Dichloroethene	**0.73**	**J**	2.5	0.68	ug/L			11/07/16 17:54	2.5
1,2-Dichloropropane	2.5	U	2.5	0.75	ug/L			11/07/16 17:54	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	0.65	ug/L			11/07/16 17:54	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	0.78	ug/L			11/07/16 17:54	2.5
Ethylbenzene	2.5	U	2.5	0.65	ug/L			11/07/16 17:54	2.5
2-Hexanone	25	U *	25	3.1	ug/L			11/07/16 17:54	2.5
Methylene Chloride	13	U	13	1.3	ug/L			11/07/16 17:54	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	1.8	ug/L			11/07/16 17:54	2.5
Styrene	2.5	U	2.5	0.58	ug/L			11/07/16 17:54	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.80	ug/L			11/07/16 17:54	2.5
Tetrachloroethene	2.5	U	2.5	0.75	ug/L			11/07/16 17:54	2.5
Toluene	2.5	U	2.5	0.58	ug/L			11/07/16 17:54	2.5
Trichloroethene	**27**		2.5	0.83	ug/L			11/07/16 17:54	2.5
Vinyl chloride	**39**		2.5	1.1	ug/L			11/07/16 17:54	2.5
Xylenes, Total	5.0	U	5.0	0.60	ug/L			11/07/16 17:54	2.5
1,1,1-Trichloroethane	2.5	U	2.5	0.58	ug/L			11/07/16 17:54	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.85	ug/L			11/07/16 17:54	2.5
Cyclohexane	2.5	U	2.5	1.1	ug/L			11/07/16 17:54	2.5
1,2-Dibromo-3-Chloropropane	2.5	U	2.5	1.2	ug/L			11/07/16 17:54	2.5
1,2-Dibromoethane	2.5	U	2.5	0.58	ug/L			11/07/16 17:54	2.5
Dichlorodifluoromethane	2.5	U	2.5	1.3	ug/L			11/07/16 17:54	2.5
cis-1,2-Dichloroethene	**62**		2.5	0.75	ug/L			11/07/16 17:54	2.5
trans-1,2-Dichloroethene	**3.3**		2.5	0.73	ug/L			11/07/16 17:54	2.5
Isopropylbenzene	2.5	U	2.5	0.53	ug/L			11/07/16 17:54	2.5
Methyl acetate	25	U	25	3.6	ug/L			11/07/16 17:54	2.5
Methyl tert-butyl ether	2.5	U	2.5	0.68	ug/L			11/07/16 17:54	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	1.0	ug/L			11/07/16 17:54	2.5
1,2,4-Trichlorobenzene	2.5	U	2.5	0.68	ug/L			11/07/16 17:54	2.5
1,2-Dichlorobenzene	2.5	U	2.5	0.65	ug/L			11/07/16 17:54	2.5
1,3-Dichlorobenzene	2.5	U	2.5	0.80	ug/L			11/07/16 17:54	2.5
1,4-Dichlorobenzene	2.5	U	2.5	0.58	ug/L			11/07/16 17:54	2.5
Trichlorofluoromethane	2.5	U	2.5	1.3	ug/L			11/07/16 17:54	2.5
Dibromochloromethane	2.5	U	2.5	0.63	ug/L			11/07/16 17:54	2.5
Methylcyclohexane	2.5	U	2.5	1.1	ug/L			11/07/16 17:54	2.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		63 - 132		11/07/16 17:54	2.5
4-Bromofluorobenzene (Surr)	91		73 - 120		11/07/16 17:54	2.5
Toluene-d8 (Surr)	105		73 - 124		11/07/16 17:54	2.5
Dibromofluoromethane (Surr)	99		80 - 120		11/07/16 17:54	2.5

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

Client Sample ID: GW-17303-102616-JY-008
Date Collected: 10/26/16 10:00
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2500	U	2500	440	ug/L			11/04/16 01:55	250
Benzene	250	U	250	70	ug/L			11/04/16 01:55	250
Bromodichloromethane	250	U	250	75	ug/L			11/04/16 01:55	250
Bromoform	250	U	250	110	ug/L			11/04/16 01:55	250
Bromomethane	250	U	250	110	ug/L			11/04/16 01:55	250
2-Butanone (MEK)	2500	U	2500	260	ug/L			11/04/16 01:55	250
Carbon disulfide	1300	U	1300	85	ug/L			11/04/16 01:55	250
Carbon tetrachloride	250	U	250	88	ug/L			11/04/16 01:55	250
Chlorobenzene	**220**	**J**	250	80	ug/L			11/04/16 01:55	250
Chloroethane	250	U	250	100	ug/L			11/04/16 01:55	250
Chloroform	250	U	250	78	ug/L			11/04/16 01:55	250
Chloromethane	250	U	250	110	ug/L			11/04/16 01:55	250
1,1-Dichloroethane	250	U	250	63	ug/L			11/04/16 01:55	250
1,2-Dichloroethane	250	U	250	75	ug/L			11/04/16 01:55	250
1,1-Dichloroethene	250	U	250	68	ug/L			11/04/16 01:55	250
1,2-Dichloropropane	250	U	250	75	ug/L			11/04/16 01:55	250
cis-1,3-Dichloropropene	250	U	250	65	ug/L			11/04/16 01:55	250
trans-1,3-Dichloropropene	250	U	250	78	ug/L			11/04/16 01:55	250
Ethylbenzene	**74**	**J**	250	65	ug/L			11/04/16 01:55	250
2-Hexanone	2500	U	2500	310	ug/L			11/04/16 01:55	250
Methylene Chloride	1300	U	1300	130	ug/L			11/04/16 01:55	250
4-Methyl-2-pentanone (MIBK)	2500	U	2500	180	ug/L			11/04/16 01:55	250
Styrene	250	U	250	58	ug/L			11/04/16 01:55	250
1,1,2,2-Tetrachloroethane	250	U	250	80	ug/L			11/04/16 01:55	250
Tetrachloroethene	250	U	250	75	ug/L			11/04/16 01:55	250
Toluene	250	U	250	58	ug/L			11/04/16 01:55	250
Trichloroethene	250	U	250	83	ug/L			11/04/16 01:55	250
Vinyl chloride	**5700**		250	110	ug/L			11/04/16 01:55	250
Xylenes, Total	500	U	500	60	ug/L			11/04/16 01:55	250
1,1,1-Trichloroethane	250	U	250	58	ug/L			11/04/16 01:55	250
1,1,2-Trichloroethane	250	U	250	85	ug/L			11/04/16 01:55	250
Cyclohexane	250	U	250	110	ug/L			11/04/16 01:55	250
1,2-Dibromo-3-Chloropropane	250	U	250	120	ug/L			11/04/16 01:55	250
1,2-Dibromoethane	250	U	250	58	ug/L			11/04/16 01:55	250
Dichlorodifluoromethane	250	U	250	130	ug/L			11/04/16 01:55	250
cis-1,2-Dichloroethene	**4300**		250	75	ug/L			11/04/16 01:55	250
trans-1,2-Dichloroethene	250	U	250	73	ug/L			11/04/16 01:55	250
Isopropylbenzene	250	U	250	53	ug/L			11/04/16 01:55	250
Methyl acetate	2500	U	2500	360	ug/L			11/04/16 01:55	250
Methyl tert-butyl ether	250	U	250	68	ug/L			11/04/16 01:55	250
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	100	ug/L			11/04/16 01:55	250
1,2,4-Trichlorobenzene	250	U	250	68	ug/L			11/04/16 01:55	250
1,2-Dichlorobenzene	250	U	250	65	ug/L			11/04/16 01:55	250
1,3-Dichlorobenzene	250	U	250	80	ug/L			11/04/16 01:55	250
1,4-Dichlorobenzene	250	U	250	58	ug/L			11/04/16 01:55	250
Trichlorofluoromethane	250	U	250	130	ug/L			11/04/16 01:55	250
Dibromochloromethane	250	U	250	63	ug/L			11/04/16 01:55	250
Methylcyclohexane	250	U	250	110	ug/L			11/04/16 01:55	250

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/04/16 01:55	250
4-Bromofluorobenzene (Surr)	93		73 - 120		11/04/16 01:55	250
Toluene-d8 (Surr)	93		73 - 124		11/04/16 01:55	250
Dibromofluoromethane (Surr)	90		80 - 120		11/04/16 01:55	250

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

Client Sample ID: GW-17303-102616-JY-009
Date Collected: 10/26/16 12:25
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5000	U	5000	880	ug/L			11/04/16 02:18	500
Benzene	500	U	500	140	ug/L			11/04/16 02:18	500
Bromodichloromethane	500	U	500	150	ug/L			11/04/16 02:18	500
Bromoform	500	U	500	220	ug/L			11/04/16 02:18	500
Bromomethane	500	U	500	210	ug/L			11/04/16 02:18	500
2-Butanone (MEK)	5000	U	5000	510	ug/L			11/04/16 02:18	500
Carbon disulfide	2500	U	2500	170	ug/L			11/04/16 02:18	500
Carbon tetrachloride	500	U	500	180	ug/L			11/04/16 02:18	500
Chlorobenzene	500	U	500	160	ug/L			11/04/16 02:18	500
Chloroethane	500	U	500	210	ug/L			11/04/16 02:18	500
Chloroform	500	U	500	160	ug/L			11/04/16 02:18	500
Chloromethane	500	U	500	220	ug/L			11/04/16 02:18	500
1,1-Dichloroethane	500	U	500	130	ug/L			11/04/16 02:18	500
1,2-Dichloroethane	500	U	500	150	ug/L			11/04/16 02:18	500
1,1-Dichloroethene	500	U	500	140	ug/L			11/04/16 02:18	500
1,2-Dichloropropane	500	U	500	150	ug/L			11/04/16 02:18	500
cis-1,3-Dichloropropene	500	U	500	130	ug/L			11/04/16 02:18	500
trans-1,3-Dichloropropene	500	U	500	160	ug/L			11/04/16 02:18	500
Ethylbenzene	500	U	500	130	ug/L			11/04/16 02:18	500
2-Hexanone	5000	U	5000	620	ug/L			11/04/16 02:18	500
Methylene Chloride	2500	U	2500	270	ug/L			11/04/16 02:18	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	360	ug/L			11/04/16 02:18	500
Styrene	500	U	500	120	ug/L			11/04/16 02:18	500
1,1,2,2-Tetrachloroethane	500	U	500	160	ug/L			11/04/16 02:18	500
Tetrachloroethene	500	U	500	150	ug/L			11/04/16 02:18	500
Toluene	500	U	500	120	ug/L			11/04/16 02:18	500
Trichloroethene	500	U	500	170	ug/L			11/04/16 02:18	500
Vinyl chloride	**13000**		500	230	ug/L			11/04/16 02:18	500
Xylenes, Total	1000	U	1000	120	ug/L			11/04/16 02:18	500
1,1,1-Trichloroethane	500	U	500	120	ug/L			11/04/16 02:18	500
1,1,2-Trichloroethane	500	U	500	170	ug/L			11/04/16 02:18	500
Cyclohexane	500	U	500	220	ug/L			11/04/16 02:18	500
1,2-Dibromo-3-Chloropropane	500	U	500	240	ug/L			11/04/16 02:18	500
1,2-Dibromoethane	500	U	500	120	ug/L			11/04/16 02:18	500
Dichlorodifluoromethane	500	U	500	250	ug/L			11/04/16 02:18	500
cis-1,2-Dichloroethene	**3500**		500	150	ug/L			11/04/16 02:18	500
trans-1,2-Dichloroethene	500	U	500	150	ug/L			11/04/16 02:18	500
Isopropylbenzene	500	U	500	110	ug/L			11/04/16 02:18	500
Methyl acetate	5000	U	5000	720	ug/L			11/04/16 02:18	500
Methyl tert-butyl ether	500	U	500	140	ug/L			11/04/16 02:18	500
1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	210	ug/L			11/04/16 02:18	500
1,2,4-Trichlorobenzene	500	U	500	140	ug/L			11/04/16 02:18	500
1,2-Dichlorobenzene	500	U	500	130	ug/L			11/04/16 02:18	500
1,3-Dichlorobenzene	500	U	500	160	ug/L			11/04/16 02:18	500
1,4-Dichlorobenzene	500	U	500	120	ug/L			11/04/16 02:18	500
Trichlorofluoromethane	500	U	500	250	ug/L			11/04/16 02:18	500
Dibromochloromethane	500	U	500	130	ug/L			11/04/16 02:18	500
Methylcyclohexane	500	U	500	230	ug/L			11/04/16 02:18	500

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/04/16 02:18	500
4-Bromofluorobenzene (Surr)	90		73 - 120		11/04/16 02:18	500
Toluene-d8 (Surr)	90		73 - 124		11/04/16 02:18	500
Dibromofluoromethane (Surr)	90		80 - 120		11/04/16 02:18	500

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

Client Sample ID: GW-17303-102616-JY-010
Date Collected: 10/26/16 09:50
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2500	U	2500	440	ug/L			11/04/16 02:42	250
Benzene	250	U	250	70	ug/L			11/04/16 02:42	250
Bromodichloromethane	250	U	250	75	ug/L			11/04/16 02:42	250
Bromoform	250	U	250	110	ug/L			11/04/16 02:42	250
Bromomethane	250	U	250	110	ug/L			11/04/16 02:42	250
2-Butanone (MEK)	2500	U	2500	260	ug/L			11/04/16 02:42	250
Carbon disulfide	1300	U	1300	85	ug/L			11/04/16 02:42	250
Carbon tetrachloride	250	U	250	88	ug/L			11/04/16 02:42	250
Chlorobenzene	250	U	250	80	ug/L			11/04/16 02:42	250
Chloroethane	250	U	250	100	ug/L			11/04/16 02:42	250
Chloroform	250	U	250	78	ug/L			11/04/16 02:42	250
Chloromethane	250	U	250	110	ug/L			11/04/16 02:42	250
1,1-Dichloroethane	250	U	250	63	ug/L			11/04/16 02:42	250
1,2-Dichloroethane	250	U	250	75	ug/L			11/04/16 02:42	250
1,1-Dichloroethene	250	U	250	68	ug/L			11/04/16 02:42	250
1,2-Dichloropropane	250	U	250	75	ug/L			11/04/16 02:42	250
cis-1,3-Dichloropropene	250	U	250	65	ug/L			11/04/16 02:42	250
trans-1,3-Dichloropropene	250	U	250	78	ug/L			11/04/16 02:42	250
Ethylbenzene	250	U	250	65	ug/L			11/04/16 02:42	250
2-Hexanone	2500	U	2500	310	ug/L			11/04/16 02:42	250
Methylene Chloride	1300	U	1300	130	ug/L			11/04/16 02:42	250
4-Methyl-2-pentanone (MIBK)	2500	U	2500	180	ug/L			11/04/16 02:42	250
Styrene	250	U	250	58	ug/L			11/04/16 02:42	250
1,1,2,2-Tetrachloroethane	250	U	250	80	ug/L			11/04/16 02:42	250
Tetrachloroethene	250	U	250	75	ug/L			11/04/16 02:42	250
Toluene	250	U	250	58	ug/L			11/04/16 02:42	250
Trichloroethene	250	U	250	83	ug/L			11/04/16 02:42	250
Vinyl chloride	**12000**		250	110	ug/L			11/04/16 02:42	250
Xylenes, Total	500	U	500	60	ug/L			11/04/16 02:42	250
1,1,1-Trichloroethane	250	U	250	58	ug/L			11/04/16 02:42	250
1,1,2-Trichloroethane	250	U	250	85	ug/L			11/04/16 02:42	250
Cyclohexane	250	U	250	110	ug/L			11/04/16 02:42	250
1,2-Dibromo-3-Chloropropane	250	U	250	120	ug/L			11/04/16 02:42	250
1,2-Dibromoethane	250	U	250	58	ug/L			11/04/16 02:42	250
Dichlorodifluoromethane	250	U	250	130	ug/L			11/04/16 02:42	250
cis-1,2-Dichloroethene	**1400**		250	75	ug/L			11/04/16 02:42	250
trans-1,2-Dichloroethene	**130**	**J**	250	73	ug/L			11/04/16 02:42	250
Isopropylbenzene	250	U	250	53	ug/L			11/04/16 02:42	250
Methyl acetate	2500	U	2500	360	ug/L			11/04/16 02:42	250
Methyl tert-butyl ether	250	U	250	68	ug/L			11/04/16 02:42	250
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	100	ug/L			11/04/16 02:42	250
1,2,4-Trichlorobenzene	250	U	250	68	ug/L			11/04/16 02:42	250
1,2-Dichlorobenzene	250	U	250	65	ug/L			11/04/16 02:42	250
1,3-Dichlorobenzene	250	U	250	80	ug/L			11/04/16 02:42	250
1,4-Dichlorobenzene	250	U	250	58	ug/L			11/04/16 02:42	250
Trichlorofluoromethane	250	U	250	130	ug/L			11/04/16 02:42	250
Dibromochloromethane	250	U	250	63	ug/L			11/04/16 02:42	250
Methylcyclohexane	250	U	250	110	ug/L			11/04/16 02:42	250

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 132		11/04/16 02:42	250
4-Bromofluorobenzene (Surr)	93		73 - 120		11/04/16 02:42	250
Toluene-d8 (Surr)	91		73 - 124		11/04/16 02:42	250
Dibromofluoromethane (Surr)	91		80 - 120		11/04/16 02:42	250

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

Client Sample ID: GW-17303-102616-JY-011
Date Collected: 10/26/16 10:45
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2000	U	2000	350	ug/L			11/04/16 03:06	200
Benzene	200	U	200	56	ug/L			11/04/16 03:06	200
Bromodichloromethane	200	U	200	60	ug/L			11/04/16 03:06	200
Bromoform	200	U	200	86	ug/L			11/04/16 03:06	200
Bromomethane	200	U	200	84	ug/L			11/04/16 03:06	200
2-Butanone (MEK)	2000	U	2000	200	ug/L			11/04/16 03:06	200
Carbon disulfide	1000	U	1000	68	ug/L			11/04/16 03:06	200
Carbon tetrachloride	200	U	200	70	ug/L			11/04/16 03:06	200
Chlorobenzene	200	U	200	64	ug/L			11/04/16 03:06	200
Chloroethane	200	U	200	82	ug/L			11/04/16 03:06	200
Chloroform	200	U	200	62	ug/L			11/04/16 03:06	200
Chloromethane	200	U	200	86	ug/L			11/04/16 03:06	200
1,1-Dichloroethane	200	U	200	50	ug/L			11/04/16 03:06	200
1,2-Dichloroethane	200	U	200	60	ug/L			11/04/16 03:06	200
1,1-Dichloroethene	200	U	200	54	ug/L			11/04/16 03:06	200
1,2-Dichloropropane	200	U	200	60	ug/L			11/04/16 03:06	200
cis-1,3-Dichloropropene	200	U	200	52	ug/L			11/04/16 03:06	200
trans-1,3-Dichloropropene	200	U	200	62	ug/L			11/04/16 03:06	200
Ethylbenzene	200	U	200	52	ug/L			11/04/16 03:06	200
2-Hexanone	2000	U	2000	250	ug/L			11/04/16 03:06	200
Methylene Chloride	1000	U	1000	110	ug/L			11/04/16 03:06	200
4-Methyl-2-pentanone (MIBK)	2000	U	2000	140	ug/L			11/04/16 03:06	200
Styrene	200	U	200	46	ug/L			11/04/16 03:06	200
1,1,2,2-Tetrachloroethane	200	U	200	64	ug/L			11/04/16 03:06	200
Tetrachloroethene	200	U	200	60	ug/L			11/04/16 03:06	200
Toluene	200	U	200	46	ug/L			11/04/16 03:06	200
Trichloroethene	200	U	200	66	ug/L			11/04/16 03:06	200
Vinyl chloride	**4900**		200	90	ug/L			11/04/16 03:06	200
Xylenes, Total	400	U	400	48	ug/L			11/04/16 03:06	200
1,1,1-Trichloroethane	200	U	200	46	ug/L			11/04/16 03:06	200
1,1,2-Trichloroethane	200	U	200	68	ug/L			11/04/16 03:06	200
Cyclohexane	200	U	200	88	ug/L			11/04/16 03:06	200
1,2-Dibromo-3-Chloropropane	200	U	200	94	ug/L			11/04/16 03:06	200
1,2-Dibromoethane	200	U	200	46	ug/L			11/04/16 03:06	200
Dichlorodifluoromethane	200	U	200	100	ug/L			11/04/16 03:06	200
cis-1,2-Dichloroethene	**2100**		200	60	ug/L			11/04/16 03:06	200
trans-1,2-Dichloroethene	**75**	**J**	200	58	ug/L			11/04/16 03:06	200
Isopropylbenzene	200	U	200	42	ug/L			11/04/16 03:06	200
Methyl acetate	2000	U	2000	290	ug/L			11/04/16 03:06	200
Methyl tert-butyl ether	200	U	200	54	ug/L			11/04/16 03:06	200
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	82	ug/L			11/04/16 03:06	200
1,2,4-Trichlorobenzene	200	U	200	54	ug/L			11/04/16 03:06	200
1,2-Dichlorobenzene	200	U	200	52	ug/L			11/04/16 03:06	200
1,3-Dichlorobenzene	200	U	200	64	ug/L			11/04/16 03:06	200
1,4-Dichlorobenzene	200	U	200	46	ug/L			11/04/16 03:06	200
Trichlorofluoromethane	200	U	200	100	ug/L			11/04/16 03:06	200
Dibromochloromethane	200	U	200	50	ug/L			11/04/16 03:06	200
Methylcyclohexane	200	U	200	90	ug/L			11/04/16 03:06	200

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 132		11/04/16 03:06	200
4-Bromofluorobenzene (Surr)	93		73 - 120		11/04/16 03:06	200
Toluene-d8 (Surr)	92		73 - 124		11/04/16 03:06	200
Dibromofluoromethane (Surr)	90		80 - 120		11/04/16 03:06	200

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

Client Sample ID: GW-17303-102616-JY-012
Date Collected: 10/26/16 11:40
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	50000	U	50000	8800	ug/L			11/04/16 19:00	5000
Benzene	5000	U	5000	1400	ug/L			11/04/16 19:00	5000
Bromodichloromethane	5000	U	5000	1500	ug/L			11/04/16 19:00	5000
Bromoform	5000	U	5000	2200	ug/L			11/04/16 19:00	5000
Bromomethane	5000	U	5000	2100	ug/L			11/04/16 19:00	5000
2-Butanone (MEK)	50000	U	50000	5100	ug/L			11/04/16 19:00	5000
Carbon disulfide	25000	U	25000	1700	ug/L			11/04/16 19:00	5000
Carbon tetrachloride	5000	U	5000	1800	ug/L			11/04/16 19:00	5000
Chlorobenzene	5000	U	5000	1600	ug/L			11/04/16 19:00	5000
Chloroethane	5000	U	5000	2100	ug/L			11/04/16 19:00	5000
Chloroform	5000	U	5000	1600	ug/L			11/04/16 19:00	5000
Chloromethane	5000	U	5000	2200	ug/L			11/04/16 19:00	5000
1,1-Dichloroethane	5000	U	5000	1300	ug/L			11/04/16 19:00	5000
1,2-Dichloroethane	5000	U	5000	1500	ug/L			11/04/16 19:00	5000
1,1-Dichloroethene	5000	U	5000	1400	ug/L			11/04/16 19:00	5000
1,2-Dichloropropane	5000	U	5000	1500	ug/L			11/04/16 19:00	5000
cis-1,3-Dichloropropene	5000	U	5000	1300	ug/L			11/04/16 19:00	5000
trans-1,3-Dichloropropene	5000	U	5000	1600	ug/L			11/04/16 19:00	5000
Ethylbenzene	5000	U	5000	1300	ug/L			11/04/16 19:00	5000
2-Hexanone	50000	U *	50000	6200	ug/L			11/04/16 19:00	5000
Methylene Chloride	25000	U	25000	2700	ug/L			11/04/16 19:00	5000
4-Methyl-2-pentanone (MIBK)	50000	U	50000	3600	ug/L			11/04/16 19:00	5000
Styrene	5000	U	5000	1200	ug/L			11/04/16 19:00	5000
1,1,2,2-Tetrachloroethane	5000	U	5000	1600	ug/L			11/04/16 19:00	5000
Tetrachloroethene	5000	U	5000	1500	ug/L			11/04/16 19:00	5000
Toluene	5000	U	5000	1200	ug/L			11/04/16 19:00	5000
Trichloroethene	5000	U	5000	1700	ug/L			11/04/16 19:00	5000
Vinyl chloride	**51000**		5000	2300	ug/L			11/04/16 19:00	5000
Xylenes, Total	10000	U	10000	1200	ug/L			11/04/16 19:00	5000
1,1,1-Trichloroethane	5000	U	5000	1200	ug/L			11/04/16 19:00	5000
1,1,2-Trichloroethane	5000	U	5000	1700	ug/L			11/04/16 19:00	5000
Cyclohexane	5000	U	5000	2200	ug/L			11/04/16 19:00	5000
1,2-Dibromo-3-Chloropropane	5000	U	5000	2400	ug/L			11/04/16 19:00	5000
1,2-Dibromoethane	5000	U	5000	1200	ug/L			11/04/16 19:00	5000
Dichlorodifluoromethane	5000	U	5000	2500	ug/L			11/04/16 19:00	5000
cis-1,2-Dichloroethene	**5600**		5000	1500	ug/L			11/04/16 19:00	5000
trans-1,2-Dichloroethene	5000	U	5000	1500	ug/L			11/04/16 19:00	5000
Isopropylbenzene	5000	U	5000	1100	ug/L			11/04/16 19:00	5000
Methyl acetate	50000	U	50000	7200	ug/L			11/04/16 19:00	5000
Methyl tert-butyl ether	5000	U	5000	1400	ug/L			11/04/16 19:00	5000
1,1,2-Trichloro-1,2,2-trifluoroethane	5000	U	5000	2100	ug/L			11/04/16 19:00	5000
1,2,4-Trichlorobenzene	5000	U	5000	1400	ug/L			11/04/16 19:00	5000
1,2-Dichlorobenzene	5000	U	5000	1300	ug/L			11/04/16 19:00	5000
1,3-Dichlorobenzene	5000	U	5000	1600	ug/L			11/04/16 19:00	5000
1,4-Dichlorobenzene	5000	U	5000	1200	ug/L			11/04/16 19:00	5000
Trichlorofluoromethane	5000	U	5000	2500	ug/L			11/04/16 19:00	5000
Dibromochloromethane	5000	U	5000	1300	ug/L			11/04/16 19:00	5000
Methylcyclohexane	5000	U	5000	2300	ug/L			11/04/16 19:00	5000

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		63 - 132		11/04/16 19:00	5000
4-Bromofluorobenzene (Surr)	89		73 - 120		11/04/16 19:00	5000
Toluene-d8 (Surr)	104		73 - 124		11/04/16 19:00	5000
Dibromofluoromethane (Surr)	101		80 - 120		11/04/16 19:00	5000

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

Client Sample ID: GW-17303-102716-JY-013
Date Collected: 10/27/16 09:20
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	250	U	250	44	ug/L			11/04/16 22:40	25
Benzene	**10**	**J**	25	7.0	ug/L			11/04/16 22:40	25
Bromodichloromethane	25	U	25	7.5	ug/L			11/04/16 22:40	25
Bromoform	25	U	25	11	ug/L			11/04/16 22:40	25
Bromomethane	25	U	25	11	ug/L			11/04/16 22:40	25
2-Butanone (MEK)	250	U	250	26	ug/L			11/04/16 22:40	25
Carbon disulfide	130	U	130	8.5	ug/L			11/04/16 22:40	25
Carbon tetrachloride	25	U	25	8.8	ug/L			11/04/16 22:40	25
Chlorobenzene	25	U	25	8.0	ug/L			11/04/16 22:40	25
Chloroethane	25	U	25	10	ug/L			11/04/16 22:40	25
Chloroform	25	U	25	7.8	ug/L			11/04/16 22:40	25
Chloromethane	25	U	25	11	ug/L			11/04/16 22:40	25
1,1-Dichloroethane	25	U	25	6.3	ug/L			11/04/16 22:40	25
1,2-Dichloroethane	25	U	25	7.5	ug/L			11/04/16 22:40	25
1,1-Dichloroethene	25	U	25	6.8	ug/L			11/04/16 22:40	25
1,2-Dichloropropane	25	U	25	7.5	ug/L			11/04/16 22:40	25
cis-1,3-Dichloropropene	25	U	25	6.5	ug/L			11/04/16 22:40	25
trans-1,3-Dichloropropene	25	U	25	7.8	ug/L			11/04/16 22:40	25
Ethylbenzene	**32**		25	6.5	ug/L			11/04/16 22:40	25
2-Hexanone	250	U F1 *	250	31	ug/L			11/04/16 22:40	25
Methylene Chloride	130	U	130	13	ug/L			11/04/16 22:40	25
4-Methyl-2-pentanone (MIBK)	250	U	250	18	ug/L			11/04/16 22:40	25
Styrene	25	U	25	5.8	ug/L			11/04/16 22:40	25
1,1,2,2-Tetrachloroethane	25	U	25	8.0	ug/L			11/04/16 22:40	25
Tetrachloroethene	25	U	25	7.5	ug/L			11/04/16 22:40	25
Toluene	**62**		25	5.8	ug/L			11/04/16 22:40	25
Trichloroethene	**15**	**J**	25	8.3	ug/L			11/04/16 22:40	25
Vinyl chloride	**46**		25	11	ug/L			11/04/16 22:40	25
Xylenes, Total	**140**		50	6.0	ug/L			11/04/16 22:40	25
1,1,1-Trichloroethane	25	U	25	5.8	ug/L			11/04/16 22:40	25
1,1,2-Trichloroethane	25	U	25	8.5	ug/L			11/04/16 22:40	25
Cyclohexane	25	U	25	11	ug/L			11/04/16 22:40	25
1,2-Dibromo-3-Chloropropane	25	U	25	12	ug/L			11/04/16 22:40	25
1,2-Dibromoethane	25	U	25	5.8	ug/L			11/04/16 22:40	25
Dichlorodifluoromethane	25	U	25	13	ug/L			11/04/16 22:40	25
cis-1,2-Dichloroethene	**30**		25	7.5	ug/L			11/04/16 22:40	25
trans-1,2-Dichloroethene	25	U	25	7.3	ug/L			11/04/16 22:40	25
Isopropylbenzene	25	U	25	5.3	ug/L			11/04/16 22:40	25
Methyl acetate	250	U	250	36	ug/L			11/04/16 22:40	25
Methyl tert-butyl ether	25	U	25	6.8	ug/L			11/04/16 22:40	25
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	25	10	ug/L			11/04/16 22:40	25
1,2,4-Trichlorobenzene	25	U	25	6.8	ug/L			11/04/16 22:40	25
1,2-Dichlorobenzene	25	U	25	6.5	ug/L			11/04/16 22:40	25
1,3-Dichlorobenzene	25	U	25	8.0	ug/L			11/04/16 22:40	25
1,4-Dichlorobenzene	25	U	25	5.8	ug/L			11/04/16 22:40	25
Trichlorofluoromethane	25	U	25	13	ug/L			11/04/16 22:40	25
Dibromochloromethane	25	U	25	6.3	ug/L			11/04/16 22:40	25
Methylcyclohexane	25	U	25	11	ug/L			11/04/16 22:40	25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		63 - 132		11/04/16 22:40	25
4-Bromofluorobenzene (Surr)	94		73 - 120		11/04/16 22:40	25
Toluene-d8 (Surr)	106		73 - 124		11/04/16 22:40	25
Dibromofluoromethane (Surr)	101		80 - 120		11/04/16 22:40	25

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

Client Sample ID: GW-17303-102716-JY-014
Date Collected: 10/27/16 10:10
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	290	U	290	50	ug/L			11/04/16 19:22	28.57
Benzene	29	U	29	8.0	ug/L			11/04/16 19:22	28.57
Bromodichloromethane	29	U	29	8.6	ug/L			11/04/16 19:22	28.57
Bromoform	29	U	29	12	ug/L			11/04/16 19:22	28.57
Bromomethane	29	U	29	12	ug/L			11/04/16 19:22	28.57
2-Butanone (MEK)	290	U	290	29	ug/L			11/04/16 19:22	28.57
Carbon disulfide	140	U	140	9.7	ug/L			11/04/16 19:22	28.57
Carbon tetrachloride	29	U	29	10	ug/L			11/04/16 19:22	28.57
Chlorobenzene	29	U	29	9.1	ug/L			11/04/16 19:22	28.57
Chloroethane	29	U	29	12	ug/L			11/04/16 19:22	28.57
Chloroform	29	U	29	8.9	ug/L			11/04/16 19:22	28.57
Chloromethane	29	U	29	12	ug/L			11/04/16 19:22	28.57
1,1-Dichloroethane	29	U	29	7.1	ug/L			11/04/16 19:22	28.57
1,2-Dichloroethane	29	U	29	8.6	ug/L			11/04/16 19:22	28.57
1,1-Dichloroethene	29	U	29	7.7	ug/L			11/04/16 19:22	28.57
1,2-Dichloropropane	29	U	29	8.6	ug/L			11/04/16 19:22	28.57
cis-1,3-Dichloropropene	29	U	29	7.4	ug/L			11/04/16 19:22	28.57
trans-1,3-Dichloropropene	29	U	29	8.9	ug/L			11/04/16 19:22	28.57
Ethylbenzene	29	U	29	7.4	ug/L			11/04/16 19:22	28.57
2-Hexanone	290	U *	290	35	ug/L			11/04/16 19:22	28.57
Methylene Chloride	140	U	140	15	ug/L			11/04/16 19:22	28.57
4-Methyl-2-pentanone (MIBK)	290	U	290	20	ug/L			11/04/16 19:22	28.57
Styrene	29	U	29	6.6	ug/L			11/04/16 19:22	28.57
1,1,2,2-Tetrachloroethane	29	U	29	9.1	ug/L			11/04/16 19:22	28.57
Tetrachloroethene	29	U	29	8.6	ug/L			11/04/16 19:22	28.57
Toluene	29	U	29	6.6	ug/L			11/04/16 19:22	28.57
Trichloroethene	**70**		29	9.4	ug/L			11/04/16 19:22	28.57
Vinyl chloride	**300**		29	13	ug/L			11/04/16 19:22	28.57
Xylenes, Total	57	U	57	6.9	ug/L			11/04/16 19:22	28.57
1,1,1-Trichloroethane	29	U	29	6.6	ug/L			11/04/16 19:22	28.57
1,1,2-Trichloroethane	29	U	29	9.7	ug/L			11/04/16 19:22	28.57
Cyclohexane	29	U	29	13	ug/L			11/04/16 19:22	28.57
1,2-Dibromo-3-Chloropropane	29	U	29	13	ug/L			11/04/16 19:22	28.57
1,2-Dibromoethane	29	U	29	6.6	ug/L			11/04/16 19:22	28.57
Dichlorodifluoromethane	29	U	29	14	ug/L			11/04/16 19:22	28.57
cis-1,2-Dichloroethene	**130**		29	8.6	ug/L			11/04/16 19:22	28.57
trans-1,2-Dichloroethene	**9.4**	**J**	29	8.3	ug/L			11/04/16 19:22	28.57
Isopropylbenzene	29	U	29	6.0	ug/L			11/04/16 19:22	28.57
Methyl acetate	290	U	290	41	ug/L			11/04/16 19:22	28.57
Methyl tert-butyl ether	29	U	29	7.7	ug/L			11/04/16 19:22	28.57
1,1,2-Trichloro-1,2,2-trifluoroethane	29	U	29	12	ug/L			11/04/16 19:22	28.57
1,2,4-Trichlorobenzene	29	U	29	7.7	ug/L			11/04/16 19:22	28.57
1,2-Dichlorobenzene	29	U	29	7.4	ug/L			11/04/16 19:22	28.57
1,3-Dichlorobenzene	29	U	29	9.1	ug/L			11/04/16 19:22	28.57
1,4-Dichlorobenzene	29	U	29	6.6	ug/L			11/04/16 19:22	28.57
Trichlorofluoromethane	29	U	29	14	ug/L			11/04/16 19:22	28.57
Dibromochloromethane	29	U	29	7.1	ug/L			11/04/16 19:22	28.57
Methylcyclohexane	29	U	29	13	ug/L			11/04/16 19:22	28.57

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		63 - 132		11/04/16 19:22	28.57
4-Bromofluorobenzene (Surr)	93		73 - 120		11/04/16 19:22	28.57
Toluene-d8 (Surr)	103		73 - 124		11/04/16 19:22	28.57
Dibromofluoromethane (Surr)	101		80 - 120		11/04/16 19:22	28.57

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

Client Sample ID: GW-17303-102716-JY-015
Date Collected: 10/27/16 11:20
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	170000	U	170000	29000	ug/L			11/07/16 18:16	16666.67
Benzene	17000	U	17000	4700	ug/L			11/07/16 18:16	16666.67
Bromodichloromethane	17000	U	17000	5000	ug/L			11/07/16 18:16	16666.67
Bromoform	17000	U	17000	7200	ug/L			11/07/16 18:16	16666.67
Bromomethane	17000	U	17000	7000	ug/L			11/07/16 18:16	16666.67
2-Butanone (MEK)	170000	U *	170000	17000	ug/L			11/07/16 18:16	16666.67
Carbon disulfide	83000	U	83000	5700	ug/L			11/07/16 18:16	16666.67
Carbon tetrachloride	17000	U	17000	5800	ug/L			11/07/16 18:16	16666.67
Chlorobenzene	17000	U	17000	5300	ug/L			11/07/16 18:16	16666.67
Chloroethane	17000	U	17000	6800	ug/L			11/07/16 18:16	16666.67
Chloroform	17000	U	17000	5200	ug/L			11/07/16 18:16	16666.67
Chloromethane	17000	U	17000	7200	ug/L			11/07/16 18:16	16666.67
1,1-Dichloroethane	17000	U	17000	4200	ug/L			11/07/16 18:16	16666.67
1,2-Dichloroethane	17000	U	17000	5000	ug/L			11/07/16 18:16	16666.67
1,1-Dichloroethene	17000	U	17000	4500	ug/L			11/07/16 18:16	16666.67
1,2-Dichloropropane	17000	U	17000	5000	ug/L			11/07/16 18:16	16666.67
cis-1,3-Dichloropropene	17000	U	17000	4300	ug/L			11/07/16 18:16	16666.67
trans-1,3-Dichloropropene	17000	U	17000	5200	ug/L			11/07/16 18:16	16666.67
Ethylbenzene	17000	U	17000	4300	ug/L			11/07/16 18:16	16666.67
2-Hexanone	170000	U *	170000	21000	ug/L			11/07/16 18:16	16666.67
Methylene Chloride	83000	U	83000	8800	ug/L			11/07/16 18:16	16666.67
4-Methyl-2-pentanone (MIBK)	170000	U	170000	12000	ug/L			11/07/16 18:16	16666.67
Styrene	17000	U	17000	3800	ug/L			11/07/16 18:16	16666.67
1,1,2,2-Tetrachloroethane	17000	U	17000	5300	ug/L			11/07/16 18:16	16666.67
Tetrachloroethene	17000	U	17000	5000	ug/L			11/07/16 18:16	16666.67
Toluene	17000	U	17000	3800	ug/L			11/07/16 18:16	16666.67
Trichloroethene	17000	U	17000	5500	ug/L			11/07/16 18:16	16666.67
Vinyl chloride	**80000**		17000	7500	ug/L			11/07/16 18:16	16666.67

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

Client Sample ID: GW-17303-102716-JY-015
Date Collected: 10/27/16 11:20
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	33000	U	33000	4000	ug/L			11/07/16 18:16	16666.67
1,1,1-Trichloroethane	17000	U	17000	3800	ug/L			11/07/16 18:16	16666.67
1,1,2-Trichloroethane	17000	U	17000	5700	ug/L			11/07/16 18:16	16666.67
Cyclohexane	17000	U	17000	7300	ug/L			11/07/16 18:16	16666.67
1,2-Dibromo-3-Chloropropane	17000	U	17000	7800	ug/L			11/07/16 18:16	16666.67
1,2-Dibromoethane	17000	U	17000	3800	ug/L			11/07/16 18:16	16666.67
Dichlorodifluoromethane	17000	U	17000	8300	ug/L			11/07/16 18:16	16666.67
cis-1,2-Dichloroethene	**320000**		17000	5000	ug/L			11/07/16 18:16	16666.67
trans-1,2-Dichloroethene	17000	U	17000	4800	ug/L			11/07/16 18:16	16666.67
Isopropylbenzene	17000	U	17000	3500	ug/L			11/07/16 18:16	16666.67
Methyl acetate	170000	U	170000	24000	ug/L			11/07/16 18:16	16666.67
Methyl tert-butyl ether	17000	U	17000	4500	ug/L			11/07/16 18:16	16666.67
1,1,2-Trichloro-1,2,2-trifluoroethane	17000	U	17000	6800	ug/L			11/07/16 18:16	16666.67
1,2,4-Trichlorobenzene	17000	U	17000	4500	ug/L			11/07/16 18:16	16666.67
1,2-Dichlorobenzene	17000	U	17000	4300	ug/L			11/07/16 18:16	16666.67
1,3-Dichlorobenzene	17000	U	17000	5300	ug/L			11/07/16 18:16	16666.67
1,4-Dichlorobenzene	17000	U	17000	3800	ug/L			11/07/16 18:16	16666.67
Trichlorofluoromethane	17000	U	17000	8300	ug/L			11/07/16 18:16	16666.67
Dibromochloromethane	17000	U	17000	4200	ug/L			11/07/16 18:16	16666.67
Methylcyclohexane	17000	U	17000	7500	ug/L			11/07/16 18:16	16666.67

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*63 - 132*		*11/07/16 18:16*	*16666.67*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*11/07/16 18:16*	*16666.67*
Toluene-d8 (Surr)	*108*		*73 - 124*		*11/07/16 18:16*	*16666.67*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*11/07/16 18:16*	*16666.67*

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

Client Sample ID: GW-17303-102716-JY-016
Date Collected: 10/27/16 12:10
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1400	U	1400	250	ug/L			11/04/16 20:06	142.86
Benzene	140	U	140	40	ug/L			11/04/16 20:06	142.86
Bromodichloromethane	140	U	140	43	ug/L			11/04/16 20:06	142.86
Bromoform	140	U	140	61	ug/L			11/04/16 20:06	142.86
Bromomethane	140	U	140	60	ug/L			11/04/16 20:06	142.86
2-Butanone (MEK)	1400	U	1400	150	ug/L			11/04/16 20:06	142.86
Carbon disulfide	710	U	710	49	ug/L			11/04/16 20:06	142.86
Carbon tetrachloride	140	U	140	50	ug/L			11/04/16 20:06	142.86
Chlorobenzene	140	U	140	46	ug/L			11/04/16 20:06	142.86
Chloroethane	140	U	140	59	ug/L			11/04/16 20:06	142.86
Chloroform	140	U	140	44	ug/L			11/04/16 20:06	142.86
Chloromethane	140	U	140	61	ug/L			11/04/16 20:06	142.86
1,1-Dichloroethane	140	U	140	36	ug/L			11/04/16 20:06	142.86
1,2-Dichloroethane	140	U	140	43	ug/L			11/04/16 20:06	142.86
1,1-Dichloroethene	140	U	140	39	ug/L			11/04/16 20:06	142.86
1,2-Dichloropropane	140	U	140	43	ug/L			11/04/16 20:06	142.86
cis-1,3-Dichloropropene	140	U	140	37	ug/L			11/04/16 20:06	142.86
trans-1,3-Dichloropropene	140	U	140	44	ug/L			11/04/16 20:06	142.86
Ethylbenzene	140	U	140	37	ug/L			11/04/16 20:06	142.86
2-Hexanone	1400	U *	1400	180	ug/L			11/04/16 20:06	142.86
Methylene Chloride	710	U	710	76	ug/L			11/04/16 20:06	142.86
4-Methyl-2-pentanone (MIBK)	1400	U	1400	100	ug/L			11/04/16 20:06	142.86
Styrene	140	U	140	33	ug/L			11/04/16 20:06	142.86
1,1,2,2-Tetrachloroethane	140	U	140	46	ug/L			11/04/16 20:06	142.86
Tetrachloroethene	140	U	140	43	ug/L			11/04/16 20:06	142.86
Toluene	140	U	140	33	ug/L			11/04/16 20:06	142.86
Trichloroethene	**110**	**J**	140	47	ug/L			11/04/16 20:06	142.86
Vinyl chloride	**2000**		140	64	ug/L			11/04/16 20:06	142.86
Xylenes, Total	290	U	290	34	ug/L			11/04/16 20:06	142.86
1,1,1-Trichloroethane	140	U	140	33	ug/L			11/04/16 20:06	142.86
1,1,2-Trichloroethane	140	U	140	49	ug/L			11/04/16 20:06	142.86
Cyclohexane	140	U	140	63	ug/L			11/04/16 20:06	142.86
1,2-Dibromo-3-Chloropropane	140	U	140	67	ug/L			11/04/16 20:06	142.86
1,2-Dibromoethane	140	U	140	33	ug/L			11/04/16 20:06	142.86
Dichlorodifluoromethane	140	U	140	71	ug/L			11/04/16 20:06	142.86
cis-1,2-Dichloroethene	**1000**		140	43	ug/L			11/04/16 20:06	142.86
trans-1,2-Dichloroethene	**59**	**J**	140	41	ug/L			11/04/16 20:06	142.86
Isopropylbenzene	140	U	140	30	ug/L			11/04/16 20:06	142.86
Methyl acetate	1400	U	1400	200	ug/L			11/04/16 20:06	142.86
Methyl tert-butyl ether	140	U	140	39	ug/L			11/04/16 20:06	142.86
1,1,2-Trichloro-1,2,2-trifluoroethane	140	U	140	59	ug/L			11/04/16 20:06	142.86
1,2,4-Trichlorobenzene	140	U	140	39	ug/L			11/04/16 20:06	142.86
1,2-Dichlorobenzene	140	U	140	37	ug/L			11/04/16 20:06	142.86
1,3-Dichlorobenzene	140	U	140	46	ug/L			11/04/16 20:06	142.86
1,4-Dichlorobenzene	140	U	140	33	ug/L			11/04/16 20:06	142.86
Trichlorofluoromethane	140	U	140	71	ug/L			11/04/16 20:06	142.86
Dibromochloromethane	140	U	140	36	ug/L			11/04/16 20:06	142.86
Methylcyclohexane	140	U	140	64	ug/L			11/04/16 20:06	142.86

