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2024 Annual Technical Progress Report Submittal **RACER Trust Bay City Powertrain Industrial Land**

GHD has prepared this 2024 Annual Technical Progress Report (Annual Report) for the Revitalizing Auto Communities Environmental Response Trust (RACER) Bay City Powertrain Industrial Land (Site) located in Bay City, Michigan.

This Annual Report covers the RACER Site for the reporting period from November 8, 2023 to December 11, 2024, unless otherwise noted in the report. Included as part of this submittal, as applicable, are descriptions of actions related to the implementation of the Feasibility Study/Remedial Action Plan (FS/RAP), supplemental response actions and operation, maintenance, and monitoring activities. This Annual Report summarizes activities related to these action plans, outlines project status, and details any difficulties encountered during the implementation of the action plans.

This annual report does not summarize modifications to stormwater management at the Site that are necessary as a result of the General Motors Corporation (GMC) bankruptcy process. The Storm Water Improvements Work Plan was submitted to Michigan Department of Environment, Great Lakes, and Energy (EGLE) on April 20, 2022. EGLE responded via email on June 2, 2022, identifying no issues with the proposed stormwater improvements but providing comments, which are acknowledged. General Motors LLC's (GM's) portion of the separation work was completed in September 2023. The remaining modifications were completed by RACER in September 2024. A construction completion report will be prepared and submitted to EGLE which will document the work completed during the construction period.

1. Summary of On-Going Activities and Project Status

The following sections summarize the activities performed related to implementation of the RAP, supplemental response actions, and operation, maintenance, and monitoring, and details any difficulties encountered during the implementation of the action plans.

1.1 Remedial Action Plan

RAP operation and maintenance activities are being implemented for the Site.

A groundwater treatment system has been designed to provide operational independence from the treatment system at the neighboring GM facility which previously treated groundwater and stormwater from the RACER Site. The need for this system resulted from the outcome of the GMC June 2009 bankruptcy (i.e., RACER

received ownership of the Site and GM obtained ownership of the adjacent operating facility). The construction of the system was initiated in November 2012 and was fully commissioned in April 2015. Since the system was fully commissioned, RACER has been treating extracted groundwater prior to discharge to the City of Bay City sewer. New groundwater extraction pumps and associated well upgrades were completed as part of the new groundwater treatment system construction.

1.1.1 Operation and Maintenance Activities

An initial Monitoring, Operation, and Maintenance Plan (O&M Plan) was submitted on behalf of GMC in November 2000 to Michigan Department of Environmental Quality (MDEQ now referred to EGLE). Revised O&M Plan sections were submitted on behalf of GMC to MDEQ in June 2001, conditionally approved by MDEQ on November 27, 2001, and the final O&M Plan was submitted on behalf of GMC in January 2002 and subsequently approved by MDEQ. Specific O&M activities for the new RACER groundwater treatment system were added to the existing O&M Plan after the commissioning of the treatment system in April 2015. A revised Operation, Maintenance, and Monitoring Plan manual was submitted on behalf of RACER to MDEQ on November 14, 2016, as part of the Corrective Measures/Remedial Action Plan Completion Report and approved by MDEQ in an approval letter dated February 22, 2017.

1.1.2 Operation and Maintenance Activities–Groundwater Extraction System

Groundwater levels in the entire Crotty Street Channel (CSC) are lowered through the operation of a pump in CSC extraction well EW-15, since the entire CSC is hydraulically well connected due to the porous nature of the soils (backfill was pea gravel and sand) in the CSC. In addition, groundwater levels in the Machine Storage Area (MSA) are lowered through the operation of pumps in MSA extraction wells EW-6, EW-8, and EW12, which discharge to EW-15. The pump in EW-15 directs water to the RACER groundwater treatment system where the extracted water is treated before being discharged to the City of Bay City sanitary sewer system under Industrial User Discharge Permit (120807).

The groundwater extraction system operated regularly during the 12-month period covered by this report, except when the groundwater treatment system was down for maintenance.

Maintenance activity checklists are completed monthly and include the operational status and water level measurements of the extraction wells. As stated in last year's annual report dated January 29, 2024, in an effort to streamline reporting effort, the monthly checklists are no longer being presented in the Annual Reports. Monthly checklists and other field activity documents will continue to be maintained by GHD and can be made available upon request.

1.1.3 Operation and Maintenance Activities – Groundwater Treatment System

Extracted groundwater is treated through the on-Site groundwater treatment system before being discharged to the City of Bay City under Industrial User Discharge Permit (120807). The treatment system incorporates aeration, settling, bag filtration and granular activated carbon (GAC) filtration to remove contaminants of concern.

The groundwater treatment system operated regularly during this reporting period, except when down for maintenance (for example: bag filter replacement, backflushing of GACs, or replacement of GACs), and during 2024 system cleanout, which is described below.

From April 2015, when the groundwater treatment system was fully commissioned, through December 11, 2024, approximately 1,714,616 gallons of groundwater were treated.

2024 Treatment System Cleanout

The treatment system required cleaning to remove sludge and sediments that accumulated in the sludge tank and other system components. Job Site Services (JSS) was contracted by GHD to perform part of the cleaning in July 2024. The cleaning process proceeded as follows:

The groundwater extraction system was shut down on July 12, 2024, approximately 1 week prior to cleaning, to allow settling of the water in the tanks. Over the next several days, water was decanted from the sludge tank, settling chamber, and clear well via submersible pump by GHD personnel. Decanted water was treated through the treatment system. The GAC was backwashed to improve water treatment efficiency.

On July 17, 2024, JSS operated a vacuum truck and utilized a pressure washer, as necessary, to remove the sludge from the tanks. Water was drained from the vacuum truck to the extent possible. The remaining sludge from the vacuum truck was emptied into a double-lined rolloff box that resided on a secondary containment pad. Equipment decontamination was performed using isopropyl alcohol (to prevent fouling of the GAC), and confirmation equipment wipe samples were collected from all non-disposable parts and analyzed for polychlorinated biphenyls (PCBs). Wipe results were either non-detect or below 100 micrograms per 100 centimetres squared (100ug/100cm²) PCBs and therefore the equipment is confirmed to be decontaminated. All decanted/drained water and decontamination water was treated through the treatment system.

For approximately the next two weeks, excess water was decanted from the rolloff box via submersible pump by GHD personnel. Decanted water was treated through the treatment system. The treatment system filter bags were changed out, new GAC units were installed, and the system was prepped for restart. The groundwater extraction and treatment system was restarted on August 29, 2024.

Complete details on the treatment system cleanout event will be documented in the storm sewer modification construction completion report.

1.1.4 Saginaw River Levels

From 1977 until 2017, Saginaw River water levels have been recorded from government operated entities, such as the National Oceanic and Atmospheric Administration (NOAA) and United States Geological Survey (USGS). In 2017, as a result of damaged gauges or unavailable information from USGS and NOAA, GHD utilized the monthly manual measurements of the on-Site staff gauges for the water level in the Saginaw River, however these staff gauges have also been damaged over time. In 2023, GHD began measuring the elevation of the Saginaw River from the top of the break wall, identified as BW-3 (River), and will continue to do so moving forward until another USGS station is installed or another source of Saginaw River water levels is identified.