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		63 - 132		11/04/16 20:06	142.86
4-Bromofluorobenzene (Surr)	91		73 - 120		11/04/16 20:06	142.86
Toluene-d8 (Surr)	104		73 - 124		11/04/16 20:06	142.86
Dibromofluoromethane (Surr)	99		80 - 120		11/04/16 20:06	142.86

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

Client Sample ID: GW-17303-102716-JY-017
Date Collected: 10/27/16 12:15
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1400	U	1400	250	ug/L			11/04/16 20:28	142.86
Benzene	140	U	140	40	ug/L			11/04/16 20:28	142.86
Bromodichloromethane	140	U	140	43	ug/L			11/04/16 20:28	142.86
Bromoform	140	U	140	61	ug/L			11/04/16 20:28	142.86
Bromomethane	140	U	140	60	ug/L			11/04/16 20:28	142.86
2-Butanone (MEK)	1400	U	1400	150	ug/L			11/04/16 20:28	142.86
Carbon disulfide	710	U	710	49	ug/L			11/04/16 20:28	142.86
Carbon tetrachloride	140	U	140	50	ug/L			11/04/16 20:28	142.86
Chlorobenzene	140	U	140	46	ug/L			11/04/16 20:28	142.86
Chloroethane	140	U	140	59	ug/L			11/04/16 20:28	142.86
Chloroform	140	U	140	44	ug/L			11/04/16 20:28	142.86
Chloromethane	140	U	140	61	ug/L			11/04/16 20:28	142.86
1,1-Dichloroethane	140	U	140	36	ug/L			11/04/16 20:28	142.86
1,2-Dichloroethane	140	U	140	43	ug/L			11/04/16 20:28	142.86
1,1-Dichloroethene	140	U	140	39	ug/L			11/04/16 20:28	142.86
1,2-Dichloropropane	140	U	140	43	ug/L			11/04/16 20:28	142.86
cis-1,3-Dichloropropene	140	U	140	37	ug/L			11/04/16 20:28	142.86
trans-1,3-Dichloropropene	140	U	140	44	ug/L			11/04/16 20:28	142.86
Ethylbenzene	140	U	140	37	ug/L			11/04/16 20:28	142.86
2-Hexanone	1400	U *	1400	180	ug/L			11/04/16 20:28	142.86
Methylene Chloride	710	U	710	76	ug/L			11/04/16 20:28	142.86
4-Methyl-2-pentanone (MIBK)	1400	U	1400	100	ug/L			11/04/16 20:28	142.86
Styrene	140	U	140	33	ug/L			11/04/16 20:28	142.86
1,1,2,2-Tetrachloroethane	140	U	140	46	ug/L			11/04/16 20:28	142.86
Tetrachloroethene	140	U	140	43	ug/L			11/04/16 20:28	142.86
Toluene	140	U	140	33	ug/L			11/04/16 20:28	142.86
Trichloroethene	**120**	**J**	140	47	ug/L			11/04/16 20:28	142.86
Vinyl chloride	**2100**		140	64	ug/L			11/04/16 20:28	142.86
Xylenes, Total	290	U	290	34	ug/L			11/04/16 20:28	142.86
1,1,1-Trichloroethane	140	U	140	33	ug/L			11/04/16 20:28	142.86
1,1,2-Trichloroethane	140	U	140	49	ug/L			11/04/16 20:28	142.86
Cyclohexane	140	U	140	63	ug/L			11/04/16 20:28	142.86
1,2-Dibromo-3-Chloropropane	140	U	140	67	ug/L			11/04/16 20:28	142.86
1,2-Dibromoethane	140	U	140	33	ug/L			11/04/16 20:28	142.86
Dichlorodifluoromethane	140	U	140	71	ug/L			11/04/16 20:28	142.86
cis-1,2-Dichloroethene	**1200**		140	43	ug/L			11/04/16 20:28	142.86
trans-1,2-Dichloroethene	**61**	**J**	140	41	ug/L			11/04/16 20:28	142.86
Isopropylbenzene	140	U	140	30	ug/L			11/04/16 20:28	142.86
Methyl acetate	1400	U	1400	200	ug/L			11/04/16 20:28	142.86
Methyl tert-butyl ether	140	U	140	39	ug/L			11/04/16 20:28	142.86
1,1,2-Trichloro-1,2,2-trifluoroethane	140	U	140	59	ug/L			11/04/16 20:28	142.86
1,2,4-Trichlorobenzene	140	U	140	39	ug/L			11/04/16 20:28	142.86
1,2-Dichlorobenzene	140	U	140	37	ug/L			11/04/16 20:28	142.86
1,3-Dichlorobenzene	140	U	140	46	ug/L			11/04/16 20:28	142.86
1,4-Dichlorobenzene	140	U	140	33	ug/L			11/04/16 20:28	142.86
Trichlorofluoromethane	140	U	140	71	ug/L			11/04/16 20:28	142.86
Dibromochloromethane	140	U	140	36	ug/L			11/04/16 20:28	142.86
Methylcyclohexane	140	U	140	64	ug/L			11/04/16 20:28	142.86

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		63 - 132		11/04/16 20:28	142.86
4-Bromofluorobenzene (Surr)	92		73 - 120		11/04/16 20:28	142.86
Toluene-d8 (Surr)	103		73 - 124		11/04/16 20:28	142.86
Dibromofluoromethane (Surr)	97		80 - 120		11/04/16 20:28	142.86

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

Client Sample ID: GW-17303-102716-JY-018
Date Collected: 10/27/16 13:05
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-19
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1300	U	1300	220	ug/L			11/04/16 20:50	125
Benzene	**50**	**J**	130	35	ug/L			11/04/16 20:50	125
Bromodichloromethane	130	U	130	38	ug/L			11/04/16 20:50	125
Bromoform	130	U	130	54	ug/L			11/04/16 20:50	125
Bromomethane	130	U	130	53	ug/L			11/04/16 20:50	125
2-Butanone (MEK)	1300	U	1300	130	ug/L			11/04/16 20:50	125
Carbon disulfide	630	U	630	43	ug/L			11/04/16 20:50	125
Carbon tetrachloride	130	U	130	44	ug/L			11/04/16 20:50	125
Chlorobenzene	130	U	130	40	ug/L			11/04/16 20:50	125
Chloroethane	130	U	130	51	ug/L			11/04/16 20:50	125
Chloroform	130	U	130	39	ug/L			11/04/16 20:50	125
Chloromethane	130	U	130	54	ug/L			11/04/16 20:50	125
1,1-Dichloroethane	130	U	130	31	ug/L			11/04/16 20:50	125
1,2-Dichloroethane	130	U	130	38	ug/L			11/04/16 20:50	125
1,1-Dichloroethene	130	U	130	34	ug/L			11/04/16 20:50	125
1,2-Dichloropropane	130	U	130	38	ug/L			11/04/16 20:50	125
cis-1,3-Dichloropropene	130	U	130	33	ug/L			11/04/16 20:50	125
trans-1,3-Dichloropropene	130	U	130	39	ug/L			11/04/16 20:50	125
Ethylbenzene	**210**		130	33	ug/L			11/04/16 20:50	125
2-Hexanone	1300	U *	1300	150	ug/L			11/04/16 20:50	125
Methylene Chloride	630	U	630	66	ug/L			11/04/16 20:50	125
4-Methyl-2-pentanone (MIBK)	1300	U	1300	89	ug/L			11/04/16 20:50	125
Styrene	130	U	130	29	ug/L			11/04/16 20:50	125
1,1,2,2-Tetrachloroethane	130	U	130	40	ug/L			11/04/16 20:50	125
Tetrachloroethene	130	U	130	38	ug/L			11/04/16 20:50	125
Toluene	**670**		130	29	ug/L			11/04/16 20:50	125
Trichloroethene	130	U	130	41	ug/L			11/04/16 20:50	125
Vinyl chloride	**2300**		130	56	ug/L			11/04/16 20:50	125
Xylenes, Total	**860**		250	30	ug/L			11/04/16 20:50	125
1,1,1-Trichloroethane	130	U	130	29	ug/L			11/04/16 20:50	125
1,1,2-Trichloroethane	130	U	130	43	ug/L			11/04/16 20:50	125
Cyclohexane	**61**	**J**	130	55	ug/L			11/04/16 20:50	125
1,2-Dibromo-3-Chloropropane	130	U	130	59	ug/L			11/04/16 20:50	125
1,2-Dibromoethane	130	U	130	29	ug/L			11/04/16 20:50	125
Dichlorodifluoromethane	130	U	130	63	ug/L			11/04/16 20:50	125
cis-1,2-Dichloroethene	**760**		130	38	ug/L			11/04/16 20:50	125
trans-1,2-Dichloroethene	130	U	130	36	ug/L			11/04/16 20:50	125
Isopropylbenzene	**91**	**J**	130	26	ug/L			11/04/16 20:50	125
Methyl acetate	1300	U	1300	180	ug/L			11/04/16 20:50	125
Methyl tert-butyl ether	130	U	130	34	ug/L			11/04/16 20:50	125
1,1,2-Trichloro-1,2,2-trifluoroethane	130	U	130	51	ug/L			11/04/16 20:50	125
1,2,4-Trichlorobenzene	130	U	130	34	ug/L			11/04/16 20:50	125
1,2-Dichlorobenzene	130	U	130	33	ug/L			11/04/16 20:50	125
1,3-Dichlorobenzene	130	U	130	40	ug/L			11/04/16 20:50	125
1,4-Dichlorobenzene	130	U	130	29	ug/L			11/04/16 20:50	125
Trichlorofluoromethane	130	U	130	63	ug/L			11/04/16 20:50	125
Dibromochloromethane	130	U	130	31	ug/L			11/04/16 20:50	125
Methylcyclohexane	130	U	130	56	ug/L			11/04/16 20:50	125

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		63 - 132		11/04/16 20:50	125
4-Bromofluorobenzene (Surr)	93		73 - 120		11/04/16 20:50	125
Toluene-d8 (Surr)	102		73 - 124		11/04/16 20:50	125
Dibromofluoromethane (Surr)	99		80 - 120		11/04/16 20:50	125

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

Client Sample ID: GW-17303-102716-JY-019
Date Collected: 10/27/16 14:00
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-20
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	50	U	50	8.8	ug/L			11/04/16 21:12	5
Benzene	**27**		5.0	1.4	ug/L			11/04/16 21:12	5
Bromodichloromethane	5.0	U	5.0	1.5	ug/L			11/04/16 21:12	5
Bromoform	5.0	U	5.0	2.2	ug/L			11/04/16 21:12	5
Bromomethane	5.0	U	5.0	2.1	ug/L			11/04/16 21:12	5
2-Butanone (MEK)	50	U	50	5.1	ug/L			11/04/16 21:12	5
Carbon disulfide	25	U	25	1.7	ug/L			11/04/16 21:12	5
Carbon tetrachloride	5.0	U	5.0	1.8	ug/L			11/04/16 21:12	5
Chlorobenzene	5.0	U	5.0	1.6	ug/L			11/04/16 21:12	5
Chloroethane	5.0	U	5.0	2.1	ug/L			11/04/16 21:12	5
Chloroform	5.0	U	5.0	1.6	ug/L			11/04/16 21:12	5
Chloromethane	5.0	U	5.0	2.2	ug/L			11/04/16 21:12	5
1,1-Dichloroethane	5.0	U	5.0	1.3	ug/L			11/04/16 21:12	5
1,2-Dichloroethane	5.0	U	5.0	1.5	ug/L			11/04/16 21:12	5
1,1-Dichloroethene	5.0	U	5.0	1.4	ug/L			11/04/16 21:12	5
1,2-Dichloropropane	5.0	U	5.0	1.5	ug/L			11/04/16 21:12	5
cis-1,3-Dichloropropene	5.0	U	5.0	1.3	ug/L			11/04/16 21:12	5
trans-1,3-Dichloropropene	5.0	U	5.0	1.6	ug/L			11/04/16 21:12	5
Ethylbenzene	**140**		5.0	1.3	ug/L			11/04/16 21:12	5
2-Hexanone	50	U *	50	6.2	ug/L			11/04/16 21:12	5
Methylene Chloride	25	U	25	2.7	ug/L			11/04/16 21:12	5
4-Methyl-2-pentanone (MIBK)	50	U	50	3.6	ug/L			11/04/16 21:12	5
Styrene	5.0	U	5.0	1.2	ug/L			11/04/16 21:12	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.6	ug/L			11/04/16 21:12	5
Tetrachloroethene	5.0	U	5.0	1.5	ug/L			11/04/16 21:12	5
Toluene	**31**		5.0	1.2	ug/L			11/04/16 21:12	5
Trichloroethene	**2.2**	**J**	5.0	1.7	ug/L			11/04/16 21:12	5
Vinyl chloride	**30**		5.0	2.3	ug/L			11/04/16 21:12	5
Xylenes, Total	**210**		10	1.2	ug/L			11/04/16 21:12	5
1,1,1-Trichloroethane	5.0	U	5.0	1.2	ug/L			11/04/16 21:12	5
1,1,2-Trichloroethane	5.0	U	5.0	1.7	ug/L			11/04/16 21:12	5
Cyclohexane	**54**		5.0	2.2	ug/L			11/04/16 21:12	5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	2.4	ug/L			11/04/16 21:12	5
1,2-Dibromoethane	5.0	U	5.0	1.2	ug/L			11/04/16 21:12	5
Dichlorodifluoromethane	5.0	U	5.0	2.5	ug/L			11/04/16 21:12	5
cis-1,2-Dichloroethene	**17**		5.0	1.5	ug/L			11/04/16 21:12	5
trans-1,2-Dichloroethene	5.0	U	5.0	1.5	ug/L			11/04/16 21:12	5
Isopropylbenzene	**51**		5.0	1.1	ug/L			11/04/16 21:12	5
Methyl acetate	50	U	50	7.2	ug/L			11/04/16 21:12	5
Methyl tert-butyl ether	5.0	U	5.0	1.4	ug/L			11/04/16 21:12	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	2.1	ug/L			11/04/16 21:12	5
1,2,4-Trichlorobenzene	5.0	U	5.0	1.4	ug/L			11/04/16 21:12	5
1,2-Dichlorobenzene	5.0	U	5.0	1.3	ug/L			11/04/16 21:12	5
1,3-Dichlorobenzene	5.0	U	5.0	1.6	ug/L			11/04/16 21:12	5
1,4-Dichlorobenzene	5.0	U	5.0	1.2	ug/L			11/04/16 21:12	5
Trichlorofluoromethane	5.0	U	5.0	2.5	ug/L			11/04/16 21:12	5
Dibromochloromethane	5.0	U	5.0	1.3	ug/L			11/04/16 21:12	5
Methylcyclohexane	**7.2**		5.0	2.3	ug/L			11/04/16 21:12	5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		63 - 132		11/04/16 21:12	5
4-Bromofluorobenzene (Surr)	100		73 - 120		11/04/16 21:12	5
Toluene-d8 (Surr)	101		73 - 124		11/04/16 21:12	5
Dibromofluoromethane (Surr)	100		80 - 120		11/04/16 21:12	5

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

Client Sample ID: GW-17303-102716-JY-020
Date Collected: 10/27/16 15:00
Date Received: 10/28/16 11:58

Lab Sample ID: 240-71416-21
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	170	U	170	29	ug/L			11/04/16 21:34	16.67
Benzene	17	U	17	4.7	ug/L			11/04/16 21:34	16.67
Bromodichloromethane	17	U	17	5.0	ug/L			11/04/16 21:34	16.67
Bromoform	17	U	17	7.2	ug/L			11/04/16 21:34	16.67
Bromomethane	17	U	17	7.0	ug/L			11/04/16 21:34	16.67
2-Butanone (MEK)	170	U	170	17	ug/L			11/04/16 21:34	16.67
Carbon disulfide	83	U	83	5.7	ug/L			11/04/16 21:34	16.67
Carbon tetrachloride	17	U	17	5.8	ug/L			11/04/16 21:34	16.67
Chlorobenzene	17	U	17	5.3	ug/L			11/04/16 21:34	16.67
Chloroethane	17	U	17	6.8	ug/L			11/04/16 21:34	16.67
Chloroform	17	U	17	5.2	ug/L			11/04/16 21:34	16.67
Chloromethane	17	U	17	7.2	ug/L			11/04/16 21:34	16.67
1,1-Dichloroethane	17	U	17	4.2	ug/L			11/04/16 21:34	16.67
1,2-Dichloroethane	17	U	17	5.0	ug/L			11/04/16 21:34	16.67
1,1-Dichloroethene	17	U	17	4.5	ug/L			11/04/16 21:34	16.67
1,2-Dichloropropane	17	U	17	5.0	ug/L			11/04/16 21:34	16.67
cis-1,3-Dichloropropene	17	U	17	4.3	ug/L			11/04/16 21:34	16.67
trans-1,3-Dichloropropene	17	U	17	5.2	ug/L			11/04/16 21:34	16.67
Ethylbenzene	17	U	17	4.3	ug/L			11/04/16 21:34	16.67
2-Hexanone	170	U *	170	21	ug/L			11/04/16 21:34	16.67
Methylene Chloride	83	U	83	8.8	ug/L			11/04/16 21:34	16.67
4-Methyl-2-pentanone (MIBK)	170	U	170	12	ug/L			11/04/16 21:34	16.67
Styrene	17	U	17	3.8	ug/L			11/04/16 21:34	16.67
1,1,2,2-Tetrachloroethane	17	U	17	5.3	ug/L			11/04/16 21:34	16.67
Tetrachloroethene	17	U	17	5.0	ug/L			11/04/16 21:34	16.67
Toluene	17	U	17	3.8	ug/L			11/04/16 21:34	16.67
Trichloroethene	**33**		17	5.5	ug/L			11/04/16 21:34	16.67
Vinyl chloride	**160**		17	7.5	ug/L			11/04/16 21:34	16.67
Xylenes, Total	33	U	33	4.0	ug/L			11/04/16 21:34	16.67
1,1,1-Trichloroethane	17	U	17	3.8	ug/L			11/04/16 21:34	16.67
1,1,2-Trichloroethane	17	U	17	5.7	ug/L			11/04/16 21:34	16.67
Cyclohexane	17	U	17	7.3	ug/L			11/04/16 21:34	16.67
1,2-Dibromo-3-Chloropropane	17	U	17	7.8	ug/L			11/04/16 21:34	16.67
1,2-Dibromoethane	17	U	17	3.8	ug/L			11/04/16 21:34	16.67
Dichlorodifluoromethane	17	U	17	8.3	ug/L			11/04/16 21:34	16.67
cis-1,2-Dichloroethene	**140**		17	5.0	ug/L			11/04/16 21:34	16.67
trans-1,2-Dichloroethene	**15**	**J**	17	4.8	ug/L			11/04/16 21:34	16.67
Isopropylbenzene	17	U	17	3.5	ug/L			11/04/16 21:34	16.67
Methyl acetate	170	U	170	24	ug/L			11/04/16 21:34	16.67
Methyl tert-butyl ether	17	U	17	4.5	ug/L			11/04/16 21:34	16.67
1,1,2-Trichloro-1,2,2-trifluoroethane	17	U	17	6.8	ug/L			11/04/16 21:34	16.67
1,2,4-Trichlorobenzene	17	U	17	4.5	ug/L			11/04/16 21:34	16.67
1,2-Dichlorobenzene	17	U	17	4.3	ug/L			11/04/16 21:34	16.67
1,3-Dichlorobenzene	17	U	17	5.3	ug/L			11/04/16 21:34	16.67
1,4-Dichlorobenzene	17	U	17	3.8	ug/L			11/04/16 21:34	16.67
Trichlorofluoromethane	17	U	17	8.3	ug/L			11/04/16 21:34	16.67
Dibromochloromethane	17	U	17	4.2	ug/L			11/04/16 21:34	16.67
Methylcyclohexane	17	U	17	7.5	ug/L			11/04/16 21:34	16.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		63 - 132		11/04/16 21:34	16.67
4-Bromofluorobenzene (Surr)	90		73 - 120		11/04/16 21:34	16.67
Toluene-d8 (Surr)	106		73 - 124		11/04/16 21:34	16.67
Dibromofluoromethane (Surr)	99		80 - 120		11/04/16 21:34	16.67

GC/MS VOA

Analysis Batch: 254245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71416-1	TB-17303-102516	Total/NA	Water	8260B	
240-71416-2	GW-17303-102516-JY-001	Total/NA	Water	8260B	
240-71416-3	GW-17303-102516-JY-002	Total/NA	Water	8260B	
240-71416-4	GW-17303-102516-JY-003	Total/NA	Water	8260B	
MB 240-254245/6	Method Blank	Total/NA	Water	8260B	
LCS 240-254245/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 254290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71416-9	GW-17303-102616-JY-008	Total/NA	Water	8260B	
240-71416-10	GW-17303-102616-JY-009	Total/NA	Water	8260B	
240-71416-11	GW-17303-102616-JY-010	Total/NA	Water	8260B	
240-71416-12	GW-17303-102616-JY-011	Total/NA	Water	8260B	
MB 240-254290/18	Method Blank	Total/NA	Water	8260B	
LCS 240-254290/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 240-254290/7	Lab Control Sample Dup	Total/NA	Water	8260B	
240-71416-12 MS	GW-17303-102616-JY-011	Total/NA	Water	8260B	
240-71416-12 MSD	GW-17303-102616-JY-011	Total/NA	Water	8260B	

Analysis Batch: 254412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71416-5	GW-17303-102516-JY-004	Total/NA	Water	8260B	
240-71416-6	GW-17303-102516-JY-005	Total/NA	Water	8260B	
240-71416-7	GW-17303-102516-JY-006	Total/NA	Water	8260B	
240-71416-13	GW-17303-102616-JY-012	Total/NA	Water	8260B	
240-71416-14	GW-17303-102716-JY-013	Total/NA	Water	8260B	
240-71416-15	GW-17303-102716-JY-014	Total/NA	Water	8260B	
240-71416-17	GW-17303-102716-JY-016	Total/NA	Water	8260B	
240-71416-18	GW-17303-102716-JY-017	Total/NA	Water	8260B	
240-71416-19	GW-17303-102716-JY-018	Total/NA	Water	8260B	
240-71416-20	GW-17303-102716-JY-019	Total/NA	Water	8260B	
240-71416-21	GW-17303-102716-JY-020	Total/NA	Water	8260B	
MB 240-254412/6	Method Blank	Total/NA	Water	8260B	
LCS 240-254412/4	Lab Control Sample	Total/NA	Water	8260B	
240-71416-14 MS	GW-17303-102716-JY-013	Total/NA	Water	8260B	
240-71416-14 MSD	GW-17303-102716-JY-013	Total/NA	Water	8260B	

Analysis Batch: 254586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71416-8	GW-17303-102516-JY-007	Total/NA	Water	8260B	
240-71416-16	GW-17303-102716-JY-015	Total/NA	Water	8260B	
MB 240-254586/6	Method Blank	Total/NA	Water	8260B	
LCS 240-254586/4	Lab Control Sample	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-254245/6
Matrix: Water
Analysis Batch: 254245

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			11/03/16 15:49	1
Benzene	1.0	U	1.0	0.28	ug/L			11/03/16 15:49	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/03/16 15:49	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/03/16 15:49	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/03/16 15:49	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/03/16 15:49	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/03/16 15:49	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/03/16 15:49	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 15:49	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/03/16 15:49	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/03/16 15:49	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/03/16 15:49	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/03/16 15:49	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/03/16 15:49	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/03/16 15:49	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/03/16 15:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/03/16 15:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/03/16 15:49	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/03/16 15:49	1
2-Hexanone	10	U	10	1.2	ug/L			11/03/16 15:49	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/03/16 15:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/03/16 15:49	1
Styrene	1.0	U	1.0	0.23	ug/L			11/03/16 15:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/03/16 15:49	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 15:49	1
Toluene	1.0	U	1.0	0.23	ug/L			11/03/16 15:49	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/03/16 15:49	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/03/16 15:49	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/03/16 15:49	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/03/16 15:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 15:49	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/03/16 15:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/03/16 15:49	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/03/16 15:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 15:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 15:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/03/16 15:49	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 15:49	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 15:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/03/16 15:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/03/16 15:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/03/16 15:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/03/16 15:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 15:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 15:49	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 15:49	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/03/16 15:49	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/03/16 15:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*123*		*63 - 132*		*11/03/16 15:49*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*11/03/16 15:49*	*1*
Toluene-d8 (Surr)	*111*		*73 - 124*		*11/03/16 15:49*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*11/03/16 15:49*	*1*

Lab Sample ID: LCS 240-254245/4
Matrix: Water
Analysis Batch: 254245

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	20.1		ug/L		101	46 - 120
Benzene	10.0	9.43		ug/L		94	80 - 120
Bromodichloromethane	10.0	10.7		ug/L		107	76 - 125
Bromoform	10.0	10.2		ug/L		102	52 - 157
Bromomethane	10.0	5.45		ug/L		55	24 - 160
2-Butanone (MEK)	20.0	22.6		ug/L		113	54 - 122
Carbon disulfide	10.0	7.84		ug/L		78	58 - 160
Carbon tetrachloride	10.0	10.9		ug/L		109	69 - 149
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120
Chloroethane	10.0	3.91		ug/L		39	24 - 147
Chloroform	10.0	9.67		ug/L		97	80 - 120
Chloromethane	10.0	9.37		ug/L		94	50 - 135
1,1-Dichloroethane	10.0	9.66		ug/L		97	77 - 121
1,2-Dichloroethane	10.0	12.3		ug/L		123	76 - 130
1,1-Dichloroethene	10.0	8.33		ug/L		83	70 - 141
1,2-Dichloropropane	10.0	11.0		ug/L		110	79 - 121
cis-1,3-Dichloropropene	10.0	9.93		ug/L		99	75 - 120
trans-1,3-Dichloropropene	10.0	10.2		ug/L		102	65 - 120
Ethylbenzene	10.0	10.2		ug/L		102	80 - 120
2-Hexanone	20.0	26.4	*	ug/L		132	56 - 124
Methylene Chloride	10.0	8.20		ug/L		82	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	22.6		ug/L		113	60 - 131
Styrene	10.0	9.99		ug/L		100	80 - 120
1,1,2,2-Tetrachloroethane	10.0	10.6		ug/L		106	61 - 130
Tetrachloroethene	10.0	10.2		ug/L		102	80 - 123
Toluene	10.0	11.2		ug/L		112	80 - 121
Trichloroethene	10.0	9.89		ug/L		99	80 - 122
Vinyl chloride	10.0	8.12		ug/L		81	60 - 129
Xylenes, Total	20.0	19.8		ug/L		99	80 - 120
1,1,1-Trichloroethane	10.0	9.67		ug/L		97	79 - 133
1,1,2-Trichloroethane	10.0	11.3		ug/L		113	80 - 120
Cyclohexane	10.0	8.89		ug/L		89	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	8.60		ug/L		86	46 - 140
1,2-Dibromoethane	10.0	11.3		ug/L		113	80 - 126
Dichlorodifluoromethane	10.0	8.28		ug/L		83	32 - 140
cis-1,2-Dichloroethene	10.0	8.93		ug/L		89	80 - 120
trans-1,2-Dichloroethene	10.0	8.92		ug/L		89	80 - 123
Isopropylbenzene	10.0	9.63		ug/L		96	80 - 120
Methyl acetate	50.0	55.1		ug/L		110	65 - 124
Methyl tert-butyl ether	10.0	8.77		ug/L		88	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.04		ug/L		90	65 - 151
1,2,4-Trichlorobenzene	10.0	8.06		ug/L		81	53 - 137
1,2-Dichlorobenzene	10.0	9.74		ug/L		97	80 - 120

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

Lab Sample ID: LCS 240-254245/4
Matrix: Water
Analysis Batch: 254245

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	10.2		ug/L		102	80 - 120
1,4-Dichlorobenzene	10.0	10.5		ug/L		105	80 - 120
Trichlorofluoromethane	10.0	6.82		ug/L		68	56 - 161
Dibromochloromethane	10.0	10.2		ug/L		102	68 - 131
Methylcyclohexane	10.0	8.02		ug/L		80	71 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*63 - 132*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Toluene-d8 (Surr)	*109*		*73 - 124*
Dibromofluoromethane (Surr)	*91*		*80 - 120*

Lab Sample ID: MB 240-254290/18
Matrix: Water
Analysis Batch: 254290

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			11/03/16 23:30	1
Benzene	1.0	U	1.0	0.28	ug/L			11/03/16 23:30	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/03/16 23:30	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/03/16 23:30	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/03/16 23:30	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/03/16 23:30	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/03/16 23:30	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/03/16 23:30	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 23:30	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/03/16 23:30	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/03/16 23:30	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/03/16 23:30	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/03/16 23:30	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/03/16 23:30	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/03/16 23:30	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/03/16 23:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/03/16 23:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/03/16 23:30	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/03/16 23:30	1
2-Hexanone	10	U	10	1.2	ug/L			11/03/16 23:30	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/03/16 23:30	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/03/16 23:30	1
Styrene	1.0	U	1.0	0.23	ug/L			11/03/16 23:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/03/16 23:30	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 23:30	1
Toluene	1.0	U	1.0	0.23	ug/L			11/03/16 23:30	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/03/16 23:30	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/03/16 23:30	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/03/16 23:30	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/03/16 23:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 23:30	1

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

Lab Sample ID: MB 240-254290/18
Matrix: Water
Analysis Batch: 254290

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			11/03/16 23:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/03/16 23:30	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/03/16 23:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 23:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 23:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/03/16 23:30	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 23:30	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 23:30	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/03/16 23:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/03/16 23:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/03/16 23:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/03/16 23:30	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/03/16 23:30	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 23:30	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/03/16 23:30	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/03/16 23:30	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/03/16 23:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 132*		*11/03/16 23:30*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*11/03/16 23:30*	*1*
Toluene-d8 (Surr)	*92*		*73 - 124*		*11/03/16 23:30*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*11/03/16 23:30*	*1*

Lab Sample ID: LCS 240-254290/4
Matrix: Water
Analysis Batch: 254290

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	33.8		ug/L		84	46 - 120
Benzene	20.0	18.9		ug/L		94	80 - 120
Bromodichloromethane	20.0	18.8		ug/L		94	76 - 125
Bromoform	20.0	22.3		ug/L		112	52 - 157
Bromomethane	20.0	18.1		ug/L		91	24 - 160
2-Butanone (MEK)	40.0	37.9		ug/L		95	54 - 122
Carbon disulfide	20.0	19.0		ug/L		95	58 - 160
Carbon tetrachloride	20.0	18.2		ug/L		91	69 - 149
Chlorobenzene	20.0	18.3		ug/L		92	80 - 120
Chloroethane	20.0	18.8		ug/L		94	24 - 147
Chloroform	20.0	20.1		ug/L		100	80 - 120
Chloromethane	20.0	17.7		ug/L		88	50 - 135
1,1-Dichloroethane	20.0	18.6		ug/L		93	77 - 121
1,2-Dichloroethane	20.0	18.5		ug/L		93	76 - 130
1,1-Dichloroethene	20.0	19.4		ug/L		97	70 - 141
1,2-Dichloropropane	20.0	19.5		ug/L		98	79 - 121
cis-1,3-Dichloropropene	20.0	18.3		ug/L		92	75 - 120
trans-1,3-Dichloropropene	20.0	17.8		ug/L		89	65 - 120
Ethylbenzene	20.0	18.5		ug/L		92	80 - 120

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

Lab Sample ID: LCS 240-254290/4
Matrix: Water
Analysis Batch: 254290

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	40.0	41.6		ug/L		104	56 - 124
Methylene Chloride	20.0	17.3		ug/L		87	68 - 136
4-Methyl-2-pentanone (MIBK)	40.0	39.2		ug/L		98	60 - 131
Styrene	20.0	19.2		ug/L		96	80 - 120
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		101	61 - 130
Tetrachloroethene	20.0	19.1		ug/L		95	80 - 123
Toluene	20.0	18.5		ug/L		92	80 - 121
Trichloroethene	20.0	19.3		ug/L		97	80 - 122
Vinyl chloride	20.0	18.6		ug/L		93	60 - 129
Xylenes, Total	40.0	36.6		ug/L		92	80 - 120
1,1,1-Trichloroethane	20.0	18.3		ug/L		92	79 - 133
1,1,2-Trichloroethane	20.0	18.7		ug/L		94	80 - 120
Cyclohexane	20.0	25.3		ug/L		127	66 - 135
1,2-Dibromo-3-Chloropropane	20.0	19.7		ug/L		98	46 - 140
1,2-Dibromoethane	20.0	19.0		ug/L		95	80 - 126
Dichlorodifluoromethane	20.0	18.5		ug/L		92	32 - 140
cis-1,2-Dichloroethene	20.0	18.5		ug/L		92	80 - 120
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	80 - 123
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 120
Methyl acetate	100	94.6		ug/L		95	65 - 124
Methyl tert-butyl ether	20.0	17.3		ug/L		86	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.1		ug/L		105	65 - 151
1,2,4-Trichlorobenzene	20.0	19.8		ug/L		99	53 - 137
1,2-Dichlorobenzene	20.0	18.1		ug/L		91	80 - 120
1,3-Dichlorobenzene	20.0	18.3		ug/L		92	80 - 120
1,4-Dichlorobenzene	20.0	18.5		ug/L		93	80 - 120
Trichlorofluoromethane	20.0	21.4		ug/L		107	56 - 161
Dibromochloromethane	20.0	18.4		ug/L		92	68 - 131
Methylcyclohexane	20.0	24.2		ug/L		121	71 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*63 - 132*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Toluene-d8 (Surr)	*92*		*73 - 124*
Dibromofluoromethane (Surr)	*91*		*80 - 120*

Lab Sample ID: LCSD 240-254290/7
Matrix: Water
Analysis Batch: 254290

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	40.0	30.2		ug/L		75	46 - 120	11	35
Benzene	20.0	20.5		ug/L		103	80 - 120	8	35
Bromodichloromethane	20.0	20.2		ug/L		101	76 - 125	7	35
Bromoform	20.0	23.8		ug/L		119	52 - 157	7	35
Bromomethane	20.0	19.7		ug/L		98	24 - 160	8	35
2-Butanone (MEK)	40.0	38.4		ug/L		96	54 - 122	1	35

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

Lab Sample ID: LCSD 240-254290/7
Matrix: Water
Analysis Batch: 254290

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide			20.0	20.9		ug/L		105	58 - 160	10	35
Carbon tetrachloride			20.0	18.4		ug/L		92	69 - 149	1	35
Chlorobenzene			20.0	19.8		ug/L		99	80 - 120	8	35
Chloroethane			20.0	20.3		ug/L		101	24 - 147	8	35
Chloroform			20.0	21.6		ug/L		108	80 - 120	7	35
Chloromethane			20.0	20.1		ug/L		101	50 - 135	13	35
1,1-Dichloroethane			20.0	19.9		ug/L		99	77 - 121	6	35
1,2-Dichloroethane			20.0	19.3		ug/L		96	76 - 130	4	35
1,1-Dichloroethene			20.0	20.7		ug/L		104	70 - 141	6	35
1,2-Dichloropropane			20.0	21.0		ug/L		105	79 - 121	7	35
cis-1,3-Dichloropropene			20.0	19.9		ug/L		100	75 - 120	8	35
trans-1,3-Dichloropropene			20.0	19.3		ug/L		97	65 - 120	8	35
Ethylbenzene			20.0	20.4		ug/L		102	80 - 120	10	35
2-Hexanone			40.0	42.9		ug/L		107	56 - 124	3	35
Methylene Chloride			20.0	19.3		ug/L		96	68 - 136	11	35
4-Methyl-2-pentanone (MIBK)			40.0	40.9		ug/L		102	60 - 131	4	35
Styrene			20.0	20.9		ug/L		105	80 - 120	9	35
1,1,2,2-Tetrachloroethane			20.0	20.3		ug/L		101	61 - 130	0	35
Tetrachloroethene			20.0	19.6		ug/L		98	80 - 123	3	35
Toluene			20.0	19.3		ug/L		97	80 - 121	4	35
Trichloroethene			20.0	20.7		ug/L		103	80 - 122	7	35
Vinyl chloride			20.0	20.3		ug/L		101	60 - 129	9	35
Xylenes, Total			40.0	39.8		ug/L		100	80 - 120	8	35
1,1,1-Trichloroethane			20.0	19.3		ug/L		97	79 - 133	5	35
1,1,2-Trichloroethane			20.0	19.5		ug/L		97	80 - 120	4	35
Cyclohexane			20.0	24.6		ug/L		123	66 - 135	3	35
1,2-Dibromo-3-Chloropropane			20.0	20.1		ug/L		100	46 - 140	2	35
1,2-Dibromoethane			20.0	20.3		ug/L		102	80 - 126	7	35
Dichlorodifluoromethane			20.0	18.5		ug/L		92	32 - 140	0	35
cis-1,2-Dichloroethene			20.0	19.7		ug/L		98	80 - 120	6	35
trans-1,2-Dichloroethene			20.0	21.0		ug/L		105	80 - 123	5	35
Isopropylbenzene			20.0	20.9		ug/L		105	80 - 120	10	35
Methyl acetate			100	93.2		ug/L		93	65 - 124	1	35
Methyl tert-butyl ether			20.0	19.4		ug/L		97	75 - 126	12	35
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	20.7		ug/L		104	65 - 151	2	35
1,2,4-Trichlorobenzene			20.0	20.3		ug/L		101	53 - 137	3	35
1,2-Dichlorobenzene			20.0	19.8		ug/L		99	80 - 120	9	35
1,3-Dichlorobenzene			20.0	20.2		ug/L		101	80 - 120	10	35
1,4-Dichlorobenzene			20.0	20.0		ug/L		100	80 - 120	8	35
Trichlorofluoromethane			20.0	22.0		ug/L		110	56 - 161	3	35
Dibromochloromethane			20.0	19.5		ug/L		98	68 - 131	6	35
Methylcyclohexane			20.0	21.0		ug/L		105	71 - 122	14	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 132*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Toluene-d8 (Surr)	*91*		*73 - 124*

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

Lab Sample ID: LCSD 240-254290/7
Matrix: Water
Analysis Batch: 254290

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*94*		*80 - 120*

Lab Sample ID: 240-71416-12 MS
Matrix: Water
Analysis Batch: 254290

Client Sample ID: GW-17303-102616-JY-011
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	U	8000	5680		ug/L		71	28 - 120
Benzene	200	U	4000	3860		ug/L		97	67 - 126
Bromodichloromethane	200	U	4000	3710		ug/L		93	64 - 127
Bromoform	200	U	4000	3820		ug/L		95	40 - 149
Bromomethane	200	U	4000	3700		ug/L		92	10 - 169
2-Butanone (MEK)	2000	U	8000	7820		ug/L		98	38 - 123
Carbon disulfide	1000	U	4000	4570		ug/L		114	43 - 172
Carbon tetrachloride	200	U	4000	3270		ug/L		82	51 - 154
Chlorobenzene	200	U	4000	3810		ug/L		95	58 - 128
Chloroethane	200	U	4000	3990		ug/L		100	10 - 162
Chloroform	200	U	4000	4010		ug/L		100	67 - 133
Chloromethane	200	U	4000	3670		ug/L		92	30 - 143
1,1-Dichloroethane	200	U	4000	3730		ug/L		93	57 - 135
1,2-Dichloroethane	200	U	4000	3740		ug/L		93	62 - 137
1,1-Dichloroethene	200	U	4000	3720		ug/L		93	50 - 156
1,2-Dichloropropane	200	U	4000	3920		ug/L		98	66 - 130
cis-1,3-Dichloropropene	200	U	4000	3530		ug/L		88	58 - 120
trans-1,3-Dichloropropene	200	U	4000	3330		ug/L		83	48 - 120
Ethylbenzene	200	U	4000	3930		ug/L		98	66 - 123
2-Hexanone	2000	U	8000	7880		ug/L		98	41 - 135
Methylene Chloride	1000	U	4000	3570		ug/L		89	48 - 138
4-Methyl-2-pentanone (MIBK)	2000	U	8000	7450		ug/L		93	43 - 143
Styrene	200	U	4000	3960		ug/L		99	62 - 131
1,1,2,2-Tetrachloroethane	200	U	4000	3950		ug/L		99	48 - 134
Tetrachloroethene	200	U	4000	3740		ug/L		94	54 - 138
Toluene	200	U	4000	3720		ug/L		93	63 - 130
Trichloroethene	200	U	4000	3840		ug/L		96	58 - 139
Vinyl chloride	4900		4000	8210		ug/L		83	38 - 147
Xylenes, Total	400	U	8000	7500		ug/L		94	60 - 126
1,1,1-Trichloroethane	200	U	4000	3490		ug/L		87	55 - 150
1,1,2-Trichloroethane	200	U	4000	3770		ug/L		94	65 - 130
Cyclohexane	200	U	4000	3560		ug/L		89	36 - 144
1,2-Dibromo-3-Chloropropane	200	U	4000	3640		ug/L		91	37 - 139
1,2-Dibromoethane	200	U	4000	3920		ug/L		98	64 - 137
Dichlorodifluoromethane	200	U	4000	3050		ug/L		76	16 - 140
cis-1,2-Dichloroethene	2100		4000	5810		ug/L		92	64 - 134
trans-1,2-Dichloroethene	75	J	4000	3990		ug/L		98	70 - 137
Isopropylbenzene	200	U	4000	3900		ug/L		98	57 - 132
Methyl acetate	2000	U	20000	18100		ug/L		90	46 - 135
Methyl tert-butyl ether	200	U	4000	3710		ug/L		93	50 - 137

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

Lab Sample ID: 240-71416-12 MS
Matrix: Water
Analysis Batch: 254290

Client Sample ID: GW-17303-102616-JY-011
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	4000	3530		ug/L		88	41 - 149
1,2,4-Trichlorobenzene	200	U	4000	3890		ug/L		97	35 - 140
1,2-Dichlorobenzene	200	U	4000	3700		ug/L		93	62 - 123
1,3-Dichlorobenzene	200	U	4000	3770		ug/L		94	59 - 122
1,4-Dichlorobenzene	200	U	4000	3830		ug/L		96	60 - 122
Trichlorofluoromethane	200	U	4000	3510		ug/L		88	26 - 175
Dibromochloromethane	200	U	4000	3630		ug/L		91	56 - 132
Methylcyclohexane	200	U	4000	3570		ug/L		89	31 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*63 - 132*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Toluene-d8 (Surr)	*92*		*73 - 124*
Dibromofluoromethane (Surr)	*94*		*80 - 120*

Lab Sample ID: 240-71416-12 MSD
Matrix: Water
Analysis Batch: 254290

Client Sample ID: GW-17303-102616-JY-011
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	2000	U	8000	6330		ug/L		79	28 - 120	11	35
Benzene	200	U	4000	3950		ug/L		99	67 - 126	2	31
Bromodichloromethane	200	U	4000	3760		ug/L		94	64 - 127	1	35
Bromoform	200	U	4000	3980		ug/L		99	40 - 149	4	35
Bromomethane	200	U	4000	3910		ug/L		98	10 - 169	6	35
2-Butanone (MEK)	2000	U	8000	7820		ug/L		98	38 - 123	0	35
Carbon disulfide	1000	U	4000	3900		ug/L		97	43 - 172	16	35
Carbon tetrachloride	200	U	4000	3290		ug/L		82	51 - 154	1	35
Chlorobenzene	200	U	4000	3910		ug/L		98	58 - 128	3	35
Chloroethane	200	U	4000	4010		ug/L		100	10 - 162	1	35
Chloroform	200	U	4000	4080		ug/L		102	67 - 133	2	35
Chloromethane	200	U	4000	3640		ug/L		91	30 - 143	1	35
1,1-Dichloroethane	200	U	4000	3890		ug/L		97	57 - 135	4	35
1,2-Dichloroethane	200	U	4000	3800		ug/L		95	62 - 137	2	35
1,1-Dichloroethene	200	U	4000	4000		ug/L		100	50 - 156	7	35
1,2-Dichloropropane	200	U	4000	4050		ug/L		101	66 - 130	3	35
cis-1,3-Dichloropropene	200	U	4000	3700		ug/L		93	58 - 120	5	35
trans-1,3-Dichloropropene	200	U	4000	3440		ug/L		86	48 - 120	3	35
Ethylbenzene	200	U	4000	3900		ug/L		97	66 - 123	1	34
2-Hexanone	2000	U	8000	8200		ug/L		102	41 - 135	4	35
Methylene Chloride	1000	U	4000	3800		ug/L		95	48 - 138	6	35
4-Methyl-2-pentanone (MIBK)	2000	U	8000	7650		ug/L		96	43 - 143	3	35
Styrene	200	U	4000	3990		ug/L		100	62 - 131	1	35
1,1,2,2-Tetrachloroethane	200	U	4000	3960		ug/L		99	48 - 134	0	35
Tetrachloroethene	200	U	4000	3970		ug/L		99	54 - 138	6	35
Toluene	200	U	4000	3860		ug/L		96	63 - 130	4	33
Trichloroethene	200	U	4000	3900		ug/L		97	58 - 139	2	35

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

Lab Sample ID: 240-71416-12 MSD
Matrix: Water
Analysis Batch: 254290

Client Sample ID: GW-17303-102616-JY-011
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	4900		4000	8680		ug/L		95	38 - 147	6	35
Xylenes, Total	400	U	8000	7840		ug/L		98	60 - 126	4	35
1,1,1-Trichloroethane	200	U	4000	3580		ug/L		90	55 - 150	3	35
1,1,2-Trichloroethane	200	U	4000	3950		ug/L		99	65 - 130	5	35
Cyclohexane	200	U	4000	4070		ug/L		102	36 - 144	13	35
1,2-Dibromo-3-Chloropropane	200	U	4000	3660		ug/L		91	37 - 139	0	35
1,2-Dibromoethane	200	U	4000	4060		ug/L		101	64 - 137	3	35
Dichlorodifluoromethane	200	U	4000	3150		ug/L		79	16 - 140	3	35
cis-1,2-Dichloroethene	2100		4000	5950		ug/L		95	64 - 134	2	35
trans-1,2-Dichloroethene	75	J	4000	4210		ug/L		103	70 - 137	5	25
Isopropylbenzene	200	U	4000	4040		ug/L		101	57 - 132	4	35
Methyl acetate	2000	U	20000	18500		ug/L		92	46 - 135	2	34
Methyl tert-butyl ether	200	U	4000	3700		ug/L		93	50 - 137	0	35
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	4000	3720		ug/L		93	41 - 149	5	35
1,2,4-Trichlorobenzene	200	U	4000	4120		ug/L		103	35 - 140	6	35
1,2-Dichlorobenzene	200	U	4000	3950		ug/L		99	62 - 123	6	35
1,3-Dichlorobenzene	200	U	4000	3910		ug/L		98	59 - 122	3	35
1,4-Dichlorobenzene	200	U	4000	3890		ug/L		97	60 - 122	1	35
Trichlorofluoromethane	200	U	4000	3910		ug/L		98	26 - 175	11	35
Dibromochloromethane	200	U	4000	3640		ug/L		91	56 - 132	0	35
Methylcyclohexane	200	U	4000	3610		ug/L		90	31 - 139	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 132*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Toluene-d8 (Surr)	*94*		*73 - 124*
Dibromofluoromethane (Surr)	*93*		*80 - 120*

Lab Sample ID: MB 240-254412/6
Matrix: Water
Analysis Batch: 254412

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			11/04/16 15:11	1
Benzene	1.0	U	1.0	0.28	ug/L			11/04/16 15:11	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/04/16 15:11	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/04/16 15:11	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/04/16 15:11	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/04/16 15:11	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/04/16 15:11	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/04/16 15:11	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 15:11	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/04/16 15:11	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/04/16 15:11	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/04/16 15:11	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/04/16 15:11	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/04/16 15:11	1

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

Lab Sample ID: MB 240-254412/6
Matrix: Water
Analysis Batch: 254412

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/04/16 15:11	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/04/16 15:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/04/16 15:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/04/16 15:11	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/04/16 15:11	1
2-Hexanone	10	U	10	1.2	ug/L			11/04/16 15:11	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/04/16 15:11	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/04/16 15:11	1
Styrene	1.0	U	1.0	0.23	ug/L			11/04/16 15:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/04/16 15:11	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 15:11	1
Toluene	1.0	U	1.0	0.23	ug/L			11/04/16 15:11	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/04/16 15:11	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/04/16 15:11	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/04/16 15:11	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/04/16 15:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/04/16 15:11	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/04/16 15:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/04/16 15:11	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/04/16 15:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 15:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 15:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/04/16 15:11	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/04/16 15:11	1
Methyl acetate	10	U	10	1.4	ug/L			11/04/16 15:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/04/16 15:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/04/16 15:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/04/16 15:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/04/16 15:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 15:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/04/16 15:11	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 15:11	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/04/16 15:11	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/04/16 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*63 - 132*		*11/04/16 15:11*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*11/04/16 15:11*	*1*
Toluene-d8 (Surr)	*106*		*73 - 124*		*11/04/16 15:11*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*11/04/16 15:11*	*1*

Lab Sample ID: LCS 240-254412/4
Matrix: Water
Analysis Batch: 254412

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	20.3		ug/L		102	46 - 120
Benzene	10.0	9.97		ug/L		100	80 - 120

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

Lab Sample ID: LCS 240-254412/4
Matrix: Water
Analysis Batch: 254412

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	10.0	10.5		ug/L		105	76 - 125
Bromoform	10.0	9.75		ug/L		98	52 - 157
Bromomethane	10.0	6.06		ug/L		61	24 - 160
2-Butanone (MEK)	20.0	24.2		ug/L		121	54 - 122
Carbon disulfide	10.0	8.30		ug/L		83	58 - 160
Carbon tetrachloride	10.0	11.2		ug/L		112	69 - 149
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120
Chloroethane	10.0	4.41		ug/L		44	24 - 147
Chloroform	10.0	10.5		ug/L		105	80 - 120
Chloromethane	10.0	9.31		ug/L		93	50 - 135
1,1-Dichloroethane	10.0	10.1		ug/L		101	77 - 121
1,2-Dichloroethane	10.0	12.5		ug/L		125	76 - 130
1,1-Dichloroethene	10.0	8.31		ug/L		83	70 - 141
1,2-Dichloropropane	10.0	10.7		ug/L		107	79 - 121
cis-1,3-Dichloropropene	10.0	9.56		ug/L		96	75 - 120
trans-1,3-Dichloropropene	10.0	9.89		ug/L		99	65 - 120
Ethylbenzene	10.0	10.1		ug/L		101	80 - 120
2-Hexanone	20.0	28.5	*	ug/L		143	56 - 124
Methylene Chloride	10.0	8.86		ug/L		89	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	22.6		ug/L		113	60 - 131
Styrene	10.0	9.52		ug/L		95	80 - 120
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	61 - 130
Tetrachloroethene	10.0	10.7		ug/L		107	80 - 123
Toluene	10.0	10.9		ug/L		109	80 - 121
Trichloroethene	10.0	9.97		ug/L		100	80 - 122
Vinyl chloride	10.0	8.06		ug/L		81	60 - 129
Xylenes, Total	20.0	19.7		ug/L		99	80 - 120
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	79 - 133
1,1,2-Trichloroethane	10.0	10.8		ug/L		108	80 - 120
Cyclohexane	10.0	9.01		ug/L		90	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	9.00		ug/L		90	46 - 140
1,2-Dibromoethane	10.0	10.6		ug/L		106	80 - 126
Dichlorodifluoromethane	10.0	7.71		ug/L		77	32 - 140
cis-1,2-Dichloroethene	10.0	9.28		ug/L		93	80 - 120
trans-1,2-Dichloroethene	10.0	9.47		ug/L		95	80 - 123
Isopropylbenzene	10.0	9.74		ug/L		97	80 - 120
Methyl acetate	50.0	57.6		ug/L		115	65 - 124
Methyl tert-butyl ether	10.0	8.99		ug/L		90	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.43		ug/L		84	65 - 151
1,2,4-Trichlorobenzene	10.0	7.93		ug/L		79	53 - 137
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	80 - 120
1,3-Dichlorobenzene	10.0	9.92		ug/L		99	80 - 120
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	80 - 120
Trichlorofluoromethane	10.0	8.21		ug/L		82	56 - 161
Dibromochloromethane	10.0	10.3		ug/L		103	68 - 131
Methylcyclohexane	10.0	7.75		ug/L		78	71 - 122

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

Lab Sample ID: LCS 240-254412/4
Matrix: Water
Analysis Batch: 254412

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*117*		*63 - 132*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Toluene-d8 (Surr)	*110*		*73 - 124*
Dibromofluoromethane (Surr)	*102*		*80 - 120*

Lab Sample ID: 240-71416-14 MS
Matrix: Water
Analysis Batch: 254412

Client Sample ID: GW-17303-102716-JY-013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	U	500	491		ug/L		98	28 - 120
Benzene	10	J	250	247		ug/L		95	67 - 126
Bromodichloromethane	25	U	250	248		ug/L		99	64 - 127
Bromoform	25	U	250	216		ug/L		86	40 - 149
Bromomethane	25	U	250	87.7		ug/L		35	10 - 169
2-Butanone (MEK)	250	U	500	596		ug/L		119	38 - 123
Carbon disulfide	130	U	250	177		ug/L		71	43 - 172
Carbon tetrachloride	25	U	250	252		ug/L		101	51 - 154
Chlorobenzene	25	U	250	245		ug/L		98	58 - 128
Chloroethane	25	U	250	62.2		ug/L		25	10 - 162
Chloroform	25	U	250	252		ug/L		101	67 - 133
Chloromethane	25	U	250	212		ug/L		85	30 - 143
1,1-Dichloroethane	25	U	250	243		ug/L		97	57 - 135
1,2-Dichloroethane	25	U	250	301		ug/L		120	62 - 137
1,1-Dichloroethene	25	U	250	202		ug/L		81	50 - 156
1,2-Dichloropropane	25	U	250	269		ug/L		108	66 - 130
cis-1,3-Dichloropropene	25	U	250	220		ug/L		88	58 - 120
trans-1,3-Dichloropropene	25	U	250	229		ug/L		91	48 - 120
Ethylbenzene	32		250	263		ug/L		93	66 - 123
2-Hexanone	250	U F1 *	500	681	F1	ug/L		136	41 - 135
Methylene Chloride	130	U	250	210		ug/L		84	48 - 138
4-Methyl-2-pentanone (MIBK)	250	U	500	568		ug/L		114	43 - 143
Styrene	25	U	250	228		ug/L		91	62 - 131
1,1,2,2-Tetrachloroethane	25	U	250	266		ug/L		106	48 - 134
Tetrachloroethene	25	U	250	242		ug/L		97	54 - 138
Toluene	62		250	313		ug/L		101	63 - 130
Trichloroethene	15	J	250	238		ug/L		89	58 - 139
Vinyl chloride	46		250	226		ug/L		72	38 - 147
Xylenes, Total	140		500	594		ug/L		92	60 - 126
1,1,1-Trichloroethane	25	U	250	231		ug/L		92	55 - 150
1,1,2-Trichloroethane	25	U	250	277		ug/L		111	65 - 130
Cyclohexane	25	U	250	213		ug/L		85	36 - 144
1,2-Dibromo-3-Chloropropane	25	U	250	216		ug/L		87	37 - 139
1,2-Dibromoethane	25	U	250	253		ug/L		101	64 - 137
Dichlorodifluoromethane	25	U	250	168		ug/L		67	16 - 140
cis-1,2-Dichloroethene	30		250	253		ug/L		89	64 - 134
trans-1,2-Dichloroethene	25	U	250	221		ug/L		89	70 - 137
Isopropylbenzene	25	U	250	221		ug/L		88	57 - 132

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

Lab Sample ID: 240-71416-14 MS
Matrix: Water
Analysis Batch: 254412

Client Sample ID: GW-17303-102716-JY-013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	250	U	1250	1420		ug/L		114	46 - 135
Methyl tert-butyl ether	25	U	250	216		ug/L		86	50 - 137
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	250	211		ug/L		84	41 - 149
1,2,4-Trichlorobenzene	25	U	250	192		ug/L		77	35 - 140
1,2-Dichlorobenzene	25	U	250	244		ug/L		97	62 - 123
1,3-Dichlorobenzene	25	U	250	244		ug/L		97	59 - 122
1,4-Dichlorobenzene	25	U	250	238		ug/L		95	60 - 122
Trichlorofluoromethane	25	U	250	145		ug/L		58	26 - 175
Dibromochloromethane	25	U	250	236		ug/L		95	56 - 132
Methylcyclohexane	25	U	250	182		ug/L		73	31 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*63 - 132*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Toluene-d8 (Surr)	*107*		*73 - 124*
Dibromofluoromethane (Surr)	*97*		*80 - 120*

Lab Sample ID: 240-71416-14 MSD
Matrix: Water
Analysis Batch: 254412

Client Sample ID: GW-17303-102716-JY-013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	250	U	500	529		ug/L		106	28 - 120	7	35
Benzene	10	J	250	254		ug/L		98	67 - 126	3	31
Bromodichloromethane	25	U	250	265		ug/L		106	64 - 127	6	35
Bromoform	25	U	250	231		ug/L		92	40 - 149	7	35
Bromomethane	25	U	250	109		ug/L		43	10 - 169	21	35
2-Butanone (MEK)	250	U	500	612		ug/L		122	38 - 123	3	35
Carbon disulfide	130	U	250	184		ug/L		73	43 - 172	4	35
Carbon tetrachloride	25	U	250	280		ug/L		112	51 - 154	10	35
Chlorobenzene	25	U	250	250		ug/L		100	58 - 128	2	35
Chloroethane	25	U	250	72.0		ug/L		29	10 - 162	15	35
Chloroform	25	U	250	258		ug/L		103	67 - 133	2	35
Chloromethane	25	U	250	222		ug/L		89	30 - 143	4	35
1,1-Dichloroethane	25	U	250	251		ug/L		101	57 - 135	3	35
1,2-Dichloroethane	25	U	250	312		ug/L		125	62 - 137	3	35
1,1-Dichloroethene	25	U	250	223		ug/L		89	50 - 156	10	35
1,2-Dichloropropane	25	U	250	281		ug/L		112	66 - 130	4	35
cis-1,3-Dichloropropene	25	U	250	234		ug/L		94	58 - 120	6	35
trans-1,3-Dichloropropene	25	U	250	235		ug/L		94	48 - 120	3	35
Ethylbenzene	32		250	279		ug/L		99	66 - 123	6	34
2-Hexanone	250	U F1 *	500	687	F1	ug/L		137	41 - 135	1	35
Methylene Chloride	130	U	250	220		ug/L		88	48 - 138	5	35
4-Methyl-2-pentanone (MIBK)	250	U	500	595		ug/L		119	43 - 143	5	35
Styrene	25	U	250	244		ug/L		97	62 - 131	7	35
1,1,2,2-Tetrachloroethane	25	U	250	275		ug/L		110	48 - 134	3	35
Tetrachloroethene	25	U	250	245		ug/L		98	54 - 138	1	35

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

Lab Sample ID: 240-71416-14 MSD
Matrix: Water
Analysis Batch: 254412

Client Sample ID: GW-17303-102716-JY-013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	62		250	327		ug/L		106	63 - 130	4	33
Trichloroethene	15	J	250	255		ug/L		96	58 - 139	7	35
Vinyl chloride	46		250	246		ug/L		80	38 - 147	9	35
Xylenes, Total	140		500	619		ug/L		97	60 - 126	4	35
1,1,1-Trichloroethane	25	U	250	240		ug/L		96	55 - 150	4	35
1,1,2-Trichloroethane	25	U	250	283		ug/L		113	65 - 130	2	35
Cyclohexane	25	U	250	231		ug/L		93	36 - 144	8	35
1,2-Dibromo-3-Chloropropane	25	U	250	222		ug/L		89	37 - 139	2	35
1,2-Dibromoethane	25	U	250	261		ug/L		104	64 - 137	3	35
Dichlorodifluoromethane	25	U	250	182		ug/L		73	16 - 140	8	35
cis-1,2-Dichloroethene	30		250	261		ug/L		92	64 - 134	3	35
trans-1,2-Dichloroethene	25	U	250	226		ug/L		90	70 - 137	2	25
Isopropylbenzene	25	U	250	232		ug/L		93	57 - 132	5	35
Methyl acetate	250	U	1250	1490		ug/L		119	46 - 135	5	34
Methyl tert-butyl ether	25	U	250	224		ug/L		90	50 - 137	4	35
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	250	225		ug/L		90	41 - 149	7	35
1,2,4-Trichlorobenzene	25	U	250	202		ug/L		81	35 - 140	5	35
1,2-Dichlorobenzene	25	U	250	240		ug/L		96	62 - 123	1	35
1,3-Dichlorobenzene	25	U	250	244		ug/L		97	59 - 122	0	35
1,4-Dichlorobenzene	25	U	250	242		ug/L		97	60 - 122	2	35
Trichlorofluoromethane	25	U	250	168		ug/L		67	26 - 175	14	35
Dibromochloromethane	25	U	250	244		ug/L		98	56 - 132	3	35
Methylcyclohexane	25	U	250	195		ug/L		78	31 - 139	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*63 - 132*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Toluene-d8 (Surr)	*105*		*73 - 124*
Dibromofluoromethane (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 240-254586/6
Matrix: Water
Analysis Batch: 254586

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			11/07/16 12:33	1
Benzene	1.0	U	1.0	0.28	ug/L			11/07/16 12:33	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/07/16 12:33	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/07/16 12:33	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/07/16 12:33	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/07/16 12:33	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/07/16 12:33	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/07/16 12:33	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/07/16 12:33	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/07/16 12:33	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/07/16 12:33	1

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

Lab Sample ID: MB 240-254586/6
Matrix: Water
Analysis Batch: 254586

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/07/16 12:33	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/07/16 12:33	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/07/16 12:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/07/16 12:33	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/07/16 12:33	1
2-Hexanone	10	U	10	1.2	ug/L			11/07/16 12:33	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/07/16 12:33	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/07/16 12:33	1
Styrene	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/07/16 12:33	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
Toluene	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/07/16 12:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/07/16 12:33	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/07/16 12:33	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/07/16 12:33	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/07/16 12:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/07/16 12:33	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/07/16 12:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/07/16 12:33	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/07/16 12:33	1
Methyl acetate	10	U	10	1.4	ug/L			11/07/16 12:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/07/16 12:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/07/16 12:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/07/16 12:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/07/16 12:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/07/16 12:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/07/16 12:33	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/07/16 12:33	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/07/16 12:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*63 - 132*		*11/07/16 12:33*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*11/07/16 12:33*	*1*
Toluene-d8 (Surr)	*103*		*73 - 124*		*11/07/16 12:33*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*11/07/16 12:33*	*1*

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

Lab Sample ID: LCS 240-254586/4
Matrix: Water
Analysis Batch: 254586

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	20.7		ug/L		104	46 - 120
Benzene	10.0	9.64		ug/L		96	80 - 120
Bromodichloromethane	10.0	10.6		ug/L		106	76 - 125
Bromoform	10.0	9.72		ug/L		97	52 - 157
Bromomethane	10.0	5.30		ug/L		53	24 - 160
2-Butanone (MEK)	20.0	24.6	*	ug/L		123	54 - 122
Carbon disulfide	10.0	8.09		ug/L		81	58 - 160
Carbon tetrachloride	10.0	11.4		ug/L		114	69 - 149
Chlorobenzene	10.0	10.0		ug/L		100	80 - 120
Chloroethane	10.0	4.01		ug/L		40	24 - 147
Chloroform	10.0	10.1		ug/L		101	80 - 120
Chloromethane	10.0	9.70		ug/L		97	50 - 135
1,1-Dichloroethane	10.0	9.85		ug/L		99	77 - 121
1,2-Dichloroethane	10.0	11.9		ug/L		119	76 - 130
1,1-Dichloroethene	10.0	8.34		ug/L		83	70 - 141
1,2-Dichloropropane	10.0	10.7		ug/L		107	79 - 121
cis-1,3-Dichloropropene	10.0	9.46		ug/L		95	75 - 120
trans-1,3-Dichloropropene	10.0	9.79		ug/L		98	65 - 120
Ethylbenzene	10.0	9.67		ug/L		97	80 - 120
2-Hexanone	20.0	27.0	*	ug/L		135	56 - 124
Methylene Chloride	10.0	8.49		ug/L		85	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	23.4		ug/L		117	60 - 131
Styrene	10.0	9.00		ug/L		90	80 - 120
1,1,2,2-Tetrachloroethane	10.0	10.3		ug/L		103	61 - 130
Tetrachloroethene	10.0	10.4		ug/L		104	80 - 123
Toluene	10.0	10.7		ug/L		107	80 - 121
Trichloroethene	10.0	9.73		ug/L		97	80 - 122
Vinyl chloride	10.0	8.55		ug/L		86	60 - 129
Xylenes, Total	20.0	18.5		ug/L		93	80 - 120
1,1,1-Trichloroethane	10.0	9.84		ug/L		98	79 - 133
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	80 - 120
Cyclohexane	10.0	9.25		ug/L		93	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	9.01		ug/L		90	46 - 140
1,2-Dibromoethane	10.0	10.5		ug/L		105	80 - 126
Dichlorodifluoromethane	10.0	8.18		ug/L		82	32 - 140
cis-1,2-Dichloroethene	10.0	9.06		ug/L		91	80 - 120
trans-1,2-Dichloroethene	10.0	8.76		ug/L		88	80 - 123
Isopropylbenzene	10.0	9.22		ug/L		92	80 - 120
Methyl acetate	50.0	58.1		ug/L		116	65 - 124
Methyl tert-butyl ether	10.0	8.94		ug/L		89	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.64		ug/L		86	65 - 151
1,2,4-Trichlorobenzene	10.0	8.24		ug/L		82	53 - 137
1,2-Dichlorobenzene	10.0	9.58		ug/L		96	80 - 120
1,3-Dichlorobenzene	10.0	9.68		ug/L		97	80 - 120
1,4-Dichlorobenzene	10.0	9.96		ug/L		100	80 - 120
Trichlorofluoromethane	10.0	8.09		ug/L		81	56 - 161
Dibromochloromethane	10.0	10.3		ug/L		103	68 - 131

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

Lab Sample ID: LCS 240-254586/4
Matrix: Water
Analysis Batch: 254586

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methylcyclohexane			10.0	7.54		ug/L		75	71 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*63 - 132*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Toluene-d8 (Surr)	*106*		*73 - 124*
Dibromofluoromethane (Surr)	*99*		*80 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-132)	(73-120)	(73-124)	(80-120)
240-71416-1	TB-17303-102516	119	90	105	98
240-71416-2	GW-17303-102516-JY-001	120	88	104	100
240-71416-3	GW-17303-102516-JY-002	116	94	109	94
240-71416-4	GW-17303-102516-JY-003	115	94	104	95
240-71416-5	GW-17303-102516-JY-004	117	87	101	100
240-71416-6	GW-17303-102516-JY-005	118	90	102	100
240-71416-7	GW-17303-102516-JY-006	117	92	104	97
240-71416-8	GW-17303-102516-JY-007	118	91	105	99
240-71416-9	GW-17303-102616-JY-008	91	93	93	90
240-71416-10	GW-17303-102616-JY-009	91	90	90	90
240-71416-11	GW-17303-102616-JY-010	90	93	91	91
240-71416-12	GW-17303-102616-JY-011	90	93	92	90
240-71416-12 MS	GW-17303-102616-JY-011	89	97	92	94
240-71416-12 MSD	GW-17303-102616-JY-011	91	99	94	93
240-71416-13	GW-17303-102616-JY-012	121	89	104	101
240-71416-14	GW-17303-102716-JY-013	122	94	106	101
240-71416-14 MS	GW-17303-102716-JY-013	115	100	107	97
240-71416-14 MSD	GW-17303-102716-JY-013	113	97	105	98
240-71416-15	GW-17303-102716-JY-014	121	93	103	101
240-71416-16	GW-17303-102716-JY-015	120	90	108	100
240-71416-17	GW-17303-102716-JY-016	119	91	104	99
240-71416-18	GW-17303-102716-JY-017	120	92	103	97
240-71416-19	GW-17303-102716-JY-018	121	93	102	99
240-71416-20	GW-17303-102716-JY-019	118	100	101	100
240-71416-21	GW-17303-102716-JY-020	116	90	106	99
LCS 240-254245/4	Lab Control Sample	112	106	109	91
LCS 240-254290/4	Lab Control Sample	92	98	92	91
LCS 240-254412/4	Lab Control Sample	117	103	110	102
LCS 240-254586/4	Lab Control Sample	114	98	106	99
LCSD 240-254290/7	Lab Control Sample Dup	91	101	91	94
MB 240-254245/6	Method Blank	123	99	111	98
MB 240-254290/18	Method Blank	91	95	92	91
MB 240-254412/6	Method Blank	112	95	106	96
MB 240-254586/6	Method Blank	117	91	103	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

Client Sample ID: TB-17303-102516
Lab Sample ID: 240-71416-1
Date Collected: 10/25/16 00:00
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254245	11/03/16 21:41	LRW	TAL CAN

Client Sample ID: GW-17303-102516-JY-001
Lab Sample ID: 240-71416-2
Date Collected: 10/25/16 09:00
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254245	11/03/16 22:03	LRW	TAL CAN

Client Sample ID: GW-17303-102516-JY-002
Lab Sample ID: 240-71416-3
Date Collected: 10/25/16 09:50
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254245	11/03/16 22:25	LRW	TAL CAN

Client Sample ID: GW-17303-102516-JY-003
Lab Sample ID: 240-71416-4
Date Collected: 10/25/16 09:55
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254245	11/03/16 22:47	LRW	TAL CAN

Client Sample ID: GW-17303-102516-JY-004
Lab Sample ID: 240-71416-5
Date Collected: 10/25/16 10:50
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254412	11/04/16 17:31	LRW	TAL CAN

Client Sample ID: GW-17303-102516-JY-005
Lab Sample ID: 240-71416-6
Date Collected: 10/25/16 11:50
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254412	11/04/16 17:53	LRW	TAL CAN

Client Sample ID: GW-17303-102516-JY-006 — Lab Sample ID: 240-71416-7

Date Collected: 10/25/16 12:45 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254412	11/04/16 18:16	LRW	TAL CAN

Client Sample ID: GW-17303-102516-JY-007 — Lab Sample ID: 240-71416-8

Date Collected: 10/25/16 14:00 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	254586	11/07/16 17:54	LRW	TAL CAN

Client Sample ID: GW-17303-102616-JY-008 — Lab Sample ID: 240-71416-9

Date Collected: 10/26/16 10:00 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	254290	11/04/16 01:55	TJL1	TAL CAN

Client Sample ID: GW-17303-102616-JY-009 — Lab Sample ID: 240-71416-10

Date Collected: 10/26/16 12:25 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	254290	11/04/16 02:18	TJL1	TAL CAN

Client Sample ID: GW-17303-102616-JY-010 — Lab Sample ID: 240-71416-11

Date Collected: 10/26/16 09:50 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	254290	11/04/16 02:42	TJL1	TAL CAN

Client Sample ID: GW-17303-102616-JY-011 — Lab Sample ID: 240-71416-12

Date Collected: 10/26/16 10:45 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	254290	11/04/16 03:06	TJL1	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

Client Sample ID: GW-17303-102616-JY-012 — Lab Sample ID: 240-71416-13

Date Collected: 10/26/16 11:40 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5000	254412	11/04/16 19:00	LRW	TAL CAN

Client Sample ID: GW-17303-102716-JY-013 — Lab Sample ID: 240-71416-14

Date Collected: 10/27/16 09:20 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	254412	11/04/16 22:40	LRW	TAL CAN

Client Sample ID: GW-17303-102716-JY-014 — Lab Sample ID: 240-71416-15

Date Collected: 10/27/16 10:10 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		28.57	254412	11/04/16 19:22	LRW	TAL CAN

Client Sample ID: GW-17303-102716-JY-015 — Lab Sample ID: 240-71416-16

Date Collected: 10/27/16 11:20 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		16666.67	254586	11/07/16 18:16	LRW	TAL CAN

Client Sample ID: GW-17303-102716-JY-016 — Lab Sample ID: 240-71416-17

Date Collected: 10/27/16 12:10 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		142.86	254412	11/04/16 20:06	LRW	TAL CAN

Client Sample ID: GW-17303-102716-JY-017 — Lab Sample ID: 240-71416-18

Date Collected: 10/27/16 12:15 — **Matrix: Water**
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		142.86	254412	11/04/16 20:28	LRW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

Client Sample ID: GW-17303-102716-JY-018

Lab Sample ID: 240-71416-19

Date Collected: 10/27/16 13:05
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		125	254412	11/04/16 20:50	LRW	TAL CAN

Client Sample ID: GW-17303-102716-JY-019

Lab Sample ID: 240-71416-20

Date Collected: 10/27/16 14:00
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	254412	11/04/16 21:12	LRW	TAL CAN

Client Sample ID: GW-17303-102716-JY-020

Lab Sample ID: 240-71416-21

Date Collected: 10/27/16 15:00
Matrix: Water
Date Received: 10/28/16 11:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		16.67	254412	11/04/16 21:34	LRW	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71416-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17
Illinois	NELAP	5	200004	07-31-17
Kansas	NELAP	7	E-10336	01-31-17
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16 *
Minnesota	NELAP	5	039-999-348	12-31-16 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17
Nevada	State Program	9	OH-000482008A	07-31-17
New Jersey	NELAP	2	OH001	06-30-17
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-17
Texas	NELAP	6	T104704517-15-5	08-31-17
USDA	Federal		P330-13-00319	11-26-16 *
Virginia	NELAP	3	460175	09-14-17
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17

* Certification renewal pending - certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1.4/C1.8

Chain of Custody Record

164028

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: Amanda Bush	Date: 10-27-16	COC No:
Company Name: GHD	Tel/Fax:	Lab Contact: D. Heidler	Carrier: Fed Ex	1 of 2 COCs
Address: 14496 N. Sheldon Ste 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Plymouth, Mich. 48170	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 734 453 5123	TAT if different from Below GHD STD			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Rouge CVO	☐ 1 week			
Site: 17303-036	☐ 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)	TCL VOC	Sample Specific Notes:
TB-17303-102576	10/25/16	—	G	WQ	1	N	N	X	
GW-17303-102576-JY-001		0900	G	WG	3	N	N	X	
-002		0950	G	WG	3			X	
-003		0955	G	WG	3			X	
-004		1050	G	WG	3			X	
-005		1150	G	WG	3			X	
-006		1245	G	WG	3			X	
-007		1400	G	WG	3			X	
GW-17303-102616-JY-008	10/26/16	1000	G	WG	3			X	
-009		1225	G	WG	3			X	
-010		0950	G	WG	3			X	
-011		1045	G	WG	3			X	

240-71416 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:

LPN 24006020

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:
John York	GHD	10-27-16 1630	[signature]	TAL	10/28/16 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

11/9/2016

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

Chain of Custody Record

164029

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:	Date: 10-27-16	COC No:
Company Name: GHD	Tel/Fax:	Lab Contact: D. Heckelberg	Carrier: Fed Ex	2 of 2 COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Plymouth, Mich. 48170	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Ferry CVO	☐ 1 week			
Site: 17303	☐ 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)	TCL VOC	Sample Specific Notes:
GW-17303-102616-JY-012	10/26/16	1140	G	WG	3	N	N	X	
GW-17303-102716-JY-013	10/27/16	0920	G	WG	9	N	Y	X	
-014		1010	G	WG	3	N	N	X	
-015		1120	G	WG	3	N	N	X	
-016		1210	G	WG	3	N	N	X	
-017		1215	G	WG	3	N	N	X	
-018		1305	G	WG	3	N	N	X	
-019		1400	G	WG	3	N	N	X	
GW-17303-102716-JY-020		1510	G	WG	3	N	N	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:
[signature]	GHD	10-27-16 1630	[signature]	TANC	10/28/16 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

11/9/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____

Canton Facility

Client GHD Site Name _____ Cooler unpacked by: BMack

Cooler Received on 10/28/14 Opened on 10/28/14

FedEx: 1st Grd Exp UPS FAS Stetson 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 **+0.4** °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.8 °C

IR GUN #36 (CF **+1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
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 11-15 have been checked at the originating laboratory.		
11. Were sample(s) at the correct pH upon receipt?	Yes No	NA pH Strip Lot# **HC682547**
12. Were VOAs on the COC?	Yes	No
13. Were air bubbles >6 mm in any VOA vials?	Yes	No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # covered	Yes	No
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

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): _____

Ref: SOP NC-SC-0005, Sample Receiving

L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-101216 Cooler Receipt Form.doc djl

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: 240-71478-1
Client Project/Site: 17303-036, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
11/10/2016 9:36:07 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: 240-71478-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-71478-1

Comments
No additional comments.

Receipt
The samples were received on 10/29/2016 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-254410 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: There was an MS/MSD analyzed in batch 254410 but could not be reported because the associated sample needed reanalyzed in a different batch.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-254586 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.

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: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-71478-1	TB-17303-102816	WQ	10/28/16 00:00	10/29/16 10:15
240-71478-2	GW-17303-102816-JY-021	Water	10/28/16 09:30	10/29/16 10:15
240-71478-3	GW-17303-102816-JY-022	Water	10/28/16 10:15	10/29/16 10:15
240-71478-4	GW-17303-102816-JY-023	Water	10/28/16 10:20	10/29/16 10:15
240-71478-5	GW-17303-102816-JY-024	Water	10/28/16 11:15	10/29/16 10:15
240-71478-6	GW-17303-102816-JY-025	Water	10/28/16 12:15	10/29/16 10:15
240-71478-7	GW-17303-102816-JY-026	Water	10/28/16 09:10	10/29/16 10:15
240-71478-8	GW-17303-102816-JY-027	Water	10/28/16 10:20	10/29/16 10:15
240-71478-9	GW-17303-102816-JY-028	Water	10/28/16 11:25	10/29/16 10:15
240-71478-10	GW-17303-102816-JY-029	Water	10/28/16 12:40	10/29/16 10:15
240-71478-11	GW-17303-102816-JY-030	Water	10/28/16 13:15	10/29/16 10:15
240-71478-12	GW-17303-102816-JY-031	Water	10/28/16 13:50	10/29/16 10:15
240-71478-13	GW-17303-102816-JY-032	Water	10/28/16 14:20	10/29/16 10:15

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

Client Sample ID: TB-17303-102816 — Lab Sample ID: 240-71478-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.0	J *	10	1.8	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-021 — Lab Sample ID: 240-71478-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1500		67	30	ug/L	66.67		8260B	Total/NA
cis-1,2-Dichloroethene	1300		67	20	ug/L	66.67		8260B	Total/NA
trans-1,2-Dichloroethene	56	J	67	19	ug/L	66.67		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-022 — Lab Sample ID: 240-71478-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	440		25	11	ug/L	25		8260B	Total/NA
cis-1,2-Dichloroethene	32		25	7.5	ug/L	25		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-023 — Lab Sample ID: 240-71478-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	440		25	11	ug/L	25		8260B	Total/NA
cis-1,2-Dichloroethene	33		25	7.5	ug/L	25		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-024 — Lab Sample ID: 240-71478-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.4		2.0	0.66	ug/L	2		8260B	Total/NA
Vinyl chloride	40		2.0	0.90	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	18		2.0	0.60	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	0.74	J	2.0	0.58	ug/L	2		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-025 — Lab Sample ID: 240-71478-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.51	J	1.4	0.47	ug/L	1.43		8260B	Total/NA
Vinyl chloride	26		1.4	0.64	ug/L	1.43		8260B	Total/NA
cis-1,2-Dichloroethene	16		1.4	0.43	ug/L	1.43		8260B	Total/NA
trans-1,2-Dichloroethene	0.77	J	1.4	0.41	ug/L	1.43		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-026 — Lab Sample ID: 240-71478-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	7800		500	230	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene	1200		500	150	ug/L	500		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-027 — Lab Sample ID: 240-71478-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	9800		330	150	ug/L	333.33		8260B	Total/NA
cis-1,2-Dichloroethene	3600		330	100	ug/L	333.33		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-028 — Lab Sample ID: 240-71478-9

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

Client Sample ID: GW-17303-102816-JY-028 (Continued) — Lab Sample ID: 240-71478-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	3600		200	90	ug/L	200		8260B	Total/NA
cis-1,2-Dichloroethene	3200		200	60	ug/L	200		8260B	Total/NA
trans-1,2-Dichloroethene	110	J	200	58	ug/L	200		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-029 — Lab Sample ID: 240-71478-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	10		10	2.8	ug/L	10		8260B	Total/NA
Vinyl chloride	130		10	4.5	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	4.6	J	10	3.0	ug/L	10		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-030 — Lab Sample ID: 240-71478-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.5		1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.2		1.0	0.30	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-031 — Lab Sample ID: 240-71478-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	5.6	J	11	5.0	ug/L	11.11		8260B	Total/NA
cis-1,2-Dichloroethene	220		11	3.3	ug/L	11.11		8260B	Total/NA
trans-1,2-Dichloroethene	18		11	3.2	ug/L	11.11		8260B	Total/NA

Client Sample ID: GW-17303-102816-JY-032 — Lab Sample ID: 240-71478-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.80	J	1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.67	J	1.0	0.30	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: TB-17303-102816
Date Collected: 10/28/16 00:00
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-1
Matrix: WQ

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.0**	**J ***	10	1.8	ug/L			11/04/16 19:24	1
Benzene	1.0	U	1.0	0.28	ug/L			11/04/16 19:24	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/04/16 19:24	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/04/16 19:24	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/04/16 19:24	1
2-Butanone (MEK)	10	U *	10	1.0	ug/L			11/04/16 19:24	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/04/16 19:24	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/04/16 19:24	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 19:24	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/04/16 19:24	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/04/16 19:24	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/04/16 19:24	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/04/16 19:24	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/04/16 19:24	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/04/16 19:24	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/04/16 19:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/04/16 19:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/04/16 19:24	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/04/16 19:24	1
2-Hexanone	10	U	10	1.2	ug/L			11/04/16 19:24	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/04/16 19:24	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/04/16 19:24	1
Styrene	1.0	U	1.0	0.23	ug/L			11/04/16 19:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/04/16 19:24	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 19:24	1
Toluene	1.0	U	1.0	0.23	ug/L			11/04/16 19:24	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/04/16 19:24	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/04/16 19:24	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/04/16 19:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/04/16 19:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/04/16 19:24	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/04/16 19:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/04/16 19:24	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/04/16 19:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 19:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 19:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/04/16 19:24	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/04/16 19:24	1
Methyl acetate	10	U	10	1.4	ug/L			11/04/16 19:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/04/16 19:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/04/16 19:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/04/16 19:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/04/16 19:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 19:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/04/16 19:24	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 19:24	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/04/16 19:24	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/04/16 19:24	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		63 - 132		11/04/16 19:24	1
4-Bromofluorobenzene (Surr)	82		73 - 120		11/04/16 19:24	1
Toluene-d8 (Surr)	89		73 - 124		11/04/16 19:24	1
Dibromofluoromethane (Surr)	89		80 - 120		11/04/16 19:24	1

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

Client Sample ID: GW-17303-102816-JY-021
Date Collected: 10/28/16 09:30
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U *	670	120	ug/L			11/04/16 19:46	66.67
Benzene	67	U	67	19	ug/L			11/04/16 19:46	66.67
Bromodichloromethane	67	U	67	20	ug/L			11/04/16 19:46	66.67
Bromoform	67	U	67	29	ug/L			11/04/16 19:46	66.67
Bromomethane	67	U	67	28	ug/L			11/04/16 19:46	66.67
2-Butanone (MEK)	670	U *	670	68	ug/L			11/04/16 19:46	66.67
Carbon disulfide	330	U	330	23	ug/L			11/04/16 19:46	66.67
Carbon tetrachloride	67	U	67	23	ug/L			11/04/16 19:46	66.67
Chlorobenzene	67	U	67	21	ug/L			11/04/16 19:46	66.67
Chloroethane	67	U	67	27	ug/L			11/04/16 19:46	66.67
Chloroform	67	U	67	21	ug/L			11/04/16 19:46	66.67
Chloromethane	67	U	67	29	ug/L			11/04/16 19:46	66.67
1,1-Dichloroethane	67	U	67	17	ug/L			11/04/16 19:46	66.67
1,2-Dichloroethane	67	U	67	20	ug/L			11/04/16 19:46	66.67
1,1-Dichloroethene	67	U	67	18	ug/L			11/04/16 19:46	66.67
1,2-Dichloropropane	67	U	67	20	ug/L			11/04/16 19:46	66.67
cis-1,3-Dichloropropene	67	U	67	17	ug/L			11/04/16 19:46	66.67
trans-1,3-Dichloropropene	67	U	67	21	ug/L			11/04/16 19:46	66.67
Ethylbenzene	67	U	67	17	ug/L			11/04/16 19:46	66.67
2-Hexanone	670	U	670	82	ug/L			11/04/16 19:46	66.67
Methylene Chloride	330	U	330	35	ug/L			11/04/16 19:46	66.67
4-Methyl-2-pentanone (MIBK)	670	U	670	47	ug/L			11/04/16 19:46	66.67
Styrene	67	U	67	15	ug/L			11/04/16 19:46	66.67
1,1,2,2-Tetrachloroethane	67	U	67	21	ug/L			11/04/16 19:46	66.67
Tetrachloroethene	67	U	67	20	ug/L			11/04/16 19:46	66.67
Toluene	67	U	67	15	ug/L			11/04/16 19:46	66.67
Trichloroethene	67	U	67	22	ug/L			11/04/16 19:46	66.67
Vinyl chloride	**1500**		67	30	ug/L			11/04/16 19:46	66.67
Xylenes, Total	130	U	130	16	ug/L			11/04/16 19:46	66.67
1,1,1-Trichloroethane	67	U	67	15	ug/L			11/04/16 19:46	66.67
1,1,2-Trichloroethane	67	U	67	23	ug/L			11/04/16 19:46	66.67
Cyclohexane	67	U	67	29	ug/L			11/04/16 19:46	66.67
1,2-Dibromo-3-Chloropropane	67	U	67	31	ug/L			11/04/16 19:46	66.67
1,2-Dibromoethane	67	U	67	15	ug/L			11/04/16 19:46	66.67
Dichlorodifluoromethane	67	U	67	33	ug/L			11/04/16 19:46	66.67
cis-1,2-Dichloroethene	**1300**		67	20	ug/L			11/04/16 19:46	66.67
trans-1,2-Dichloroethene	**56**	**J**	67	19	ug/L			11/04/16 19:46	66.67
Isopropylbenzene	67	U	67	14	ug/L			11/04/16 19:46	66.67
Methyl acetate	670	U	670	95	ug/L			11/04/16 19:46	66.67
Methyl tert-butyl ether	67	U	67	18	ug/L			11/04/16 19:46	66.67
1,1,2-Trichloro-1,2,2-trifluoroethane	67	U	67	27	ug/L			11/04/16 19:46	66.67
1,2,4-Trichlorobenzene	67	U	67	18	ug/L			11/04/16 19:46	66.67
1,2-Dichlorobenzene	67	U	67	17	ug/L			11/04/16 19:46	66.67
1,3-Dichlorobenzene	67	U	67	21	ug/L			11/04/16 19:46	66.67
1,4-Dichlorobenzene	67	U	67	15	ug/L			11/04/16 19:46	66.67
Trichlorofluoromethane	67	U	67	33	ug/L			11/04/16 19:46	66.67
Dibromochloromethane	67	U	67	17	ug/L			11/04/16 19:46	66.67
Methylcyclohexane	67	U	67	30	ug/L			11/04/16 19:46	66.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 132		11/04/16 19:46	66.67
4-Bromofluorobenzene (Surr)	80		73 - 120		11/04/16 19:46	66.67
Toluene-d8 (Surr)	90		73 - 124		11/04/16 19:46	66.67
Dibromofluoromethane (Surr)	88		80 - 120		11/04/16 19:46	66.67

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

Client Sample ID: GW-17303-102816-JY-022
Date Collected: 10/28/16 10:15
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	250	U *	250	44	ug/L			11/04/16 20:09	25
Benzene	25	U	25	7.0	ug/L			11/04/16 20:09	25
Bromodichloromethane	25	U	25	7.5	ug/L			11/04/16 20:09	25
Bromoform	25	U	25	11	ug/L			11/04/16 20:09	25
Bromomethane	25	U	25	11	ug/L			11/04/16 20:09	25
2-Butanone (MEK)	250	U *	250	26	ug/L			11/04/16 20:09	25
Carbon disulfide	130	U	130	8.5	ug/L			11/04/16 20:09	25
Carbon tetrachloride	25	U	25	8.8	ug/L			11/04/16 20:09	25
Chlorobenzene	25	U	25	8.0	ug/L			11/04/16 20:09	25
Chloroethane	25	U	25	10	ug/L			11/04/16 20:09	25
Chloroform	25	U	25	7.8	ug/L			11/04/16 20:09	25
Chloromethane	25	U	25	11	ug/L			11/04/16 20:09	25
1,1-Dichloroethane	25	U	25	6.3	ug/L			11/04/16 20:09	25
1,2-Dichloroethane	25	U	25	7.5	ug/L			11/04/16 20:09	25
1,1-Dichloroethene	25	U	25	6.8	ug/L			11/04/16 20:09	25
1,2-Dichloropropane	25	U	25	7.5	ug/L			11/04/16 20:09	25
cis-1,3-Dichloropropene	25	U	25	6.5	ug/L			11/04/16 20:09	25
trans-1,3-Dichloropropene	25	U	25	7.8	ug/L			11/04/16 20:09	25
Ethylbenzene	25	U	25	6.5	ug/L			11/04/16 20:09	25
2-Hexanone	250	U	250	31	ug/L			11/04/16 20:09	25
Methylene Chloride	130	U	130	13	ug/L			11/04/16 20:09	25
4-Methyl-2-pentanone (MIBK)	250	U	250	18	ug/L			11/04/16 20:09	25
Styrene	25	U	25	5.8	ug/L			11/04/16 20:09	25
1,1,2,2-Tetrachloroethane	25	U	25	8.0	ug/L			11/04/16 20:09	25
Tetrachloroethene	25	U	25	7.5	ug/L			11/04/16 20:09	25
Toluene	25	U	25	5.8	ug/L			11/04/16 20:09	25
Trichloroethene	25	U	25	8.3	ug/L			11/04/16 20:09	25
Vinyl chloride	**440**		25	11	ug/L			11/04/16 20:09	25
Xylenes, Total	50	U	50	6.0	ug/L			11/04/16 20:09	25
1,1,1-Trichloroethane	25	U	25	5.8	ug/L			11/04/16 20:09	25
1,1,2-Trichloroethane	25	U	25	8.5	ug/L			11/04/16 20:09	25
Cyclohexane	25	U	25	11	ug/L			11/04/16 20:09	25
1,2-Dibromo-3-Chloropropane	25	U	25	12	ug/L			11/04/16 20:09	25
1,2-Dibromoethane	25	U	25	5.8	ug/L			11/04/16 20:09	25
Dichlorodifluoromethane	25	U	25	13	ug/L			11/04/16 20:09	25
cis-1,2-Dichloroethene	**32**		25	7.5	ug/L			11/04/16 20:09	25
trans-1,2-Dichloroethene	25	U	25	7.3	ug/L			11/04/16 20:09	25
Isopropylbenzene	25	U	25	5.3	ug/L			11/04/16 20:09	25
Methyl acetate	250	U	250	36	ug/L			11/04/16 20:09	25
Methyl tert-butyl ether	25	U	25	6.8	ug/L			11/04/16 20:09	25
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	25	10	ug/L			11/04/16 20:09	25
1,2,4-Trichlorobenzene	25	U	25	6.8	ug/L			11/04/16 20:09	25
1,2-Dichlorobenzene	25	U	25	6.5	ug/L			11/04/16 20:09	25
1,3-Dichlorobenzene	25	U	25	8.0	ug/L			11/04/16 20:09	25
1,4-Dichlorobenzene	25	U	25	5.8	ug/L			11/04/16 20:09	25
Trichlorofluoromethane	25	U	25	13	ug/L			11/04/16 20:09	25
Dibromochloromethane	25	U	25	6.3	ug/L			11/04/16 20:09	25
Methylcyclohexane	25	U	25	11	ug/L			11/04/16 20:09	25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 132		11/04/16 20:09	25
4-Bromofluorobenzene (Surr)	77		73 - 120		11/04/16 20:09	25
Toluene-d8 (Surr)	88		73 - 124		11/04/16 20:09	25
Dibromofluoromethane (Surr)	88		80 - 120		11/04/16 20:09	25