Based on the combined NOAA and USGS data from 1977 to September 2, 2017, the average Saginaw River water level was approximately 578.89 feet (ft) above mean sea level (AMSL). Recent water levels were above the average Saginaw River water level, as the water levels measured at BW-3 in 2024 ranged between 579.29 to 580.02 ft AMSL.

1.1.5 Monitoring Activities

Maintenance Monitoring

As part of the monthly maintenance activity checklists, water levels are collected from each extraction well. Table 1 presents the monthly extraction well groundwater elevations, based on the depth-to-water measurements, for this reporting period. System levels were not measured during the August 2024 system cleaning shutdown and inadvertently missed during the November 2024 system inspection.

Semi-annual groundwater treatment system influent samples (collected from EW-15) were collected in January, June, and December 2024. Table 2 presents the analytical results for this reporting period compared to EGLE's

Part 201 Generic Residential Drinking Water, Nonresidential Drinking Water, and Groundwater Surface Water Interface Criteria.

Annual Monitoring Event

In accordance with the O&M Plan, an annual monitoring event was conducted in October 2024. Figure 1 presents the locations where groundwater chemical analysis is performed. Figure 2 presents the locations where depth-to-water measurements for groundwater and surface water are monitored.

On October 10, 2024, depth-to-water measurements were collected from on-Site monitoring wells. Figure 3 presents the annual shallow groundwater elevations. Table 3 presents the annual groundwater elevations, based on the depth-to-water measurements, from 2015 to present. Attachment A presents historical groundwater elevations from 1999 to 2014.

Between October 10 and 17, 2024, the annual groundwater monitoring for PCBs in groundwater was conducted. Table 4 presents the analytical results summary for the annual groundwater monitoring event, compared to EGLE's Part 201 Generic Residential Drinking Water, Nonresidential Drinking Water, and Groundwater Surface Water Interface Criteria. A summary of the analytical groundwater data from 2012 to present is presented in Attachment B. The laboratory data reports for all chemical analysis conducted in the reporting period and data validation for the 2024 annual sampling event are presented in Attachment C.

A review of the historical groundwater sample results reveals that the 2024 results are consistent with previous years. Since 2012, LMW13S has consistently reported PCB concentrations above the EGLE Part 201 Residential and Nonresidential Drinking Water Criteria of 0.5 (parts per billion) ppb. Also since 2012, MW102D1 has consistently reported PCB concentrations above the EGLE Part 201 Groundwater Surface Water Interface Criteria of 0.2 ppb (with some exceptions prior to 2016). No other elevated concentrations were observed in 2024.

Compliance Monitoring (Industrial User Discharge Permit)

In accordance with the requirements of the Industrial User Discharge Permit (120807) with the City of Bay City, semi-annual composite discharge compliance samples were collected from the groundwater treatment system effluent in January, June, and December 2024. Table 5 presents the results compared to the maximum discharge limits.

There were no exceedances of permit discharge standards observed.

1.2 Supplemental Response Actions

A Declaration of Restrictive Covenant (DRC) for the Site was recorded with the Bay County Register of Deeds on November 17, 2015. The location and content of permanent markers were reviewed and approved by MDEQ on November 4, 2015.

A Corrective Measures Remedial Action Plan Completion Report was prepared and submitted to MDEQ for review on September 23, 2016. MDEQ approved RCRA Corrective Action Complete with Controls (RCRA Corrective Action Event Code CA900CR) on September 28, 2016.

Modifications to stormwater management at the Site are necessary as a result of the GMC bankruptcy process. GM's portion of the separation work was completed in September 2023. The remaining modifications were completed by RACER in September 2024. Information obtained during the evaluation of stormwater modifications indicates the 2015 DRC needs to be revised to account for slight differences in exposure barrier and slurry wall locations, stormwater modifications, utilization of permanent markers, and other clarifications. In addition, per the Corrective Action Maintenance and Monitoring (Camm) Inspection Report discussed below, EGLE requested the 2015 DRC be revised to include a provision addressing the vapor intrusion to indoor air pathway. Revision of the DRC is in progress, including discussions with GM.

2. EGLE CAMM Inspection

On October 30, 2023, EGLE completed a CAMM inspection as a requirement of the RCRA CA Environmental Indicators form 900 - Corrective Action Complete with Controls. Representatives at the inspection included: Jeremy Pepin (EGLE-MMD), Art Ostaszewski (EGLE-MMD), Joe Rogers (EGLE-MMD), Dave Favero (RACER), John-Eric Pardys (GHD), and John York (GHD). On April 9, 2024, EGLE provided RACER with the inspection report which contained a list of items to be addressed based on the inspection completed. Responses on the CAMM Inspection Report were provided to EGLE on May 23, 2024.

The following work was conducted as a response to the CAMM Inspection Report:

- The perimeter fence was repaired in areas where it was damaged or compromised, specifically on the east side where fill was missing and on the west side where a gap was present. These repairs were completed in July 2024.
- Repairs to areas of the vegetated cover which were impacted during the stormwater separation work were completed in August 2024.
- Five monitoring well protective casings were repaired in August 2024.

The CAMM Inspection Report also identified that repairs were required for the concrete barrier area.

This work will be scheduled for spring 2025 dependent upon weather and contractor availability.

3. Proposed Modifications to the Monitoring Program

No modifications are proposed at this time with the exception of scheduling alterations, detailed below.

4. Schedule

All activities have been completed within the required time frames.

As part of the 2025 monitoring program, RACER will continue to perform monthly extraction and treatment system inspections and regular pump maintenance, as necessary. RACER will also collect semi-annual groundwater treatment system influent and effluent samples in December and June 2025. The annual groundwater monitoring event will be completed in August 2025.

Should you have any questions on the above, please do not hesitate to contact us.