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

Client Sample ID: GW-17303-102816-JY-023
Date Collected: 10/28/16 10:20
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	250	U *	250	44	ug/L			11/04/16 20:31	25
Benzene	25	U	25	7.0	ug/L			11/04/16 20:31	25
Bromodichloromethane	25	U	25	7.5	ug/L			11/04/16 20:31	25
Bromoform	25	U	25	11	ug/L			11/04/16 20:31	25
Bromomethane	25	U	25	11	ug/L			11/04/16 20:31	25
2-Butanone (MEK)	250	U *	250	26	ug/L			11/04/16 20:31	25
Carbon disulfide	130	U	130	8.5	ug/L			11/04/16 20:31	25
Carbon tetrachloride	25	U	25	8.8	ug/L			11/04/16 20:31	25
Chlorobenzene	25	U	25	8.0	ug/L			11/04/16 20:31	25
Chloroethane	25	U	25	10	ug/L			11/04/16 20:31	25
Chloroform	25	U	25	7.8	ug/L			11/04/16 20:31	25
Chloromethane	25	U	25	11	ug/L			11/04/16 20:31	25
1,1-Dichloroethane	25	U	25	6.3	ug/L			11/04/16 20:31	25
1,2-Dichloroethane	25	U	25	7.5	ug/L			11/04/16 20:31	25
1,1-Dichloroethene	25	U	25	6.8	ug/L			11/04/16 20:31	25
1,2-Dichloropropane	25	U	25	7.5	ug/L			11/04/16 20:31	25
cis-1,3-Dichloropropene	25	U	25	6.5	ug/L			11/04/16 20:31	25
trans-1,3-Dichloropropene	25	U	25	7.8	ug/L			11/04/16 20:31	25
Ethylbenzene	25	U	25	6.5	ug/L			11/04/16 20:31	25
2-Hexanone	250	U	250	31	ug/L			11/04/16 20:31	25
Methylene Chloride	130	U	130	13	ug/L			11/04/16 20:31	25
4-Methyl-2-pentanone (MIBK)	250	U	250	18	ug/L			11/04/16 20:31	25
Styrene	25	U	25	5.8	ug/L			11/04/16 20:31	25
1,1,2,2-Tetrachloroethane	25	U	25	8.0	ug/L			11/04/16 20:31	25
Tetrachloroethene	25	U	25	7.5	ug/L			11/04/16 20:31	25
Toluene	25	U	25	5.8	ug/L			11/04/16 20:31	25
Trichloroethene	25	U	25	8.3	ug/L			11/04/16 20:31	25
Vinyl chloride	**440**		25	11	ug/L			11/04/16 20:31	25
Xylenes, Total	50	U	50	6.0	ug/L			11/04/16 20:31	25
1,1,1-Trichloroethane	25	U	25	5.8	ug/L			11/04/16 20:31	25
1,1,2-Trichloroethane	25	U	25	8.5	ug/L			11/04/16 20:31	25
Cyclohexane	25	U	25	11	ug/L			11/04/16 20:31	25
1,2-Dibromo-3-Chloropropane	25	U	25	12	ug/L			11/04/16 20:31	25
1,2-Dibromoethane	25	U	25	5.8	ug/L			11/04/16 20:31	25
Dichlorodifluoromethane	25	U	25	13	ug/L			11/04/16 20:31	25
cis-1,2-Dichloroethene	**33**		25	7.5	ug/L			11/04/16 20:31	25
trans-1,2-Dichloroethene	25	U	25	7.3	ug/L			11/04/16 20:31	25
Isopropylbenzene	25	U	25	5.3	ug/L			11/04/16 20:31	25
Methyl acetate	250	U	250	36	ug/L			11/04/16 20:31	25
Methyl tert-butyl ether	25	U	25	6.8	ug/L			11/04/16 20:31	25
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	25	10	ug/L			11/04/16 20:31	25
1,2,4-Trichlorobenzene	25	U	25	6.8	ug/L			11/04/16 20:31	25
1,2-Dichlorobenzene	25	U	25	6.5	ug/L			11/04/16 20:31	25
1,3-Dichlorobenzene	25	U	25	8.0	ug/L			11/04/16 20:31	25
1,4-Dichlorobenzene	25	U	25	5.8	ug/L			11/04/16 20:31	25
Trichlorofluoromethane	25	U	25	13	ug/L			11/04/16 20:31	25
Dibromochloromethane	25	U	25	6.3	ug/L			11/04/16 20:31	25
Methylcyclohexane	25	U	25	11	ug/L			11/04/16 20:31	25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		63 - 132		11/04/16 20:31	25
4-Bromofluorobenzene (Surr)	79		73 - 120		11/04/16 20:31	25
Toluene-d8 (Surr)	90		73 - 124		11/04/16 20:31	25
Dibromofluoromethane (Surr)	87		80 - 120		11/04/16 20:31	25

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

Client Sample ID: GW-17303-102816-JY-024
Date Collected: 10/28/16 11:15
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U *	20	3.5	ug/L			11/04/16 20:54	2
Benzene	2.0	U	2.0	0.56	ug/L			11/04/16 20:54	2
Bromodichloromethane	2.0	U	2.0	0.60	ug/L			11/04/16 20:54	2
Bromoform	2.0	U	2.0	0.86	ug/L			11/04/16 20:54	2
Bromomethane	2.0	U	2.0	0.84	ug/L			11/04/16 20:54	2
2-Butanone (MEK)	20	U *	20	2.0	ug/L			11/04/16 20:54	2
Carbon disulfide	10	U	10	0.68	ug/L			11/04/16 20:54	2
Carbon tetrachloride	2.0	U	2.0	0.70	ug/L			11/04/16 20:54	2
Chlorobenzene	2.0	U	2.0	0.64	ug/L			11/04/16 20:54	2
Chloroethane	2.0	U	2.0	0.82	ug/L			11/04/16 20:54	2
Chloroform	2.0	U	2.0	0.62	ug/L			11/04/16 20:54	2
Chloromethane	2.0	U	2.0	0.86	ug/L			11/04/16 20:54	2
1,1-Dichloroethane	2.0	U	2.0	0.50	ug/L			11/04/16 20:54	2
1,2-Dichloroethane	2.0	U	2.0	0.60	ug/L			11/04/16 20:54	2
1,1-Dichloroethene	2.0	U	2.0	0.54	ug/L			11/04/16 20:54	2
1,2-Dichloropropane	2.0	U	2.0	0.60	ug/L			11/04/16 20:54	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.52	ug/L			11/04/16 20:54	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.62	ug/L			11/04/16 20:54	2
Ethylbenzene	2.0	U	2.0	0.52	ug/L			11/04/16 20:54	2
2-Hexanone	20	U	20	2.5	ug/L			11/04/16 20:54	2
Methylene Chloride	10	U	10	1.1	ug/L			11/04/16 20:54	2
4-Methyl-2-pentanone (MIBK)	20	U	20	1.4	ug/L			11/04/16 20:54	2
Styrene	2.0	U	2.0	0.46	ug/L			11/04/16 20:54	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.64	ug/L			11/04/16 20:54	2
Tetrachloroethene	2.0	U	2.0	0.60	ug/L			11/04/16 20:54	2
Toluene	2.0	U	2.0	0.46	ug/L			11/04/16 20:54	2
Trichloroethene	**2.4**		2.0	0.66	ug/L			11/04/16 20:54	2
Vinyl chloride	**40**		2.0	0.90	ug/L			11/04/16 20:54	2
Xylenes, Total	4.0	U	4.0	0.48	ug/L			11/04/16 20:54	2
1,1,1-Trichloroethane	2.0	U	2.0	0.46	ug/L			11/04/16 20:54	2
1,1,2-Trichloroethane	2.0	U	2.0	0.68	ug/L			11/04/16 20:54	2
Cyclohexane	2.0	U	2.0	0.88	ug/L			11/04/16 20:54	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.94	ug/L			11/04/16 20:54	2
1,2-Dibromoethane	2.0	U	2.0	0.46	ug/L			11/04/16 20:54	2
Dichlorodifluoromethane	2.0	U	2.0	1.0	ug/L			11/04/16 20:54	2
cis-1,2-Dichloroethene	**18**		2.0	0.60	ug/L			11/04/16 20:54	2
trans-1,2-Dichloroethene	**0.74**	**J**	2.0	0.58	ug/L			11/04/16 20:54	2
Isopropylbenzene	2.0	U	2.0	0.42	ug/L			11/04/16 20:54	2
Methyl acetate	20	U	20	2.9	ug/L			11/04/16 20:54	2
Methyl tert-butyl ether	2.0	U	2.0	0.54	ug/L			11/04/16 20:54	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.82	ug/L			11/04/16 20:54	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.54	ug/L			11/04/16 20:54	2
1,2-Dichlorobenzene	2.0	U	2.0	0.52	ug/L			11/04/16 20:54	2
1,3-Dichlorobenzene	2.0	U	2.0	0.64	ug/L			11/04/16 20:54	2
1,4-Dichlorobenzene	2.0	U	2.0	0.46	ug/L			11/04/16 20:54	2
Trichlorofluoromethane	2.0	U	2.0	1.0	ug/L			11/04/16 20:54	2
Dibromochloromethane	2.0	U	2.0	0.50	ug/L			11/04/16 20:54	2
Methylcyclohexane	2.0	U	2.0	0.90	ug/L			11/04/16 20:54	2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		63 - 132		11/04/16 20:54	2
4-Bromofluorobenzene (Surr)	79		73 - 120		11/04/16 20:54	2
Toluene-d8 (Surr)	89		73 - 124		11/04/16 20:54	2
Dibromofluoromethane (Surr)	87		80 - 120		11/04/16 20:54	2

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

Client Sample ID: GW-17303-102816-JY-025
Date Collected: 10/28/16 12:15
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	14	U *	14	2.5	ug/L			11/04/16 21:16	1.43
Benzene	1.4	U	1.4	0.40	ug/L			11/04/16 21:16	1.43
Bromodichloromethane	1.4	U	1.4	0.43	ug/L			11/04/16 21:16	1.43
Bromoform	1.4	U	1.4	0.61	ug/L			11/04/16 21:16	1.43
Bromomethane	1.4	U	1.4	0.60	ug/L			11/04/16 21:16	1.43
2-Butanone (MEK)	14	U *	14	1.5	ug/L			11/04/16 21:16	1.43
Carbon disulfide	7.2	U	7.2	0.49	ug/L			11/04/16 21:16	1.43
Carbon tetrachloride	1.4	U	1.4	0.50	ug/L			11/04/16 21:16	1.43
Chlorobenzene	1.4	U	1.4	0.46	ug/L			11/04/16 21:16	1.43
Chloroethane	1.4	U	1.4	0.59	ug/L			11/04/16 21:16	1.43
Chloroform	1.4	U	1.4	0.44	ug/L			11/04/16 21:16	1.43
Chloromethane	1.4	U	1.4	0.61	ug/L			11/04/16 21:16	1.43
1,1-Dichloroethane	1.4	U	1.4	0.36	ug/L			11/04/16 21:16	1.43
1,2-Dichloroethane	1.4	U	1.4	0.43	ug/L			11/04/16 21:16	1.43
1,1-Dichloroethene	1.4	U	1.4	0.39	ug/L			11/04/16 21:16	1.43
1,2-Dichloropropane	1.4	U	1.4	0.43	ug/L			11/04/16 21:16	1.43
cis-1,3-Dichloropropene	1.4	U	1.4	0.37	ug/L			11/04/16 21:16	1.43
trans-1,3-Dichloropropene	1.4	U	1.4	0.44	ug/L			11/04/16 21:16	1.43
Ethylbenzene	1.4	U	1.4	0.37	ug/L			11/04/16 21:16	1.43
2-Hexanone	14	U	14	1.8	ug/L			11/04/16 21:16	1.43
Methylene Chloride	7.2	U	7.2	0.76	ug/L			11/04/16 21:16	1.43
4-Methyl-2-pentanone (MIBK)	14	U	14	1.0	ug/L			11/04/16 21:16	1.43
Styrene	1.4	U	1.4	0.33	ug/L			11/04/16 21:16	1.43
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.46	ug/L			11/04/16 21:16	1.43
Tetrachloroethene	1.4	U	1.4	0.43	ug/L			11/04/16 21:16	1.43
Toluene	1.4	U	1.4	0.33	ug/L			11/04/16 21:16	1.43
Trichloroethene	**0.51**	**J**	1.4	0.47	ug/L			11/04/16 21:16	1.43
Vinyl chloride	**26**		1.4	0.64	ug/L			11/04/16 21:16	1.43
Xylenes, Total	2.9	U	2.9	0.34	ug/L			11/04/16 21:16	1.43
1,1,1-Trichloroethane	1.4	U	1.4	0.33	ug/L			11/04/16 21:16	1.43
1,1,2-Trichloroethane	1.4	U	1.4	0.49	ug/L			11/04/16 21:16	1.43
Cyclohexane	1.4	U	1.4	0.63	ug/L			11/04/16 21:16	1.43
1,2-Dibromo-3-Chloropropane	1.4	U	1.4	0.67	ug/L			11/04/16 21:16	1.43
1,2-Dibromoethane	1.4	U	1.4	0.33	ug/L			11/04/16 21:16	1.43
Dichlorodifluoromethane	1.4	U	1.4	0.72	ug/L			11/04/16 21:16	1.43
cis-1,2-Dichloroethene	**16**		1.4	0.43	ug/L			11/04/16 21:16	1.43
trans-1,2-Dichloroethene	**0.77**	**J**	1.4	0.41	ug/L			11/04/16 21:16	1.43
Isopropylbenzene	1.4	U	1.4	0.30	ug/L			11/04/16 21:16	1.43
Methyl acetate	14	U	14	2.0	ug/L			11/04/16 21:16	1.43
Methyl tert-butyl ether	1.4	U	1.4	0.39	ug/L			11/04/16 21:16	1.43
1,1,2-Trichloro-1,2,2-trifluoroethane	1.4	U	1.4	0.59	ug/L			11/04/16 21:16	1.43
1,2,4-Trichlorobenzene	1.4	U	1.4	0.39	ug/L			11/04/16 21:16	1.43
1,2-Dichlorobenzene	1.4	U	1.4	0.37	ug/L			11/04/16 21:16	1.43
1,3-Dichlorobenzene	1.4	U	1.4	0.46	ug/L			11/04/16 21:16	1.43
1,4-Dichlorobenzene	1.4	U	1.4	0.33	ug/L			11/04/16 21:16	1.43
Trichlorofluoromethane	1.4	U	1.4	0.72	ug/L			11/04/16 21:16	1.43
Dibromochloromethane	1.4	U	1.4	0.36	ug/L			11/04/16 21:16	1.43
Methylcyclohexane	1.4	U	1.4	0.64	ug/L			11/04/16 21:16	1.43

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		63 - 132		11/04/16 21:16	1.43
4-Bromofluorobenzene (Surr)	74		73 - 120		11/04/16 21:16	1.43
Toluene-d8 (Surr)	91		73 - 124		11/04/16 21:16	1.43
Dibromofluoromethane (Surr)	89		80 - 120		11/04/16 21:16	1.43

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

Client Sample ID: GW-17303-102816-JY-026
Date Collected: 10/28/16 09:10
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5000	U *	5000	880	ug/L			11/04/16 21:38	500
Benzene	500	U	500	140	ug/L			11/04/16 21:38	500
Bromodichloromethane	500	U	500	150	ug/L			11/04/16 21:38	500
Bromoform	500	U	500	220	ug/L			11/04/16 21:38	500
Bromomethane	500	U	500	210	ug/L			11/04/16 21:38	500
2-Butanone (MEK)	5000	U *	5000	510	ug/L			11/04/16 21:38	500
Carbon disulfide	2500	U	2500	170	ug/L			11/04/16 21:38	500
Carbon tetrachloride	500	U	500	180	ug/L			11/04/16 21:38	500
Chlorobenzene	500	U	500	160	ug/L			11/04/16 21:38	500
Chloroethane	500	U	500	210	ug/L			11/04/16 21:38	500
Chloroform	500	U	500	160	ug/L			11/04/16 21:38	500
Chloromethane	500	U	500	220	ug/L			11/04/16 21:38	500
1,1-Dichloroethane	500	U	500	130	ug/L			11/04/16 21:38	500
1,2-Dichloroethane	500	U	500	150	ug/L			11/04/16 21:38	500
1,1-Dichloroethene	500	U	500	140	ug/L			11/04/16 21:38	500
1,2-Dichloropropane	500	U	500	150	ug/L			11/04/16 21:38	500
cis-1,3-Dichloropropene	500	U	500	130	ug/L			11/04/16 21:38	500
trans-1,3-Dichloropropene	500	U	500	160	ug/L			11/04/16 21:38	500
Ethylbenzene	500	U	500	130	ug/L			11/04/16 21:38	500
2-Hexanone	5000	U	5000	620	ug/L			11/04/16 21:38	500
Methylene Chloride	2500	U	2500	270	ug/L			11/04/16 21:38	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	360	ug/L			11/04/16 21:38	500
Styrene	500	U	500	120	ug/L			11/04/16 21:38	500
1,1,2,2-Tetrachloroethane	500	U	500	160	ug/L			11/04/16 21:38	500
Tetrachloroethene	500	U	500	150	ug/L			11/04/16 21:38	500
Toluene	500	U	500	120	ug/L			11/04/16 21:38	500
Trichloroethene	500	U	500	170	ug/L			11/04/16 21:38	500
Vinyl chloride	**7800**		500	230	ug/L			11/04/16 21:38	500
Xylenes, Total	1000	U	1000	120	ug/L			11/04/16 21:38	500
1,1,1-Trichloroethane	500	U	500	120	ug/L			11/04/16 21:38	500
1,1,2-Trichloroethane	500	U	500	170	ug/L			11/04/16 21:38	500
Cyclohexane	500	U	500	220	ug/L			11/04/16 21:38	500
1,2-Dibromo-3-Chloropropane	500	U	500	240	ug/L			11/04/16 21:38	500
1,2-Dibromoethane	500	U	500	120	ug/L			11/04/16 21:38	500
Dichlorodifluoromethane	500	U	500	250	ug/L			11/04/16 21:38	500
cis-1,2-Dichloroethene	**1200**		500	150	ug/L			11/04/16 21:38	500
trans-1,2-Dichloroethene	500	U	500	150	ug/L			11/04/16 21:38	500
Isopropylbenzene	500	U	500	110	ug/L			11/04/16 21:38	500
Methyl acetate	5000	U	5000	720	ug/L			11/04/16 21:38	500
Methyl tert-butyl ether	500	U	500	140	ug/L			11/04/16 21:38	500
1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	210	ug/L			11/04/16 21:38	500
1,2,4-Trichlorobenzene	500	U	500	140	ug/L			11/04/16 21:38	500
1,2-Dichlorobenzene	500	U	500	130	ug/L			11/04/16 21:38	500
1,3-Dichlorobenzene	500	U	500	160	ug/L			11/04/16 21:38	500
1,4-Dichlorobenzene	500	U	500	120	ug/L			11/04/16 21:38	500
Trichlorofluoromethane	500	U	500	250	ug/L			11/04/16 21:38	500
Dibromochloromethane	500	U	500	130	ug/L			11/04/16 21:38	500
Methylcyclohexane	500	U	500	230	ug/L			11/04/16 21:38	500

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 132		11/04/16 21:38	500
4-Bromofluorobenzene (Surr)	78		73 - 120		11/04/16 21:38	500
Toluene-d8 (Surr)	90		73 - 124		11/04/16 21:38	500
Dibromofluoromethane (Surr)	89		80 - 120		11/04/16 21:38	500

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

Client Sample ID: GW-17303-102816-JY-027
Date Collected: 10/28/16 10:20
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3300	U *	3300	590	ug/L			11/04/16 22:01	333.33
Benzene	330	U	330	93	ug/L			11/04/16 22:01	333.33
Bromodichloromethane	330	U	330	100	ug/L			11/04/16 22:01	333.33
Bromoform	330	U	330	140	ug/L			11/04/16 22:01	333.33
Bromomethane	330	U	330	140	ug/L			11/04/16 22:01	333.33
2-Butanone (MEK)	3300	U *	3300	340	ug/L			11/04/16 22:01	333.33
Carbon disulfide	1700	U	1700	110	ug/L			11/04/16 22:01	333.33
Carbon tetrachloride	330	U	330	120	ug/L			11/04/16 22:01	333.33
Chlorobenzene	330	U	330	110	ug/L			11/04/16 22:01	333.33
Chloroethane	330	U	330	140	ug/L			11/04/16 22:01	333.33
Chloroform	330	U	330	100	ug/L			11/04/16 22:01	333.33
Chloromethane	330	U	330	140	ug/L			11/04/16 22:01	333.33
1,1-Dichloroethane	330	U	330	83	ug/L			11/04/16 22:01	333.33
1,2-Dichloroethane	330	U	330	100	ug/L			11/04/16 22:01	333.33
1,1-Dichloroethene	330	U	330	90	ug/L			11/04/16 22:01	333.33
1,2-Dichloropropane	330	U	330	100	ug/L			11/04/16 22:01	333.33
cis-1,3-Dichloropropene	330	U	330	87	ug/L			11/04/16 22:01	333.33
trans-1,3-Dichloropropene	330	U	330	100	ug/L			11/04/16 22:01	333.33
Ethylbenzene	330	U	330	87	ug/L			11/04/16 22:01	333.33
2-Hexanone	3300	U	3300	410	ug/L			11/04/16 22:01	333.33
Methylene Chloride	1700	U	1700	180	ug/L			11/04/16 22:01	333.33
4-Methyl-2-pentanone (MIBK)	3300	U	3300	240	ug/L			11/04/16 22:01	333.33
Styrene	330	U	330	77	ug/L			11/04/16 22:01	333.33
1,1,2,2-Tetrachloroethane	330	U	330	110	ug/L			11/04/16 22:01	333.33
Tetrachloroethene	330	U	330	100	ug/L			11/04/16 22:01	333.33
Toluene	330	U	330	77	ug/L			11/04/16 22:01	333.33
Trichloroethene	330	U	330	110	ug/L			11/04/16 22:01	333.33
Vinyl chloride	**9800**		330	150	ug/L			11/04/16 22:01	333.33
Xylenes, Total	670	U	670	80	ug/L			11/04/16 22:01	333.33
1,1,1-Trichloroethane	330	U	330	77	ug/L			11/04/16 22:01	333.33
1,1,2-Trichloroethane	330	U	330	110	ug/L			11/04/16 22:01	333.33
Cyclohexane	330	U	330	150	ug/L			11/04/16 22:01	333.33
1,2-Dibromo-3-Chloropropane	330	U	330	160	ug/L			11/04/16 22:01	333.33
1,2-Dibromoethane	330	U	330	77	ug/L			11/04/16 22:01	333.33
Dichlorodifluoromethane	330	U	330	170	ug/L			11/04/16 22:01	333.33
cis-1,2-Dichloroethene	**3600**		330	100	ug/L			11/04/16 22:01	333.33
trans-1,2-Dichloroethene	330	U	330	97	ug/L			11/04/16 22:01	333.33
Isopropylbenzene	330	U	330	70	ug/L			11/04/16 22:01	333.33
Methyl acetate	3300	U	3300	480	ug/L			11/04/16 22:01	333.33
Methyl tert-butyl ether	330	U	330	90	ug/L			11/04/16 22:01	333.33
1,1,2-Trichloro-1,2,2-trifluoroethane	330	U	330	140	ug/L			11/04/16 22:01	333.33
1,2,4-Trichlorobenzene	330	U	330	90	ug/L			11/04/16 22:01	333.33
1,2-Dichlorobenzene	330	U	330	87	ug/L			11/04/16 22:01	333.33
1,3-Dichlorobenzene	330	U	330	110	ug/L			11/04/16 22:01	333.33
1,4-Dichlorobenzene	330	U	330	77	ug/L			11/04/16 22:01	333.33
Trichlorofluoromethane	330	U	330	170	ug/L			11/04/16 22:01	333.33
Dibromochloromethane	330	U	330	83	ug/L			11/04/16 22:01	333.33
Methylcyclohexane	330	U	330	150	ug/L			11/04/16 22:01	333.33

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		63 - 132		11/04/16 22:01	333.33
4-Bromofluorobenzene (Surr)	79		73 - 120		11/04/16 22:01	333.33
Toluene-d8 (Surr)	90		73 - 124		11/04/16 22:01	333.33
Dibromofluoromethane (Surr)	85		80 - 120		11/04/16 22:01	333.33

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

Client Sample ID: GW-17303-102816-JY-028
Date Collected: 10/28/16 11:25
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2000	U	2000	350	ug/L			11/08/16 16:55	200
Benzene	200	U	200	56	ug/L			11/08/16 16:55	200
Bromodichloromethane	200	U	200	60	ug/L			11/08/16 16:55	200
Bromoform	200	U	200	86	ug/L			11/08/16 16:55	200
Bromomethane	200	U	200	84	ug/L			11/08/16 16:55	200
2-Butanone (MEK)	2000	U	2000	200	ug/L			11/08/16 16:55	200
Carbon disulfide	1000	U	1000	68	ug/L			11/08/16 16:55	200
Carbon tetrachloride	200	U	200	70	ug/L			11/08/16 16:55	200
Chlorobenzene	200	U	200	64	ug/L			11/08/16 16:55	200
Chloroethane	200	U	200	82	ug/L			11/08/16 16:55	200
Chloroform	200	U	200	62	ug/L			11/08/16 16:55	200
Chloromethane	200	U	200	86	ug/L			11/08/16 16:55	200
1,1-Dichloroethane	200	U	200	50	ug/L			11/08/16 16:55	200
1,2-Dichloroethane	200	U	200	60	ug/L			11/08/16 16:55	200
1,1-Dichloroethene	200	U	200	54	ug/L			11/08/16 16:55	200
1,2-Dichloropropane	200	U	200	60	ug/L			11/08/16 16:55	200
cis-1,3-Dichloropropene	200	U	200	52	ug/L			11/08/16 16:55	200
trans-1,3-Dichloropropene	200	U	200	62	ug/L			11/08/16 16:55	200
Ethylbenzene	200	U	200	52	ug/L			11/08/16 16:55	200
2-Hexanone	2000	U	2000	250	ug/L			11/08/16 16:55	200
Methylene Chloride	1000	U	1000	110	ug/L			11/08/16 16:55	200
4-Methyl-2-pentanone (MIBK)	2000	U	2000	140	ug/L			11/08/16 16:55	200
Styrene	200	U	200	46	ug/L			11/08/16 16:55	200
1,1,2,2-Tetrachloroethane	200	U	200	64	ug/L			11/08/16 16:55	200
Tetrachloroethene	200	U	200	60	ug/L			11/08/16 16:55	200
Toluene	200	U	200	46	ug/L			11/08/16 16:55	200
Trichloroethene	200	U	200	66	ug/L			11/08/16 16:55	200
Vinyl chloride	**3600**		200	90	ug/L			11/08/16 16:55	200
Xylenes, Total	400	U	400	48	ug/L			11/08/16 16:55	200
1,1,1-Trichloroethane	200	U	200	46	ug/L			11/08/16 16:55	200
1,1,2-Trichloroethane	200	U	200	68	ug/L			11/08/16 16:55	200
Cyclohexane	200	U	200	88	ug/L			11/08/16 16:55	200
1,2-Dibromo-3-Chloropropane	200	U	200	94	ug/L			11/08/16 16:55	200
1,2-Dibromoethane	200	U	200	46	ug/L			11/08/16 16:55	200
Dichlorodifluoromethane	200	U	200	100	ug/L			11/08/16 16:55	200
cis-1,2-Dichloroethene	**3200**		200	60	ug/L			11/08/16 16:55	200
trans-1,2-Dichloroethene	**110**	**J**	200	58	ug/L			11/08/16 16:55	200
Isopropylbenzene	200	U	200	42	ug/L			11/08/16 16:55	200
Methyl acetate	2000	U	2000	290	ug/L			11/08/16 16:55	200
Methyl tert-butyl ether	200	U	200	54	ug/L			11/08/16 16:55	200
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	82	ug/L			11/08/16 16:55	200
1,2,4-Trichlorobenzene	200	U	200	54	ug/L			11/08/16 16:55	200
1,2-Dichlorobenzene	200	U	200	52	ug/L			11/08/16 16:55	200
1,3-Dichlorobenzene	200	U	200	64	ug/L			11/08/16 16:55	200
1,4-Dichlorobenzene	200	U	200	46	ug/L			11/08/16 16:55	200
Trichlorofluoromethane	200	U	200	100	ug/L			11/08/16 16:55	200
Dibromochloromethane	200	U	200	50	ug/L			11/08/16 16:55	200
Methylcyclohexane	200	U	200	90	ug/L			11/08/16 16:55	200

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 132		11/08/16 16:55	200
4-Bromofluorobenzene (Surr)	90		73 - 120		11/08/16 16:55	200
Toluene-d8 (Surr)	90		73 - 124		11/08/16 16:55	200
Dibromofluoromethane (Surr)	93		80 - 120		11/08/16 16:55	200

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

Client Sample ID: GW-17303-102816-JY-029
Date Collected: 10/28/16 12:40
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	100	U	100	18	ug/L			11/08/16 17:18	10
Benzene	**10**		10	2.8	ug/L			11/08/16 17:18	10
Bromodichloromethane	10	U	10	3.0	ug/L			11/08/16 17:18	10
Bromoform	10	U	10	4.3	ug/L			11/08/16 17:18	10
Bromomethane	10	U	10	4.2	ug/L			11/08/16 17:18	10
2-Butanone (MEK)	100	U	100	10	ug/L			11/08/16 17:18	10
Carbon disulfide	50	U	50	3.4	ug/L			11/08/16 17:18	10
Carbon tetrachloride	10	U	10	3.5	ug/L			11/08/16 17:18	10
Chlorobenzene	10	U	10	3.2	ug/L			11/08/16 17:18	10
Chloroethane	10	U	10	4.1	ug/L			11/08/16 17:18	10
Chloroform	10	U	10	3.1	ug/L			11/08/16 17:18	10
Chloromethane	10	U	10	4.3	ug/L			11/08/16 17:18	10
1,1-Dichloroethane	10	U	10	2.5	ug/L			11/08/16 17:18	10
1,2-Dichloroethane	10	U	10	3.0	ug/L			11/08/16 17:18	10
1,1-Dichloroethene	10	U	10	2.7	ug/L			11/08/16 17:18	10
1,2-Dichloropropane	10	U	10	3.0	ug/L			11/08/16 17:18	10
cis-1,3-Dichloropropene	10	U	10	2.6	ug/L			11/08/16 17:18	10
trans-1,3-Dichloropropene	10	U	10	3.1	ug/L			11/08/16 17:18	10
Ethylbenzene	10	U	10	2.6	ug/L			11/08/16 17:18	10
2-Hexanone	100	U	100	12	ug/L			11/08/16 17:18	10
Methylene Chloride	50	U	50	5.3	ug/L			11/08/16 17:18	10
4-Methyl-2-pentanone (MIBK)	100	U	100	7.1	ug/L			11/08/16 17:18	10
Styrene	10	U	10	2.3	ug/L			11/08/16 17:18	10
1,1,2,2-Tetrachloroethane	10	U	10	3.2	ug/L			11/08/16 17:18	10
Tetrachloroethene	10	U	10	3.0	ug/L			11/08/16 17:18	10
Toluene	10	U	10	2.3	ug/L			11/08/16 17:18	10
Trichloroethene	10	U	10	3.3	ug/L			11/08/16 17:18	10
Vinyl chloride	**130**		10	4.5	ug/L			11/08/16 17:18	10
Xylenes, Total	20	U	20	2.4	ug/L			11/08/16 17:18	10
1,1,1-Trichloroethane	10	U	10	2.3	ug/L			11/08/16 17:18	10
1,1,2-Trichloroethane	10	U	10	3.4	ug/L			11/08/16 17:18	10
Cyclohexane	10	U	10	4.4	ug/L			11/08/16 17:18	10
1,2-Dibromo-3-Chloropropane	10	U	10	4.7	ug/L			11/08/16 17:18	10
1,2-Dibromoethane	10	U	10	2.3	ug/L			11/08/16 17:18	10
Dichlorodifluoromethane	10	U	10	5.0	ug/L			11/08/16 17:18	10
cis-1,2-Dichloroethene	**4.6**	**J**	10	3.0	ug/L			11/08/16 17:18	10
trans-1,2-Dichloroethene	10	U	10	2.9	ug/L			11/08/16 17:18	10
Isopropylbenzene	10	U	10	2.1	ug/L			11/08/16 17:18	10
Methyl acetate	100	U	100	14	ug/L			11/08/16 17:18	10
Methyl tert-butyl ether	10	U	10	2.7	ug/L			11/08/16 17:18	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	4.1	ug/L			11/08/16 17:18	10
1,2,4-Trichlorobenzene	10	U	10	2.7	ug/L			11/08/16 17:18	10
1,2-Dichlorobenzene	10	U	10	2.6	ug/L			11/08/16 17:18	10
1,3-Dichlorobenzene	10	U	10	3.2	ug/L			11/08/16 17:18	10
1,4-Dichlorobenzene	10	U	10	2.3	ug/L			11/08/16 17:18	10
Trichlorofluoromethane	10	U	10	5.0	ug/L			11/08/16 17:18	10
Dibromochloromethane	10	U	10	2.5	ug/L			11/08/16 17:18	10
Methylcyclohexane	10	U	10	4.5	ug/L			11/08/16 17:18	10

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 132		11/08/16 17:18	10
4-Bromofluorobenzene (Surr)	86		73 - 120		11/08/16 17:18	10
Toluene-d8 (Surr)	86		73 - 124		11/08/16 17:18	10
Dibromofluoromethane (Surr)	92		80 - 120		11/08/16 17:18	10

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

Client Sample ID: GW-17303-102816-JY-030
Date Collected: 10/28/16 13:15
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			11/08/16 17:41	1
Benzene	1.0	U	1.0	0.28	ug/L			11/08/16 17:41	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/08/16 17:41	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/08/16 17:41	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/08/16 17:41	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/08/16 17:41	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/08/16 17:41	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/08/16 17:41	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 17:41	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/08/16 17:41	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/08/16 17:41	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/08/16 17:41	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/08/16 17:41	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/08/16 17:41	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/08/16 17:41	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/08/16 17:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/08/16 17:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/08/16 17:41	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/08/16 17:41	1
2-Hexanone	10	U	10	1.2	ug/L			11/08/16 17:41	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/08/16 17:41	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/08/16 17:41	1
Styrene	1.0	U	1.0	0.23	ug/L			11/08/16 17:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/08/16 17:41	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 17:41	1
Toluene	1.0	U	1.0	0.23	ug/L			11/08/16 17:41	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/08/16 17:41	1
Vinyl chloride	**1.5**		1.0	0.45	ug/L			11/08/16 17:41	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/08/16 17:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/08/16 17:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/08/16 17:41	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/08/16 17:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/08/16 17:41	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/08/16 17:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 17:41	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.30	ug/L			11/08/16 17:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/08/16 17:41	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/08/16 17:41	1
Methyl acetate	10	U	10	1.4	ug/L			11/08/16 17:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/08/16 17:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/08/16 17:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/08/16 17:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/08/16 17:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 17:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/08/16 17:41	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 17:41	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/08/16 17:41	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/08/16 17:41	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 132		11/08/16 17:41	1
4-Bromofluorobenzene (Surr)	84		73 - 120		11/08/16 17:41	1
Toluene-d8 (Surr)	85		73 - 124		11/08/16 17:41	1
Dibromofluoromethane (Surr)	90		80 - 120		11/08/16 17:41	1

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

Client Sample ID: GW-17303-102816-JY-031
Date Collected: 10/28/16 13:50
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	110	U	110	20	ug/L			11/07/16 18:38	11.11
Benzene	11	U	11	3.1	ug/L			11/07/16 18:38	11.11
Bromodichloromethane	11	U	11	3.3	ug/L			11/07/16 18:38	11.11
Bromoform	11	U	11	4.8	ug/L			11/07/16 18:38	11.11
Bromomethane	11	U	11	4.7	ug/L			11/07/16 18:38	11.11
2-Butanone (MEK)	110	U *	110	11	ug/L			11/07/16 18:38	11.11
Carbon disulfide	56	U	56	3.8	ug/L			11/07/16 18:38	11.11
Carbon tetrachloride	11	U	11	3.9	ug/L			11/07/16 18:38	11.11
Chlorobenzene	11	U	11	3.6	ug/L			11/07/16 18:38	11.11
Chloroethane	11	U	11	4.6	ug/L			11/07/16 18:38	11.11
Chloroform	11	U	11	3.4	ug/L			11/07/16 18:38	11.11
Chloromethane	11	U	11	4.8	ug/L			11/07/16 18:38	11.11
1,1-Dichloroethane	11	U	11	2.8	ug/L			11/07/16 18:38	11.11
1,2-Dichloroethane	11	U	11	3.3	ug/L			11/07/16 18:38	11.11
1,1-Dichloroethene	11	U	11	3.0	ug/L			11/07/16 18:38	11.11
1,2-Dichloropropane	11	U	11	3.3	ug/L			11/07/16 18:38	11.11
cis-1,3-Dichloropropene	11	U	11	2.9	ug/L			11/07/16 18:38	11.11
trans-1,3-Dichloropropene	11	U	11	3.4	ug/L			11/07/16 18:38	11.11
Ethylbenzene	11	U	11	2.9	ug/L			11/07/16 18:38	11.11
2-Hexanone	110	U *	110	14	ug/L			11/07/16 18:38	11.11
Methylene Chloride	56	U	56	5.9	ug/L			11/07/16 18:38	11.11
4-Methyl-2-pentanone (MIBK)	110	U	110	7.9	ug/L			11/07/16 18:38	11.11
Styrene	11	U	11	2.6	ug/L			11/07/16 18:38	11.11
1,1,2,2-Tetrachloroethane	11	U	11	3.6	ug/L			11/07/16 18:38	11.11
Tetrachloroethene	11	U	11	3.3	ug/L			11/07/16 18:38	11.11
Toluene	11	U	11	2.6	ug/L			11/07/16 18:38	11.11
Trichloroethene	11	U	11	3.7	ug/L			11/07/16 18:38	11.11
Vinyl chloride	**5.6**	**J**	11	5.0	ug/L			11/07/16 18:38	11.11
Xylenes, Total	22	U	22	2.7	ug/L			11/07/16 18:38	11.11
1,1,1-Trichloroethane	11	U	11	2.6	ug/L			11/07/16 18:38	11.11
1,1,2-Trichloroethane	11	U	11	3.8	ug/L			11/07/16 18:38	11.11
Cyclohexane	11	U	11	4.9	ug/L			11/07/16 18:38	11.11
1,2-Dibromo-3-Chloropropane	11	U	11	5.2	ug/L			11/07/16 18:38	11.11
1,2-Dibromoethane	11	U	11	2.6	ug/L			11/07/16 18:38	11.11
Dichlorodifluoromethane	11	U	11	5.6	ug/L			11/07/16 18:38	11.11
cis-1,2-Dichloroethene	**220**		11	3.3	ug/L			11/07/16 18:38	11.11
trans-1,2-Dichloroethene	**18**		11	3.2	ug/L			11/07/16 18:38	11.11
Isopropylbenzene	11	U	11	2.3	ug/L			11/07/16 18:38	11.11
Methyl acetate	110	U	110	16	ug/L			11/07/16 18:38	11.11
Methyl tert-butyl ether	11	U	11	3.0	ug/L			11/07/16 18:38	11.11
1,1,2-Trichloro-1,2,2-trifluoroethane	11	U	11	4.6	ug/L			11/07/16 18:38	11.11
1,2,4-Trichlorobenzene	11	U	11	3.0	ug/L			11/07/16 18:38	11.11
1,2-Dichlorobenzene	11	U	11	2.9	ug/L			11/07/16 18:38	11.11
1,3-Dichlorobenzene	11	U	11	3.6	ug/L			11/07/16 18:38	11.11
1,4-Dichlorobenzene	11	U	11	2.6	ug/L			11/07/16 18:38	11.11
Trichlorofluoromethane	11	U	11	5.6	ug/L			11/07/16 18:38	11.11
Dibromochloromethane	11	U	11	2.8	ug/L			11/07/16 18:38	11.11
Methylcyclohexane	11	U	11	5.0	ug/L			11/07/16 18:38	11.11

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		63 - 132		11/07/16 18:38	11.11
4-Bromofluorobenzene (Surr)	91		73 - 120		11/07/16 18:38	11.11
Toluene-d8 (Surr)	102		73 - 124		11/07/16 18:38	11.11
Dibromofluoromethane (Surr)	100		80 - 120		11/07/16 18:38	11.11

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

Client Sample ID: GW-17303-102816-JY-032
Date Collected: 10/28/16 14:20
Date Received: 10/29/16 10:15

Lab Sample ID: 240-71478-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.8	ug/L			11/07/16 19:00	1
Benzene	1.0	U	1.0	0.28	ug/L			11/07/16 19:00	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/07/16 19:00	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/07/16 19:00	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/07/16 19:00	1
2-Butanone (MEK)	10	U *	10	1.0	ug/L			11/07/16 19:00	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/07/16 19:00	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/07/16 19:00	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/07/16 19:00	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/07/16 19:00	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/07/16 19:00	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/07/16 19:00	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/07/16 19:00	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/07/16 19:00	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/07/16 19:00	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/07/16 19:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/07/16 19:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/07/16 19:00	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/07/16 19:00	1
2-Hexanone	10	U *	10	1.2	ug/L			11/07/16 19:00	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/07/16 19:00	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/07/16 19:00	1
Styrene	1.0	U	1.0	0.23	ug/L			11/07/16 19:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/07/16 19:00	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/07/16 19:00	1
Toluene	1.0	U	1.0	0.23	ug/L			11/07/16 19:00	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/07/16 19:00	1
Vinyl chloride	**0.80**	**J**	1.0	0.45	ug/L			11/07/16 19:00	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/07/16 19:00	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/07/16 19:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/07/16 19:00	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/07/16 19:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/07/16 19:00	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/07/16 19:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/07/16 19:00	1
cis-1,2-Dichloroethene	**0.67**	**J**	1.0	0.30	ug/L			11/07/16 19:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/07/16 19:00	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/07/16 19:00	1
Methyl acetate	10	U	10	1.4	ug/L			11/07/16 19:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/07/16 19:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/07/16 19:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/07/16 19:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/07/16 19:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/07/16 19:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/07/16 19:00	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/07/16 19:00	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/07/16 19:00	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/07/16 19:00	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		63 - 132		11/07/16 19:00	1
4-Bromofluorobenzene (Surr)	92		73 - 120		11/07/16 19:00	1
Toluene-d8 (Surr)	102		73 - 124		11/07/16 19:00	1
Dibromofluoromethane (Surr)	97		80 - 120		11/07/16 19:00	1

GC/MS VOA

Analysis Batch: 254410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71478-1	TB-17303-102816	Total/NA	WQ	8260B	
240-71478-2	GW-17303-102816-JY-021	Total/NA	Water	8260B	
240-71478-3	GW-17303-102816-JY-022	Total/NA	Water	8260B	
240-71478-4	GW-17303-102816-JY-023	Total/NA	Water	8260B	
240-71478-5	GW-17303-102816-JY-024	Total/NA	Water	8260B	
240-71478-6	GW-17303-102816-JY-025	Total/NA	Water	8260B	
240-71478-7	GW-17303-102816-JY-026	Total/NA	Water	8260B	
240-71478-8	GW-17303-102816-JY-027	Total/NA	Water	8260B	
MB 240-254410/6	Method Blank	Total/NA	Water	8260B	
LCS 240-254410/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 254586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71478-12	GW-17303-102816-JY-031	Total/NA	Water	8260B	
240-71478-13	GW-17303-102816-JY-032	Total/NA	Water	8260B	
MB 240-254586/6	Method Blank	Total/NA	Water	8260B	
LCS 240-254586/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 254726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71478-9	GW-17303-102816-JY-028	Total/NA	Water	8260B	
240-71478-10	GW-17303-102816-JY-029	Total/NA	Water	8260B	
240-71478-11	GW-17303-102816-JY-030	Total/NA	Water	8260B	
MB 240-254726/8	Method Blank	Total/NA	Water	8260B	
LCS 240-254726/5	Lab Control Sample	Total/NA	Water	8260B	
240-71478-9 MS	GW-17303-102816-JY-028	Total/NA	Water	8260B	
240-71478-9 MSD	GW-17303-102816-JY-028	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-254410/6
Matrix: Water
Analysis Batch: 254410

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			11/04/16 15:14	1
Benzene	1.0	U	1.0	0.28	ug/L			11/04/16 15:14	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/04/16 15:14	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/04/16 15:14	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/04/16 15:14	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/04/16 15:14	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/04/16 15:14	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/04/16 15:14	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 15:14	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/04/16 15:14	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/04/16 15:14	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/04/16 15:14	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/04/16 15:14	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/04/16 15:14	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/04/16 15:14	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/04/16 15:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/04/16 15:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/04/16 15:14	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/04/16 15:14	1
2-Hexanone	10	U	10	1.2	ug/L			11/04/16 15:14	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/04/16 15:14	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/04/16 15:14	1
Styrene	1.0	U	1.0	0.23	ug/L			11/04/16 15:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/04/16 15:14	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 15:14	1
Toluene	1.0	U	1.0	0.23	ug/L			11/04/16 15:14	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/04/16 15:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/04/16 15:14	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/04/16 15:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/04/16 15:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/04/16 15:14	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/04/16 15:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/04/16 15:14	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/04/16 15:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 15:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/04/16 15:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/04/16 15:14	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/04/16 15:14	1
Methyl acetate	10	U	10	1.4	ug/L			11/04/16 15:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/04/16 15:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/04/16 15:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/04/16 15:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/04/16 15:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/04/16 15:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/04/16 15:14	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/04/16 15:14	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/04/16 15:14	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/04/16 15:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 132*		*11/04/16 15:14*	*1*
4-Bromofluorobenzene (Surr)	*82*		*73 - 120*		*11/04/16 15:14*	*1*
Toluene-d8 (Surr)	*90*		*73 - 124*		*11/04/16 15:14*	*1*
Dibromofluoromethane (Surr)	*86*		*80 - 120*		*11/04/16 15:14*	*1*

Lab Sample ID: LCS 240-254410/4
Matrix: Water
Analysis Batch: 254410

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	24.3	*	ug/L		121	46 - 120
Benzene	10.0	9.70		ug/L		97	80 - 120
Bromodichloromethane	10.0	9.51		ug/L		95	76 - 125
Bromoform	10.0	7.77		ug/L		78	52 - 157
Bromomethane	10.0	6.74		ug/L		67	24 - 160
2-Butanone (MEK)	20.0	25.4	*	ug/L		127	54 - 122
Carbon disulfide	10.0	9.68		ug/L		97	58 - 160
Carbon tetrachloride	10.0	9.65		ug/L		97	69 - 149
Chlorobenzene	10.0	9.55		ug/L		95	80 - 120
Chloroethane	10.0	7.21		ug/L		72	24 - 147
Chloroform	10.0	10.2		ug/L		102	80 - 120
Chloromethane	10.0	10.9		ug/L		109	50 - 135
1,1-Dichloroethane	10.0	9.47		ug/L		95	77 - 121
1,2-Dichloroethane	10.0	10.8		ug/L		108	76 - 130
1,1-Dichloroethene	10.0	9.41		ug/L		94	70 - 141
1,2-Dichloropropane	10.0	9.87		ug/L		99	79 - 121
cis-1,3-Dichloropropene	10.0	8.63		ug/L		86	75 - 120
trans-1,3-Dichloropropene	10.0	8.43		ug/L		84	65 - 120
Ethylbenzene	10.0	9.45		ug/L		94	80 - 120
2-Hexanone	20.0	20.9		ug/L		105	56 - 124
Methylene Chloride	10.0	10.1		ug/L		101	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	20.0		ug/L		100	60 - 131
Styrene	10.0	9.87		ug/L		99	80 - 120
1,1,2,2-Tetrachloroethane	10.0	9.56		ug/L		96	61 - 130
Tetrachloroethene	10.0	9.36		ug/L		94	80 - 123
Toluene	10.0	10.2		ug/L		102	80 - 121
Trichloroethene	10.0	9.44		ug/L		94	80 - 122
Vinyl chloride	10.0	10.1		ug/L		101	60 - 129
Xylenes, Total	20.0	18.9		ug/L		95	80 - 120
1,1,1-Trichloroethane	10.0	9.32		ug/L		93	79 - 133
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	80 - 120
Cyclohexane	10.0	10.0		ug/L		100	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	7.62		ug/L		76	46 - 140
1,2-Dibromoethane	10.0	9.96		ug/L		100	80 - 126
Dichlorodifluoromethane	10.0	10.9		ug/L		109	32 - 140
cis-1,2-Dichloroethene	10.0	9.46		ug/L		95	80 - 120
trans-1,2-Dichloroethene	10.0	9.86		ug/L		99	80 - 123
Isopropylbenzene	10.0	9.36		ug/L		94	80 - 120
Methyl acetate	50.0	53.8		ug/L		108	65 - 124
Methyl tert-butyl ether	10.0	8.50		ug/L		85	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.46		ug/L		95	65 - 151
1,2,4-Trichlorobenzene	10.0	7.50		ug/L		75	53 - 137
1,2-Dichlorobenzene	10.0	9.24		ug/L		92	80 - 120

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

Lab Sample ID: LCS 240-254410/4
Matrix: Water
Analysis Batch: 254410

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	9.03		ug/L		90	80 - 120
1,4-Dichlorobenzene	10.0	9.26		ug/L		93	80 - 120
Trichlorofluoromethane	10.0	9.30		ug/L		93	56 - 161
Dibromochloromethane	10.0	9.17		ug/L		92	68 - 131
Methylcyclohexane	10.0	8.98		ug/L		90	71 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 132*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*
Toluene-d8 (Surr)	*93*		*73 - 124*
Dibromofluoromethane (Surr)	*88*		*80 - 120*

Lab Sample ID: MB 240-254586/6
Matrix: Water
Analysis Batch: 254586

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			11/07/16 12:33	1
Benzene	1.0	U	1.0	0.28	ug/L			11/07/16 12:33	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/07/16 12:33	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/07/16 12:33	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/07/16 12:33	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/07/16 12:33	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/07/16 12:33	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/07/16 12:33	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/07/16 12:33	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/07/16 12:33	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/07/16 12:33	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/07/16 12:33	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/07/16 12:33	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/07/16 12:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/07/16 12:33	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/07/16 12:33	1
2-Hexanone	10	U	10	1.2	ug/L			11/07/16 12:33	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/07/16 12:33	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/07/16 12:33	1
Styrene	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/07/16 12:33	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
Toluene	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/07/16 12:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/07/16 12:33	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/07/16 12:33	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/07/16 12:33	1

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

Lab Sample ID: MB 240-254586/6
Matrix: Water
Analysis Batch: 254586

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			11/07/16 12:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/07/16 12:33	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/07/16 12:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/07/16 12:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/07/16 12:33	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/07/16 12:33	1
Methyl acetate	10	U	10	1.4	ug/L			11/07/16 12:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/07/16 12:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/07/16 12:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/07/16 12:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/07/16 12:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/07/16 12:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/07/16 12:33	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/07/16 12:33	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/07/16 12:33	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/07/16 12:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*63 - 132*		*11/07/16 12:33*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*11/07/16 12:33*	*1*
Toluene-d8 (Surr)	*103*		*73 - 124*		*11/07/16 12:33*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*11/07/16 12:33*	*1*

Lab Sample ID: LCS 240-254586/4
Matrix: Water
Analysis Batch: 254586

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	20.7		ug/L		104	46 - 120
Benzene	10.0	9.64		ug/L		96	80 - 120
Bromodichloromethane	10.0	10.6		ug/L		106	76 - 125
Bromoform	10.0	9.72		ug/L		97	52 - 157
Bromomethane	10.0	5.30		ug/L		53	24 - 160
2-Butanone (MEK)	20.0	24.6	*	ug/L		123	54 - 122
Carbon disulfide	10.0	8.09		ug/L		81	58 - 160
Carbon tetrachloride	10.0	11.4		ug/L		114	69 - 149
Chlorobenzene	10.0	10.0		ug/L		100	80 - 120
Chloroethane	10.0	4.01		ug/L		40	24 - 147
Chloroform	10.0	10.1		ug/L		101	80 - 120
Chloromethane	10.0	9.70		ug/L		97	50 - 135
1,1-Dichloroethane	10.0	9.85		ug/L		99	77 - 121
1,2-Dichloroethane	10.0	11.9		ug/L		119	76 - 130
1,1-Dichloroethene	10.0	8.34		ug/L		83	70 - 141
1,2-Dichloropropane	10.0	10.7		ug/L		107	79 - 121
cis-1,3-Dichloropropene	10.0	9.46		ug/L		95	75 - 120
trans-1,3-Dichloropropene	10.0	9.79		ug/L		98	65 - 120
Ethylbenzene	10.0	9.67		ug/L		97	80 - 120

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

Lab Sample ID: LCS 240-254586/4
Matrix: Water
Analysis Batch: 254586

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	27.0	*	ug/L		135	56 - 124
Methylene Chloride	10.0	8.49		ug/L		85	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	23.4		ug/L		117	60 - 131
Styrene	10.0	9.00		ug/L		90	80 - 120
1,1,2,2-Tetrachloroethane	10.0	10.3		ug/L		103	61 - 130
Tetrachloroethene	10.0	10.4		ug/L		104	80 - 123
Toluene	10.0	10.7		ug/L		107	80 - 121
Trichloroethene	10.0	9.73		ug/L		97	80 - 122
Vinyl chloride	10.0	8.55		ug/L		86	60 - 129
Xylenes, Total	20.0	18.5		ug/L		93	80 - 120
1,1,1-Trichloroethane	10.0	9.84		ug/L		98	79 - 133
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	80 - 120
Cyclohexane	10.0	9.25		ug/L		93	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	9.01		ug/L		90	46 - 140
1,2-Dibromoethane	10.0	10.5		ug/L		105	80 - 126
Dichlorodifluoromethane	10.0	8.18		ug/L		82	32 - 140
cis-1,2-Dichloroethene	10.0	9.06		ug/L		91	80 - 120
trans-1,2-Dichloroethene	10.0	8.76		ug/L		88	80 - 123
Isopropylbenzene	10.0	9.22		ug/L		92	80 - 120
Methyl acetate	50.0	58.1		ug/L		116	65 - 124
Methyl tert-butyl ether	10.0	8.94		ug/L		89	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.64		ug/L		86	65 - 151
1,2,4-Trichlorobenzene	10.0	8.24		ug/L		82	53 - 137
1,2-Dichlorobenzene	10.0	9.58		ug/L		96	80 - 120
1,3-Dichlorobenzene	10.0	9.68		ug/L		97	80 - 120
1,4-Dichlorobenzene	10.0	9.96		ug/L		100	80 - 120
Trichlorofluoromethane	10.0	8.09		ug/L		81	56 - 161
Dibromochloromethane	10.0	10.3		ug/L		103	68 - 131
Methylcyclohexane	10.0	7.54		ug/L		75	71 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*63 - 132*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Toluene-d8 (Surr)	*106*		*73 - 124*
Dibromofluoromethane (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 240-254726/8
Matrix: Water
Analysis Batch: 254726

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			11/08/16 10:45	1
Benzene	1.0	U	1.0	0.28	ug/L			11/08/16 10:45	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/08/16 10:45	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/08/16 10:45	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/08/16 10:45	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/08/16 10:45	1

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

Lab Sample ID: MB 240-254726/8
Matrix: Water
Analysis Batch: 254726

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/08/16 10:45	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/08/16 10:45	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 10:45	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/08/16 10:45	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/08/16 10:45	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/08/16 10:45	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/08/16 10:45	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/08/16 10:45	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/08/16 10:45	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/08/16 10:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/08/16 10:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/08/16 10:45	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/08/16 10:45	1
2-Hexanone	10	U	10	1.2	ug/L			11/08/16 10:45	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/08/16 10:45	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/08/16 10:45	1
Styrene	1.0	U	1.0	0.23	ug/L			11/08/16 10:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/08/16 10:45	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 10:45	1
Toluene	1.0	U	1.0	0.23	ug/L			11/08/16 10:45	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/08/16 10:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/16 10:45	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/08/16 10:45	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/08/16 10:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/08/16 10:45	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/08/16 10:45	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/08/16 10:45	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/08/16 10:45	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 10:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 10:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/08/16 10:45	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/08/16 10:45	1
Methyl acetate	10	U	10	1.4	ug/L			11/08/16 10:45	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/08/16 10:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/08/16 10:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/08/16 10:45	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/08/16 10:45	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 10:45	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/08/16 10:45	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 10:45	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/08/16 10:45	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/08/16 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*63 - 132*		*11/08/16 10:45*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*11/08/16 10:45*	*1*
Toluene-d8 (Surr)	*86*		*73 - 124*		*11/08/16 10:45*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*11/08/16 10:45*	*1*

Lab Sample ID: LCS 240-254726/5
Matrix: Water
Analysis Batch: 254726

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	43.9		ug/L		110	46 - 120
Benzene	20.0	18.5		ug/L		92	80 - 120
Bromodichloromethane	20.0	18.0		ug/L		90	76 - 125
Bromoform	20.0	20.9		ug/L		104	52 - 157
Bromomethane	20.0	18.4		ug/L		92	24 - 160
2-Butanone (MEK)	40.0	41.4		ug/L		104	54 - 122
Carbon disulfide	20.0	19.7		ug/L		98	58 - 160
Carbon tetrachloride	20.0	18.6		ug/L		93	69 - 149
Chlorobenzene	20.0	17.0		ug/L		85	80 - 120
Chloroethane	20.0	20.4		ug/L		102	24 - 147
Chloroform	20.0	18.3		ug/L		91	80 - 120
Chloromethane	20.0	17.9		ug/L		90	50 - 135
1,1-Dichloroethane	20.0	18.6		ug/L		93	77 - 121
1,2-Dichloroethane	20.0	17.8		ug/L		89	76 - 130
1,1-Dichloroethene	20.0	19.4		ug/L		97	70 - 141
1,2-Dichloropropane	20.0	19.1		ug/L		95	79 - 121
cis-1,3-Dichloropropene	20.0	17.8		ug/L		89	75 - 120
trans-1,3-Dichloropropene	20.0	17.9		ug/L		89	65 - 120
Ethylbenzene	20.0	17.9		ug/L		89	80 - 120
2-Hexanone	40.0	43.5		ug/L		109	56 - 124
Methylene Chloride	20.0	17.7		ug/L		89	68 - 136
4-Methyl-2-pentanone (MIBK)	40.0	41.8		ug/L		105	60 - 131
Styrene	20.0	17.9		ug/L		90	80 - 120
1,1,2,2-Tetrachloroethane	20.0	21.2		ug/L		106	61 - 130
Tetrachloroethene	20.0	18.5		ug/L		93	80 - 123
Toluene	20.0	18.3		ug/L		91	80 - 121
Trichloroethene	20.0	18.7		ug/L		94	80 - 122
Vinyl chloride	20.0	18.0		ug/L		90	60 - 129
Xylenes, Total	40.0	35.2		ug/L		88	80 - 120
1,1,1-Trichloroethane	20.0	17.4		ug/L		87	79 - 133
1,1,2-Trichloroethane	20.0	19.5		ug/L		97	80 - 120
Cyclohexane	20.0	19.4		ug/L		97	66 - 135
1,2-Dibromo-3-Chloropropane	20.0	21.2		ug/L		106	46 - 140
1,2-Dibromoethane	20.0	19.6		ug/L		98	80 - 126
Dichlorodifluoromethane	20.0	12.1		ug/L		60	32 - 140
cis-1,2-Dichloroethene	20.0	18.4		ug/L		92	80 - 120
trans-1,2-Dichloroethene	20.0	18.9		ug/L		95	80 - 123
Isopropylbenzene	20.0	17.7		ug/L		88	80 - 120
Methyl acetate	100	115		ug/L		115	65 - 124
Methyl tert-butyl ether	20.0	18.7		ug/L		93	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.4		ug/L		97	65 - 151
1,2,4-Trichlorobenzene	20.0	16.6		ug/L		83	53 - 137
1,2-Dichlorobenzene	20.0	17.7		ug/L		88	80 - 120
1,3-Dichlorobenzene	20.0	16.8		ug/L		84	80 - 120
1,4-Dichlorobenzene	20.0	16.9		ug/L		85	80 - 120
Trichlorofluoromethane	20.0	15.8		ug/L		79	56 - 161
Dibromochloromethane	20.0	19.1		ug/L		95	68 - 131
Methylcyclohexane	20.0	17.7		ug/L		88	71 - 122

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

Lab Sample ID: LCS 240-254726/5
Matrix: Water
Analysis Batch: 254726

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*63 - 132*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*
Toluene-d8 (Surr)	*88*		*73 - 124*
Dibromofluoromethane (Surr)	*90*		*80 - 120*

Lab Sample ID: 240-71478-9 MS
Matrix: Water
Analysis Batch: 254726

Client Sample ID: GW-17303-102816-JY-028
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2000	U	8000	8050		ug/L		101	28 - 120
Benzene	200	U	4000	3560		ug/L		89	67 - 126
Bromodichloromethane	200	U	4000	3430		ug/L		86	64 - 127
Bromoform	200	U	4000	4000		ug/L		100	40 - 149
Bromomethane	200	U	4000	3370		ug/L		84	10 - 169
2-Butanone (MEK)	2000	U	8000	8480		ug/L		106	38 - 123
Carbon disulfide	1000	U	4000	3690		ug/L		92	43 - 172
Carbon tetrachloride	200	U	4000	3440		ug/L		86	51 - 154
Chlorobenzene	200	U	4000	3150		ug/L		79	58 - 128
Chloroethane	200	U	4000	3620		ug/L		90	10 - 162
Chloroform	200	U	4000	3500		ug/L		88	67 - 133
Chloromethane	200	U	4000	3140		ug/L		78	30 - 143
1,1-Dichloroethane	200	U	4000	3530		ug/L		88	57 - 135
1,2-Dichloroethane	200	U	4000	3490		ug/L		87	62 - 137
1,1-Dichloroethene	200	U	4000	3830		ug/L		96	50 - 156
1,2-Dichloropropane	200	U	4000	3580		ug/L		89	66 - 130
cis-1,3-Dichloropropene	200	U	4000	3230		ug/L		81	58 - 120
trans-1,3-Dichloropropene	200	U	4000	3300		ug/L		83	48 - 120
Ethylbenzene	200	U	4000	3220		ug/L		81	66 - 123
2-Hexanone	2000	U	8000	8860		ug/L		111	41 - 135
Methylene Chloride	1000	U	4000	3390		ug/L		85	48 - 138
4-Methyl-2-pentanone (MIBK)	2000	U	8000	8390		ug/L		105	43 - 143
Styrene	200	U	4000	3350		ug/L		84	62 - 131
1,1,2,2-Tetrachloroethane	200	U	4000	4300		ug/L		107	48 - 134
Tetrachloroethene	200	U	4000	3290		ug/L		82	54 - 138
Toluene	200	U	4000	3430		ug/L		86	63 - 130
Trichloroethene	200	U	4000	3390		ug/L		85	58 - 139
Vinyl chloride	3600		4000	6620		ug/L		75	38 - 147
Xylenes, Total	400	U	8000	6390		ug/L		80	60 - 126
1,1,1-Trichloroethane	200	U	4000	3300		ug/L		82	55 - 150
1,1,2-Trichloroethane	200	U	4000	3790		ug/L		95	65 - 130
Cyclohexane	200	U	4000	3800		ug/L		95	36 - 144
1,2-Dibromo-3-Chloropropane	200	U	4000	4250		ug/L		106	37 - 139
1,2-Dibromoethane	200	U	4000	3900		ug/L		97	64 - 137
Dichlorodifluoromethane	200	U	4000	2610		ug/L		65	16 - 140
cis-1,2-Dichloroethene	3200		4000	6290		ug/L		76	64 - 134
trans-1,2-Dichloroethene	110	J	4000	3670		ug/L		89	70 - 137
Isopropylbenzene	200	U	4000	3160		ug/L		79	57 - 132

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

Lab Sample ID: 240-71478-9 MS
Matrix: Water
Analysis Batch: 254726

Client Sample ID: GW-17303-102816-JY-028
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	2000	U	20000	23700		ug/L		118	46 - 135
Methyl tert-butyl ether	200	U	4000	3630		ug/L		91	50 - 137
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	4000	3800		ug/L		95	41 - 149
1,2,4-Trichlorobenzene	200	U	4000	3060		ug/L		77	35 - 140
1,2-Dichlorobenzene	200	U	4000	3210		ug/L		80	62 - 123
1,3-Dichlorobenzene	200	U	4000	3030		ug/L		76	59 - 122
1,4-Dichlorobenzene	200	U	4000	3120		ug/L		78	60 - 122
Trichlorofluoromethane	200	U	4000	3220		ug/L		81	26 - 175
Dibromochloromethane	200	U	4000	3630		ug/L		91	56 - 132
Methylcyclohexane	200	U	4000	3500		ug/L		88	31 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*63 - 132*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*
Toluene-d8 (Surr)	*89*		*73 - 124*
Dibromofluoromethane (Surr)	*90*		*80 - 120*

Lab Sample ID: 240-71478-9 MSD
Matrix: Water
Analysis Batch: 254726

Client Sample ID: GW-17303-102816-JY-028
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	2000	U	8000	8960		ug/L		112	28 - 120	11	35
Benzene	200	U	4000	3730		ug/L		93	67 - 126	5	31
Bromodichloromethane	200	U	4000	3640		ug/L		91	64 - 127	6	35
Bromoform	200	U	4000	4240		ug/L		106	40 - 149	6	35
Bromomethane	200	U	4000	3670		ug/L		92	10 - 169	8	35
2-Butanone (MEK)	2000	U	8000	8870		ug/L		111	38 - 123	4	35
Carbon disulfide	1000	U	4000	3780		ug/L		95	43 - 172	2	35
Carbon tetrachloride	200	U	4000	3460		ug/L		86	51 - 154	0	35
Chlorobenzene	200	U	4000	3360		ug/L		84	58 - 128	6	35
Chloroethane	200	U	4000	3980		ug/L		100	10 - 162	10	35
Chloroform	200	U	4000	3770		ug/L		94	67 - 133	7	35
Chloromethane	200	U	4000	3520		ug/L		88	30 - 143	12	35
1,1-Dichloroethane	200	U	4000	3760		ug/L		94	57 - 135	6	35
1,2-Dichloroethane	200	U	4000	3710		ug/L		93	62 - 137	6	35
1,1-Dichloroethene	200	U	4000	3890		ug/L		97	50 - 156	1	35
1,2-Dichloropropane	200	U	4000	3770		ug/L		94	66 - 130	5	35
cis-1,3-Dichloropropene	200	U	4000	3440		ug/L		86	58 - 120	6	35
trans-1,3-Dichloropropene	200	U	4000	3520		ug/L		88	48 - 120	6	35
Ethylbenzene	200	U	4000	3430		ug/L		86	66 - 123	6	34
2-Hexanone	2000	U	8000	9280		ug/L		116	41 - 135	5	35
Methylene Chloride	1000	U	4000	3650		ug/L		91	48 - 138	7	35
4-Methyl-2-pentanone (MIBK)	2000	U	8000	8910		ug/L		111	43 - 143	6	35
Styrene	200	U	4000	3570		ug/L		89	62 - 131	6	35
1,1,2,2-Tetrachloroethane	200	U	4000	4500		ug/L		113	48 - 134	5	35
Tetrachloroethene	200	U	4000	3390		ug/L		85	54 - 138	3	35

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

Lab Sample ID: 240-71478-9 MSD
Matrix: Water
Analysis Batch: 254726

Client Sample ID: GW-17303-102816-JY-028
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	200	U	4000	3580		ug/L		89	63 - 130	4	33
Trichloroethene	200	U	4000	3520		ug/L		88	58 - 139	4	35
Vinyl chloride	3600		4000	6860		ug/L		81	38 - 147	4	35
Xylenes, Total	400	U	8000	6750		ug/L		84	60 - 126	5	35
1,1,1-Trichloroethane	200	U	4000	3450		ug/L		86	55 - 150	4	35
1,1,2-Trichloroethane	200	U	4000	4030		ug/L		101	65 - 130	6	35
Cyclohexane	200	U	4000	3460		ug/L		86	36 - 144	9	35
1,2-Dibromo-3-Chloropropane	200	U	4000	4530		ug/L		113	37 - 139	6	35
1,2-Dibromoethane	200	U	4000	4160		ug/L		104	64 - 137	7	35
Dichlorodifluoromethane	200	U	4000	2460		ug/L		62	16 - 140	6	35
cis-1,2-Dichloroethene	3200		4000	6730		ug/L		87	64 - 134	7	35
trans-1,2-Dichloroethene	110	J	4000	3880		ug/L		94	70 - 137	6	25
Isopropylbenzene	200	U	4000	3380		ug/L		84	57 - 132	7	35
Methyl acetate	2000	U	20000	25100		ug/L		126	46 - 135	6	34
Methyl tert-butyl ether	200	U	4000	3950		ug/L		99	50 - 137	8	35
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	4000	3360		ug/L		84	41 - 149	12	35
1,2,4-Trichlorobenzene	200	U	4000	3230		ug/L		81	35 - 140	5	35
1,2-Dichlorobenzene	200	U	4000	3520		ug/L		88	62 - 123	9	35
1,3-Dichlorobenzene	200	U	4000	3280		ug/L		82	59 - 122	8	35
1,4-Dichlorobenzene	200	U	4000	3330		ug/L		83	60 - 122	7	35
Trichlorofluoromethane	200	U	4000	3320		ug/L		83	26 - 175	3	35
Dibromochloromethane	200	U	4000	3870		ug/L		97	56 - 132	6	35
Methylcyclohexane	200	U	4000	3050		ug/L		76	31 - 139	14	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 132*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Toluene-d8 (Surr)	*91*		*73 - 124*
Dibromofluoromethane (Surr)	*90*		*80 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-132)	(73-120)	(73-124)	(80-120)
240-71478-2	GW-17303-102816-JY-021	106	80	90	88
240-71478-3	GW-17303-102816-JY-022	106	77	88	88
240-71478-4	GW-17303-102816-JY-023	108	79	90	87
240-71478-5	GW-17303-102816-JY-024	104	79	89	87
240-71478-6	GW-17303-102816-JY-025	103	74	91	89
240-71478-7	GW-17303-102816-JY-026	106	78	90	89
240-71478-8	GW-17303-102816-JY-027	103	79	90	85
240-71478-9	GW-17303-102816-JY-028	90	90	90	93
240-71478-9 MS	GW-17303-102816-JY-028	89	91	89	90
240-71478-9 MSD	GW-17303-102816-JY-028	91	93	91	90
240-71478-10	GW-17303-102816-JY-029	95	86	86	92
240-71478-11	GW-17303-102816-JY-030	90	84	85	90
240-71478-12	GW-17303-102816-JY-031	116	91	102	100
240-71478-13	GW-17303-102816-JY-032	116	92	102	97
LCS 240-254410/4	Lab Control Sample	97	88	93	88
LCS 240-254586/4	Lab Control Sample	114	98	106	99
LCS 240-254726/5	Lab Control Sample	87	87	88	90
MB 240-254410/6	Method Blank	105	82	90	86
MB 240-254586/6	Method Blank	117	91	103	100
MB 240-254726/8	Method Blank	93	87	86	93

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-132)	(73-120)	(73-124)	(80-120)
240-71478-1	TB-17303-102816	109	82	89	89

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

Client Sample ID: TB-17303-102816
Lab Sample ID: 240-71478-1
Date Collected: 10/28/16 00:00
Matrix: WQ
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254410	11/04/16 19:24	LRW	TAL CAN

Client Sample ID: GW-17303-102816-JY-021
Lab Sample ID: 240-71478-2
Date Collected: 10/28/16 09:30
Matrix: Water
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		66.67	254410	11/04/16 19:46	LRW	TAL CAN

Client Sample ID: GW-17303-102816-JY-022
Lab Sample ID: 240-71478-3
Date Collected: 10/28/16 10:15
Matrix: Water
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	254410	11/04/16 20:09	LRW	TAL CAN

Client Sample ID: GW-17303-102816-JY-023
Lab Sample ID: 240-71478-4
Date Collected: 10/28/16 10:20
Matrix: Water
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	254410	11/04/16 20:31	LRW	TAL CAN

Client Sample ID: GW-17303-102816-JY-024
Lab Sample ID: 240-71478-5
Date Collected: 10/28/16 11:15
Matrix: Water
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	254410	11/04/16 20:54	LRW	TAL CAN

Client Sample ID: GW-17303-102816-JY-025
Lab Sample ID: 240-71478-6
Date Collected: 10/28/16 12:15
Matrix: Water
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.43	254410	11/04/16 21:16	LRW	TAL CAN

Client Sample ID: GW-17303-102816-JY-026 — Lab Sample ID: 240-71478-7

Date Collected: 10/28/16 09:10 — **Matrix: Water**
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	254410	11/04/16 21:38	LRW	TAL CAN

Client Sample ID: GW-17303-102816-JY-027 — Lab Sample ID: 240-71478-8

Date Collected: 10/28/16 10:20 — **Matrix: Water**
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		333.33	254410	11/04/16 22:01	LRW	TAL CAN

Client Sample ID: GW-17303-102816-JY-028 — Lab Sample ID: 240-71478-9

Date Collected: 10/28/16 11:25 — **Matrix: Water**
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	254726	11/08/16 16:55	HMB	TAL CAN

Client Sample ID: GW-17303-102816-JY-029 — Lab Sample ID: 240-71478-10

Date Collected: 10/28/16 12:40 — **Matrix: Water**
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	254726	11/08/16 17:18	HMB	TAL CAN

Client Sample ID: GW-17303-102816-JY-030 — Lab Sample ID: 240-71478-11

Date Collected: 10/28/16 13:15 — **Matrix: Water**
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254726	11/08/16 17:41	HMB	TAL CAN

Client Sample ID: GW-17303-102816-JY-031 — Lab Sample ID: 240-71478-12

Date Collected: 10/28/16 13:50 — **Matrix: Water**
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		11.11	254586	11/07/16 18:38	LRW	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

Client Sample ID: GW-17303-102816-JY-032 — **Lab Sample ID: 240-71478-13**
Date Collected: 10/28/16 14:20 — **Matrix: Water**
Date Received: 10/29/16 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254586	11/07/16 19:00	LRW	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71478-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17
Illinois	NELAP	5	200004	07-31-17
Kansas	NELAP	7	E-10336	01-31-17
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16 *
Minnesota	NELAP	5	039-999-348	12-31-16 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17
Nevada	State Program	9	OH-000482008A	07-31-17
New Jersey	NELAP	2	OH001	06-30-17
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-17
Texas	NELAP	6	T104704517-15-5	08-31-17
USDA	Federal		P330-13-00319	11-26-16 *
Virginia	NELAP	3	460175	09-14-17
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17

* Certification renewal pending - certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

3.8/C4.2

Chain of Custody Record

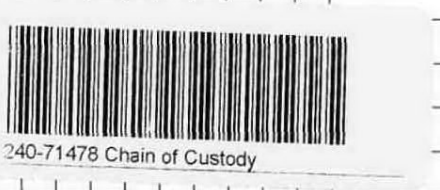
164031

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: Arvindeep B.	Date: 10-28-16	COC No:
Company Name: GHD	Tel/Fax:	Lab Contact: D. Hackler	Carrier: Fed Ex	1 of 2 COCs
Address: 14496 N. Sheldon Ste 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Plymouth, Mich. 48170	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 734 / 453 5723	TAT if different from Below GHD STD			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Power CVO	☐ 1 week			
Site: 17303-T02-03Y16	☐ 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)	TCL VOC	Sample Specific Notes:
TB-17303-102816	10/28/16	—	G	WQ	1	N	N	X	
GW-17303-102816-JY-021		0930	G	WG	3	N	N	X	
-022		1015	G	WG	3	N	N	X	
-023		1020	G	WG	3	N	N	X	
-024		1115	G	WG	3	N	N	X	
-025		1215	G	WG	3	N	N	X	
-026		0910	G	WG	3	N	N	X	
-027		1020	G	WG	3	N	N	X	
-028		1125	G	WG	9	N	Y	X	
-029		1240	G	WG	3	N	N	X	
-030		1315	G	WG	3	N	N	X	
GW-17303-102816-JY-031		1350	G	WG	3	N	N	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:

LPN 24006020

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	GHD	10-28-16 1500		DANC	10/29/16 10:15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

11/10/2016

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

Chain of Custody Record

164030

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: 10-28-16	COC No:
Company Name: GHD	Tel/Fax:	Lab Contact: D. Heckler	Carrier: Fed Ex	2 of 2 COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Plymouth, Mich. 48170	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below STD			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: River CVO	☐ 1 week			
Site: 17303	☐ 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)	TCL VOC	Sample Specific Notes:
GW-17303-102816-JY-032	10/28/16	1420	G	WG	3	N	N	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:

24006020

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	GHD	10-28-16 1500		TANC	10/29/16 10:15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

11/10/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: [signature]
Cooler Received on 10/29/16 Opened on 10/29/16
FedEx: 1st Grd Exp UPS FAS Stetson 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 **+0.4** °C) Observed Cooler Temp. 3.8 °C Corrected Cooler Temp. 4.2 °C
   IR GUN #36 (CF **+1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
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 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC682547**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

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): _____.

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-101216 Cooler Receipt Form.doc djl

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: 240-71561-1
Client Project/Site: 17303-036, RACER CVO

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
11/15/2016 8:32:57 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: 240-71561-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-71561-1

Comments
No additional comments.

Receipt
The samples were received on 11/2/2016 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-254811 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 (LCS) for analytical batch 240-254909 recovered outside control limits for the following analytes: Acetone and Methyl Acetate. 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: There was an MS/MSD analyzed in batch 254909 but could not be reported because the associated sample needed reanalyzed in a different batch.

Method(s) 8260B: The laboratory control sample (LCS) for 255101 recovered outside control limits for the following analyte(s): Trichlorofluoromethane. Trichlorofluoromethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. TRIP BLANK (240-71561-22) and (LCS 240-255101/4) .

Method(s) 8260B: The laboratory control sample (LCS) for 255330 recovered outside control limits for the following analyte(s): Trichlorofluoromethane. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. GW-17303-110116-DS-050 (240-71561-18) and (LCS 240-255330/4)

Method(s) 8260B: There is no MS/MSD in batch 255330 due to an incorrect dilution.

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: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-71561-1	GW-17303-103116-DS-033	Water	10/31/16 09:00	11/02/16 09:20
240-71561-2	GW-17303-103116-DS-034	Water	10/31/16 08:50	11/02/16 09:20
240-71561-3	GW-17303-103116-DS-035	Water	10/31/16 09:50	11/02/16 09:20
240-71561-4	GW-17303-103116-DS-036	Water	10/31/16 09:35	11/02/16 09:20
240-71561-5	GW-17303-103116-DS-037	Water	10/31/16 11:00	11/02/16 09:20
240-71561-6	GW-17303-103116-DS-038	Water	10/31/16 10:45	11/02/16 09:20
240-71561-7	GW-17303-103116-DS-039	Water	10/31/16 13:05	11/02/16 09:20
240-71561-8	GW-17303-103116-DS-040	Water	10/31/16 11:40	11/02/16 09:20
240-71561-9	GW-17303-103116-DS-041	Water	10/31/16 14:05	11/02/16 09:20
240-71561-10	GW-17303-103116-DS-042	Water	10/31/16 12:35	11/02/16 09:20
240-71561-11	GW-17303-103116-DS-043	Water	10/31/16 13:25	11/02/16 09:20
240-71561-12	GW-17303-103116-DS-044	Water	10/31/16 14:15	11/02/16 09:20
240-71561-13	GW-17303-103116-DS-045	Water	10/31/16 15:05	11/02/16 09:20
240-71561-14	GW-17303-103116-DS-046	Water	10/31/16 16:00	11/02/16 09:20
240-71561-15	GW-17303-110116-DS-047	Water	11/01/16 09:35	11/02/16 09:20
240-71561-16	GW-17303-110116-DS-048	Water	11/01/16 10:35	11/02/16 09:20
240-71561-17	GW-17303-110116-DS-049	Water	11/01/16 11:30	11/02/16 09:20
240-71561-18	GW-17303-110116-DS-050	Water	11/01/16 12:15	11/02/16 09:20
240-71561-19	GW-17303-110116-DS-051	Water	11/01/16 12:50	11/02/16 09:20
240-71561-20	GW-17303-110116-DS-052	Water	11/01/16 13:55	11/02/16 09:20
240-71561-21	GW-17303-110116-DS-053	Water	11/01/16 14:55	11/02/16 09:20
240-71561-22	TRIP BLANK	Water	10/31/16 00:00	11/02/16 09:20

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Client Sample ID: GW-17303-103116-DS-033 — Lab Sample ID: 240-71561-1

No Detections.

Client Sample ID: GW-17303-103116-DS-034 — Lab Sample ID: 240-71561-2

No Detections.

Client Sample ID: GW-17303-103116-DS-035 — Lab Sample ID: 240-71561-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	16000		1000	450	ug/L	1000		8260B	Total/NA
cis-1,2-Dichloroethene	950	J	1000	300	ug/L	1000		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-036 — Lab Sample ID: 240-71561-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.8		1.0	0.33	ug/L	1		8260B	Total/NA
Vinyl chloride	11		1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	25		1.0	0.30	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.4		1.0	0.29	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-037 — Lab Sample ID: 240-71561-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	6100		250	110	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	3800		250	75	ug/L	250		8260B	Total/NA
trans-1,2-Dichloroethene	73	J	250	73	ug/L	250		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-038 — Lab Sample ID: 240-71561-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.9		1.0	0.33	ug/L	1		8260B	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	5.8		1.0	0.30	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.5		1.0	0.29	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-039 — Lab Sample ID: 240-71561-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	150	J	170	55	ug/L	166.67		8260B	Total/NA
Vinyl chloride	2400		170	75	ug/L	166.67		8260B	Total/NA
cis-1,2-Dichloroethene	1200		170	50	ug/L	166.67		8260B	Total/NA
trans-1,2-Dichloroethene	640		170	48	ug/L	166.67		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-040 — Lab Sample ID: 240-71561-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.3	J	1.4	0.47	ug/L	1.43		8260B	Total/NA
Vinyl chloride	16		1.4	0.64	ug/L	1.43		8260B	Total/NA
cis-1,2-Dichloroethene	40		1.4	0.43	ug/L	1.43		8260B	Total/NA
trans-1,2-Dichloroethene	1.9		1.4	0.41	ug/L	1.43		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Client Sample ID: GW-17303-103116-DS-041 — Lab Sample ID: 240-71561-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	35	J	50	14	ug/L	50		8260B	Total/NA
Vinyl chloride	920		50	23	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	170		50	15	ug/L	50		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-042 — Lab Sample ID: 240-71561-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.75	J	1.0	0.27	ug/L	1		8260B	Total/NA
Trichloroethene	1.5		1.0	0.33	ug/L	1		8260B	Total/NA
Vinyl chloride	7.2		1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	12		1.0	0.30	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.34	J	1.0	0.29	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-043 — Lab Sample ID: 240-71561-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.83	J	1.0	0.27	ug/L	1		8260B	Total/NA
Vinyl chloride	12		1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.30	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-044 — Lab Sample ID: 240-71561-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.95	J	1.0	0.33	ug/L	1		8260B	Total/NA
Vinyl chloride	4.5		1.0	0.45	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.30	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	4.1		1.0	0.29	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-045 — Lab Sample ID: 240-71561-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	5.7	J	17	5.5	ug/L	16.67		8260B	Total/NA
Vinyl chloride	100		17	7.5	ug/L	16.67		8260B	Total/NA
cis-1,2-Dichloroethene	440		17	5.0	ug/L	16.67		8260B	Total/NA
trans-1,2-Dichloroethene	32		17	4.8	ug/L	16.67		8260B	Total/NA

Client Sample ID: GW-17303-103116-DS-046 — Lab Sample ID: 240-71561-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1900		130	56	ug/L	125		8260B	Total/NA
cis-1,2-Dichloroethene	1200		130	38	ug/L	125		8260B	Total/NA
trans-1,2-Dichloroethene	61	J	130	36	ug/L	125		8260B	Total/NA

Client Sample ID: GW-17303-110116-DS-047 — Lab Sample ID: 240-71561-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0	0.28	ug/L	1		8260B	Total/NA
Vinyl chloride	2.2		1.0	0.45	ug/L	1		8260B	Total/NA
Cyclohexane	0.73	J	1.0	0.44	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.9		1.0	0.30	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Client Sample ID: GW-17303-110116-DS-048 — Lab Sample ID: 240-71561-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	14		1.7	0.55	ug/L	1.67		8260B	Total/NA
Vinyl chloride	28		1.7	0.75	ug/L	1.67		8260B	Total/NA
Xylenes, Total	1.2	J	3.3	0.40	ug/L	1.67		8260B	Total/NA
cis-1,2-Dichloroethene	46		1.7	0.50	ug/L	1.67		8260B	Total/NA
trans-1,2-Dichloroethene	0.81	J	1.7	0.48	ug/L	1.67		8260B	Total/NA
1,4-Dichlorobenzene	1.1	J	1.7	0.38	ug/L	1.67		8260B	Total/NA

Client Sample ID: GW-17303-110116-DS-049 — Lab Sample ID: 240-71561-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	9100		500	230	ug/L	500		8260B	Total/NA

Client Sample ID: GW-17303-110116-DS-050 — Lab Sample ID: 240-71561-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.0		2.0	0.56	ug/L	2		8260B	Total/NA
Trichloroethene	0.70	J	2.0	0.66	ug/L	2		8260B	Total/NA
Vinyl chloride	33		2.0	0.90	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	5.2		2.0	0.60	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	0.64	J	2.0	0.58	ug/L	2		8260B	Total/NA

Client Sample ID: GW-17303-110116-DS-051 — Lab Sample ID: 240-71561-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	1.7	J	5.0	0.34	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17303-110116-DS-052 — Lab Sample ID: 240-71561-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.6	J	3.3	0.93	ug/L	3.33		8260B	Total/NA
Vinyl chloride	50		3.3	1.5	ug/L	3.33		8260B	Total/NA
cis-1,2-Dichloroethene	20		3.3	1.0	ug/L	3.33		8260B	Total/NA
trans-1,2-Dichloroethene	2.5	J	3.3	0.97	ug/L	3.33		8260B	Total/NA

Client Sample ID: GW-17303-110116-DS-053 — Lab Sample ID: 240-71561-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	5000		250	110	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	100	J	250	75	ug/L	250		8260B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-71561-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	10	1.8	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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: GW-17303-103116-DS-033
Date Collected: 10/31/16 09:00
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/08/16 21:46	1
Benzene	1.0	U	1.0	0.28	ug/L			11/08/16 21:46	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/08/16 21:46	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/08/16 21:46	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/08/16 21:46	1
2-Butanone (MEK)	10	U *	10	1.0	ug/L			11/08/16 21:46	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/08/16 21:46	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/08/16 21:46	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 21:46	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/08/16 21:46	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/08/16 21:46	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/08/16 21:46	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/08/16 21:46	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/08/16 21:46	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/08/16 21:46	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/08/16 21:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/08/16 21:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/08/16 21:46	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/08/16 21:46	1
2-Hexanone	10	U	10	1.2	ug/L			11/08/16 21:46	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/08/16 21:46	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/08/16 21:46	1
Styrene	1.0	U	1.0	0.23	ug/L			11/08/16 21:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/08/16 21:46	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 21:46	1
Toluene	1.0	U	1.0	0.23	ug/L			11/08/16 21:46	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/08/16 21:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/16 21:46	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/08/16 21:46	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/08/16 21:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/08/16 21:46	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/08/16 21:46	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/08/16 21:46	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/08/16 21:46	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 21:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 21:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/08/16 21:46	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/08/16 21:46	1
Methyl acetate	10	U	10	1.4	ug/L			11/08/16 21:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/08/16 21:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/08/16 21:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/08/16 21:46	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/08/16 21:46	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 21:46	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/08/16 21:46	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 21:46	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/08/16 21:46	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/08/16 21:46	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		63 - 132		11/08/16 21:46	1
4-Bromofluorobenzene (Surr)	75		73 - 120		11/08/16 21:46	1
Toluene-d8 (Surr)	88		73 - 124		11/08/16 21:46	1
Dibromofluoromethane (Surr)	86		80 - 120		11/08/16 21:46	1

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

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

Client Sample ID: GW-17303-103116-DS-034
Date Collected: 10/31/16 08:50
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/08/16 22:08	1
Benzene	1.0	U	1.0	0.28	ug/L			11/08/16 22:08	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/08/16 22:08	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/08/16 22:08	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/08/16 22:08	1
2-Butanone (MEK)	10	U *	10	1.0	ug/L			11/08/16 22:08	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/08/16 22:08	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/08/16 22:08	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 22:08	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/08/16 22:08	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/08/16 22:08	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/08/16 22:08	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/08/16 22:08	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/08/16 22:08	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/08/16 22:08	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/08/16 22:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/08/16 22:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/08/16 22:08	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/08/16 22:08	1
2-Hexanone	10	U	10	1.2	ug/L			11/08/16 22:08	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/08/16 22:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/08/16 22:08	1
Styrene	1.0	U	1.0	0.23	ug/L			11/08/16 22:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/08/16 22:08	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 22:08	1
Toluene	1.0	U	1.0	0.23	ug/L			11/08/16 22:08	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/08/16 22:08	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/16 22:08	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/08/16 22:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/08/16 22:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/08/16 22:08	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/08/16 22:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/08/16 22:08	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/08/16 22:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 22:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 22:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/08/16 22:08	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/08/16 22:08	1
Methyl acetate	10	U	10	1.4	ug/L			11/08/16 22:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/08/16 22:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/08/16 22:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/08/16 22:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/08/16 22:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 22:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/08/16 22:08	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 22:08	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/08/16 22:08	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/08/16 22:08	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		63 - 132		11/08/16 22:08	1
4-Bromofluorobenzene (Surr)	76		73 - 120		11/08/16 22:08	1
Toluene-d8 (Surr)	86		73 - 124		11/08/16 22:08	1
Dibromofluoromethane (Surr)	89		80 - 120		11/08/16 22:08	1

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

Client Sample ID: GW-17303-103116-DS-035
Date Collected: 10/31/16 09:50
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10000	U *	10000	1800	ug/L			11/09/16 12:59	1000
Benzene	1000	U	1000	280	ug/L			11/09/16 12:59	1000
Bromodichloromethane	1000	U	1000	300	ug/L			11/09/16 12:59	1000
Bromoform	1000	U	1000	430	ug/L			11/09/16 12:59	1000
Bromomethane	1000	U	1000	420	ug/L			11/09/16 12:59	1000
2-Butanone (MEK)	10000	U	10000	1000	ug/L			11/09/16 12:59	1000
Carbon disulfide	5000	U	5000	340	ug/L			11/09/16 12:59	1000
Carbon tetrachloride	1000	U	1000	350	ug/L			11/09/16 12:59	1000
Chlorobenzene	1000	U	1000	320	ug/L			11/09/16 12:59	1000
Chloroethane	1000	U	1000	410	ug/L			11/09/16 12:59	1000
Chloroform	1000	U	1000	310	ug/L			11/09/16 12:59	1000
Chloromethane	1000	U	1000	430	ug/L			11/09/16 12:59	1000
1,1-Dichloroethane	1000	U	1000	250	ug/L			11/09/16 12:59	1000
1,2-Dichloroethane	1000	U	1000	300	ug/L			11/09/16 12:59	1000
1,1-Dichloroethene	1000	U	1000	270	ug/L			11/09/16 12:59	1000
1,2-Dichloropropane	1000	U	1000	300	ug/L			11/09/16 12:59	1000
cis-1,3-Dichloropropene	1000	U	1000	260	ug/L			11/09/16 12:59	1000
trans-1,3-Dichloropropene	1000	U	1000	310	ug/L			11/09/16 12:59	1000
Ethylbenzene	1000	U	1000	260	ug/L			11/09/16 12:59	1000
2-Hexanone	10000	U	10000	1200	ug/L			11/09/16 12:59	1000
Methylene Chloride	5000	U	5000	530	ug/L			11/09/16 12:59	1000
4-Methyl-2-pentanone (MIBK)	10000	U	10000	710	ug/L			11/09/16 12:59	1000
Styrene	1000	U	1000	230	ug/L			11/09/16 12:59	1000
1,1,2,2-Tetrachloroethane	1000	U	1000	320	ug/L			11/09/16 12:59	1000
Tetrachloroethene	1000	U	1000	300	ug/L			11/09/16 12:59	1000
Toluene	1000	U	1000	230	ug/L			11/09/16 12:59	1000
Trichloroethene	1000	U	1000	330	ug/L			11/09/16 12:59	1000
Vinyl chloride	**16000**		1000	450	ug/L			11/09/16 12:59	1000
Xylenes, Total	2000	U	2000	240	ug/L			11/09/16 12:59	1000
1,1,1-Trichloroethane	1000	U	1000	230	ug/L			11/09/16 12:59	1000
1,1,2-Trichloroethane	1000	U	1000	340	ug/L			11/09/16 12:59	1000
Cyclohexane	1000	U	1000	440	ug/L			11/09/16 12:59	1000
1,2-Dibromo-3-Chloropropane	1000	U	1000	470	ug/L			11/09/16 12:59	1000
1,2-Dibromoethane	1000	U	1000	230	ug/L			11/09/16 12:59	1000
Dichlorodifluoromethane	1000	U	1000	500	ug/L			11/09/16 12:59	1000
cis-1,2-Dichloroethene	**950**	**J**	1000	300	ug/L			11/09/16 12:59	1000
trans-1,2-Dichloroethene	1000	U	1000	290	ug/L			11/09/16 12:59	1000
Isopropylbenzene	1000	U	1000	210	ug/L			11/09/16 12:59	1000
Methyl acetate	10000	U *	10000	1400	ug/L			11/09/16 12:59	1000
Methyl tert-butyl ether	1000	U	1000	270	ug/L			11/09/16 12:59	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	U	1000	410	ug/L			11/09/16 12:59	1000
1,2,4-Trichlorobenzene	1000	U	1000	270	ug/L			11/09/16 12:59	1000
1,2-Dichlorobenzene	1000	U	1000	260	ug/L			11/09/16 12:59	1000
1,3-Dichlorobenzene	1000	U	1000	320	ug/L			11/09/16 12:59	1000
1,4-Dichlorobenzene	1000	U	1000	230	ug/L			11/09/16 12:59	1000
Trichlorofluoromethane	1000	U	1000	500	ug/L			11/09/16 12:59	1000
Dibromochloromethane	1000	U	1000	250	ug/L			11/09/16 12:59	1000
Methylcyclohexane	1000	U	1000	450	ug/L			11/09/16 12:59	1000