Sincerely,



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Engineer

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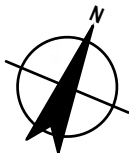
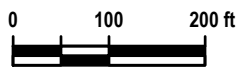
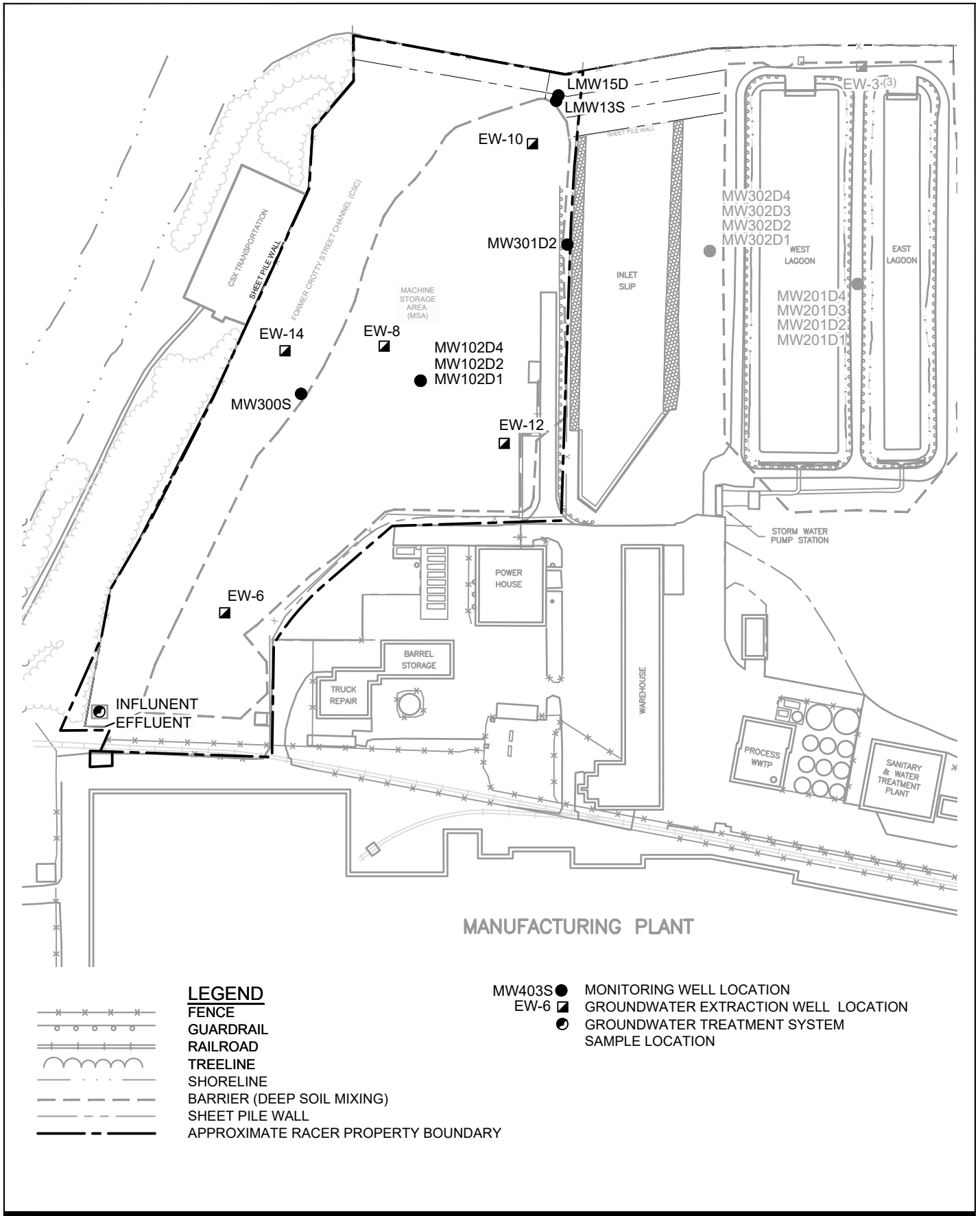
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Encl.

Figure 1	Chemical Analysis Monitoring Locations
Figure 2	Water Elevation Monitoring Locations
Figure 3	Shallow Groundwater Elevations
Table 1	Groundwater Extraction System Water Elevations
Table 2	Analytical Results Summary–Groundwater Treatment System Influent Sampling
Table 3	Monitoring Well Completion Details and Groundwater Elevations
Table 4	Analytical Results Summary–Annual Sampling
Table 5	Analytical Results Summary–Groundwater Treatment System Effluent Sampling
Table 6	Summary of Long-Term Groundwater and Stormwater Monitoring Activities
Attachment A	Historical Groundwater Elevations from 1999 to 2014
Attachment B	Analytical Results Summary (2013 to 2024)
Attachment C	Laboratory Reports and Data Validation Memorandums

Copy to: Richard Finn, City of Bay City
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Brendan Mullen, RACER Trust
Dave Favero, RACER Trust
Jessica Gallaway, GHD

Figures

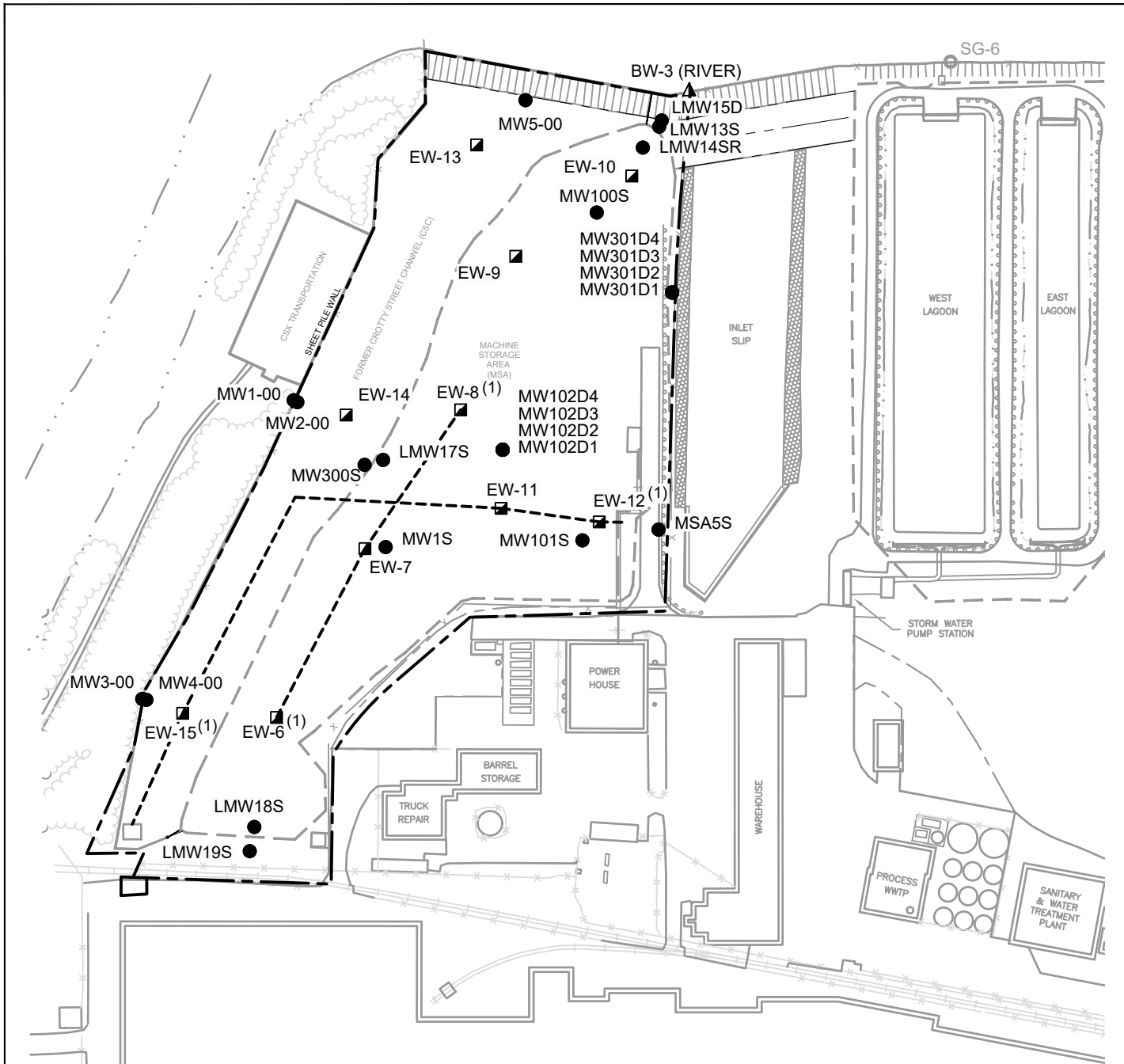


RACER TRUST - BAY CITY INDUSTRIAL LAND
 BAY CITY, MICHIGAN

Project No. 11208058
 Date November 2023

**CHEMICAL ANALYSIS MONITORING
 LOCATIONS**

FIGURE 1



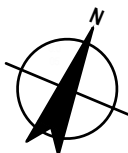
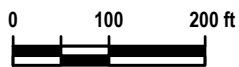
MANUFACTURING PLANT