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 132		11/09/16 12:59	1000
4-Bromofluorobenzene (Surr)	88		73 - 120		11/09/16 12:59	1000
Toluene-d8 (Surr)	88		73 - 124		11/09/16 12:59	1000
Dibromofluoromethane (Surr)	92		80 - 120		11/09/16 12:59	1000

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

Client Sample ID: GW-17303-103116-DS-036
Date Collected: 10/31/16 09:35
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/09/16 13:22	1
Benzene	1.0	U	1.0	0.28	ug/L			11/09/16 13:22	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/09/16 13:22	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/09/16 13:22	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/09/16 13:22	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/09/16 13:22	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/09/16 13:22	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/09/16 13:22	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 13:22	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/09/16 13:22	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/09/16 13:22	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/09/16 13:22	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/09/16 13:22	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/09/16 13:22	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/09/16 13:22	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/09/16 13:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/09/16 13:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/09/16 13:22	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/09/16 13:22	1
2-Hexanone	10	U	10	1.2	ug/L			11/09/16 13:22	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/09/16 13:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/09/16 13:22	1
Styrene	1.0	U	1.0	0.23	ug/L			11/09/16 13:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/09/16 13:22	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 13:22	1
Toluene	1.0	U	1.0	0.23	ug/L			11/09/16 13:22	1
Trichloroethene	**1.8**		1.0	0.33	ug/L			11/09/16 13:22	1
Vinyl chloride	**11**		1.0	0.45	ug/L			11/09/16 13:22	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/09/16 13:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/09/16 13:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/09/16 13:22	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/09/16 13:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/09/16 13:22	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/09/16 13:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 13:22	1
cis-1,2-Dichloroethene	**25**		1.0	0.30	ug/L			11/09/16 13:22	1
trans-1,2-Dichloroethene	**1.4**		1.0	0.29	ug/L			11/09/16 13:22	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/09/16 13:22	1
Methyl acetate	10	U *	10	1.4	ug/L			11/09/16 13:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/09/16 13:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/09/16 13:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/09/16 13:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/09/16 13:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 13:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/09/16 13:22	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 13:22	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/09/16 13:22	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/09/16 13:22	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 132		11/09/16 13:22	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/09/16 13:22	1
Toluene-d8 (Surr)	87		73 - 124		11/09/16 13:22	1
Dibromofluoromethane (Surr)	93		80 - 120		11/09/16 13:22	1

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

Client Sample ID: GW-17303-103116-DS-037
Date Collected: 10/31/16 11:00
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2500	U *	2500	440	ug/L			11/09/16 13:45	250
Benzene	250	U	250	70	ug/L			11/09/16 13:45	250
Bromodichloromethane	250	U	250	75	ug/L			11/09/16 13:45	250
Bromoform	250	U	250	110	ug/L			11/09/16 13:45	250
Bromomethane	250	U	250	110	ug/L			11/09/16 13:45	250
2-Butanone (MEK)	2500	U	2500	260	ug/L			11/09/16 13:45	250
Carbon disulfide	1300	U	1300	85	ug/L			11/09/16 13:45	250
Carbon tetrachloride	250	U	250	88	ug/L			11/09/16 13:45	250
Chlorobenzene	250	U	250	80	ug/L			11/09/16 13:45	250
Chloroethane	250	U	250	100	ug/L			11/09/16 13:45	250
Chloroform	250	U	250	78	ug/L			11/09/16 13:45	250
Chloromethane	250	U	250	110	ug/L			11/09/16 13:45	250
1,1-Dichloroethane	250	U	250	63	ug/L			11/09/16 13:45	250
1,2-Dichloroethane	250	U	250	75	ug/L			11/09/16 13:45	250
1,1-Dichloroethene	250	U	250	68	ug/L			11/09/16 13:45	250
1,2-Dichloropropane	250	U	250	75	ug/L			11/09/16 13:45	250
cis-1,3-Dichloropropene	250	U	250	65	ug/L			11/09/16 13:45	250
trans-1,3-Dichloropropene	250	U	250	78	ug/L			11/09/16 13:45	250
Ethylbenzene	250	U	250	65	ug/L			11/09/16 13:45	250
2-Hexanone	2500	U	2500	310	ug/L			11/09/16 13:45	250
Methylene Chloride	1300	U	1300	130	ug/L			11/09/16 13:45	250
4-Methyl-2-pentanone (MIBK)	2500	U	2500	180	ug/L			11/09/16 13:45	250
Styrene	250	U	250	58	ug/L			11/09/16 13:45	250
1,1,2,2-Tetrachloroethane	250	U	250	80	ug/L			11/09/16 13:45	250
Tetrachloroethene	250	U	250	75	ug/L			11/09/16 13:45	250
Toluene	250	U	250	58	ug/L			11/09/16 13:45	250
Trichloroethene	250	U	250	83	ug/L			11/09/16 13:45	250
Vinyl chloride	**6100**		250	110	ug/L			11/09/16 13:45	250
Xylenes, Total	500	U	500	60	ug/L			11/09/16 13:45	250
1,1,1-Trichloroethane	250	U	250	58	ug/L			11/09/16 13:45	250
1,1,2-Trichloroethane	250	U	250	85	ug/L			11/09/16 13:45	250
Cyclohexane	250	U	250	110	ug/L			11/09/16 13:45	250
1,2-Dibromo-3-Chloropropane	250	U	250	120	ug/L			11/09/16 13:45	250
1,2-Dibromoethane	250	U	250	58	ug/L			11/09/16 13:45	250
Dichlorodifluoromethane	250	U	250	130	ug/L			11/09/16 13:45	250
cis-1,2-Dichloroethene	**3800**		250	75	ug/L			11/09/16 13:45	250
trans-1,2-Dichloroethene	**73**	**J**	250	73	ug/L			11/09/16 13:45	250
Isopropylbenzene	250	U	250	53	ug/L			11/09/16 13:45	250
Methyl acetate	2500	U *	2500	360	ug/L			11/09/16 13:45	250
Methyl tert-butyl ether	250	U	250	68	ug/L			11/09/16 13:45	250
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	100	ug/L			11/09/16 13:45	250
1,2,4-Trichlorobenzene	250	U	250	68	ug/L			11/09/16 13:45	250
1,2-Dichlorobenzene	250	U	250	65	ug/L			11/09/16 13:45	250
1,3-Dichlorobenzene	250	U	250	80	ug/L			11/09/16 13:45	250
1,4-Dichlorobenzene	250	U	250	58	ug/L			11/09/16 13:45	250
Trichlorofluoromethane	250	U	250	130	ug/L			11/09/16 13:45	250
Dibromochloromethane	250	U	250	63	ug/L			11/09/16 13:45	250
Methylcyclohexane	250	U	250	110	ug/L			11/09/16 13:45	250

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/09/16 13:45	250
4-Bromofluorobenzene (Surr)	86		73 - 120		11/09/16 13:45	250
Toluene-d8 (Surr)	85		73 - 124		11/09/16 13:45	250
Dibromofluoromethane (Surr)	93		80 - 120		11/09/16 13:45	250

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

Client Sample ID: GW-17303-103116-DS-038
Date Collected: 10/31/16 10:45
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/09/16 14:09	1
Benzene	1.0	U	1.0	0.28	ug/L			11/09/16 14:09	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/09/16 14:09	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/09/16 14:09	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/09/16 14:09	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/09/16 14:09	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/09/16 14:09	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/09/16 14:09	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 14:09	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/09/16 14:09	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/09/16 14:09	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/09/16 14:09	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/09/16 14:09	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/09/16 14:09	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/09/16 14:09	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/09/16 14:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/09/16 14:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/09/16 14:09	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/09/16 14:09	1
2-Hexanone	10	U	10	1.2	ug/L			11/09/16 14:09	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/09/16 14:09	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/09/16 14:09	1
Styrene	1.0	U	1.0	0.23	ug/L			11/09/16 14:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/09/16 14:09	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 14:09	1
Toluene	1.0	U	1.0	0.23	ug/L			11/09/16 14:09	1
Trichloroethene	**2.9**		1.0	0.33	ug/L			11/09/16 14:09	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			11/09/16 14:09	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/09/16 14:09	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/09/16 14:09	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/09/16 14:09	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/09/16 14:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/09/16 14:09	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/09/16 14:09	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 14:09	1
cis-1,2-Dichloroethene	**5.8**		1.0	0.30	ug/L			11/09/16 14:09	1
trans-1,2-Dichloroethene	**2.5**		1.0	0.29	ug/L			11/09/16 14:09	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/09/16 14:09	1
Methyl acetate	10	U *	10	1.4	ug/L			11/09/16 14:09	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/09/16 14:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/09/16 14:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/09/16 14:09	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/09/16 14:09	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 14:09	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/09/16 14:09	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 14:09	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/09/16 14:09	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/09/16 14:09	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/09/16 14:09	1
4-Bromofluorobenzene (Surr)	85		73 - 120		11/09/16 14:09	1
Toluene-d8 (Surr)	84		73 - 124		11/09/16 14:09	1
Dibromofluoromethane (Surr)	92		80 - 120		11/09/16 14:09	1

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

Client Sample ID: GW-17303-103116-DS-039
Date Collected: 10/31/16 13:05
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1700	U *	1700	290	ug/L			11/09/16 14:32	166.67
Benzene	170	U	170	47	ug/L			11/09/16 14:32	166.67
Bromodichloromethane	170	U	170	50	ug/L			11/09/16 14:32	166.67
Bromoform	170	U	170	72	ug/L			11/09/16 14:32	166.67
Bromomethane	170	U	170	70	ug/L			11/09/16 14:32	166.67
2-Butanone (MEK)	1700	U	1700	170	ug/L			11/09/16 14:32	166.67
Carbon disulfide	830	U	830	57	ug/L			11/09/16 14:32	166.67
Carbon tetrachloride	170	U	170	58	ug/L			11/09/16 14:32	166.67
Chlorobenzene	170	U	170	53	ug/L			11/09/16 14:32	166.67
Chloroethane	170	U	170	68	ug/L			11/09/16 14:32	166.67
Chloroform	170	U	170	52	ug/L			11/09/16 14:32	166.67
Chloromethane	170	U	170	72	ug/L			11/09/16 14:32	166.67
1,1-Dichloroethane	170	U	170	42	ug/L			11/09/16 14:32	166.67
1,2-Dichloroethane	170	U	170	50	ug/L			11/09/16 14:32	166.67
1,1-Dichloroethene	170	U	170	45	ug/L			11/09/16 14:32	166.67
1,2-Dichloropropane	170	U	170	50	ug/L			11/09/16 14:32	166.67
cis-1,3-Dichloropropene	170	U	170	43	ug/L			11/09/16 14:32	166.67
trans-1,3-Dichloropropene	170	U	170	52	ug/L			11/09/16 14:32	166.67
Ethylbenzene	170	U	170	43	ug/L			11/09/16 14:32	166.67
2-Hexanone	1700	U	1700	210	ug/L			11/09/16 14:32	166.67
Methylene Chloride	830	U	830	88	ug/L			11/09/16 14:32	166.67
4-Methyl-2-pentanone (MIBK)	1700	U	1700	120	ug/L			11/09/16 14:32	166.67
Styrene	170	U	170	38	ug/L			11/09/16 14:32	166.67
1,1,2,2-Tetrachloroethane	170	U	170	53	ug/L			11/09/16 14:32	166.67
Tetrachloroethene	170	U	170	50	ug/L			11/09/16 14:32	166.67
Toluene	170	U	170	38	ug/L			11/09/16 14:32	166.67
Trichloroethene	**150**	**J**	170	55	ug/L			11/09/16 14:32	166.67
Vinyl chloride	**2400**		170	75	ug/L			11/09/16 14:32	166.67
Xylenes, Total	330	U	330	40	ug/L			11/09/16 14:32	166.67
1,1,1-Trichloroethane	170	U	170	38	ug/L			11/09/16 14:32	166.67
1,1,2-Trichloroethane	170	U	170	57	ug/L			11/09/16 14:32	166.67
Cyclohexane	170	U	170	73	ug/L			11/09/16 14:32	166.67
1,2-Dibromo-3-Chloropropane	170	U	170	78	ug/L			11/09/16 14:32	166.67
1,2-Dibromoethane	170	U	170	38	ug/L			11/09/16 14:32	166.67
Dichlorodifluoromethane	170	U	170	83	ug/L			11/09/16 14:32	166.67
cis-1,2-Dichloroethene	**1200**		170	50	ug/L			11/09/16 14:32	166.67
trans-1,2-Dichloroethene	**640**		170	48	ug/L			11/09/16 14:32	166.67
Isopropylbenzene	170	U	170	35	ug/L			11/09/16 14:32	166.67
Methyl acetate	1700	U *	1700	240	ug/L			11/09/16 14:32	166.67
Methyl tert-butyl ether	170	U	170	45	ug/L			11/09/16 14:32	166.67
1,1,2-Trichloro-1,2,2-trifluoroethane	170	U	170	68	ug/L			11/09/16 14:32	166.67
1,2,4-Trichlorobenzene	170	U	170	45	ug/L			11/09/16 14:32	166.67
1,2-Dichlorobenzene	170	U	170	43	ug/L			11/09/16 14:32	166.67
1,3-Dichlorobenzene	170	U	170	53	ug/L			11/09/16 14:32	166.67
1,4-Dichlorobenzene	170	U	170	38	ug/L			11/09/16 14:32	166.67
Trichlorofluoromethane	170	U	170	83	ug/L			11/09/16 14:32	166.67
Dibromochloromethane	170	U	170	42	ug/L			11/09/16 14:32	166.67
Methylcyclohexane	170	U	170	75	ug/L			11/09/16 14:32	166.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		63 - 132		11/09/16 14:32	166.67
4-Bromofluorobenzene (Surr)	84		73 - 120		11/09/16 14:32	166.67
Toluene-d8 (Surr)	83		73 - 124		11/09/16 14:32	166.67
Dibromofluoromethane (Surr)	92		80 - 120		11/09/16 14:32	166.67

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

Client Sample ID: GW-17303-103116-DS-040
Date Collected: 10/31/16 11:40
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	14	U *	14	2.5	ug/L			11/09/16 14:55	1.43
Benzene	1.4	U	1.4	0.40	ug/L			11/09/16 14:55	1.43
Bromodichloromethane	1.4	U	1.4	0.43	ug/L			11/09/16 14:55	1.43
Bromoform	1.4	U	1.4	0.61	ug/L			11/09/16 14:55	1.43
Bromomethane	1.4	U	1.4	0.60	ug/L			11/09/16 14:55	1.43
2-Butanone (MEK)	14	U	14	1.5	ug/L			11/09/16 14:55	1.43
Carbon disulfide	7.2	U	7.2	0.49	ug/L			11/09/16 14:55	1.43
Carbon tetrachloride	1.4	U	1.4	0.50	ug/L			11/09/16 14:55	1.43
Chlorobenzene	1.4	U	1.4	0.46	ug/L			11/09/16 14:55	1.43
Chloroethane	1.4	U	1.4	0.59	ug/L			11/09/16 14:55	1.43
Chloroform	1.4	U	1.4	0.44	ug/L			11/09/16 14:55	1.43
Chloromethane	1.4	U	1.4	0.61	ug/L			11/09/16 14:55	1.43
1,1-Dichloroethane	1.4	U	1.4	0.36	ug/L			11/09/16 14:55	1.43
1,2-Dichloroethane	1.4	U	1.4	0.43	ug/L			11/09/16 14:55	1.43
1,1-Dichloroethene	1.4	U	1.4	0.39	ug/L			11/09/16 14:55	1.43
1,2-Dichloropropane	1.4	U	1.4	0.43	ug/L			11/09/16 14:55	1.43
cis-1,3-Dichloropropene	1.4	U	1.4	0.37	ug/L			11/09/16 14:55	1.43
trans-1,3-Dichloropropene	1.4	U	1.4	0.44	ug/L			11/09/16 14:55	1.43
Ethylbenzene	1.4	U	1.4	0.37	ug/L			11/09/16 14:55	1.43
2-Hexanone	14	U	14	1.8	ug/L			11/09/16 14:55	1.43
Methylene Chloride	7.2	U	7.2	0.76	ug/L			11/09/16 14:55	1.43
4-Methyl-2-pentanone (MIBK)	14	U	14	1.0	ug/L			11/09/16 14:55	1.43
Styrene	1.4	U	1.4	0.33	ug/L			11/09/16 14:55	1.43
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.46	ug/L			11/09/16 14:55	1.43
Tetrachloroethene	1.4	U	1.4	0.43	ug/L			11/09/16 14:55	1.43
Toluene	1.4	U	1.4	0.33	ug/L			11/09/16 14:55	1.43
Trichloroethene	**1.3**	**J**	1.4	0.47	ug/L			11/09/16 14:55	1.43
Vinyl chloride	**16**		1.4	0.64	ug/L			11/09/16 14:55	1.43
Xylenes, Total	2.9	U	2.9	0.34	ug/L			11/09/16 14:55	1.43
1,1,1-Trichloroethane	1.4	U	1.4	0.33	ug/L			11/09/16 14:55	1.43
1,1,2-Trichloroethane	1.4	U	1.4	0.49	ug/L			11/09/16 14:55	1.43
Cyclohexane	1.4	U	1.4	0.63	ug/L			11/09/16 14:55	1.43
1,2-Dibromo-3-Chloropropane	1.4	U	1.4	0.67	ug/L			11/09/16 14:55	1.43
1,2-Dibromoethane	1.4	U	1.4	0.33	ug/L			11/09/16 14:55	1.43
Dichlorodifluoromethane	1.4	U	1.4	0.72	ug/L			11/09/16 14:55	1.43
cis-1,2-Dichloroethene	**40**		1.4	0.43	ug/L			11/09/16 14:55	1.43
trans-1,2-Dichloroethene	**1.9**		1.4	0.41	ug/L			11/09/16 14:55	1.43
Isopropylbenzene	1.4	U	1.4	0.30	ug/L			11/09/16 14:55	1.43
Methyl acetate	14	U *	14	2.0	ug/L			11/09/16 14:55	1.43
Methyl tert-butyl ether	1.4	U	1.4	0.39	ug/L			11/09/16 14:55	1.43
1,1,2-Trichloro-1,2,2-trifluoroethane	1.4	U	1.4	0.59	ug/L			11/09/16 14:55	1.43
1,2,4-Trichlorobenzene	1.4	U	1.4	0.39	ug/L			11/09/16 14:55	1.43
1,2-Dichlorobenzene	1.4	U	1.4	0.37	ug/L			11/09/16 14:55	1.43
1,3-Dichlorobenzene	1.4	U	1.4	0.46	ug/L			11/09/16 14:55	1.43
1,4-Dichlorobenzene	1.4	U	1.4	0.33	ug/L			11/09/16 14:55	1.43
Trichlorofluoromethane	1.4	U	1.4	0.72	ug/L			11/09/16 14:55	1.43
Dibromochloromethane	1.4	U	1.4	0.36	ug/L			11/09/16 14:55	1.43
Methylcyclohexane	1.4	U	1.4	0.64	ug/L			11/09/16 14:55	1.43

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/09/16 14:55	1.43
4-Bromofluorobenzene (Surr)	85		73 - 120		11/09/16 14:55	1.43
Toluene-d8 (Surr)	86		73 - 124		11/09/16 14:55	1.43
Dibromofluoromethane (Surr)	92		80 - 120		11/09/16 14:55	1.43

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

Client Sample ID: GW-17303-103116-DS-041
Date Collected: 10/31/16 14:05
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	500	U *	500	88	ug/L			11/09/16 15:18	50
Benzene	**35**	**J**	50	14	ug/L			11/09/16 15:18	50
Bromodichloromethane	50	U	50	15	ug/L			11/09/16 15:18	50
Bromoform	50	U	50	22	ug/L			11/09/16 15:18	50
Bromomethane	50	U	50	21	ug/L			11/09/16 15:18	50
2-Butanone (MEK)	500	U	500	51	ug/L			11/09/16 15:18	50
Carbon disulfide	250	U	250	17	ug/L			11/09/16 15:18	50
Carbon tetrachloride	50	U	50	18	ug/L			11/09/16 15:18	50
Chlorobenzene	50	U	50	16	ug/L			11/09/16 15:18	50
Chloroethane	50	U	50	21	ug/L			11/09/16 15:18	50
Chloroform	50	U	50	16	ug/L			11/09/16 15:18	50
Chloromethane	50	U	50	22	ug/L			11/09/16 15:18	50
1,1-Dichloroethane	50	U	50	13	ug/L			11/09/16 15:18	50
1,2-Dichloroethane	50	U	50	15	ug/L			11/09/16 15:18	50
1,1-Dichloroethene	50	U	50	14	ug/L			11/09/16 15:18	50
1,2-Dichloropropane	50	U	50	15	ug/L			11/09/16 15:18	50
cis-1,3-Dichloropropene	50	U	50	13	ug/L			11/09/16 15:18	50
trans-1,3-Dichloropropene	50	U	50	16	ug/L			11/09/16 15:18	50
Ethylbenzene	50	U	50	13	ug/L			11/09/16 15:18	50
2-Hexanone	500	U	500	62	ug/L			11/09/16 15:18	50
Methylene Chloride	250	U	250	27	ug/L			11/09/16 15:18	50
4-Methyl-2-pentanone (MIBK)	500	U	500	36	ug/L			11/09/16 15:18	50
Styrene	50	U	50	12	ug/L			11/09/16 15:18	50
1,1,2,2-Tetrachloroethane	50	U	50	16	ug/L			11/09/16 15:18	50
Tetrachloroethene	50	U	50	15	ug/L			11/09/16 15:18	50
Toluene	50	U	50	12	ug/L			11/09/16 15:18	50
Trichloroethene	50	U	50	17	ug/L			11/09/16 15:18	50
Vinyl chloride	**920**		50	23	ug/L			11/09/16 15:18	50
Xylenes, Total	100	U	100	12	ug/L			11/09/16 15:18	50
1,1,1-Trichloroethane	50	U	50	12	ug/L			11/09/16 15:18	50
1,1,2-Trichloroethane	50	U	50	17	ug/L			11/09/16 15:18	50
Cyclohexane	50	U	50	22	ug/L			11/09/16 15:18	50
1,2-Dibromo-3-Chloropropane	50	U	50	24	ug/L			11/09/16 15:18	50
1,2-Dibromoethane	50	U	50	12	ug/L			11/09/16 15:18	50
Dichlorodifluoromethane	50	U	50	25	ug/L			11/09/16 15:18	50
cis-1,2-Dichloroethene	**170**		50	15	ug/L			11/09/16 15:18	50
trans-1,2-Dichloroethene	50	U	50	15	ug/L			11/09/16 15:18	50
Isopropylbenzene	50	U	50	11	ug/L			11/09/16 15:18	50
Methyl acetate	500	U *	500	72	ug/L			11/09/16 15:18	50
Methyl tert-butyl ether	50	U	50	14	ug/L			11/09/16 15:18	50
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	50	21	ug/L			11/09/16 15:18	50
1,2,4-Trichlorobenzene	50	U	50	14	ug/L			11/09/16 15:18	50
1,2-Dichlorobenzene	50	U	50	13	ug/L			11/09/16 15:18	50
1,3-Dichlorobenzene	50	U	50	16	ug/L			11/09/16 15:18	50
1,4-Dichlorobenzene	50	U	50	12	ug/L			11/09/16 15:18	50
Trichlorofluoromethane	50	U	50	25	ug/L			11/09/16 15:18	50
Dibromochloromethane	50	U	50	13	ug/L			11/09/16 15:18	50
Methylcyclohexane	50	U	50	23	ug/L			11/09/16 15:18	50

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 132		11/09/16 15:18	50
4-Bromofluorobenzene (Surr)	87		73 - 120		11/09/16 15:18	50
Toluene-d8 (Surr)	86		73 - 124		11/09/16 15:18	50
Dibromofluoromethane (Surr)	91		80 - 120		11/09/16 15:18	50

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

Client Sample ID: GW-17303-103116-DS-042
Date Collected: 10/31/16 12:35
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/09/16 15:41	1
Benzene	1.0	U	1.0	0.28	ug/L			11/09/16 15:41	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/09/16 15:41	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/09/16 15:41	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/09/16 15:41	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/09/16 15:41	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/09/16 15:41	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/09/16 15:41	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 15:41	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/09/16 15:41	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/09/16 15:41	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/09/16 15:41	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/09/16 15:41	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/09/16 15:41	1
1,1-Dichloroethene	**0.75**	**J**	1.0	0.27	ug/L			11/09/16 15:41	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/09/16 15:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/09/16 15:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/09/16 15:41	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/09/16 15:41	1
2-Hexanone	10	U	10	1.2	ug/L			11/09/16 15:41	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/09/16 15:41	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/09/16 15:41	1
Styrene	1.0	U	1.0	0.23	ug/L			11/09/16 15:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/09/16 15:41	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 15:41	1
Toluene	1.0	U	1.0	0.23	ug/L			11/09/16 15:41	1
Trichloroethene	**1.5**		1.0	0.33	ug/L			11/09/16 15:41	1
Vinyl chloride	**7.2**		1.0	0.45	ug/L			11/09/16 15:41	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/09/16 15:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/09/16 15:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/09/16 15:41	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/09/16 15:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/09/16 15:41	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/09/16 15:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 15:41	1
cis-1,2-Dichloroethene	**12**		1.0	0.30	ug/L			11/09/16 15:41	1
trans-1,2-Dichloroethene	**0.34**	**J**	1.0	0.29	ug/L			11/09/16 15:41	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/09/16 15:41	1
Methyl acetate	10	U *	10	1.4	ug/L			11/09/16 15:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/09/16 15:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/09/16 15:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/09/16 15:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/09/16 15:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 15:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/09/16 15:41	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 15:41	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/09/16 15:41	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/09/16 15:41	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/09/16 15:41	1
4-Bromofluorobenzene (Surr)	85		73 - 120		11/09/16 15:41	1
Toluene-d8 (Surr)	85		73 - 124		11/09/16 15:41	1
Dibromofluoromethane (Surr)	92		80 - 120		11/09/16 15:41	1

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

Client Sample ID: GW-17303-103116-DS-043
Date Collected: 10/31/16 13:25
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/09/16 16:04	1
Benzene	1.0	U	1.0	0.28	ug/L			11/09/16 16:04	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/09/16 16:04	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/09/16 16:04	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/09/16 16:04	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/09/16 16:04	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/09/16 16:04	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/09/16 16:04	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 16:04	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/09/16 16:04	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/09/16 16:04	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/09/16 16:04	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/09/16 16:04	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/09/16 16:04	1
1,1-Dichloroethene	**0.83**	**J**	1.0	0.27	ug/L			11/09/16 16:04	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/09/16 16:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/09/16 16:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/09/16 16:04	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/09/16 16:04	1
2-Hexanone	10	U	10	1.2	ug/L			11/09/16 16:04	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/09/16 16:04	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/09/16 16:04	1
Styrene	1.0	U	1.0	0.23	ug/L			11/09/16 16:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/09/16 16:04	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 16:04	1
Toluene	1.0	U	1.0	0.23	ug/L			11/09/16 16:04	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/09/16 16:04	1
Vinyl chloride	**12**		1.0	0.45	ug/L			11/09/16 16:04	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/09/16 16:04	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/09/16 16:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/09/16 16:04	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/09/16 16:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/09/16 16:04	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/09/16 16:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 16:04	1
cis-1,2-Dichloroethene	**13**		1.0	0.30	ug/L			11/09/16 16:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/09/16 16:04	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/09/16 16:04	1
Methyl acetate	10	U *	10	1.4	ug/L			11/09/16 16:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/09/16 16:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/09/16 16:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/09/16 16:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/09/16 16:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 16:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/09/16 16:04	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 16:04	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/09/16 16:04	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/09/16 16:04	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/09/16 16:04	1
4-Bromofluorobenzene (Surr)	85		73 - 120		11/09/16 16:04	1
Toluene-d8 (Surr)	84		73 - 124		11/09/16 16:04	1
Dibromofluoromethane (Surr)	92		80 - 120		11/09/16 16:04	1

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

Client Sample ID: GW-17303-103116-DS-044
Date Collected: 10/31/16 14:15
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/09/16 16:27	1
Benzene	1.0	U	1.0	0.28	ug/L			11/09/16 16:27	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/09/16 16:27	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/09/16 16:27	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/09/16 16:27	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/09/16 16:27	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/09/16 16:27	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/09/16 16:27	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 16:27	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/09/16 16:27	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/09/16 16:27	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/09/16 16:27	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/09/16 16:27	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/09/16 16:27	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/09/16 16:27	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/09/16 16:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/09/16 16:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/09/16 16:27	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/09/16 16:27	1
2-Hexanone	10	U	10	1.2	ug/L			11/09/16 16:27	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/09/16 16:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/09/16 16:27	1
Styrene	1.0	U	1.0	0.23	ug/L			11/09/16 16:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/09/16 16:27	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 16:27	1
Toluene	1.0	U	1.0	0.23	ug/L			11/09/16 16:27	1
Trichloroethene	**0.95**	**J**	1.0	0.33	ug/L			11/09/16 16:27	1
Vinyl chloride	**4.5**		1.0	0.45	ug/L			11/09/16 16:27	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/09/16 16:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/09/16 16:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/09/16 16:27	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/09/16 16:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/09/16 16:27	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/09/16 16:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 16:27	1
cis-1,2-Dichloroethene	**14**		1.0	0.30	ug/L			11/09/16 16:27	1
trans-1,2-Dichloroethene	**4.1**		1.0	0.29	ug/L			11/09/16 16:27	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/09/16 16:27	1
Methyl acetate	10	U *	10	1.4	ug/L			11/09/16 16:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/09/16 16:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/09/16 16:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/09/16 16:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/09/16 16:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 16:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/09/16 16:27	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 16:27	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/09/16 16:27	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/09/16 16:27	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 132		11/09/16 16:27	1
4-Bromofluorobenzene (Surr)	87		73 - 120		11/09/16 16:27	1
Toluene-d8 (Surr)	86		73 - 124		11/09/16 16:27	1
Dibromofluoromethane (Surr)	95		80 - 120		11/09/16 16:27	1

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

Client Sample ID: GW-17303-103116-DS-045
Date Collected: 10/31/16 15:05
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	170	U *	170	29	ug/L			11/09/16 16:50	16.67
Benzene	17	U	17	4.7	ug/L			11/09/16 16:50	16.67
Bromodichloromethane	17	U	17	5.0	ug/L			11/09/16 16:50	16.67
Bromoform	17	U	17	7.2	ug/L			11/09/16 16:50	16.67
Bromomethane	17	U	17	7.0	ug/L			11/09/16 16:50	16.67
2-Butanone (MEK)	170	U	170	17	ug/L			11/09/16 16:50	16.67
Carbon disulfide	83	U	83	5.7	ug/L			11/09/16 16:50	16.67
Carbon tetrachloride	17	U	17	5.8	ug/L			11/09/16 16:50	16.67
Chlorobenzene	17	U	17	5.3	ug/L			11/09/16 16:50	16.67
Chloroethane	17	U	17	6.8	ug/L			11/09/16 16:50	16.67
Chloroform	17	U	17	5.2	ug/L			11/09/16 16:50	16.67
Chloromethane	17	U	17	7.2	ug/L			11/09/16 16:50	16.67
1,1-Dichloroethane	17	U	17	4.2	ug/L			11/09/16 16:50	16.67
1,2-Dichloroethane	17	U	17	5.0	ug/L			11/09/16 16:50	16.67
1,1-Dichloroethene	17	U	17	4.5	ug/L			11/09/16 16:50	16.67
1,2-Dichloropropane	17	U	17	5.0	ug/L			11/09/16 16:50	16.67
cis-1,3-Dichloropropene	17	U	17	4.3	ug/L			11/09/16 16:50	16.67
trans-1,3-Dichloropropene	17	U	17	5.2	ug/L			11/09/16 16:50	16.67
Ethylbenzene	17	U	17	4.3	ug/L			11/09/16 16:50	16.67
2-Hexanone	170	U	170	21	ug/L			11/09/16 16:50	16.67
Methylene Chloride	83	U	83	8.8	ug/L			11/09/16 16:50	16.67
4-Methyl-2-pentanone (MIBK)	170	U	170	12	ug/L			11/09/16 16:50	16.67
Styrene	17	U	17	3.8	ug/L			11/09/16 16:50	16.67
1,1,2,2-Tetrachloroethane	17	U	17	5.3	ug/L			11/09/16 16:50	16.67
Tetrachloroethene	17	U	17	5.0	ug/L			11/09/16 16:50	16.67
Toluene	17	U	17	3.8	ug/L			11/09/16 16:50	16.67
Trichloroethene	**5.7**	**J**	17	5.5	ug/L			11/09/16 16:50	16.67
Vinyl chloride	**100**		17	7.5	ug/L			11/09/16 16:50	16.67
Xylenes, Total	33	U	33	4.0	ug/L			11/09/16 16:50	16.67
1,1,1-Trichloroethane	17	U	17	3.8	ug/L			11/09/16 16:50	16.67
1,1,2-Trichloroethane	17	U	17	5.7	ug/L			11/09/16 16:50	16.67
Cyclohexane	17	U	17	7.3	ug/L			11/09/16 16:50	16.67
1,2-Dibromo-3-Chloropropane	17	U	17	7.8	ug/L			11/09/16 16:50	16.67
1,2-Dibromoethane	17	U	17	3.8	ug/L			11/09/16 16:50	16.67
Dichlorodifluoromethane	17	U	17	8.3	ug/L			11/09/16 16:50	16.67
cis-1,2-Dichloroethene	**440**		17	5.0	ug/L			11/09/16 16:50	16.67
trans-1,2-Dichloroethene	**32**		17	4.8	ug/L			11/09/16 16:50	16.67
Isopropylbenzene	17	U	17	3.5	ug/L			11/09/16 16:50	16.67
Methyl acetate	170	U *	170	24	ug/L			11/09/16 16:50	16.67
Methyl tert-butyl ether	17	U	17	4.5	ug/L			11/09/16 16:50	16.67
1,1,2-Trichloro-1,2,2-trifluoroethane	17	U	17	6.8	ug/L			11/09/16 16:50	16.67
1,2,4-Trichlorobenzene	17	U	17	4.5	ug/L			11/09/16 16:50	16.67
1,2-Dichlorobenzene	17	U	17	4.3	ug/L			11/09/16 16:50	16.67
1,3-Dichlorobenzene	17	U	17	5.3	ug/L			11/09/16 16:50	16.67
1,4-Dichlorobenzene	17	U	17	3.8	ug/L			11/09/16 16:50	16.67
Trichlorofluoromethane	17	U	17	8.3	ug/L			11/09/16 16:50	16.67
Dibromochloromethane	17	U	17	4.2	ug/L			11/09/16 16:50	16.67
Methylcyclohexane	17	U	17	7.5	ug/L			11/09/16 16:50	16.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 132		11/09/16 16:50	16.67
4-Bromofluorobenzene (Surr)	88		73 - 120		11/09/16 16:50	16.67
Toluene-d8 (Surr)	87		73 - 124		11/09/16 16:50	16.67
Dibromofluoromethane (Surr)	94		80 - 120		11/09/16 16:50	16.67

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

Client Sample ID: GW-17303-103116-DS-046
Date Collected: 10/31/16 16:00
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1300	U *	1300	220	ug/L			11/09/16 17:14	125
Benzene	130	U	130	35	ug/L			11/09/16 17:14	125
Bromodichloromethane	130	U	130	38	ug/L			11/09/16 17:14	125
Bromoform	130	U	130	54	ug/L			11/09/16 17:14	125
Bromomethane	130	U	130	53	ug/L			11/09/16 17:14	125
2-Butanone (MEK)	1300	U	1300	130	ug/L			11/09/16 17:14	125
Carbon disulfide	630	U	630	43	ug/L			11/09/16 17:14	125
Carbon tetrachloride	130	U	130	44	ug/L			11/09/16 17:14	125
Chlorobenzene	130	U	130	40	ug/L			11/09/16 17:14	125
Chloroethane	130	U	130	51	ug/L			11/09/16 17:14	125
Chloroform	130	U	130	39	ug/L			11/09/16 17:14	125
Chloromethane	130	U	130	54	ug/L			11/09/16 17:14	125
1,1-Dichloroethane	130	U	130	31	ug/L			11/09/16 17:14	125
1,2-Dichloroethane	130	U	130	38	ug/L			11/09/16 17:14	125
1,1-Dichloroethene	130	U	130	34	ug/L			11/09/16 17:14	125
1,2-Dichloropropane	130	U	130	38	ug/L			11/09/16 17:14	125
cis-1,3-Dichloropropene	130	U	130	33	ug/L			11/09/16 17:14	125
trans-1,3-Dichloropropene	130	U	130	39	ug/L			11/09/16 17:14	125
Ethylbenzene	130	U	130	33	ug/L			11/09/16 17:14	125
2-Hexanone	1300	U	1300	150	ug/L			11/09/16 17:14	125
Methylene Chloride	630	U	630	66	ug/L			11/09/16 17:14	125
4-Methyl-2-pentanone (MIBK)	1300	U	1300	89	ug/L			11/09/16 17:14	125
Styrene	130	U	130	29	ug/L			11/09/16 17:14	125
1,1,2,2-Tetrachloroethane	130	U	130	40	ug/L			11/09/16 17:14	125
Tetrachloroethene	130	U	130	38	ug/L			11/09/16 17:14	125
Toluene	130	U	130	29	ug/L			11/09/16 17:14	125
Trichloroethene	130	U	130	41	ug/L			11/09/16 17:14	125
Vinyl chloride	**1900**		130	56	ug/L			11/09/16 17:14	125
Xylenes, Total	250	U	250	30	ug/L			11/09/16 17:14	125
1,1,1-Trichloroethane	130	U	130	29	ug/L			11/09/16 17:14	125
1,1,2-Trichloroethane	130	U	130	43	ug/L			11/09/16 17:14	125
Cyclohexane	130	U	130	55	ug/L			11/09/16 17:14	125
1,2-Dibromo-3-Chloropropane	130	U	130	59	ug/L			11/09/16 17:14	125
1,2-Dibromoethane	130	U	130	29	ug/L			11/09/16 17:14	125
Dichlorodifluoromethane	130	U	130	63	ug/L			11/09/16 17:14	125
cis-1,2-Dichloroethene	**1200**		130	38	ug/L			11/09/16 17:14	125
trans-1,2-Dichloroethene	**61**	**J**	130	36	ug/L			11/09/16 17:14	125
Isopropylbenzene	130	U	130	26	ug/L			11/09/16 17:14	125
Methyl acetate	1300	U *	1300	180	ug/L			11/09/16 17:14	125
Methyl tert-butyl ether	130	U	130	34	ug/L			11/09/16 17:14	125
1,1,2-Trichloro-1,2,2-trifluoroethane	130	U	130	51	ug/L			11/09/16 17:14	125
1,2,4-Trichlorobenzene	130	U	130	34	ug/L			11/09/16 17:14	125
1,2-Dichlorobenzene	130	U	130	33	ug/L			11/09/16 17:14	125
1,3-Dichlorobenzene	130	U	130	40	ug/L			11/09/16 17:14	125
1,4-Dichlorobenzene	130	U	130	29	ug/L			11/09/16 17:14	125
Trichlorofluoromethane	130	U	130	63	ug/L			11/09/16 17:14	125
Dibromochloromethane	130	U	130	31	ug/L			11/09/16 17:14	125
Methylcyclohexane	130	U	130	56	ug/L			11/09/16 17:14	125

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 132		11/09/16 17:14	125
4-Bromofluorobenzene (Surr)	82		73 - 120		11/09/16 17:14	125
Toluene-d8 (Surr)	84		73 - 124		11/09/16 17:14	125
Dibromofluoromethane (Surr)	89		80 - 120		11/09/16 17:14	125

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

Client Sample ID: GW-17303-110116-DS-047
Date Collected: 11/01/16 09:35
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/09/16 17:37	1
Benzene	**1.4**		1.0	0.28	ug/L			11/09/16 17:37	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/09/16 17:37	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/09/16 17:37	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/09/16 17:37	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/09/16 17:37	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/09/16 17:37	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/09/16 17:37	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 17:37	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/09/16 17:37	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/09/16 17:37	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/09/16 17:37	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/09/16 17:37	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/09/16 17:37	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/09/16 17:37	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/09/16 17:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/09/16 17:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/09/16 17:37	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/09/16 17:37	1
2-Hexanone	10	U	10	1.2	ug/L			11/09/16 17:37	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/09/16 17:37	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/09/16 17:37	1
Styrene	1.0	U	1.0	0.23	ug/L			11/09/16 17:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/09/16 17:37	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 17:37	1
Toluene	1.0	U	1.0	0.23	ug/L			11/09/16 17:37	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/09/16 17:37	1
Vinyl chloride	**2.2**		1.0	0.45	ug/L			11/09/16 17:37	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/09/16 17:37	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/09/16 17:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/09/16 17:37	1
Cyclohexane	**0.73**	**J**	1.0	0.44	ug/L			11/09/16 17:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/09/16 17:37	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/09/16 17:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 17:37	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.30	ug/L			11/09/16 17:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/09/16 17:37	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/09/16 17:37	1
Methyl acetate	10	U *	10	1.4	ug/L			11/09/16 17:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/09/16 17:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/09/16 17:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/09/16 17:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/09/16 17:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 17:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/09/16 17:37	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 17:37	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/09/16 17:37	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/09/16 17:37	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		63 - 132		11/09/16 17:37	1
4-Bromofluorobenzene (Surr)	84		73 - 120		11/09/16 17:37	1
Toluene-d8 (Surr)	85		73 - 124		11/09/16 17:37	1
Dibromofluoromethane (Surr)	90		80 - 120		11/09/16 17:37	1

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

Client Sample ID: GW-17303-110116-DS-048
Date Collected: 11/01/16 10:35
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	17	U *	17	2.9	ug/L			11/09/16 18:00	1.67
Benzene	1.7	U	1.7	0.47	ug/L			11/09/16 18:00	1.67
Bromodichloromethane	1.7	U	1.7	0.50	ug/L			11/09/16 18:00	1.67
Bromoform	1.7	U	1.7	0.72	ug/L			11/09/16 18:00	1.67
Bromomethane	1.7	U	1.7	0.70	ug/L			11/09/16 18:00	1.67
2-Butanone (MEK)	17	U	17	1.7	ug/L			11/09/16 18:00	1.67
Carbon disulfide	8.4	U	8.4	0.57	ug/L			11/09/16 18:00	1.67
Carbon tetrachloride	1.7	U	1.7	0.58	ug/L			11/09/16 18:00	1.67
Chlorobenzene	1.7	U	1.7	0.53	ug/L			11/09/16 18:00	1.67
Chloroethane	1.7	U	1.7	0.68	ug/L			11/09/16 18:00	1.67
Chloroform	1.7	U	1.7	0.52	ug/L			11/09/16 18:00	1.67
Chloromethane	1.7	U	1.7	0.72	ug/L			11/09/16 18:00	1.67
1,1-Dichloroethane	1.7	U	1.7	0.42	ug/L			11/09/16 18:00	1.67
1,2-Dichloroethane	1.7	U	1.7	0.50	ug/L			11/09/16 18:00	1.67
1,1-Dichloroethene	1.7	U	1.7	0.45	ug/L			11/09/16 18:00	1.67
1,2-Dichloropropane	1.7	U	1.7	0.50	ug/L			11/09/16 18:00	1.67
cis-1,3-Dichloropropene	1.7	U	1.7	0.43	ug/L			11/09/16 18:00	1.67
trans-1,3-Dichloropropene	1.7	U	1.7	0.52	ug/L			11/09/16 18:00	1.67
Ethylbenzene	1.7	U	1.7	0.43	ug/L			11/09/16 18:00	1.67
2-Hexanone	17	U	17	2.1	ug/L			11/09/16 18:00	1.67
Methylene Chloride	8.4	U	8.4	0.89	ug/L			11/09/16 18:00	1.67
4-Methyl-2-pentanone (MIBK)	17	U	17	1.2	ug/L			11/09/16 18:00	1.67
Styrene	1.7	U	1.7	0.38	ug/L			11/09/16 18:00	1.67
1,1,2,2-Tetrachloroethane	1.7	U	1.7	0.53	ug/L			11/09/16 18:00	1.67
Tetrachloroethene	1.7	U	1.7	0.50	ug/L			11/09/16 18:00	1.67
Toluene	1.7	U	1.7	0.38	ug/L			11/09/16 18:00	1.67
Trichloroethene	**14**		1.7	0.55	ug/L			11/09/16 18:00	1.67
Vinyl chloride	**28**		1.7	0.75	ug/L			11/09/16 18:00	1.67
Xylenes, Total	**1.2**	**J**	3.3	0.40	ug/L			11/09/16 18:00	1.67
1,1,1-Trichloroethane	1.7	U	1.7	0.38	ug/L			11/09/16 18:00	1.67
1,1,2-Trichloroethane	1.7	U	1.7	0.57	ug/L			11/09/16 18:00	1.67
Cyclohexane	1.7	U	1.7	0.73	ug/L			11/09/16 18:00	1.67
1,2-Dibromo-3-Chloropropane	1.7	U	1.7	0.78	ug/L			11/09/16 18:00	1.67
1,2-Dibromoethane	1.7	U	1.7	0.38	ug/L			11/09/16 18:00	1.67
Dichlorodifluoromethane	1.7	U	1.7	0.84	ug/L			11/09/16 18:00	1.67
cis-1,2-Dichloroethene	**46**		1.7	0.50	ug/L			11/09/16 18:00	1.67
trans-1,2-Dichloroethene	**0.81**	**J**	1.7	0.48	ug/L			11/09/16 18:00	1.67
Isopropylbenzene	1.7	U	1.7	0.35	ug/L			11/09/16 18:00	1.67
Methyl acetate	17	U *	17	2.4	ug/L			11/09/16 18:00	1.67
Methyl tert-butyl ether	1.7	U	1.7	0.45	ug/L			11/09/16 18:00	1.67
1,1,2-Trichloro-1,2,2-trifluoroethane	1.7	U	1.7	0.68	ug/L			11/09/16 18:00	1.67
1,2,4-Trichlorobenzene	1.7	U	1.7	0.45	ug/L			11/09/16 18:00	1.67
1,2-Dichlorobenzene	1.7	U	1.7	0.43	ug/L			11/09/16 18:00	1.67
1,3-Dichlorobenzene	1.7	U	1.7	0.53	ug/L			11/09/16 18:00	1.67
1,4-Dichlorobenzene	**1.1**	**J**	1.7	0.38	ug/L			11/09/16 18:00	1.67
Trichlorofluoromethane	1.7	U	1.7	0.84	ug/L			11/09/16 18:00	1.67
Dibromochloromethane	1.7	U	1.7	0.42	ug/L			11/09/16 18:00	1.67
Methylcyclohexane	1.7	U	1.7	0.75	ug/L			11/09/16 18:00	1.67

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 132		11/09/16 18:00	1.67
4-Bromofluorobenzene (Surr)	85		73 - 120		11/09/16 18:00	1.67
Toluene-d8 (Surr)	85		73 - 124		11/09/16 18:00	1.67
Dibromofluoromethane (Surr)	90		80 - 120		11/09/16 18:00	1.67

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

Client Sample ID: GW-17303-110116-DS-049
Date Collected: 11/01/16 11:30
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5000	U *	5000	880	ug/L			11/09/16 18:23	500
Benzene	500	U	500	140	ug/L			11/09/16 18:23	500
Bromodichloromethane	500	U	500	150	ug/L			11/09/16 18:23	500
Bromoform	500	U	500	220	ug/L			11/09/16 18:23	500
Bromomethane	500	U	500	210	ug/L			11/09/16 18:23	500
2-Butanone (MEK)	5000	U	5000	510	ug/L			11/09/16 18:23	500
Carbon disulfide	2500	U	2500	170	ug/L			11/09/16 18:23	500
Carbon tetrachloride	500	U	500	180	ug/L			11/09/16 18:23	500
Chlorobenzene	500	U	500	160	ug/L			11/09/16 18:23	500
Chloroethane	500	U	500	210	ug/L			11/09/16 18:23	500
Chloroform	500	U	500	160	ug/L			11/09/16 18:23	500
Chloromethane	500	U	500	220	ug/L			11/09/16 18:23	500
1,1-Dichloroethane	500	U	500	130	ug/L			11/09/16 18:23	500
1,2-Dichloroethane	500	U	500	150	ug/L			11/09/16 18:23	500
1,1-Dichloroethene	500	U	500	140	ug/L			11/09/16 18:23	500
1,2-Dichloropropane	500	U	500	150	ug/L			11/09/16 18:23	500
cis-1,3-Dichloropropene	500	U	500	130	ug/L			11/09/16 18:23	500
trans-1,3-Dichloropropene	500	U	500	160	ug/L			11/09/16 18:23	500
Ethylbenzene	500	U	500	130	ug/L			11/09/16 18:23	500
2-Hexanone	5000	U	5000	620	ug/L			11/09/16 18:23	500
Methylene Chloride	2500	U	2500	270	ug/L			11/09/16 18:23	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	360	ug/L			11/09/16 18:23	500
Styrene	500	U	500	120	ug/L			11/09/16 18:23	500
1,1,2,2-Tetrachloroethane	500	U	500	160	ug/L			11/09/16 18:23	500
Tetrachloroethene	500	U	500	150	ug/L			11/09/16 18:23	500
Toluene	500	U	500	120	ug/L			11/09/16 18:23	500
Trichloroethene	500	U	500	170	ug/L			11/09/16 18:23	500
Vinyl chloride	**9100**		500	230	ug/L			11/09/16 18:23	500
Xylenes, Total	1000	U	1000	120	ug/L			11/09/16 18:23	500
1,1,1-Trichloroethane	500	U	500	120	ug/L			11/09/16 18:23	500
1,1,2-Trichloroethane	500	U	500	170	ug/L			11/09/16 18:23	500
Cyclohexane	500	U	500	220	ug/L			11/09/16 18:23	500
1,2-Dibromo-3-Chloropropane	500	U	500	240	ug/L			11/09/16 18:23	500
1,2-Dibromoethane	500	U	500	120	ug/L			11/09/16 18:23	500
Dichlorodifluoromethane	500	U	500	250	ug/L			11/09/16 18:23	500
cis-1,2-Dichloroethene	500	U	500	150	ug/L			11/09/16 18:23	500
trans-1,2-Dichloroethene	500	U	500	150	ug/L			11/09/16 18:23	500
Isopropylbenzene	500	U	500	110	ug/L			11/09/16 18:23	500
Methyl acetate	5000	U *	5000	720	ug/L			11/09/16 18:23	500
Methyl tert-butyl ether	500	U	500	140	ug/L			11/09/16 18:23	500
1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	210	ug/L			11/09/16 18:23	500
1,2,4-Trichlorobenzene	500	U	500	140	ug/L			11/09/16 18:23	500
1,2-Dichlorobenzene	500	U	500	130	ug/L			11/09/16 18:23	500
1,3-Dichlorobenzene	500	U	500	160	ug/L			11/09/16 18:23	500
1,4-Dichlorobenzene	500	U	500	120	ug/L			11/09/16 18:23	500
Trichlorofluoromethane	500	U	500	250	ug/L			11/09/16 18:23	500
Dibromochloromethane	500	U	500	130	ug/L			11/09/16 18:23	500
Methylcyclohexane	500	U	500	230	ug/L			11/09/16 18:23	500

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		63 - 132		11/09/16 18:23	500
4-Bromofluorobenzene (Surr)	87		73 - 120		11/09/16 18:23	500
Toluene-d8 (Surr)	85		73 - 124		11/09/16 18:23	500
Dibromofluoromethane (Surr)	93		80 - 120		11/09/16 18:23	500

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

Client Sample ID: GW-17303-110116-DS-050
Date Collected: 11/01/16 12:15
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U	20	3.5	ug/L			11/11/16 13:48	2
Benzene	**6.0**		2.0	0.56	ug/L			11/11/16 13:48	2
Bromodichloromethane	2.0	U	2.0	0.60	ug/L			11/11/16 13:48	2
Bromoform	2.0	U	2.0	0.86	ug/L			11/11/16 13:48	2
Bromomethane	2.0	U	2.0	0.84	ug/L			11/11/16 13:48	2
2-Butanone (MEK)	20	U	20	2.0	ug/L			11/11/16 13:48	2
Carbon disulfide	10	U	10	0.68	ug/L			11/11/16 13:48	2
Carbon tetrachloride	2.0	U	2.0	0.70	ug/L			11/11/16 13:48	2
Chlorobenzene	2.0	U	2.0	0.64	ug/L			11/11/16 13:48	2
Chloroethane	2.0	U	2.0	0.82	ug/L			11/11/16 13:48	2
Chloroform	2.0	U	2.0	0.62	ug/L			11/11/16 13:48	2
Chloromethane	2.0	U	2.0	0.86	ug/L			11/11/16 13:48	2
1,1-Dichloroethane	2.0	U	2.0	0.50	ug/L			11/11/16 13:48	2
1,2-Dichloroethane	2.0	U	2.0	0.60	ug/L			11/11/16 13:48	2
1,1-Dichloroethene	2.0	U	2.0	0.54	ug/L			11/11/16 13:48	2
1,2-Dichloropropane	2.0	U	2.0	0.60	ug/L			11/11/16 13:48	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.52	ug/L			11/11/16 13:48	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.62	ug/L			11/11/16 13:48	2
Ethylbenzene	2.0	U	2.0	0.52	ug/L			11/11/16 13:48	2
2-Hexanone	20	U	20	2.5	ug/L			11/11/16 13:48	2
Methylene Chloride	10	U	10	1.1	ug/L			11/11/16 13:48	2
4-Methyl-2-pentanone (MIBK)	20	U	20	1.4	ug/L			11/11/16 13:48	2
Styrene	2.0	U	2.0	0.46	ug/L			11/11/16 13:48	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.64	ug/L			11/11/16 13:48	2
Tetrachloroethene	2.0	U	2.0	0.60	ug/L			11/11/16 13:48	2
Toluene	2.0	U	2.0	0.46	ug/L			11/11/16 13:48	2
Trichloroethene	**0.70**	**J**	2.0	0.66	ug/L			11/11/16 13:48	2
Vinyl chloride	**33**		2.0	0.90	ug/L			11/11/16 13:48	2
Xylenes, Total	4.0	U	4.0	0.48	ug/L			11/11/16 13:48	2
1,1,1-Trichloroethane	2.0	U	2.0	0.46	ug/L			11/11/16 13:48	2
1,1,2-Trichloroethane	2.0	U	2.0	0.68	ug/L			11/11/16 13:48	2
Cyclohexane	2.0	U	2.0	0.88	ug/L			11/11/16 13:48	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.94	ug/L			11/11/16 13:48	2
1,2-Dibromoethane	2.0	U	2.0	0.46	ug/L			11/11/16 13:48	2
Dichlorodifluoromethane	2.0	U	2.0	1.0	ug/L			11/11/16 13:48	2
cis-1,2-Dichloroethene	**5.2**		2.0	0.60	ug/L			11/11/16 13:48	2
trans-1,2-Dichloroethene	**0.64**	**J**	2.0	0.58	ug/L			11/11/16 13:48	2
Isopropylbenzene	2.0	U	2.0	0.42	ug/L			11/11/16 13:48	2
Methyl acetate	20	U	20	2.9	ug/L			11/11/16 13:48	2
Methyl tert-butyl ether	2.0	U	2.0	0.54	ug/L			11/11/16 13:48	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.82	ug/L			11/11/16 13:48	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.54	ug/L			11/11/16 13:48	2
1,2-Dichlorobenzene	2.0	U	2.0	0.52	ug/L			11/11/16 13:48	2
1,3-Dichlorobenzene	2.0	U	2.0	0.64	ug/L			11/11/16 13:48	2
1,4-Dichlorobenzene	2.0	U	2.0	0.46	ug/L			11/11/16 13:48	2
Trichlorofluoromethane	2.0	U *	2.0	1.0	ug/L			11/11/16 13:48	2
Dibromochloromethane	2.0	U	2.0	0.50	ug/L			11/11/16 13:48	2
Methylcyclohexane	2.0	U	2.0	0.90	ug/L			11/11/16 13:48	2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		63 - 132		11/11/16 13:48	2
4-Bromofluorobenzene (Surr)	105		73 - 120		11/11/16 13:48	2
Toluene-d8 (Surr)	100		73 - 124		11/11/16 13:48	2
Dibromofluoromethane (Surr)	104		80 - 120		11/11/16 13:48	2

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

Client Sample ID: GW-17303-110116-DS-051
Date Collected: 11/01/16 12:50
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-19
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U *	10	1.8	ug/L			11/09/16 19:09	1
Benzene	1.0	U	1.0	0.28	ug/L			11/09/16 19:09	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/09/16 19:09	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/09/16 19:09	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/09/16 19:09	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/09/16 19:09	1
Carbon disulfide	**1.7**	**J**	5.0	0.34	ug/L			11/09/16 19:09	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/09/16 19:09	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 19:09	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/09/16 19:09	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/09/16 19:09	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/09/16 19:09	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/09/16 19:09	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/09/16 19:09	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/09/16 19:09	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/09/16 19:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/09/16 19:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/09/16 19:09	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/09/16 19:09	1
2-Hexanone	10	U	10	1.2	ug/L			11/09/16 19:09	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/09/16 19:09	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/09/16 19:09	1
Styrene	1.0	U	1.0	0.23	ug/L			11/09/16 19:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/09/16 19:09	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 19:09	1
Toluene	1.0	U	1.0	0.23	ug/L			11/09/16 19:09	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/09/16 19:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/09/16 19:09	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/09/16 19:09	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/09/16 19:09	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/09/16 19:09	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/09/16 19:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/09/16 19:09	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/09/16 19:09	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 19:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 19:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/09/16 19:09	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/09/16 19:09	1
Methyl acetate	10	U *	10	1.4	ug/L			11/09/16 19:09	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/09/16 19:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/09/16 19:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/09/16 19:09	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/09/16 19:09	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 19:09	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/09/16 19:09	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 19:09	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/09/16 19:09	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/09/16 19:09	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/09/16 19:09	1
4-Bromofluorobenzene (Surr)	87		73 - 120		11/09/16 19:09	1
Toluene-d8 (Surr)	86		73 - 124		11/09/16 19:09	1
Dibromofluoromethane (Surr)	92		80 - 120		11/09/16 19:09	1

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

Client Sample ID: GW-17303-110116-DS-052
Date Collected: 11/01/16 13:55
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-20
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	33	U *	33	5.9	ug/L			11/09/16 19:32	3.33
Benzene	**1.6**	**J**	3.3	0.93	ug/L			11/09/16 19:32	3.33
Bromodichloromethane	3.3	U	3.3	1.0	ug/L			11/09/16 19:32	3.33
Bromoform	3.3	U	3.3	1.4	ug/L			11/09/16 19:32	3.33
Bromomethane	3.3	U	3.3	1.4	ug/L			11/09/16 19:32	3.33
2-Butanone (MEK)	33	U	33	3.4	ug/L			11/09/16 19:32	3.33
Carbon disulfide	17	U	17	1.1	ug/L			11/09/16 19:32	3.33
Carbon tetrachloride	3.3	U	3.3	1.2	ug/L			11/09/16 19:32	3.33
Chlorobenzene	3.3	U	3.3	1.1	ug/L			11/09/16 19:32	3.33
Chloroethane	3.3	U	3.3	1.4	ug/L			11/09/16 19:32	3.33
Chloroform	3.3	U	3.3	1.0	ug/L			11/09/16 19:32	3.33
Chloromethane	3.3	U	3.3	1.4	ug/L			11/09/16 19:32	3.33
1,1-Dichloroethane	3.3	U	3.3	0.83	ug/L			11/09/16 19:32	3.33
1,2-Dichloroethane	3.3	U	3.3	1.0	ug/L			11/09/16 19:32	3.33
1,1-Dichloroethene	3.3	U	3.3	0.90	ug/L			11/09/16 19:32	3.33
1,2-Dichloropropane	3.3	U	3.3	1.0	ug/L			11/09/16 19:32	3.33
cis-1,3-Dichloropropene	3.3	U	3.3	0.87	ug/L			11/09/16 19:32	3.33
trans-1,3-Dichloropropene	3.3	U	3.3	1.0	ug/L			11/09/16 19:32	3.33
Ethylbenzene	3.3	U	3.3	0.87	ug/L			11/09/16 19:32	3.33
2-Hexanone	33	U	33	4.1	ug/L			11/09/16 19:32	3.33
Methylene Chloride	17	U	17	1.8	ug/L			11/09/16 19:32	3.33
4-Methyl-2-pentanone (MIBK)	33	U	33	2.4	ug/L			11/09/16 19:32	3.33
Styrene	3.3	U	3.3	0.77	ug/L			11/09/16 19:32	3.33
1,1,2,2-Tetrachloroethane	3.3	U	3.3	1.1	ug/L			11/09/16 19:32	3.33
Tetrachloroethene	3.3	U	3.3	1.0	ug/L			11/09/16 19:32	3.33
Toluene	3.3	U	3.3	0.77	ug/L			11/09/16 19:32	3.33
Trichloroethene	3.3	U	3.3	1.1	ug/L			11/09/16 19:32	3.33
Vinyl chloride	**50**		3.3	1.5	ug/L			11/09/16 19:32	3.33
Xylenes, Total	6.7	U	6.7	0.80	ug/L			11/09/16 19:32	3.33
1,1,1-Trichloroethane	3.3	U	3.3	0.77	ug/L			11/09/16 19:32	3.33
1,1,2-Trichloroethane	3.3	U	3.3	1.1	ug/L			11/09/16 19:32	3.33
Cyclohexane	3.3	U	3.3	1.5	ug/L			11/09/16 19:32	3.33
1,2-Dibromo-3-Chloropropane	3.3	U	3.3	1.6	ug/L			11/09/16 19:32	3.33
1,2-Dibromoethane	3.3	U	3.3	0.77	ug/L			11/09/16 19:32	3.33
Dichlorodifluoromethane	3.3	U	3.3	1.7	ug/L			11/09/16 19:32	3.33
cis-1,2-Dichloroethene	**20**		3.3	1.0	ug/L			11/09/16 19:32	3.33
trans-1,2-Dichloroethene	**2.5**	**J**	3.3	0.97	ug/L			11/09/16 19:32	3.33
Isopropylbenzene	3.3	U	3.3	0.70	ug/L			11/09/16 19:32	3.33
Methyl acetate	33	U *	33	4.8	ug/L			11/09/16 19:32	3.33
Methyl tert-butyl ether	3.3	U	3.3	0.90	ug/L			11/09/16 19:32	3.33
1,1,2-Trichloro-1,2,2-trifluoroethane	3.3	U	3.3	1.4	ug/L			11/09/16 19:32	3.33
1,2,4-Trichlorobenzene	3.3	U	3.3	0.90	ug/L			11/09/16 19:32	3.33
1,2-Dichlorobenzene	3.3	U	3.3	0.87	ug/L			11/09/16 19:32	3.33
1,3-Dichlorobenzene	3.3	U	3.3	1.1	ug/L			11/09/16 19:32	3.33
1,4-Dichlorobenzene	3.3	U	3.3	0.77	ug/L			11/09/16 19:32	3.33
Trichlorofluoromethane	3.3	U	3.3	1.7	ug/L			11/09/16 19:32	3.33
Dibromochloromethane	3.3	U	3.3	0.83	ug/L			11/09/16 19:32	3.33
Methylcyclohexane	3.3	U	3.3	1.5	ug/L			11/09/16 19:32	3.33

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		63 - 132		11/09/16 19:32	3.33
4-Bromofluorobenzene (Surr)	87		73 - 120		11/09/16 19:32	3.33
Toluene-d8 (Surr)	85		73 - 124		11/09/16 19:32	3.33
Dibromofluoromethane (Surr)	91		80 - 120		11/09/16 19:32	3.33

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

Client Sample ID: GW-17303-110116-DS-053
Date Collected: 11/01/16 14:55
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-21
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2500	U *	2500	440	ug/L			11/09/16 19:55	250
Benzene	250	U	250	70	ug/L			11/09/16 19:55	250
Bromodichloromethane	250	U	250	75	ug/L			11/09/16 19:55	250
Bromoform	250	U	250	110	ug/L			11/09/16 19:55	250
Bromomethane	250	U	250	110	ug/L			11/09/16 19:55	250
2-Butanone (MEK)	2500	U	2500	260	ug/L			11/09/16 19:55	250
Carbon disulfide	1300	U	1300	85	ug/L			11/09/16 19:55	250
Carbon tetrachloride	250	U	250	88	ug/L			11/09/16 19:55	250
Chlorobenzene	250	U	250	80	ug/L			11/09/16 19:55	250
Chloroethane	250	U	250	100	ug/L			11/09/16 19:55	250
Chloroform	250	U	250	78	ug/L			11/09/16 19:55	250
Chloromethane	250	U	250	110	ug/L			11/09/16 19:55	250
1,1-Dichloroethane	250	U	250	63	ug/L			11/09/16 19:55	250
1,2-Dichloroethane	250	U	250	75	ug/L			11/09/16 19:55	250
1,1-Dichloroethene	250	U	250	68	ug/L			11/09/16 19:55	250
1,2-Dichloropropane	250	U	250	75	ug/L			11/09/16 19:55	250
cis-1,3-Dichloropropene	250	U	250	65	ug/L			11/09/16 19:55	250
trans-1,3-Dichloropropene	250	U	250	78	ug/L			11/09/16 19:55	250
Ethylbenzene	250	U	250	65	ug/L			11/09/16 19:55	250
2-Hexanone	2500	U	2500	310	ug/L			11/09/16 19:55	250
Methylene Chloride	1300	U	1300	130	ug/L			11/09/16 19:55	250
4-Methyl-2-pentanone (MIBK)	2500	U	2500	180	ug/L			11/09/16 19:55	250
Styrene	250	U	250	58	ug/L			11/09/16 19:55	250
1,1,2,2-Tetrachloroethane	250	U	250	80	ug/L			11/09/16 19:55	250
Tetrachloroethene	250	U	250	75	ug/L			11/09/16 19:55	250
Toluene	250	U	250	58	ug/L			11/09/16 19:55	250
Trichloroethene	250	U	250	83	ug/L			11/09/16 19:55	250
Vinyl chloride	**5000**		250	110	ug/L			11/09/16 19:55	250
Xylenes, Total	500	U	500	60	ug/L			11/09/16 19:55	250
1,1,1-Trichloroethane	250	U	250	58	ug/L			11/09/16 19:55	250
1,1,2-Trichloroethane	250	U	250	85	ug/L			11/09/16 19:55	250
Cyclohexane	250	U	250	110	ug/L			11/09/16 19:55	250
1,2-Dibromo-3-Chloropropane	250	U	250	120	ug/L			11/09/16 19:55	250
1,2-Dibromoethane	250	U	250	58	ug/L			11/09/16 19:55	250
Dichlorodifluoromethane	250	U	250	130	ug/L			11/09/16 19:55	250
cis-1,2-Dichloroethene	**100**	**J**	250	75	ug/L			11/09/16 19:55	250
trans-1,2-Dichloroethene	250	U	250	73	ug/L			11/09/16 19:55	250
Isopropylbenzene	250	U	250	53	ug/L			11/09/16 19:55	250
Methyl acetate	2500	U *	2500	360	ug/L			11/09/16 19:55	250
Methyl tert-butyl ether	250	U	250	68	ug/L			11/09/16 19:55	250
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	100	ug/L			11/09/16 19:55	250
1,2,4-Trichlorobenzene	250	U	250	68	ug/L			11/09/16 19:55	250
1,2-Dichlorobenzene	250	U	250	65	ug/L			11/09/16 19:55	250
1,3-Dichlorobenzene	250	U	250	80	ug/L			11/09/16 19:55	250
1,4-Dichlorobenzene	250	U	250	58	ug/L			11/09/16 19:55	250
Trichlorofluoromethane	250	U	250	130	ug/L			11/09/16 19:55	250
Dibromochloromethane	250	U	250	63	ug/L			11/09/16 19:55	250
Methylcyclohexane	250	U	250	110	ug/L			11/09/16 19:55	250

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 132		11/09/16 19:55	250
4-Bromofluorobenzene (Surr)	85		73 - 120		11/09/16 19:55	250
Toluene-d8 (Surr)	86		73 - 124		11/09/16 19:55	250
Dibromofluoromethane (Surr)	92		80 - 120		11/09/16 19:55	250

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

Client Sample ID: TRIP BLANK
Date Collected: 10/31/16 00:00
Date Received: 11/02/16 09:20

Lab Sample ID: 240-71561-22
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.0**	**J**	10	1.8	ug/L			11/10/16 14:55	1
Benzene	1.0	U	1.0	0.28	ug/L			11/10/16 14:55	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/10/16 14:55	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/10/16 14:55	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/10/16 14:55	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/10/16 14:55	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/10/16 14:55	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/10/16 14:55	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/10/16 14:55	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/10/16 14:55	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/10/16 14:55	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/10/16 14:55	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/10/16 14:55	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/10/16 14:55	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/10/16 14:55	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/10/16 14:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/10/16 14:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/10/16 14:55	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/10/16 14:55	1
2-Hexanone	10	U	10	1.2	ug/L			11/10/16 14:55	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/10/16 14:55	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/10/16 14:55	1
Styrene	1.0	U	1.0	0.23	ug/L			11/10/16 14:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/10/16 14:55	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/10/16 14:55	1
Toluene	1.0	U	1.0	0.23	ug/L			11/10/16 14:55	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/10/16 14:55	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/10/16 14:55	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/10/16 14:55	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/10/16 14:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/10/16 14:55	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/10/16 14:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/10/16 14:55	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/10/16 14:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/10/16 14:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/10/16 14:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/10/16 14:55	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/10/16 14:55	1
Methyl acetate	10	U	10	1.4	ug/L			11/10/16 14:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/10/16 14:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/10/16 14:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/10/16 14:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/10/16 14:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/10/16 14:55	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/10/16 14:55	1
Trichlorofluoromethane	1.0	U *	1.0	0.50	ug/L			11/10/16 14:55	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/10/16 14:55	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/10/16 14:55	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		63 - 132		11/10/16 14:55	1
4-Bromofluorobenzene (Surr)	100		73 - 120		11/10/16 14:55	1
Toluene-d8 (Surr)	98		73 - 124		11/10/16 14:55	1
Dibromofluoromethane (Surr)	105		80 - 120		11/10/16 14:55	1

GC/MS VOA

Analysis Batch: 254811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71561-1	GW-17303-103116-DS-033	Total/NA	Water	8260B	
240-71561-2	GW-17303-103116-DS-034	Total/NA	Water	8260B	
MB 240-254811/6	Method Blank	Total/NA	Water	8260B	
LCS 240-254811/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 254909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71561-3	GW-17303-103116-DS-035	Total/NA	Water	8260B	
240-71561-4	GW-17303-103116-DS-036	Total/NA	Water	8260B	
240-71561-5	GW-17303-103116-DS-037	Total/NA	Water	8260B	
240-71561-6	GW-17303-103116-DS-038	Total/NA	Water	8260B	
240-71561-7	GW-17303-103116-DS-039	Total/NA	Water	8260B	
240-71561-8	GW-17303-103116-DS-040	Total/NA	Water	8260B	
240-71561-9	GW-17303-103116-DS-041	Total/NA	Water	8260B	
240-71561-10	GW-17303-103116-DS-042	Total/NA	Water	8260B	
240-71561-11	GW-17303-103116-DS-043	Total/NA	Water	8260B	
240-71561-12	GW-17303-103116-DS-044	Total/NA	Water	8260B	
240-71561-13	GW-17303-103116-DS-045	Total/NA	Water	8260B	
240-71561-14	GW-17303-103116-DS-046	Total/NA	Water	8260B	
240-71561-15	GW-17303-110116-DS-047	Total/NA	Water	8260B	
240-71561-16	GW-17303-110116-DS-048	Total/NA	Water	8260B	
240-71561-17	GW-17303-110116-DS-049	Total/NA	Water	8260B	
240-71561-19	GW-17303-110116-DS-051	Total/NA	Water	8260B	
240-71561-20	GW-17303-110116-DS-052	Total/NA	Water	8260B	
240-71561-21	GW-17303-110116-DS-053	Total/NA	Water	8260B	
MB 240-254909/8	Method Blank	Total/NA	Water	8260B	
LCS 240-254909/5	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 255101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71561-22	TRIP BLANK	Total/NA	Water	8260B	
MB 240-255101/6	Method Blank	Total/NA	Water	8260B	
LCS 240-255101/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 255330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71561-18	GW-17303-110116-DS-050	Total/NA	Water	8260B	
MB 240-255330/6	Method Blank	Total/NA	Water	8260B	
LCS 240-255330/4	Lab Control Sample	Total/NA	Water	8260B	

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

Lab Sample ID: MB 240-254811/6
Matrix: Water
Analysis Batch: 254811

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			11/08/16 15:48	1
Benzene	1.0	U	1.0	0.28	ug/L			11/08/16 15:48	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/08/16 15:48	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/08/16 15:48	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/08/16 15:48	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/08/16 15:48	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/08/16 15:48	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/08/16 15:48	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 15:48	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/08/16 15:48	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/08/16 15:48	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/08/16 15:48	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/08/16 15:48	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/08/16 15:48	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/08/16 15:48	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/08/16 15:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/08/16 15:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/08/16 15:48	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/08/16 15:48	1
2-Hexanone	10	U	10	1.2	ug/L			11/08/16 15:48	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/08/16 15:48	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/08/16 15:48	1
Styrene	1.0	U	1.0	0.23	ug/L			11/08/16 15:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/08/16 15:48	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 15:48	1
Toluene	1.0	U	1.0	0.23	ug/L			11/08/16 15:48	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/08/16 15:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/16 15:48	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/08/16 15:48	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/08/16 15:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/08/16 15:48	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/08/16 15:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/08/16 15:48	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/08/16 15:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 15:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/08/16 15:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/08/16 15:48	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/08/16 15:48	1
Methyl acetate	10	U	10	1.4	ug/L			11/08/16 15:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/08/16 15:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/08/16 15:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/08/16 15:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/08/16 15:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/08/16 15:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/08/16 15:48	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/08/16 15:48	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/08/16 15:48	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/08/16 15:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 132*		*11/08/16 15:48*	*1*
4-Bromofluorobenzene (Surr)	*74*		*73 - 120*		*11/08/16 15:48*	*1*
Toluene-d8 (Surr)	*86*		*73 - 124*		*11/08/16 15:48*	*1*
Dibromofluoromethane (Surr)	*87*		*80 - 120*		*11/08/16 15:48*	*1*

Lab Sample ID: LCS 240-254811/4
Matrix: Water
Analysis Batch: 254811

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	25.9	*	ug/L		130	46 - 120
Benzene	10.0	9.98		ug/L		100	80 - 120
Bromodichloromethane	10.0	9.83		ug/L		98	76 - 125
Bromoform	10.0	8.33		ug/L		83	52 - 157
Bromomethane	10.0	6.26		ug/L		63	24 - 160
2-Butanone (MEK)	20.0	26.2	*	ug/L		131	54 - 122
Carbon disulfide	10.0	9.87		ug/L		99	58 - 160
Carbon tetrachloride	10.0	9.63		ug/L		96	69 - 149
Chlorobenzene	10.0	9.63		ug/L		96	80 - 120
Chloroethane	10.0	5.06		ug/L		51	24 - 147
Chloroform	10.0	10.4		ug/L		104	80 - 120
Chloromethane	10.0	11.4		ug/L		114	50 - 135
1,1-Dichloroethane	10.0	9.67		ug/L		97	77 - 121
1,2-Dichloroethane	10.0	11.0		ug/L		110	76 - 130
1,1-Dichloroethene	10.0	9.63		ug/L		96	70 - 141
1,2-Dichloropropane	10.0	10.3		ug/L		103	79 - 121
cis-1,3-Dichloropropene	10.0	8.86		ug/L		89	75 - 120
trans-1,3-Dichloropropene	10.0	8.52		ug/L		85	65 - 120
Ethylbenzene	10.0	9.58		ug/L		96	80 - 120
2-Hexanone	20.0	20.6		ug/L		103	56 - 124
Methylene Chloride	10.0	10.4		ug/L		104	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	20.6		ug/L		103	60 - 131
Styrene	10.0	9.94		ug/L		99	80 - 120
1,1,2,2-Tetrachloroethane	10.0	9.74		ug/L		97	61 - 130
Tetrachloroethene	10.0	9.24		ug/L		92	80 - 123
Toluene	10.0	10.1		ug/L		101	80 - 121
Trichloroethene	10.0	9.66		ug/L		97	80 - 122
Vinyl chloride	10.0	10.6		ug/L		106	60 - 129
Xylenes, Total	20.0	19.0		ug/L		95	80 - 120
1,1,1-Trichloroethane	10.0	9.31		ug/L		93	79 - 133
1,1,2-Trichloroethane	10.0	9.82		ug/L		98	80 - 120
Cyclohexane	10.0	9.50		ug/L		95	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	7.59		ug/L		76	46 - 140
1,2-Dibromoethane	10.0	9.88		ug/L		99	80 - 126
Dichlorodifluoromethane	10.0	10.7		ug/L		107	32 - 140
cis-1,2-Dichloroethene	10.0	9.92		ug/L		99	80 - 120
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	80 - 123
Isopropylbenzene	10.0	9.52		ug/L		95	80 - 120
Methyl acetate	50.0	55.9		ug/L		112	65 - 124
Methyl tert-butyl ether	10.0	8.59		ug/L		86	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.51		ug/L		95	65 - 151
1,2,4-Trichlorobenzene	10.0	7.39		ug/L		74	53 - 137
1,2-Dichlorobenzene	10.0	9.26		ug/L		93	80 - 120

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

Lab Sample ID: LCS 240-254811/4
Matrix: Water
Analysis Batch: 254811

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	9.06		ug/L		91	80 - 120
1,4-Dichlorobenzene	10.0	9.44		ug/L		94	80 - 120
Trichlorofluoromethane	10.0	9.46		ug/L		95	56 - 161
Dibromochloromethane	10.0	9.44		ug/L		94	68 - 131
Methylcyclohexane	10.0	8.65		ug/L		87	71 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 132*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*
Toluene-d8 (Surr)	*89*		*73 - 124*
Dibromofluoromethane (Surr)	*88*		*80 - 120*

Lab Sample ID: MB 240-254909/8
Matrix: Water
Analysis Batch: 254909

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			11/09/16 12:13	1
Benzene	1.0	U	1.0	0.28	ug/L			11/09/16 12:13	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/09/16 12:13	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/09/16 12:13	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/09/16 12:13	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/09/16 12:13	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/09/16 12:13	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/09/16 12:13	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 12:13	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/09/16 12:13	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/09/16 12:13	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/09/16 12:13	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/09/16 12:13	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/09/16 12:13	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/09/16 12:13	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/09/16 12:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/09/16 12:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/09/16 12:13	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/09/16 12:13	1
2-Hexanone	10	U	10	1.2	ug/L			11/09/16 12:13	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/09/16 12:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/09/16 12:13	1
Styrene	1.0	U	1.0	0.23	ug/L			11/09/16 12:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/09/16 12:13	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 12:13	1
Toluene	1.0	U	1.0	0.23	ug/L			11/09/16 12:13	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/09/16 12:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/09/16 12:13	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/09/16 12:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/09/16 12:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/09/16 12:13	1

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

Lab Sample ID: MB 240-254909/8
Matrix: Water
Analysis Batch: 254909

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			11/09/16 12:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/09/16 12:13	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/09/16 12:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 12:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/09/16 12:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/09/16 12:13	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/09/16 12:13	1
Methyl acetate	10	U	10	1.4	ug/L			11/09/16 12:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/09/16 12:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/09/16 12:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/09/16 12:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/09/16 12:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/09/16 12:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/09/16 12:13	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/09/16 12:13	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/09/16 12:13	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/09/16 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 132*		*11/09/16 12:13*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*11/09/16 12:13*	*1*
Toluene-d8 (Surr)	*87*		*73 - 124*		*11/09/16 12:13*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*11/09/16 12:13*	*1*

Lab Sample ID: LCS 240-254909/5
Matrix: Water
Analysis Batch: 254909

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	49.6	*	ug/L		124	46 - 120
Benzene	20.0	19.3		ug/L		97	80 - 120
Bromodichloromethane	20.0	18.8		ug/L		94	76 - 125
Bromoform	20.0	21.5		ug/L		107	52 - 157
Bromomethane	20.0	18.5		ug/L		93	24 - 160
2-Butanone (MEK)	40.0	47.1		ug/L		118	54 - 122
Carbon disulfide	20.0	20.3		ug/L		102	58 - 160
Carbon tetrachloride	20.0	19.1		ug/L		96	69 - 149
Chlorobenzene	20.0	17.8		ug/L		89	80 - 120
Chloroethane	20.0	19.9		ug/L		100	24 - 147
Chloroform	20.0	19.5		ug/L		98	80 - 120
Chloromethane	20.0	18.1		ug/L		91	50 - 135
1,1-Dichloroethane	20.0	19.7		ug/L		98	77 - 121
1,2-Dichloroethane	20.0	18.9		ug/L		94	76 - 130
1,1-Dichloroethene	20.0	20.7		ug/L		103	70 - 141
1,2-Dichloropropane	20.0	19.8		ug/L		99	79 - 121
cis-1,3-Dichloropropene	20.0	18.5		ug/L		93	75 - 120
trans-1,3-Dichloropropene	20.0	18.7		ug/L		93	65 - 120
Ethylbenzene	20.0	18.1		ug/L		90	80 - 120

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

Lab Sample ID: LCS 240-254909/5
Matrix: Water
Analysis Batch: 254909

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	40.0	49.2		ug/L		123	56 - 124
Methylene Chloride	20.0	19.3		ug/L		96	68 - 136
4-Methyl-2-pentanone (MIBK)	40.0	46.5		ug/L		116	60 - 131
Styrene	20.0	18.8		ug/L		94	80 - 120
1,1,2,2-Tetrachloroethane	20.0	22.9		ug/L		114	61 - 130
Tetrachloroethene	20.0	18.7		ug/L		94	80 - 123
Toluene	20.0	18.8		ug/L		94	80 - 121
Trichloroethene	20.0	19.3		ug/L		96	80 - 122
Vinyl chloride	20.0	18.5		ug/L		93	60 - 129
Xylenes, Total	40.0	36.2		ug/L		91	80 - 120
1,1,1-Trichloroethane	20.0	18.2		ug/L		91	79 - 133
1,1,2-Trichloroethane	20.0	20.5		ug/L		103	80 - 120
Cyclohexane	20.0	20.5		ug/L		102	66 - 135
1,2-Dibromo-3-Chloropropane	20.0	21.7		ug/L		109	46 - 140
1,2-Dibromoethane	20.0	20.9		ug/L		104	80 - 126
Dichlorodifluoromethane	20.0	14.3		ug/L		71	32 - 140
cis-1,2-Dichloroethene	20.0	19.6		ug/L		98	80 - 120
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	80 - 123
Isopropylbenzene	20.0	18.4		ug/L		92	80 - 120
Methyl acetate	100	129	*	ug/L		129	65 - 124
Methyl tert-butyl ether	20.0	20.2		ug/L		101	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.0		ug/L		100	65 - 151
1,2,4-Trichlorobenzene	20.0	17.5		ug/L		87	53 - 137
1,2-Dichlorobenzene	20.0	18.3		ug/L		92	80 - 120
1,3-Dichlorobenzene	20.0	17.4		ug/L		87	80 - 120
1,4-Dichlorobenzene	20.0	17.6		ug/L		88	80 - 120
Trichlorofluoromethane	20.0	18.1		ug/L		90	56 - 161
Dibromochloromethane	20.0	20.3		ug/L		101	68 - 131
Methylcyclohexane	20.0	18.5		ug/L		93	71 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 132*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*
Toluene-d8 (Surr)	*89*		*73 - 124*
Dibromofluoromethane (Surr)	*92*		*80 - 120*

Lab Sample ID: MB 240-255101/6
Matrix: Water
Analysis Batch: 255101

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			11/10/16 11:10	1
Benzene	1.0	U	1.0	0.28	ug/L			11/10/16 11:10	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/10/16 11:10	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/10/16 11:10	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/10/16 11:10	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/10/16 11:10	1

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

Lab Sample ID: MB 240-255101/6
Matrix: Water
Analysis Batch: 255101

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/10/16 11:10	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/10/16 11:10	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/10/16 11:10	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/10/16 11:10	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/10/16 11:10	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/10/16 11:10	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/10/16 11:10	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/10/16 11:10	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/10/16 11:10	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/10/16 11:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/10/16 11:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/10/16 11:10	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/10/16 11:10	1
2-Hexanone	10	U	10	1.2	ug/L			11/10/16 11:10	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/10/16 11:10	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/10/16 11:10	1
Styrene	1.0	U	1.0	0.23	ug/L			11/10/16 11:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/10/16 11:10	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/10/16 11:10	1
Toluene	1.0	U	1.0	0.23	ug/L			11/10/16 11:10	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/10/16 11:10	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/10/16 11:10	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/10/16 11:10	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/10/16 11:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/10/16 11:10	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/10/16 11:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/10/16 11:10	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/10/16 11:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/10/16 11:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/10/16 11:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/10/16 11:10	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/10/16 11:10	1
Methyl acetate	10	U	10	1.4	ug/L			11/10/16 11:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/10/16 11:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/10/16 11:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/10/16 11:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/10/16 11:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/10/16 11:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/10/16 11:10	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/10/16 11:10	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/10/16 11:10	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/10/16 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 132*		*11/10/16 11:10*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*11/10/16 11:10*	*1*
Toluene-d8 (Surr)	*103*		*73 - 124*		*11/10/16 11:10*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*11/10/16 11:10*	*1*

Lab Sample ID: LCS 240-255101/4
Matrix: Water
Analysis Batch: 255101

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	10.4		ug/L		52	46 - 120
Benzene	10.0	10.0		ug/L		100	80 - 120
Bromodichloromethane	10.0	10.5		ug/L		105	76 - 125
Bromoform	10.0	9.86		ug/L		99	52 - 157
Bromomethane	10.0	4.74		ug/L		47	24 - 160
2-Butanone (MEK)	20.0	15.7		ug/L		79	54 - 122
Carbon disulfide	10.0	10.1		ug/L		101	58 - 160
Carbon tetrachloride	10.0	14.3		ug/L		143	69 - 149
Chlorobenzene	10.0	9.94		ug/L		99	80 - 120
Chloroethane	10.0	5.09		ug/L		51	24 - 147
Chloroform	10.0	10.1		ug/L		101	80 - 120
Chloromethane	10.0	8.70		ug/L		87	50 - 135
1,1-Dichloroethane	10.0	9.54		ug/L		95	77 - 121
1,2-Dichloroethane	10.0	9.61		ug/L		96	76 - 130
1,1-Dichloroethene	10.0	10.0		ug/L		100	70 - 141
1,2-Dichloropropane	10.0	9.99		ug/L		100	79 - 121
cis-1,3-Dichloropropene	10.0	9.60		ug/L		96	75 - 120
trans-1,3-Dichloropropene	10.0	8.57		ug/L		86	65 - 120
Ethylbenzene	10.0	9.85		ug/L		99	80 - 120
2-Hexanone	20.0	17.3		ug/L		86	56 - 124
Methylene Chloride	10.0	10.6		ug/L		106	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	18.8		ug/L		94	60 - 131
Styrene	10.0	10.2		ug/L		102	80 - 120
1,1,2,2-Tetrachloroethane	10.0	8.26		ug/L		83	61 - 130
Tetrachloroethene	10.0	10.6		ug/L		106	80 - 123
Toluene	10.0	9.97		ug/L		100	80 - 121
Trichloroethene	10.0	10.8		ug/L		108	80 - 122
Vinyl chloride	10.0	8.40		ug/L		84	60 - 129
Xylenes, Total	20.0	19.5		ug/L		98	80 - 120
1,1,1-Trichloroethane	10.0	12.3		ug/L		123	79 - 133
1,1,2-Trichloroethane	10.0	9.84		ug/L		98	80 - 120
Cyclohexane	10.0	10.2		ug/L		102	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	10.2		ug/L		102	46 - 140
1,2-Dibromoethane	10.0	9.85		ug/L		98	80 - 126
Dichlorodifluoromethane	10.0	9.93		ug/L		99	32 - 140
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	80 - 120
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	80 - 123
Isopropylbenzene	10.0	10.3		ug/L		103	80 - 120
Methyl acetate	50.0	44.2		ug/L		88	65 - 124
Methyl tert-butyl ether	10.0	10.2		ug/L		102	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.5		ug/L		125	65 - 151
1,2,4-Trichlorobenzene	10.0	11.1		ug/L		111	53 - 137
1,2-Dichlorobenzene	10.0	9.69		ug/L		97	80 - 120
1,3-Dichlorobenzene	10.0	9.60		ug/L		96	80 - 120
1,4-Dichlorobenzene	10.0	9.61		ug/L		96	80 - 120
Trichlorofluoromethane	10.0	16.8	*	ug/L		168	56 - 161
Dibromochloromethane	10.0	10.6		ug/L		106	68 - 131
Methylcyclohexane	10.0	10.4		ug/L		104	71 - 122

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

Lab Sample ID: LCS 240-255101/4
Matrix: Water
Analysis Batch: 255101

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 132*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Toluene-d8 (Surr)	*108*		*73 - 124*
Dibromofluoromethane (Surr)	*109*		*80 - 120*

Lab Sample ID: MB 240-255330/6
Matrix: Water
Analysis Batch: 255330

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			11/11/16 12:42	1
Benzene	1.0	U	1.0	0.28	ug/L			11/11/16 12:42	1
Bromodichloromethane	1.0	U	1.0	0.30	ug/L			11/11/16 12:42	1
Bromoform	1.0	U	1.0	0.43	ug/L			11/11/16 12:42	1
Bromomethane	1.0	U	1.0	0.42	ug/L			11/11/16 12:42	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			11/11/16 12:42	1
Carbon disulfide	5.0	U	5.0	0.34	ug/L			11/11/16 12:42	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			11/11/16 12:42	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			11/11/16 12:42	1
Chloroethane	1.0	U	1.0	0.41	ug/L			11/11/16 12:42	1
Chloroform	1.0	U	1.0	0.31	ug/L			11/11/16 12:42	1
Chloromethane	1.0	U	1.0	0.43	ug/L			11/11/16 12:42	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/11/16 12:42	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			11/11/16 12:42	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			11/11/16 12:42	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			11/11/16 12:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			11/11/16 12:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			11/11/16 12:42	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			11/11/16 12:42	1
2-Hexanone	10	U	10	1.2	ug/L			11/11/16 12:42	1
Methylene Chloride	5.0	U	5.0	0.53	ug/L			11/11/16 12:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			11/11/16 12:42	1
Styrene	1.0	U	1.0	0.23	ug/L			11/11/16 12:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			11/11/16 12:42	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			11/11/16 12:42	1
Toluene	1.0	U	1.0	0.23	ug/L			11/11/16 12:42	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			11/11/16 12:42	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/11/16 12:42	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			11/11/16 12:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			11/11/16 12:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			11/11/16 12:42	1
Cyclohexane	1.0	U	1.0	0.44	ug/L			11/11/16 12:42	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.47	ug/L			11/11/16 12:42	1
1,2-Dibromoethane	1.0	U	1.0	0.23	ug/L			11/11/16 12:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.50	ug/L			11/11/16 12:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/11/16 12:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/11/16 12:42	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/11/16 12:42	1