LEGEND

- FENCE
- GUARDRAIL
- RAILROAD
- TREELINE
- SHORELINE
- BARRIER (DEEP SOIL MIXING)
- SHEET PILE WALL
- APPROXIMATE RACER PROPERTY BOUNDARY
- EXTRACTION DISCHARGE LINE

- MW403S ● MONITORING WELL LOCATION
- EW-6 ◻ GROUNDWATER EXTRACTION WELL LOCATION
- SG-6 ○ FORMER STAFF GAGE LOCATION
- BW-3 ▲ BREAK WALL MEASUREMENT LOCATION

NOTE:
(1) ACTIVE PUMPING LOCATION.

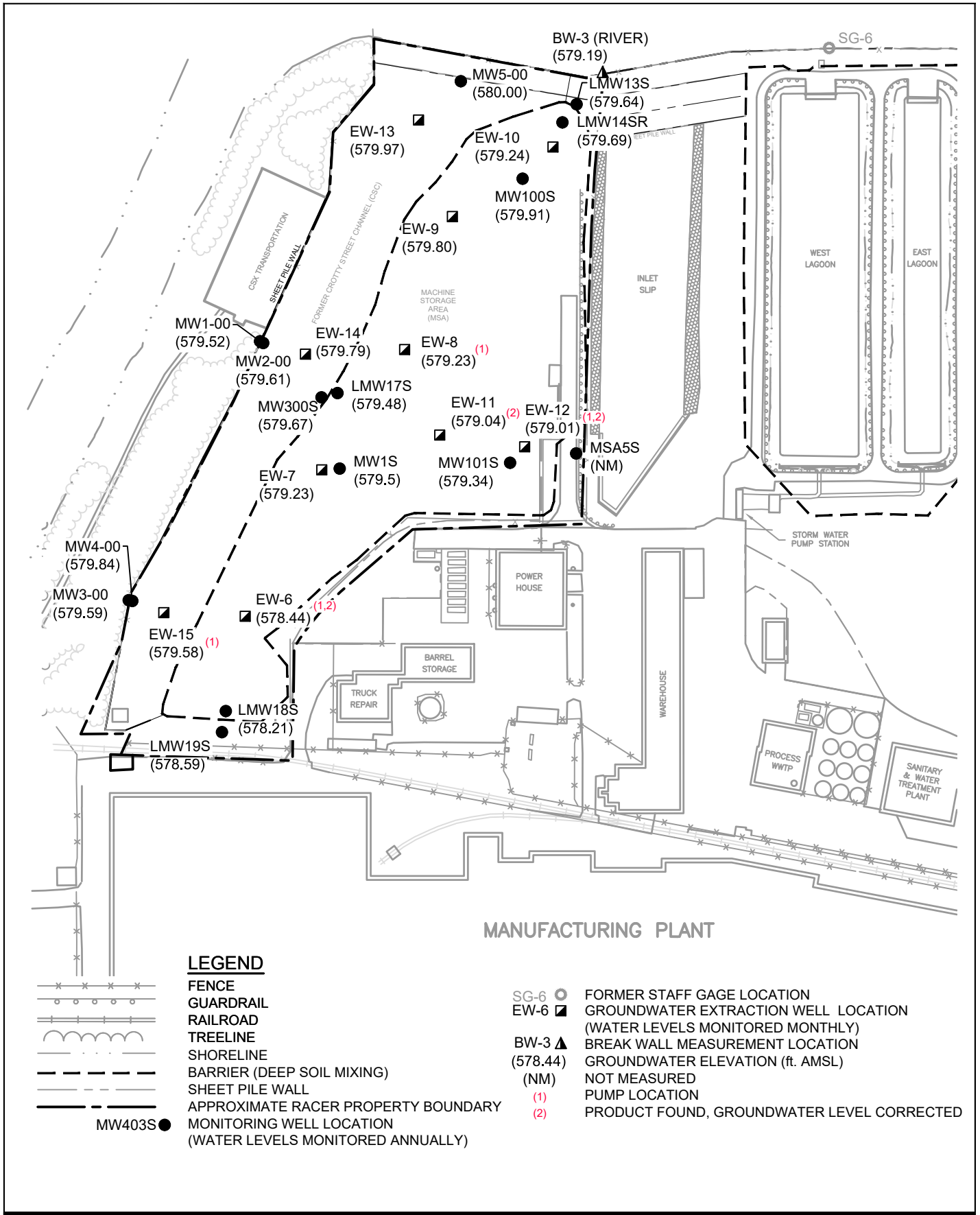


RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Project No. 11208058
Date November 2023

**WATER ELEVATION MONITORING
LOCATIONS**

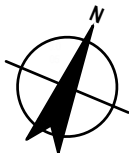
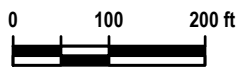
FIGURE 2



LEGEND

- FENCE
- GUARDRAIL
- RAILROAD
- TREELINE
- SHORELINE
- BARRIER (DEEP SOIL MIXING)
- SHEET PILE WALL
- APPROXIMATE RACER PROPERTY BOUNDARY
- MONITORING WELL LOCATION (WATER LEVELS MONITORED ANNUALLY)

- SG-6 ○ FORMER STAFF GAGE LOCATION
- EW-6 ◼ GROUNDWATER EXTRACTION WELL LOCATION (WATER LEVELS MONITORED MONTHLY)
- BW-3 ▲ BREAK WALL MEASUREMENT LOCATION
- (578.44) GROUNDWATER ELEVATION (ft. AMSL)
- (NM) NOT MEASURED
- (1) PUMP LOCATION
- (2) PRODUCT FOUND, GROUNDWATER LEVEL CORRECTED



RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Project No. 11208058
Date January 2025

SHALLOW GROUNDWATER ELEVATIONS
OCTOBER 10, 2024

FIGURE 3

Tables

**Groundwater Extraction System Water Elevations
Racer Trust - Bay City Site
Bay City, Michigan**

Location	Reference	Well Depth	Top ICU	1/8/2024 Elevation	2/5/2024 Elevation	3/7/2024 Elevation	4/9/2024 Elevation	5/6/2024 Elevation	6/3/2024 Elevation	8/12/2024 Elevation	9/3/2024 Elevation	10/7/2024 Elevation	12/2/2024 Elevation	
Machine Storage Area														
EW-6	(1)	589.74	570.39	572.39	578.00 (2)	578.22 (2)	578.09 (2)	578.12	578.02 (2)	578.28 (2)	NM (3)	578.34 (2)	578.47 (2)	NM (2)
EW-7		587.99	571.14	571.64	578.53	578.60	578.58	578.60	578.56	578.44	NM (3)	568.58	579.23	579.26
EW-8	(1)	588.34	572.29	573.29	578.78 (2)	578.94	578.71	578.91	578.91	578.95	NM (3)	579.20	579.27	579.13
EW-9		588.04	572.19	573.69	579.46	579.48	579.32	579.46	579.49	579.69	NM (3)	579.74	579.74	579.34
EW-10		587.77	570.82	572.32	578.94	579.12	578.96	579.20	579.25	579.51	NM (3)	579.47	579.29	578.71
EW-11		591.51	571.91	572.56	578.26 (2)	578.72 (2)	578.60 (2)	578.74 (2)	---	(2)	579.48 (2)	578.93 (2)	579.10 (2)	578.97 (2)
EW-12	(1)	586.42	571.57	573.07	578.45 (2)	579.55 (2)	579.06 (2)	579.37 (2)	---	(2)	578.46 (2)	578.61 (2)	578.97 (2)	578.92 (2)
Crotty Street Channel Containment Area														
EW-13		584.33	571.86	--	579.83	580.40	579.77	579.97	580.14	580.23	NM (3)	580.10	579.86	579.11
EW-14		582.42	569.92	--	579.89	580.22	579.56	579.83	580.00	580.09	NM (3)	580.04	579.80	579.25
EW-15	(1)	583.71	571.61	--	579.38	579.19	579.43	579.60	579.96	579.87	NM (3)	579.69	579.63	578.88
Saginaw River														
BW-3 (RIVER)		587.16	--	--	578.92	579.07	579.04	578.92	579.66	579.61	580.02	579.39	579.86	578.34

Notes:

Elevations shown in ft AMSL

ICU Intermediate Confining Unit

NM Not Measured

(1) Pumping well

(2) Product found. Where water elevations were recorded, a correction was calculated by multiplying the relative LNAPL density (0.9) by the LNAPL thickness and adding the result to the measured water/LNAPL interface elevation

(3) System shut down for maintenance

Table 2

**Analytical Results Summary
Groundwater Treatment System Influent Sampling
Racer Trust - Bay City Site
Bay City, Michigan**

AOI:
Sample Location:
Sample ID:
Sample Date:

Treatment System influent-GWTS GW-11208058-061024-JY-001 6/10/2024	Treatment System influent-GWTS W-11208058-121124-JY-001 12/11/2024
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Parameters	Units	Michigan Residential Drinking water criteria a	Michigan Nonresidential Drinking water criteria b	GSI c		
04PCBs						
Aroclor-1016 (PCB-1016)	mg/L	0.0005	0.0005	0.0002	0.001 U	0.00098 U
Aroclor-1221 (PCB-1221)	mg/L	0.0005	0.0005	0.0002	0.013^{abc}	0.013^{abc}
Aroclor-1232 (PCB-1232)	mg/L	0.0005	0.0005	0.0002	0.001 U	0.00098 U
Aroclor-1242 (PCB-1242)	mg/L	0.0005	0.0005	0.0002	0.001 U	0.00098 U
Aroclor-1248 (PCB-1248)	mg/L	0.0005	0.0005	0.0002	0.001 U	0.00098 U
Aroclor-1254 (PCB-1254)	mg/L	0.0005	0.0005	0.0002	0.001 U	0.00098 U
Aroclor-1260 (PCB-1260)	mg/L	0.0005	0.0005	0.0002	0.001 U	0.00098 U

Footnotes:
U Not detected at the associated reporting limit.

Table 3

**Monitoring Well Completion Details and Groundwater Elevations
2015 to Present
Racer Trust - Bay City Industrial Land
Bay City, Michigan**

Location	Reference Elevation (ft AMSL)	Well Depth (ft)	Screen Length (ft)	Screen Type	Riser Type	Screen Diameter (in)	10/10/2024	9/15/2023	8/22/2022	8/25/2021	8/3/2020	12/12/2019	12/19/2018	8/23/2017	12/8/2016	8/24/2015
<u>Machine Storage Area (MSA)</u>																
LMW13S	589.40	19.22	10	SS	PVC	2	579.64	580.11	580.12	580.77	581.97	581.94	580.46	580.72	580.01	580.10
LMW17S	589.31	19.83	10	SS	PVC	2	579.48	579.21	579.46	579.22	579.90	579.42	579.13	579.17	578.79	579.13
LMW18S	592.33	22.52	10	SS	PVC	2	578.21	578.59	577.88	578.95	579.30	578.85	578.64	578.48	578.17	578.62
LMW19S	588.61	19.32	10	SS	PVC	2	578.59	579.97	578.93	579.55	580.45	580.13	579.10	578.99	578.91	579.55
MW1S	591.08	12.95	2	SS	SS	2	579.5	578.73	578.75	578.77	578.88	578.77	578.79	578.76	578.77	578.73
MW100S	591.97	14.44	10	SS	SS	2	579.91	580.24	580.64	581.16	581.95	581.12	580.58	580.69	579.80	580.19
MW101S	593.34	19.22	10	SS	SS	2	579.34	579.06	578.96	579.05	579.12	579.48	579.44	578.99	579.17	579.12
MW102D1	594.86	30.99	10	SS	SS	2	579.34	579.59	580.07	580.82	582.13	581.55	580.18	580.86	579.30	579.88
MW102D2	594.93	36.21	10	SS	SS	2	579.33	579.58	580.04	580.81	582.12	581.53	580.15	580.85	579.37	579.86
MW102D3	594.91	46.74	10	SS	SS	2	579.2	579.57	580.02	580.78	582.09	581.52	580.15	580.78	579.25	579.83
MW102D4	594.90	56.85	10	SS	SS	2	579.2	579.58	579.95	580.72	582.03	581.44	580.08	580.74	579.19	579.77
MW300S	587.12	15.06	10	SS	SS	2	579.67	580.34	580.46	580.83	582.00	581.36	580.86	579.97	577.19	577.90
LMW14SR	589.01	13.00	7	SS	SS	2	579.69	579.97	580.28	581.02	582.13	581.28	580.54	580.69	579.63	580.02
<u>Perimeter Banks (PB)</u>																
LMW15D	588.34	32.80	10	SS	PVC	2	579.35	579.54	580.15	580.89	582.33	581.63	580.16	580.93	579.16	579.68
MW301D1	589.54	27.50	10	SS	SS	2	577.74	577.83	578.34	579.16	580.48	579.88	578.51	579.24	577.60	578.15
MW301D2	589.16	37.24	10	SS	SS	2	577.76	577.91	578.47	579.24	580.59	579.97	578.56	579.31	577.67	578.22
MW301D3	589.22	44.04	10	SS	SS	2	577.51	577.74	578.30	579.10	580.46	579.82	578.43	579.17	577.53	578.06
MW301D4	589.33	55.95	10	SS	SS	2	577.65	577.87	578.39	579.20	580.56	579.92	578.52	579.25	577.61	578.14
<u>Support Facilities Area (SFA)</u>																
MSA5S	588.60	18.98	--	--	SS	2	NM	NM	NM	578.91	NM	NM	588.60	579.97	579.91	580.26
<u>Crotty Street Channel</u>																
MW1-00	588.26	12.00	7	SS	SS	2	579.52	580.01	580.56	580.87	582.09	582.09	580.55	579.67	579.16	579.79
MW2-00	589.29	18.00	7	SS	SS	2	579.61	580.14	580.66	581.04	582.22	582.22	580.65	581.58	578.84	579.35
MW3-00	588.40	12.50	7	SS	SS	2	579.59	579.97	580.52	580.90	582.10	582.10	580.48	580.60	579.15	579.76
MW4-00	589.65	19.00	7	SS	SS	2	579.84	580.3	580.73	581.21	582.38	582.38	580.81	580.87	579.03	579.54
MW5-00	588.89	13.00	7	SS	SS	2	580	580.56	580.66	581.33	582.53	582.53	581.31	580.15	577.22	577.70
<u>Saginaw River</u>																
BW-3 (River)	587.16	--	--	--	--	--	579.19	579.44	NM	NM	NM	NM	NM	NM	NM	NM
SG-6 ⁽¹⁾	587.16	--	--	--	--	--	damaged	damaged	579.93 (2)	580.94	582.44	581.48	580.05	580.79	579.07	579.66