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

Lab Sample ID: MB 240-255330/6
Matrix: Water
Analysis Batch: 255330

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	10	U	10	1.4	ug/L			11/11/16 12:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.27	ug/L			11/11/16 12:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			11/11/16 12:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			11/11/16 12:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.26	ug/L			11/11/16 12:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.32	ug/L			11/11/16 12:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/11/16 12:42	1
Trichlorofluoromethane	1.0	U	1.0	0.50	ug/L			11/11/16 12:42	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			11/11/16 12:42	1
Methylcyclohexane	1.0	U	1.0	0.45	ug/L			11/11/16 12:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 132*		*11/11/16 12:42*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*11/11/16 12:42*	*1*
Toluene-d8 (Surr)	*102*		*73 - 124*		*11/11/16 12:42*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*11/11/16 12:42*	*1*

Lab Sample ID: LCS 240-255330/4
Matrix: Water
Analysis Batch: 255330

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	11.1		ug/L		56	46 - 120
Benzene	10.0	9.71		ug/L		97	80 - 120
Bromodichloromethane	10.0	10.3		ug/L		103	76 - 125
Bromoform	10.0	10.1		ug/L		101	52 - 157
Bromomethane	10.0	4.54		ug/L		45	24 - 160
2-Butanone (MEK)	20.0	15.2		ug/L		76	54 - 122
Carbon disulfide	10.0	9.68		ug/L		97	58 - 160
Carbon tetrachloride	10.0	13.9		ug/L		139	69 - 149
Chlorobenzene	10.0	9.74		ug/L		97	80 - 120
Chloroethane	10.0	5.07		ug/L		51	24 - 147
Chloroform	10.0	10.0		ug/L		100	80 - 120
Chloromethane	10.0	8.43		ug/L		84	50 - 135
1,1-Dichloroethane	10.0	9.25		ug/L		93	77 - 121
1,2-Dichloroethane	10.0	9.71		ug/L		97	76 - 130
1,1-Dichloroethene	10.0	9.95		ug/L		100	70 - 141
1,2-Dichloropropane	10.0	10.0		ug/L		100	79 - 121
cis-1,3-Dichloropropene	10.0	9.34		ug/L		93	75 - 120
trans-1,3-Dichloropropene	10.0	8.58		ug/L		86	65 - 120
Ethylbenzene	10.0	9.61		ug/L		96	80 - 120
2-Hexanone	20.0	16.6		ug/L		83	56 - 124
Methylene Chloride	10.0	9.99		ug/L		100	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	18.7		ug/L		93	60 - 131
Styrene	10.0	9.92		ug/L		99	80 - 120
1,1,2,2-Tetrachloroethane	10.0	8.07		ug/L		81	61 - 130
Tetrachloroethene	10.0	10.5		ug/L		105	80 - 123
Toluene	10.0	9.62		ug/L		96	80 - 121

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

Lab Sample ID: LCS 240-255330/4
Matrix: Water
Analysis Batch: 255330

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	10.0	10.7		ug/L		107	80 - 122
Vinyl chloride	10.0	8.12		ug/L		81	60 - 129
Xylenes, Total	20.0	19.4		ug/L		97	80 - 120
1,1,1-Trichloroethane	10.0	11.8		ug/L		118	79 - 133
1,1,2-Trichloroethane	10.0	9.58		ug/L		96	80 - 120
Cyclohexane	10.0	9.98		ug/L		100	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	10.2		ug/L		102	46 - 140
1,2-Dibromoethane	10.0	9.80		ug/L		98	80 - 126
Dichlorodifluoromethane	10.0	9.77		ug/L		98	32 - 140
cis-1,2-Dichloroethene	10.0	9.72		ug/L		97	80 - 120
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	80 - 123
Isopropylbenzene	10.0	10.1		ug/L		101	80 - 120
Methyl acetate	50.0	44.6		ug/L		89	65 - 124
Methyl tert-butyl ether	10.0	9.84		ug/L		98	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.0		ug/L		120	65 - 151
1,2,4-Trichlorobenzene	10.0	11.2		ug/L		112	53 - 137
1,2-Dichlorobenzene	10.0	9.80		ug/L		98	80 - 120
1,3-Dichlorobenzene	10.0	9.49		ug/L		95	80 - 120
1,4-Dichlorobenzene	10.0	9.59		ug/L		96	80 - 120
Trichlorofluoromethane	10.0	16.4	*	ug/L		164	56 - 161
Dibromochloromethane	10.0	10.3		ug/L		103	68 - 131
Methylcyclohexane	10.0	10.2		ug/L		102	71 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 132*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Toluene-d8 (Surr)	*104*		*73 - 124*
Dibromofluoromethane (Surr)	*108*		*80 - 120*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-132)	(73-120)	(73-124)	(80-120)
240-71561-1	GW-17303-103116-DS-033	104	75	88	86
240-71561-2	GW-17303-103116-DS-034	105	76	86	89
240-71561-3	GW-17303-103116-DS-035	93	88	88	92
240-71561-4	GW-17303-103116-DS-036	93	88	87	93
240-71561-5	GW-17303-103116-DS-037	91	86	85	93
240-71561-6	GW-17303-103116-DS-038	91	85	84	92
240-71561-7	GW-17303-103116-DS-039	89	84	83	92
240-71561-8	GW-17303-103116-DS-040	91	85	86	92
240-71561-9	GW-17303-103116-DS-041	90	87	86	91
240-71561-10	GW-17303-103116-DS-042	91	85	85	92
240-71561-11	GW-17303-103116-DS-043	91	85	84	92
240-71561-12	GW-17303-103116-DS-044	90	87	86	95
240-71561-13	GW-17303-103116-DS-045	93	88	87	94
240-71561-14	GW-17303-103116-DS-046	87	82	84	89
240-71561-15	GW-17303-110116-DS-047	92	84	85	90
240-71561-16	GW-17303-110116-DS-048	87	85	85	90
240-71561-17	GW-17303-110116-DS-049	92	87	85	93
240-71561-18	GW-17303-110116-DS-050	103	105	100	104
240-71561-19	GW-17303-110116-DS-051	91	87	86	92
240-71561-20	GW-17303-110116-DS-052	89	87	85	91
240-71561-21	GW-17303-110116-DS-053	91	85	86	92
240-71561-22	TRIP BLANK	101	100	98	105
LCS 240-254811/4	Lab Control Sample	98	87	89	88
LCS 240-254909/5	Lab Control Sample	91	89	89	92
LCS 240-255101/4	Lab Control Sample	98	106	108	109
LCS 240-255330/4	Lab Control Sample	99	108	104	108
MB 240-254811/6	Method Blank	101	74	86	87
MB 240-254909/8	Method Blank	90	86	87	91
MB 240-255101/6	Method Blank	101	100	103	107
MB 240-255330/6	Method Blank	102	97	102	105

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Client Sample ID: GW-17303-103116-DS-033
Lab Sample ID: 240-71561-1
Date Collected: 10/31/16 09:00
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254811	11/08/16 21:46	LRW	TAL CAN

Client Sample ID: GW-17303-103116-DS-034
Lab Sample ID: 240-71561-2
Date Collected: 10/31/16 08:50
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254811	11/08/16 22:08	LRW	TAL CAN

Client Sample ID: GW-17303-103116-DS-035
Lab Sample ID: 240-71561-3
Date Collected: 10/31/16 09:50
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	254909	11/09/16 12:59	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-036
Lab Sample ID: 240-71561-4
Date Collected: 10/31/16 09:35
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254909	11/09/16 13:22	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-037
Lab Sample ID: 240-71561-5
Date Collected: 10/31/16 11:00
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	254909	11/09/16 13:45	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-038
Lab Sample ID: 240-71561-6
Date Collected: 10/31/16 10:45
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254909	11/09/16 14:09	HMB	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Client Sample ID: GW-17303-103116-DS-039
Lab Sample ID: 240-71561-7
Date Collected: 10/31/16 13:05
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		166.67	254909	11/09/16 14:32	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-040
Lab Sample ID: 240-71561-8
Date Collected: 10/31/16 11:40
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.43	254909	11/09/16 14:55	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-041
Lab Sample ID: 240-71561-9
Date Collected: 10/31/16 14:05
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	254909	11/09/16 15:18	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-042
Lab Sample ID: 240-71561-10
Date Collected: 10/31/16 12:35
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254909	11/09/16 15:41	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-043
Lab Sample ID: 240-71561-11
Date Collected: 10/31/16 13:25
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254909	11/09/16 16:04	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-044
Lab Sample ID: 240-71561-12
Date Collected: 10/31/16 14:15
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254909	11/09/16 16:27	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-045 — Lab Sample ID: 240-71561-13

Date Collected: 10/31/16 15:05 — **Matrix: Water**
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		16.67	254909	11/09/16 16:50	HMB	TAL CAN

Client Sample ID: GW-17303-103116-DS-046 — Lab Sample ID: 240-71561-14

Date Collected: 10/31/16 16:00 — **Matrix: Water**
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		125	254909	11/09/16 17:14	HMB	TAL CAN

Client Sample ID: GW-17303-110116-DS-047 — Lab Sample ID: 240-71561-15

Date Collected: 11/01/16 09:35 — **Matrix: Water**
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254909	11/09/16 17:37	HMB	TAL CAN

Client Sample ID: GW-17303-110116-DS-048 — Lab Sample ID: 240-71561-16

Date Collected: 11/01/16 10:35 — **Matrix: Water**
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.67	254909	11/09/16 18:00	HMB	TAL CAN

Client Sample ID: GW-17303-110116-DS-049 — Lab Sample ID: 240-71561-17

Date Collected: 11/01/16 11:30 — **Matrix: Water**
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	254909	11/09/16 18:23	HMB	TAL CAN

Client Sample ID: GW-17303-110116-DS-050 — Lab Sample ID: 240-71561-18

Date Collected: 11/01/16 12:15 — **Matrix: Water**
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	255330	11/11/16 13:48	LEE	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Client Sample ID: GW-17303-110116-DS-051

Lab Sample ID: 240-71561-19

Date Collected: 11/01/16 12:50
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	254909	11/09/16 19:09	HMB	TAL CAN

Client Sample ID: GW-17303-110116-DS-052

Lab Sample ID: 240-71561-20

Date Collected: 11/01/16 13:55
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3.33	254909	11/09/16 19:32	HMB	TAL CAN

Client Sample ID: GW-17303-110116-DS-053

Lab Sample ID: 240-71561-21

Date Collected: 11/01/16 14:55
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	254909	11/09/16 19:55	HMB	TAL CAN

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-71561-22

Date Collected: 10/31/16 00:00
Matrix: Water
Date Received: 11/02/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255101	11/10/16 14:55	LEE	TAL CAN

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 17303-036, RACER CVO

TestAmerica Job ID: 240-71561-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17
Illinois	NELAP	5	200004	07-31-17
Kansas	NELAP	7	E-10336	01-31-17
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16 *
Minnesota	NELAP	5	039-999-348	12-31-16 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17
Nevada	State Program	9	OH-000482008A	07-31-17
New Jersey	NELAP	2	OH001	06-30-17
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-17
Texas	NELAP	6	T104704517-15-5	08-31-17
USDA	Federal		P330-13-00319	11-26-16 *
Virginia	NELAP	3	460175	09-14-17
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17

* Certification renewal pending - certification considered valid.

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

56/C4.0

Chain of Custody Record

164032

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: T. Kinney	Site Contact: Amandeep B.	Date: 10-31-16	COC No:
Company Name: GHD	Tel/Fax:	Lab Contact: D Herkler	Carrier: Fed Ex	1 of 2 COCs
Address: 14490 Sheldon rd ste 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Plymouth MI 48170	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 734-453-5123	TAT if different from Below GHD STD			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Racer CVO	☐ 1 week			
Site: 17303-T02-03116	☐ 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)	PLC VOC	Sample Specific Notes:
gw-17303-103116-DS-033	10-31-16	0900	G	W	1	N	N	Y	
-034		0850			3			X	
-035		0950			3			X	
-036		0935			3			X	
-037		1100			3			X	
-038		1045			3			X	
-039		1305			3			X	
-040		1140			3			X	
-041		1405			3			X	
-042		1235			3			X	
-043		1325			3			X	
-044		1415			3			Y	

240-71561 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: LPM 24001030

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company:	Date/Time:		Company:	Date/Time:
Relinquished by:	GHD	1600 11-01-16	Received by:	TAC	11/02/16 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

11/15/2016

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

Chain of Custody Record

164033

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: T. Kinney	Site Contact: Amardeep B.	Date: 10-31-16 / 11-01-16	COC No: 2 of 2 COCs
Company Name: GHD	Tel/Fax:	Lab Contact: D. Heckler	Carrier: Fed Ex	Sampler:
Address: 14496 Sheldon rd ste 200	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Plymouth MI 48170	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
Phone: 734-453-5123	TAT if different from Below GHD STD			Lab Sampling:
Fax:	☐ 2 weeks			
Project Name: Race - LVO	☐ 1 week			Job / SDG No.:
Site: 12303-TO2-03416	☐ 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)	TCL VOC	Sample Specific Notes:
gw-12303-103116-DS-045	10-31-16	1505	G	W	3	N	N	X	
gw-12303-103116-DS-046	10-31-16	1600			3	N	N	X	
gw-12303-110116-DS-047	11-01-16	0935			3			X	
-048		1035			3			X	
-049		1130			3			X	
-050		1215			3			X	
-051		1250			3			X	
-052		1355			3			X	
-053		1455			3			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: LAN 2400 6020

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company	Date/Time		Company	Date/Time
Relinquished by:	GHD	11-01-16 1600	Received by:	TAL	11/02/16 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

11/15/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 71561**
Canton Facility

Client GTHD Site Name _____ Cooler unpacked by: DxO

Cooler Received on 11/02/16 Opened on 11/02/16

FedEx: 1st Grd Exp UPS FAS Stetson 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 +0.4 °C) Observed Cooler Temp. 3.6 °C Corrected Cooler Temp. 4.0 °C
   IR GUN #36 (CF +1.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
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 11-15 have been checked at the originating laboratory.		
11. Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC682547**
12. Were VOAs on the COC?	Yes	No
13. Were air bubbles >6 mm in any VOA vials?	Yes	No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B615201UB	Yes	No
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

Received Trip Blank lot on COC.

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): _____.

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-101216 Cooler Receipt Form.doc djl

Appendix E
Treatability Study Results Summary

Memorandum

April 27, 2017

To:	Tom Kinney	Ref. No.:	017303
From:	Sophia Dore/Ryan Thomas/adh/6	Tel:	716-205-1978
CC:	Amandeep Bains		

Subject: **Permeable Reactive Barrier Treatment of Volatile Organic Compounds**
Laboratory Treatability Study
RACER-CVO, Ypsilanti, Michigan

1. Introduction

Groundwater at the Revitalizing Auto Communities Environmental Response (RACER) Trust CVO site located in Ypsilanti, Michigan (Site) contains chlorinated volatile organic compounds (CVOC) including vinyl chloride. A permeable reactive barrier (PRB) is being considered to prevent migration of CVOC. A laboratory treatability study was recommended in order to determine the design parameters for a PRB to intercept and treat the CVOC present at the Site. This memo contains the results from the bench-scale treatability study.

1.1 Permeable Reactive Barriers

A PRB is a passive treatment that relies on the natural flow of groundwater to bring contaminants to the reactive media. It is a permanent structure, rarely relocated or modified. The barrier serves as a reactive zone to intercept and treat contaminated groundwater. Physical, chemical, and/or biological processes can be used as removal mechanisms for contaminants. When the contaminants make contact with the reactive media, chemical reactions take place to degrade or alter the contaminants and allowing treated groundwater to pass through. In conventional trench type PRB, the reactive medium must be more permeable than the surrounding soil matrix to ensure it is the preferred flow pathway. Hydraulic flow modeling is advisable to ensure that the barrier is not overtopped or bypassed. Inorganic contaminants can precipitate out in the PRB. The precipitation may cause the barrier material to become less reactive, reduce the hydraulic conductivity, and result in clogging of the barrier or breakthrough of the plume. PRB can also consist of lines of wells for injection of the reactive media. Commonly used reactive media include zero valent iron (ZVI), zeolites, granular activated carbon (GAC), organic media, and proprietary substrates such as EHC®, which is a mixture of iron and an organic substrate.

Zero Valent Iron

Iron can be used to treat volatile organic compound (VOC) from groundwater and soil. ZVI is the commonly used form of iron for the treatment of chlorinated organic compounds in soil and groundwater. ZVI dechlorinates organic compounds by creating extremely reducing conditions when the iron is oxidized to

divalent iron ($Fe2^{+}$) and then trivalent iron ($Fe3^{+}$). Under these conditions, a proton can replace a chlorine atom on organic molecules. ZVI can also stimulate anaerobic biodegradation by creating an anaerobic environment and by serving as a proton donor for reductive dechlorination. For a ZVI PRB, a trench would be filled with a mixture containing ZVI and sand.

EHC®

EHC® is a controlled-release, integrated carbon and ZVI source that yields redox potential (Eh) in the -500 to -650 millivolts (mV) range. This Eh is lower than that achieved when using either organic materials (lactate, molasses, and sugars) or ZVI alone. EHC® dechlorinates organic compounds by an abiotic pathway similar to ZVI and also provides an additional carbon source for the stimulation of microbial degradation by reductive dechlorination. For an EHC® PRB, injection points would be used to inject a 40-percent slurry of EHC® in water. The EHC® could be injected using injection wells installed in rows running perpendicular to groundwater flow and screened within the depth interval where chlorinated solvents are present. Alternatively, EHC® could be injected using direct push technology. The probe would be advanced to the deepest point where chlorinated solvents are to be treated, and then the EHC® slurry would be injected as the probe is withdrawn. The final concentration of EHC® in the barrier would be about 3 percent. This concentration is based on recommendations from the manufacturer.

Organic Barrier

An injection well PRB with a reactive medium consisting of an emulsified vegetable oil (EVO) substrate is another option. Anaerobic biodegradation technology has been demonstrated to be effective for treating CVOC in groundwater at many sites. CVOC can be degraded under anaerobic conditions to ethene as a final end product. The addition of EVO enhances the growth of facultative microorganisms, which leads to the establishment of strict anaerobic conditions. The anaerobic conditions stimulate the growth and activity of microorganisms that convert chlorinated solvents into ethane and ethene by reductive dechlorination. An EVO barrier would create a zone where conditions for anaerobic biodegradation of chlorinated solvents would be optimized. The EVO injection is expected to need replacement at 2-year intervals.

2. Treatability Study

2.1 Objectives

The objectives of this laboratory study were the gather the data necessary to:

i) Determine whether PRB is an effective treatment for VOC at the Site

ii) Determine the optimum reagent(s) and doses to enhance degradation

iii) Assess the effectiveness of selected PRB media for VOC

iv) Determine the optimum hydraulic retention time (HRT) for VOC treatment

2.2 Sample Acquisition

The bench-scale study was conducted using a samples of groundwater and soil collected from the Site. Thirty gallons of groundwater and five pounds of soil were collected from the Site. The samples were shipped to the GHD Innovative Technology Group (ITG) laboratory in Niagara Falls, New York and were received on October 26, 2016 (soil) and October 28, 2016 (groundwater).

2.3 Task 1: Initial Characterization

Upon arrival at the laboratory, the groundwater sample was analyzed for the following parameters:

- CVOC
- Ammonia-nitrogen
- Orthophosphate-phosphorus
- pH
- Total aerobic and anaerobic microbial counts

The soil sample was analyzed for the following parameters:

- VOC
- Ammonia-nitrogen
- Orthophosphate-phosphorus
- pH
- Total aerobic and anaerobic microbial counts

The analytical results provided a characterization of baseline conditions for the treatability study.

The groundwater contained cis-1,2-dichloroethene at 7,300 micrograms per liter (µg/L) and vinyl chloride at 24,800 µg/L. Other CVOC were also present at lower concentrations. The pH of the groundwater was 7.27 standard units (S.U.); total aerobic and anaerobic microbial counts were present at $1.90x10^3$ colony forming units per milliliter (CFU/mL) and $8.75x10^2$ CFU/mL, respectively; ammonia-nitrogen was at non-detect levels; and orthophosphate-phosphorus was present at 1.34 milligrams per liter (mg/L). These data are shown in Table 1.

The soil contained cis-1,2-dichloroethene at 1,360 micrograms per kg (µg/kg) and vinyl chloride at 1,900 µg/kg; the pH was 8.48 S.U.; total aerobic and anaerobic microbial counts were $3.66x10^2$ colony forming units per gram (CFU/g) and non-detect, respectively; ammonia-nitrogen was at non-detect levels; and orthophosphate-phosphorus was present at 0.156 milligram per kilogram (mg/kg). These data are shown in Table 2.

2.4 Task 2: Column Tests

PRB media was tested by performing a column study. Four identical glass columns were packed with potential media as follows:

Column 1: 100 percent sand (control)

Column 2: 20 percent ZVI and 80 percent sand or 40 percent ZVI and 60 percent sand

Column 3: 5 percent soil, 5 percent EHC®, and 90 percent percent sand

Column 4: 5 percent soil, 95 percent sand with EVO, and nutrients

The materials were measured on a weight-per-weight basis and thoroughly mixed manually to achieve good distribution of the medium throughout the sand. The mixtures were then poured into the glass columns. Site groundwater was pumped into Columns 3 and 4 and allowed to stand in the columns to establish anaerobic conditions. Once anaerobic conditions were established, additional groundwater was pumped into the bottom of each of the columns using a multi-channel pump. After the water had been flowing through the columns for approximately 2 pore volumes, a sample of the effluent water was collected from each column and analyzed for VOC.

Based on the results of this analysis, the flow rates of the columns were adjusted. Groundwater in columns showing good removal of VOC were pumped at increasing rates through the columns, and groundwater in columns not showing good VOC removal were pumped more slowly. Adjustment of the flow rates were used to establish a minimum required HRT for each PRB matrix for treatment of Site groundwater.

2.4.1 Column 1. Control

The control column showed consistent VOC results at untreated levels throughout the study. These results are shown in Table 3.

2.4.2 Column 2. Twenty Percent ZVI and 80 Percent Sand or 40 Percent ZVI and 60 Percent Sand

Groundwater was pumped through the 20 percent ZVI and 80 percent sand at a flow rate of 0.50 milliliter per minute (mL/min), to give an HRT of 6 hours, initially. The first effluent sampling and analysis showed cis-1,2-dichloroethene removal of 45 percent, trans-1,2-dichloroethne at 65 percent, ethylbenzene at 51 percent, toluene at 8 percent, and vinyl chloride removal at 47 percent. The flow rate was then decreased to provide greater HRT. An HRT of 30 hours resulted in 98 percent removal of vinyl chloride; however, the concentration remained well above the 13-µg/L target. In order to achieve greater removal of CVOC, the column was repacked with 40 percent ZVI and 60 percent sand. After 2 pore volumes had passed through the newly packed column at an HRT of 30 hours, the effluent was sampled and the vinyl chloride concentration was reduced to 164 µg/L (99 percent removal). This concentration was still well above the 13-µg/L target, and it was not possible to increase the HRT further using a single column; therefore, a second column was packed. After at least 2 pore volumes passed through the two columns in series at a flow rate which provided an HRT of 60 hours, the effluent was sampled and the vinyl chloride concentration was 45.3 µg/L (99.7 percent removal). Concentrations of all other CVOC had been reduced to non-detect levels. The two columns were run in series and sampled two more times; however, concentrations of vinyl chloride were not reduced to below the 13-µg/L target. Due to vinyl chloride concentration remaining greater than target concentrations, a third column was packed such that three columns packed with 40 percent ZVI and 60 percent sand were set up in series to provide an HRT of 90 hours. At this HRT, 99.9 percent removal

of vinyl chloride was observed with concentrations less than 8 µg/L for three consecutive samplings. All other VOC were reduced to non-detect levels. These data are shown in Table 4.

2.4.3 Column 3. Five Percent Soil, 5 Percent EHC®, and 90 Percent Sand

Groundwater was pumped through this column at a flow rate of 0.50 mL/min initially, which gave an HRT of 6 hours. Conditioning of this column was continued since EHC relies partially on a biological mechanism, and the microbial population can take time to develop and acclimate. However, although treatment of VOC improved after more pore volumes of groundwater were run through the column and lower flow rates were tested, the lowest concentration of vinyl chloride observed in the effluent was 10,600 µg/L; therefore, this column was discontinued. These data are shown in Table 5.

2.4.4 Column 4. Five Percent Soil, 95 Percent Sand with Emulsified Vegetable Oil, and Nutrients

Groundwater was pumped through this column at a flow rate of 0.50 mL/min initially, which gave an HRT of 6 hours. At an HRT of 30 hours, 93 percent removal of cis-1,2-dichloroethene was observed; however, the vinyl chloride concentration in this effluent sample was similar to the control column. Concentrations of vinyl chloride in the effluent from this column remained greater than 10,000 µg/L. These data are shown in Table 6.

3. Summary

- Treating the groundwater by passing through ZVI and sand with an HRT of 90 hours resulted in the treatment of 99.9 percent of the vinyl chloride and removal of all other CVOC to non-detect levels. Vinyl chloride was treated to below the 13-µg/L target concentration.
- The EHC and EVO columns achieved some treatment of CVOC; however, target concentrations for vinyl chloride were not met.

4. Conclusions and Recommendations

The results of the study demonstrate that PRB is an effective treatment for CVOC at the Site. A barrier containing 40 percent ZVI and 60 percent sand would be recommended. Based on the data from the study, an HRT of at least 90 hours would be required to achieve treatment of the CVOC.

Table 1

Initial Groundwater Sample Characterization
Laboratory Treatability Study
RACER-CVO
Ypsilanti, Michigan

Parameters	Units	Groundwater
General Chemistry		
pH	S.U.	7.27
Ammonia-Nitrogen	mg/L	ND (1.0)
Orthophosphate-Phosphorus	mg/L	1.34
Microbiology		
Total Aerobic Microbial Population	CFU/mL	1.90E+03
Total Anaerobic Microbial Population	CFU/mL	8.75E+02
Volatile Organic Compounds		
1,1-Dichloroethene	µg/L	6.58
cis-1,2-Dichloroethene	µg/L	7300
trans-1,2-Dichloroethene	µg/L	92.4
Benzene	µg/L	48.1
Chlorobenzene	µg/L	30.6
Ethylbenzene	µg/L	15.5
Toluene	µg/L	105
Trichloroethene	µg/L	7.06
m/p-Xylenes	µg/L	3.24
o-Xylene	µg/L	6.46
Vinyl Chloride	µg/L	24800

Notes:

ND (x) - Not detected at the reporting limit
J - Result less than the reporting limit and is an estimated value
S.U. - Standard units
CFU/mL - Colony Forming Units per Milliliter

Table 2

Initial Soil Sample Characterization
Laboratory Treatability Study
RACER-CVO
Ypsilanti, Michigan

Parameters	Units	Soil
General Chemistry		
pH	S.U.	8.48
Ammonia-Nitrogen	mg/kg	ND (1.0)
Orthophosphate-Phosphorus	mg/kg	0.156
Microbiology		
Total Aerobic Microbial Population	CFU/g	3.66E+02
Total Anaerobic Microbial Population	CFU/g	ND (1)
Volatile Organic Compounds		
cis-1,2-Dichloroethene	µg/kg	1360
Benzene	µg/kg	62.2
Toluene	µg/kg	424
Trichloroethene	µg/kg	36 J
Vinyl Chloride	µg/kg	1990

Notes:

ND (x) - Not detected at the reporting limit
J - Result less than the reporting limit and is an estimated value
S.U. - Standard units
CFU/g - Colony Forming Units per Gram

Sample/Parameter	Units	1st Sampling	2nd Sampling	3rd Sampling	4th Sampling	5th Sampling
Flow Rate	mL/min	0.50	0.25	0.10	0.10	0.10
Hydraulic Retention Time	Hours	6	12	30	30	30
Water Passed Through	mL	1325	540	580	540	820
1,1-Dichloroethene	µg/L	ND (20)	4.43	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	2710	1710	1650	1420	1480
trans-1,2-Dichloroethene	µg/L	61.8	47.8	33.7	43.6	35.3
Benzene	µg/L	ND (20)	23.3	10.3	15.4	27.2
Chlorobenzene	µg/L	ND (20)	12.3	5.32	4.64	8.71
Ethylbenzene	µg/L	ND (20)	ND (2)	ND (2)	ND (2)	ND (2)
Toluene	µg/L	90.1	20.5	3.94	24.1	48
Trichloroethene	µg/L	ND (20)	ND (2)	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (40)	ND (4)	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	ND (20)	1.34 J	ND (2)	ND (2)	ND (2)
Vinyl Chloride	µg/L	17200	17200	19000	18400	15300

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	6th Sampling	7th Sampling
Flow Rate	mL/min	0.10	0.10
Hydraulic Retention Time	Hours	30	30
Water Passed Through	mL	450	650
1,1-Dichloroethene	µg/L	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	1460	1390
trans-1,2-Dichloroethene	µg/L	39.1	27.8
Benzene	µg/L	4.35	18.6
Chlorobenzene	µg/L	5.13	8.79
Ethylbenzene	µg/L	ND (2)	ND (2)
Toluene	µg/L	0.646	39.9
Trichloroethene	µg/L	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	ND (2)
Vinyl Chloride	µg/L	13400	13100

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	8th Sampling	9th Sampling	10th Sampling	11th Sampling
Flow Rate	mL/min	0.10	0.100	0.020	0.050
Hydraulic Retention Time	Hours	30	30	150	60
Water Passed Through	mL	730	700	390	650
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	1730	1600	1520	1700
trans-1,2-Dichloroethene	µg/L	26.7	28.3	25.9	26.2
Benzene	µg/L	28.5	31.1	25.6	27.1
Chlorobenzene	µg/L	11.1	13.8	10	14.6
Ethylbenzene	µg/L	1.91 J	3.43	2.21	3.46
Toluene	µg/L	61.1	73.7	52.5	78.2
Trichloroethene	µg/L	ND (2)	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	ND (2)	ND (2)	ND (2)
Vinyl Chloride	µg/L	13400	14100	12600	14100

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	12th Sampling	13th Sampling	14th Sampling
Flow Rate	mL/min	0.16	0.16	0.16
Hydraulic Retention Time	Hours	18.8	18.8	18.8
Water Passed Through	mL	950	1190	1210
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	1550	1070	1130
trans-1,2-Dichloroethene	µg/L	21.2	16.8	18.9
Benzene	µg/L	33	25.3	29.4
Chlorobenzene	µg/L	17.2	12.3	12.9
Ethylbenzene	µg/L	4.78	3.2	3.34
Toluene	µg/L	88.7	61.7	63.9
Trichloroethene	µg/L	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	1.93 J	1.22 J	ND (2)
Vinyl Chloride	µg/L	11900	9020	7700

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	1st Sampling[a]	2nd Sampling[a]	3rd Sampling[a]	4th Sampling[a]
Flow Rate	mL/min	0.50	0.25	0.10	0.10
Hydraulic Retention Time	Hours	6	12	30	30
Water Passed Through	mL	1415	830	510	600
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	1490	518	43.5	84.1
trans-1,2-Dichloroethene	µg/L	21.6	10.5	ND (2)	ND (2)
Benzene	µg/L	36.4	32.8	20.8	22
Chlorobenzene	µg/L	13.8	11.5	8.03	6.34
Ethylbenzene	µg/L	4.91	ND (2)	2.65	ND (2)
Toluene	µg/L	83	68.2	40.7	30
Trichloroethene	µg/L	ND (2)	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	1.15 J	1.34 J	ND (2)	ND (2)
Vinyl Chloride	µg/L	9140	3790	322	934
% Removal of 1,1-Dichloroethene	%	>90	>77	<1	<1
% Removal of cis-1,2-Dichloroethene	%	45.0	69.7	97.4	94.1
% Removal of trans-1,2-Dichloroethene	%	65.0	78.0	97.0	>97
% Removal of Benzene	%	<1	<1	<1	<1
% Removal of Chlorobenzene	%	<1	6.50	<1	<1
% Removal of Ethylbenzene	%	50.9	<1	<1	<1
% Removal of Toluene	%	7.88	<1	<1	<1
% Removal of Trichloroethene	%	<1	<1	<1	<1
% Removal of o-Xylene	%	88.5	<1	<1	<1
% Removal of Vinyl Chloride	%	46.9	78.0	98.3	94.9

Notes:

ND (x) - Not detected at reporting limit
a - Column Packed with 20% ZVI
b - Column Packed with 40% ZVI
c - Setup with 2 Columns Packed with 40% ZVI
d - Setup with 3 Columns Packed with 40% ZVI
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	5th Sampling[a]	6th Sampling[b]	7th Sampling[b]
Flow Rate	mL/min	0.10	0.10	0.10
Hydraulic Retention Time	Hours	30	30	30
Water Passed Through	mL	840	1100	400
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	212	43.4	12.3
trans-1,2-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
Benzene	µg/L	27.2	23.4	23.7
Chlorobenzene	µg/L	7.03	5.55	5.78
Ethylbenzene	µg/L	ND (2)	ND (2)	ND (2)
Toluene	µg/L	44.2	43	37.3
Trichloroethene	µg/L	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	ND (2)	ND (2)
Vinyl Chloride	µg/L	1870	164	215
% Removal of 1,1-Dichloroethene	%	<1	<1	<1
% Removal of cis-1,2-Dichloroethene	%	85.7	97.0	99.1
% Removal of trans-1,2-Dichloroethene	%	>97	97.4	>96
% Removal of Benzene	%	<1	<1	<1
% Removal of Chlorobenzene	%	19.3	<1	34.2
% Removal of Ethylbenzene	%	<1	<1	<1
% Removal of Toluene	%	<1	<1	6.52
% Removal of Trichloroethene	%	<1	<1	<1
% Removal of o-Xylene	%	<1	<1	<1
% Removal of Vinyl Chloride	%	87.8	98.8	98.4

Notes:

ND (x) - Not detected at reporting limit
a - Column Packed with 20% ZVI
b - Column Packed with 40% ZVI
c - Setup with 2 Columns Packed with 40% ZVI
d - Setup with 3 Columns Packed with 40% ZVI
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	8th Sampling[c]	9th Sampling[c]	10th Sampling[c]
Flow Rate	mL/min	0.10	0.10	0.10
Hydraulic Retention Time	Hours	60	60	60
Water Passed Through	mL	160	440	620
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	7.8	ND (2)	ND (2)
trans-1,2-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
Benzene	µg/L	ND (2)	ND (2)	ND (2)
Chlorobenzene	µg/L	ND (2)	ND (2)	ND (2)
Ethylbenzene	µg/L	ND (2)	ND (2)	ND (2)
Toluene	µg/L	9.14	2.25	1.28 J
Trichloroethene	µg/L	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	ND (2)	ND (2)
Vinyl Chloride	µg/L	125	45.3	27.1
% Removal of 1,1-Dichloroethene	%	<1	<1	<1
% Removal of cis-1,2-Dichloroethene	%	99.5	>99	>99
% Removal of trans-1,2-Dichloroethene	%	>96	>96	>96
% Removal of Benzene	%	>96	>97	>96
% Removal of Chlorobenzene	%	>91	>93	>90
% Removal of Ethylbenzene	%	>48	>71	>55
% Removal of Toluene	%	85.0	96.9	97.6
% Removal of Trichloroethene	%	<1	<1	<1
% Removal of o-Xylene	%	<1	<1	<1
% Removal of Vinyl Chloride	%	99.1	99.7	99.8

Notes:

ND (x) - Not detected at reporting limit
a - Column Packed with 20% ZVI
b - Column Packed with 40% ZVI
c - Setup with 2 Columns Packed with 40% ZVI
d - Setup with 3 Columns Packed with 40% ZVI
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	11th Sampling[c]	12th Sampling[d]	13th Sampling[d]
Flow Rate	mL/min	0.10	0.10	0.10
Hydraulic Retention Time	Hours	60	90	90
Water Passed Through	mL	520	590	500
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
trans-1,2-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
Benzene	µg/L	ND (2)	ND (2)	ND (2)
Chlorobenzene	µg/L	ND (2)	ND (2)	ND (2)
Ethylbenzene	µg/L	ND (2)	ND (2)	ND (2)
Toluene	µg/L	1.64 J	3.66	ND (2)
Trichloroethene	µg/L	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	ND (2)	ND (2)
Vinyl Chloride	µg/L	35.6	ND (2)	7.77
% Removal of 1,1-Dichloroethene	%	<1	<1	<1
% Removal of cis-1,2-Dichloroethene	%	>99	>99	>99
% Removal of trans-1,2-Dichloroethene	%	>96	>96	>94
% Removal of Benzene	%	>96	>97	>96
% Removal of Chlorobenzene	%	>93	>94	>92
% Removal of Ethylbenzene	%	>71	>79	>68
% Removal of Toluene	%	97.9	95.9	>98
% Removal of Trichloroethene	%	<1	<1	<1
% Removal of o-Xylene	%	<1	>48	>18
% Removal of Vinyl Chloride	%	99.7	>99	99.9

Notes:

ND (x) - Not detected at reporting limit
a - Column Packed with 20% ZVI
b - Column Packed with 40% ZVI
c - Setup with 2 Columns Packed with 40% ZVI
d - Setup with 3 Columns Packed with 40% ZVI
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	14th Sampling[d]
Flow Rate	mL/min	0.10
Hydraulic Retention Time	Hours	90
Water Passed Through	mL	490
1,1-Dichloroethene	µg/L	ND (2)
cis-1,2-Dichloroethene	µg/L	ND (2)
trans-1,2-Dichloroethene	µg/L	ND (2)
Benzene	µg/L	ND (2)
Chlorobenzene	µg/L	ND (2)
Ethylbenzene	µg/L	ND (2)
Toluene	µg/L	ND (2)
Trichloroethene	µg/L	ND (2)
m/p-Xylenes	µg/L	ND (4)
o-Xylene	µg/L	ND (2)
Vinyl Chloride	µg/L	7.26
% Removal of 1,1-Dichloroethene	%	<1
% Removal of cis-1,2-Dichloroethene	%	>99
% Removal of trans-1,2-Dichloroethene	%	>95
% Removal of Benzene	%	>96
% Removal of Chlorobenzene	%	>92
% Removal of Ethylbenzene	%	>70
% Removal of Toluene	%	>98
% Removal of Trichloroethene	%	<1
% Removal of o-Xylene	%	<1
% Removal of Vinyl Chloride	%	99.9

Notes:

ND (x) - Not detected at reporting limit
a - Column Packed with 20% ZVI
b - Column Packed with 40% ZVI
c - Setup with 2 Columns Packed with 40% ZVI
d - Setup with 3 Columns Packed with 40% ZVI
J - Result less than the reporting limit and is an estimated value

Table 5

Column 3 (EHC Column) Sampling Results
Laboratory Treatability Study
RACER-CVO
Ypsilanti, Michigan

Sample/Parameter	Units	1st Sampling	2nd Sampling	3rd Sampling	4th Sampling	5th Sampling	6th Sampling	7th Sampling
Flow Rate	mL/min	0.50	0.25	0.10	0.10	0.10	0.10	0.10
Hydraulic Retention Time	Hours	6	12	30	30	30	30	30
Water Passed Through	mL	630	585	490	480	380	500	250
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	1980	1730	1640	1320	1320	962	547
trans-1,2-Dichloroethene	µg/L	ND (2)	32.8	24.7	21.2	19	12.3	14.3
Benzene	µg/L	111	31.5	28.6	23.6	23.2	21.1	22.4
Chlorobenzene	µg/L	7.7	12.4	10.3	8.69	7.66	5.82	6.41
Ethylbenzene	µg/L	1.16 J	ND (2)	3.58	2.93	2.18	1.26 J	ND (2)
Toluene	µg/L	62.4	84.6	109	171	128	41.6	42.7
Trichloroethene	µg/L	ND (2)	ND (2)	1.58 J	1.62 J	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	1.21 J	ND (2)	1.08 J	ND (2)	ND (2)	ND (2)
Vinyl Chloride	µg/L	17500	16000	15500	13600	13800	10600	11800
% Removal of 1,1-Dichloroethene	%	<1	>77	<1	<1	<1	<1	<1
% Removal of cis-1,2-Dichloroethene	%	26.9	<1	0.606	7.04	10.8	34.1	60.6
% Removal of trans-1,2-Dichloroethene	%	98.4	31.4	26.7	51.4	46.2	68.5	48.6
% Removal of Benzene	%	<1	<1	<1	<1	14.7	<1	<2
% Removal of Chlorobenzene	%	23	<1	<1	<1	12.1	<1	27.1
% Removal of Ethylbenzene	%	88.4	<1	<1	<1	<1	<1	<1
% Removal of Toluene	%	30.7	<1	<1	<1	<1	<1	<1
% Removal of Trichloroethene	%	<1	<1	<2	<1	<1	<1	<1
% Removal of o-Xylene	%	>90	9.70	<1	<1	<1	<1	<1
% Removal of Vinyl Chloride	%	<1	7.0	18.4	26.1	9.80	20.9	9.92

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	1st Sampling	2nd Sampling	3rd Sampling	4th Sampling
Flow Rate	mL/min	0.50	0.25	0.10	0.10
Hydraulic Retention Time	Hours	6	12	30	30
Water Passed Through	mL	1200	890	470	530
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	2.37	ND (2)
cis-1,2-Dichloroethene	µg/L	2260	2090	1600	1660
trans-1,2-Dichloroethene	µg/L	49.6	40.2	26.5	24.9
Benzene	µg/L	91.7	45.9	27.6	29.5
Chlorobenzene	µg/L	14.6	14.2	11.5	9.23
Ethylbenzene	µg/L	5.14	5.6	4.65	3.47
Toluene	µg/L	105	89.1	66.8	57.9
Trichloroethene	µg/L	1.62 J	1	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	1.32 J	1.59 J	ND (2)	ND (2)
Vinyl Chloride	µg/L	14100	18700	15600	15500
% Removal of 1,1-Dichloroethene	%	<1	>77	<1	<1
% Removal of cis-1,2-Dichloroethene	%	16.6	<1	3.03	<1
% Removal of trans-1,2-Dichloroethene	%	19.7	15.9	21.4	42.9
% Removal of Benzene	%	<1	<1	<1	<1
% Removal of Chlorobenzene	%	<1	<1	<1	<1
% Removal of Ethylbenzene	%	48.6	<1	<1	<1
% Removal of Toluene	%	<1	<1	<1	<1
% Removal of Trichloroethene	%	<1	<1	<1	<1
% Removal of o-Xylene	%	86.8	<1	<1	<1
% Removal of Vinyl Chloride	%	<1	<1	17.9	15.8

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	5th Sampling	6th Sampling
Flow Rate	mL/min	0.10	0.10
Hydraulic Retention Time	Hours	30	30
Water Passed Through	mL	180	1330
1,1-Dichloroethene	µg/L	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	1680	107
trans-1,2-Dichloroethene	µg/L	24.1	10.7
Benzene	µg/L	26	27.6
Chlorobenzene	µg/L	8.13	8.1
Ethylbenzene	µg/L	2.18	1.44 J
Toluene	µg/L	51.2	49.3
Trichloroethene	µg/L	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	ND (2)
Vinyl Chloride	µg/L	15200	12900
% Removal of 1,1-Dichloroethene	%	<1	<1
% Removal of cis-1,2-Dichloroethene	%	<1	92.7
% Removal of trans-1,2-Dichloroethene	%	31.7	72.6
% Removal of Benzene	%	4.41	<1
% Removal of Chlorobenzene	%	6.66	<1
% Removal of Ethylbenzene	%	<1	<1
% Removal of Toluene	%	<1	<1
% Removal of Trichloroethene	%	<1	<1
% Removal of o-Xylene	%	<1	<1
% Removal of Vinyl Chloride	%	0.7	3.73

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	7th Sampling	8th Sampling	9th Sampling
Flow Rate	mL/min	0.10	0.10	0.10
Hydraulic Retention Time	Hours	30	30	30
Water Passed Through	mL	710	470	580
1,1-Dichloroethene	µg/L	ND (2)	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	46.4	80.2	196
trans-1,2-Dichloroethene	µg/L	4.72	3.3	2.95
Benzene	µg/L	29.3	28	31.3
Chlorobenzene	µg/L	8.94	8.46	10.3
Ethylbenzene	µg/L	ND (2)	ND (2)	ND (2)
Toluene	µg/L	48.5	46.2	54.8
Trichloroethene	µg/L	ND (2)	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	ND (2)	ND (2)
Vinyl Chloride	µg/L	12400	11500	15000
% Removal of 1,1-Dichloroethene	%	<1	<1	<1
% Removal of cis-1,2-Dichloroethene	%	96.7	95.4	87.8
% Removal of trans-1,2-Dichloroethene	%	83.0	87.6	89.6
% Removal of Benzene	%	<3	1.75	<1
% Removal of Chlorobenzene	%	<1	23.8	25.4
% Removal of Ethylbenzene	%	<1	>48	>71
% Removal of Toluene	%	<1	24.4	25.6
% Removal of Trichloroethene	%	<1	<1	<1
% Removal of o-Xylene	%	<1	<1	<1
% Removal of Vinyl Chloride	%	5.34	14.2	<1

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

Sample/Parameter	Units	10th Sampling	11th Sampling
Flow Rate	mL/min	0.020	0.040
Hydraulic Retention Time	Hours	150	75
Water Passed Through	mL	610	540
1,1-Dichloroethene	µg/L	ND (2)	ND (2)
cis-1,2-Dichloroethene	µg/L	21.4	612
trans-1,2-Dichloroethene	µg/L	ND (2)	7.86
Benzene	µg/L	28.1	30.2
Chlorobenzene	µg/L	8.63	10.3
Ethylbenzene	µg/L	ND (2)	ND (2)
Toluene	µg/L	45.2	52.8
Trichloroethene	µg/L	ND (2)	ND (2)
m/p-Xylenes	µg/L	ND (4)	ND (4)
o-Xylene	µg/L	ND (2)	ND (2)
Vinyl Chloride	µg/L	12300	12400
% Removal of 1,1-Dichloroethene	%	<1	<1
% Removal of cis-1,2-Dichloroethene	%	98.6	64.0
% Removal of trans-1,2-Dichloroethene	%	>96	70.0
% Removal of Benzene	%	<1	<1
% Removal of Chlorobenzene	%	13.7	29.5
% Removal of Ethylbenzene	%	>55	>71
% Removal of Toluene	%	13.9	32.5
% Removal of Trichloroethene	%	<1	<1
% Removal of o-Xylene	%	<1	<1
% Removal of Vinyl Chloride	%	2.38	12.1

Notes:

ND (x) - Not detected at reporting limit
J - Result less than the reporting limit and is an estimated value

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