Notes:

Elevations shown in ft AMSL

NM NM Not Measured

(1) SG-6 measured the Saginaw River water level from the top of the sheet pile wall. This has now been replaced with BW-3 (River) which measures at the same breakwall.

(2) Value collected on 9/8/2022

Analytical Results Summary
 Annual Sampling
 Racer Trust - Bay City Site
 Bay City, Michigan

AOI:					Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:					MW102D1	MW102D2	MW102D2	MW102D4
Sample ID:					GW-11208058-101024-BW-001	GW-11208058-101024-BW-002	GW-11208058-101024-BW-003	GW-11208058-101024-BW-004
Sample Date:					10/10/2024	10/10/2024	10/10/2024 (Duplicate)	10/10/2024
Parameters	Units	Michigan Residential Drinking water criteria <i>a</i>	Michigan Nonresidential Drinking water criteria <i>b</i>	GSI <i>c</i>				
PCBs								
Aroclor-1016 (PCB-1016)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	0.0005	0.0005	0.0002	0.00026^c	0.000095 U	0.000095 U	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.000095 U	0.000095 U	0.000095 U

Notes:

U Not detected at the associated reporting limit.

Analytical Results Summary
Annual Sampling
Racer Trust - Bay City Site
Bay City, Michigan

AOI:
Sample Location:
Sample ID:
Sample Date:

Machine Storage Area MW300S	Perimeter Banks LMW13S	Perimeter Banks LMW15D	Perimeter Banks MW301D2
GW-11208058-101724-BW-008	GW-11208058-101124-BW-006	GW-11208058-101124-BW-005	GW-11208058-101724-BW-007
10/17/2024	10/11/2024	10/11/2024	10/17/2024

Parameters	Units	Michigan Residential	Michigan Nonresidential	GSI					
		Drinking water criteria <i>a</i>	Drinking water criteria <i>b</i>						
PCBs				<i>c</i>					
Aroclor-1016 (PCB-1016)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.0002 U	0.000098 U	0.00011 U	0.00011 U
Aroclor-1221 (PCB-1221)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.0013 ^{abc}	0.000098 U	0.00011 U	0.00011 U
Aroclor-1232 (PCB-1232)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.0002 U	0.000098 U	0.00011 U	0.00011 U
Aroclor-1242 (PCB-1242)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.0002 U	0.000098 U	0.00011 U	0.00011 U
Aroclor-1248 (PCB-1248)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.0002 U	0.000098 U	0.00011 U	0.00011 U
Aroclor-1254 (PCB-1254)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.0002 U	0.000098 U	0.00011 U	0.00011 U
Aroclor-1260 (PCB-1260)	mg/L	0.0005	0.0005	0.0002	0.000095 U	0.0002 U	0.000098 U	0.00011 U	0.00011 U

Notes:
U Not detected at the associated reporting limit.

**Analytical Results Summary
Groundwater Treatment System Effluent Sampling
Racer Trust - Bay City Site
Bay City, Michigan**

Sample Location:			effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS
Sample ID:			W-11208058-011624-JY-002	W-11208058-011624-JY-003	GW-11208058-061124-JY-002	GW-11208058-061124-JY-003	W-11208058-121124-JY-002
Sample Date:			1/16/2024	1/16/2024	6/11/2024	6/11/2024	12/11/2024
Parameters	Units	Daily Maximum ⁽¹⁾					
VOAs							
Vinyl chloride	mg/L	0.002	0.001 U	-	0.001 U	-	0.001 U
Metals							
Cadmium	mg/L	0.057	-	0.002 U	-	0.002 U	0.002 U
Chromium	mg/L	6.812	-	0.005 U	-	0.005 U	0.005 U
Copper	mg/L	1.476	-	0.02 U	-	0.02 U	0.02 U
Iron	mg/L	-	-	0.1 U	-	0.17	0.10 U
Lead	mg/L	0.632	-	0.003 U	-	0.003 U	0.003 U
Mercury	mg/L	ND	-	0.0002 U	-	0.0002 U	0.0002 U
Nickel	mg/L	2.548	-	0.0022 J	-	0.0029 J	0.02 U
Silver	mg/L	0.2	-	0.005 U	-	0.005 U	0.005 U
PCBs							
Aroclor-1016 (PCB-1016)	mg/L	ND	-	0.000096 U	-	0.000095 U	0.00049 U
Aroclor-1221 (PCB-1221)	mg/L	ND	-	0.000096 U	-	0.000095 U	0.00049 U
Aroclor-1232 (PCB-1232)	mg/L	ND	-	0.000096 U	-	0.000095 U	0.00049 U
Aroclor-1242 (PCB-1242)	mg/L	ND	-	0.000096 U	-	0.000095 U	0.00049 U
Aroclor-1248 (PCB-1248)	mg/L	ND	-	0.000096 U	-	0.000095 U	0.00049 U
Aroclor-1254 (PCB-1254)	mg/L	ND	-	0.000096 U	-	0.000095 U	0.00049 U
Aroclor-1260 (PCB-1260)	mg/L	ND	-	0.000096 U	-	0.000095 U	0.00049 U
Wet							
Ammonia-N	mg/L	30	-	9.0	-	12	16
Biochemical oxygen demand (BOD)	mg/L	835	-	2.0 U	-	19 b	2.0 U
Chemical oxygen demand (COD)	mg/L	1670	-	5.1 J	-	33	13
Oil and grease (HEM), total	mg/L	100	2.2 J	-	2.0 J	-	1.3 J
pH, lab	s.u.	6.5 - 11.0	7.2 HF	-	7.7 HF	-	7.3 HF
Phosphorus	mg/L	13.8	-	0.10 U	-	0.10 U	0.10 U
Total suspended solids (TSS)	mg/L	1336	-	4.0 U	-	0.90 J	2.4 J

Notes:

- (1) Bay City Industrial User Discharge Permit (120807)
- J Estimated concentration
- U Not detected at the associated reporting limit.
- b Result Detected in the Unseeded Control blank
- HF Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Table 6

**Summary of Long-Term Groundwater and Stormwater Monitoring Activities
Racer Trust - Bay City Site
Bay City, Michigan**

Plant Area	Location	Original Program (1) 2001 - 2010			Revised 2011 - 2014			Revised 2015-2016			Revised 2017-2022			Revised 2023-2025		
		Groundwater Quality		Static Water Level (2)	Groundwater Quality		Static Water Level (2)	Groundwater Quality		Static Water Level (2)	Groundwater Quality		Static Water Level (2)	Groundwater Quality		Static Water Level (2)
		Parameters	Frequency	Frequency	Parameters	Frequency	Frequency	Parameters	Frequency	Frequency	Parameters	Frequency	Frequency	Parameters	Frequency	Frequency
Machine Storage Area (MSA)																
MSA	LMW17S	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
MSA	LMW18S (4)	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
MSA	LMW19S	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
MSA	MW1S (4)	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
MSA	MW100S (4)	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
MSA	MW101S (4)	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
MSA	MW102D1	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW102D2	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW102D3	PCBs	annually	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
MSA	MW102D4	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW300S	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	LMW14S	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
Perimeter Banks (PB)																
PB	LMW13S	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	LMW15D	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	MW301D1	PCBs	annually	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
PB	MW301D2	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	MW301D3	PCBs	annually	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
PB	MW301D4	PCBs	annually	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
PB	BW-1 (River) (3)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	annually
Crotty Street Channel (CSC)																
CSC	MW1	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
CSC	MW2	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
CSC	MW3	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
CSC	MW4	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
CSC	MW5	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
CSC	SG-1 / SG-6 (3)	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	--
Stormwater System (4)																
MSA (5)	Extraction System	PCBs	Semi-annually	--	PCBs	Semi-annually	--	PCBs	Semi-annually	--	--	--	--	--	--	--
CSC (5)	Extraction System	PCBs	Semi-annually	--	PCBs	Semi-annually	--	PCBs	Semi-annually	--	--	--	--	--	--	--
CSC (5)	CB2	PCBs	Semi-annually	--	--	--	--	--	--	--	--	--	--	--	--	--
Groundwater Treatment System																
Treatment System	Influent	--	--	--	--	--	--	--	--	--	PCBs	Semi-annually	--	PCBs	Semi-annually	--
Treatment System	Effluent	--	--	--	--	--	--	(6)	Semi-annually	--	(6)	Semi-annually	--	(6)	Semi-annually	--

Notes:

- (1) The program presented is a subset of the original program. Locations no longer included in this long-term groundwater and stormwater monitoring program are not presented.
- (2) Static water level monitoring refers to independent monitoring program to evaluate containment. Static water level measurements will also be collected at all groundwater quality monitoring wells to evaluate groundwater flow directions.
- (3) Saginaw River levels: SG-1 was damaged circa 2017 and SG-6 (located at the General Motors Site) utilized until 2023. Saginaw River levels now measured from BW-3 (River) as of 2023.
- (4) Extraction system monitoring when the water was conveyed to the GM storm water system.
- (5) To be sampled by company who maintains the extraction system.
- (6) Sampling in accordance with the Industrial User Discharge Permit with the City of Bay City (120807). Parameters include: TSS, pH, grease/oil, phosphorous, COD, BOD, cadmium, chromium, copper, mercury, lead, nickel, silver, ammonia-nitrogen, PCBs, and vinyl chloride

Attachments

Attachment A

**Historical Groundwater Elevations from
1999 to 2014**

Attachment A
Historical Groundwater Elevations
1999 to 2014
Racer Trust - Bay City Industrial Land
Bay City, Michigan

Well Location	8/6/2014	8/6/2013	8/7/2012	8/22/2011	8/16/2010	8/27/2009	8/19/2008	8/20/2007	8/16/2006	8/29/2005	8/24/2004	7/28/2003	8/26/2002	8/13/2001	3/19/2001	2/23/2001	1/24/2001	12/15/2000
<u>Machine Storage Area (MSA)</u>																		
LMW13S	579.43	578.61	578.19	578.03	578.71	579.31	578.21	577.67	578.23	578.14	579.40	578.45	582.05	578.68	577.85	578.17	578.19	578.06
LMW17S	578.96	578.87	578.85	578.80	578.83	578.81	578.58	577.58	578.63	578.31	578.80	582.73	578.91	578.68	578.74	578.83	579.06	578.79
LMW18S	578.27	577.93	577.82	577.61	577.66	577.99	577.62	578.13	578.00	578.23	578.45	578.35	578.85	578.10	578.22	578.61	578.39	578.18
LMW19S	579.32	578.44	578.58	578.34	578.25	578.53	578.45	579.71	578.45	578.85	579.21	579.24	579.93	578.79	579.56	579.96	579.59	(5)
MW1S (formerly LW-1)	578.71	578.80	578.65	578.65	578.68	579.71	580.93	578.48	n/a	577.58	578.63	578.56	578.48	578.51	578.41	(5)	578.44	578.36
MW100S (formerly EW-2)	579.32	578.81	578.49	578.18	578.86	579.27	578.40	578.01	578.38	578.57	579.15	577.27	578.91	578.93	578.36	578.64	578.87	578.65
MW101S (formerly LW-2)	579.01	579.10	578.94	578.80	578.93	578.78	578.49	578.39	578.31	577.95	578.82	578.87	579.12	578.76	578.84	578.96	579.18	578.84
MW102D1	579.39	578.34	577.90	578.71	578.39	579.42	578.83	578.04	578.30	578.30	579.02	578.25	578.98	578.18	577.61	577.40	577.47	577.62
MW102D2	579.38	578.31	577.89	578.69	578.37	579.40	578.93	578.03	578.25	578.33	579.01	578.24	578.95	578.15	577.60	577.39	577.45	577.61
MW102D3	579.35	578.27	577.84	578.67	579.34	579.41	578.89	577.98	578.25	578.31	578.98	578.20	578.93	578.11	577.56	577.34	577.40	577.56
MW102D4 (replacement)	579.30	578.24	577.79	578.63	578.29	579.33	578.76	577.98	578.22	578.25	578.94	578.16	578.86	578.03	577.49	577.27	577.33	577.47
MW300S	577.03	577.17	577.69	577.03	577.18	578.22	579.26	576.30	576.81	578.34	577.05	577.77	578.53	577.00	578.84	578.67	578.99	578.07
LMW14SR	579.22	578.55	578.14	577.47	578.60	579.19	577.96	576.98	577.97	577.50	576.94	578.13	578.45	578.23	577.38	577.77	577.88	577.54
<u>Perimeter Banks (PB)</u>																		
LMW15D	579.37	578.02	577.56	578.65	578.21	579.45	578.12	577.89	578.22	578.24	579.34	578.04	578.83	578.06	577.37	577.12	577.22	577.33
MW301D1	577.70	576.56	578.38	579.39	578.96	579.96	579.03	578.72	578.94	579.05	580.02	578.90	579.66	578.89	578.28	578.03	578.09	578.25
MW301D2	577.78	576.62	577.99	579.00	578.60	579.56	578.64	578.33	578.55	578.62	579.59	578.49	579.25	578.48	577.86	577.62	577.67	577.81
MW301D3 (formerly MW-33-A2)	577.64	576.46	577.87	578.87	578.47	579.44	578.41	578.20	578.44	578.52	579.47	578.36	579.10	578.53	577.72	577.59	577.52	577.67
MW301D4	577.96	576.54	578.15	579.16	578.74	579.70	578.75	578.48	578.69	578.80	579.71	578.57	579.28	578.48	577.86	577.63	577.68	577.82
<u>Support Facilities Area (SFA)</u>																		
MSA5S	579.67	580.22	578.58	578.67	579.10	580.10	578.04	580.10	579.28	579.76	580.57	580.55	580.65	579.74	580.65	580.42	580.62	580.46
<u>Crotty Street Channel</u>																		
MW1-00	579.35	577.71	576.44	577.17	577.13	578.95	578.74	577.11	576.92	577.09	578.37	577.78	578.44	576.72	578.61	578.14	577.81	577.49
MW2-00	578.75	577.79	576.62	577.29	577.26	578.40	578.83	577.09	576.97	577.23	577.50	577.60	578.03	576.76	578.69	578.26	577.82	577.51
MW3-00	579.38	577.67	576.47	577.25	577.14	579.01	578.74	577.19	576.94	577.13	578.51	577.77	578.38	576.70	578.62	578.26	577.79	577.48
MW4-00	578.91	577.90	576.76	577.41	577.38	578.55	578.95	577.21	577.07	577.34	577.59	577.68	578.07	576.79	578.67	578.30	577.84	577.51
MW5-00	576.99	577.00	576.73	576.77	576.95	578.04	578.82	576.55	576.72	577.85	576.91	576.28	576.72	577.02	577.06	577.86	576.97	576.91
SG-1	581.06	n/a	n/a	n/a	n/a	n/a	578.55	577.83	578.33	578.43	579.63	577.93	578.73	578.12	(5)	(5)	(5)	(5)
<u>Saginaw River (6)</u>	579.32	577.02	576.71	577.53	577.41	578.34	577.97	577.09	577.41	578.32	578.52	576.83	578.50	577.91	576.80	576.74	576.77	576.78

- Notes:
- Elevations shown in ft AMSL
 - NM Not Measured
 - n/a Elevation not available
 - (1) Approximate value
 - (2) Lock Needs Replacing
 - (3) Gage needs to be relocated
 - (4) Could not open due to liner attachment
 - (5) Could not read due to accumulation of snow and ice
 - (6) Source of Saginaw River Elevation:
 - NOAA (Essexville, MI) for prior to Nov 1, 2005.
 - USGS Station (04157065) Nov 1, 2005 to Dec 4, 2013.
 - USGS Station (04157060) Dec 4, 2013 to 2018.

Attachment A
Historical Groundwater Elevations
1999 to 2014
Racer Trust - Bay City Industrial Land
Bay City, Michigan

Well Location	11/30/2000	10/31/2000	9/11/2000	8/29/2000	7/18/2000	6/30/2000	5/30/2000	4/26/2000	3/29/2000	2/28/2000	2/2/2000	1/4/2000	11/24/1999	10/25/1999	9/27/1999	9/7/1999	7/20/1999
<u>Machine Storage Area (MSA)</u>																	
LMW13S	578.35	578.63	578.90	578.90	580.11	580.62	581.63	581.81	581.27	581.74	579.27	580.08	580.68	581.26	580.55	580.02	579.68
LMW17S	579.17	578.93	579.24	579.20	579.09	579.85	580.06	580.19	579.91	579.96	579.08	579.47	579.71	579.69	578.98	579.19	579.43
LMW18S	578.29	578.52	578.67	579.03	578.52	577.80	578.10	578.09	577.66	577.80	577.09	577.37	577.32	577.62	577.51	577.89	579.57
LMW19S	579.56	579.38	579.34	580.13	579.45	580.56	580.96	581.25	580.73	581.39	579.70	580.30	579.58	579.95	579.53	580.01	580.42
MW1S (formerly LW-1)	578.40	578.57	578.43	578.38	578.34	579.31	579.26	579.29	579.28	579.18	579.05	579.07	579.15	579.11	578.51	578.58	n/a
MW100S (formerly EW-2)	579.05	579.33	579.57	579.66	579.85	578.03	577.79	577.07	576.87	576.69	577.09	577.49	578.09	578.77	578.57	n/a	579.33
MW101S (formerly LW-2)	579.03	578.91	578.99	579.04	579.02	580.22	580.39	580.14	579.21	579.86	579.61	579.61	579.65	579.81	579.04	579.18	578.83
MW102D1	577.67	577.87	578.16	578.15	578.71	577.62	577.70	577.60	577.25	577.23	576.81	576.80	576.38	577.47	577.64	578.29	579.69
MW102D2	577.65	577.85	578.13	578.13	578.67	577.48	577.58	577.44	577.12	577.08	576.80	576.67	576.24	577.33	577.50	578.15	579.68
MW102D3	577.60	577.80	578.08	578.09	578.63	577.52	577.59	577.47	577.16	577.12	576.88	576.71	576.26	577.35	577.55	578.20	579.66
MW102D4 (replacement)	577.53	577.73	578.00	578.02	578.55	577.38	577.45	577.34	577.01	576.98	575.70	576.56	576.12	577.21	577.40	578.05	579.56
MW300S	578.84	578.27	578.16	578.24	(2)	(4)	579.89	580.18	579.73	No Access	578.55	579.27	579.91	578.87	578.90	579.33	579.69
LMW14SR	578.04	578.13	578.16	578.21	579.19	579.32	579.22	578.91	578.99	578.55	578.58	Damaged	Damaged	578.58	578.30	578.88	579.97
<u>Perimeter Banks (PB)</u>																	
LMW15D	577.48	577.63	577.94	578.03	578.43	(4)	578.88	578.74	578.56	578.56	578.23	577.95	577.18	578.49	578.93	579.81	579.68
MW301D1	578.34	(5)	(5)	578.88	578.65	579.37	578.80	578.85	578.59	578.56	578.28	578.05	577.42	578.63	578.99	579.67	579.73
MW301D2	577.92	(5)	(5)	578.47	578.56	578.80	578.89	578.77	578.54	578.51	578.22	577.99	577.35	578.57	578.93	579.62	579.69
MW301D3 (formerly MW-33-A2)	577.78	(5)	(5)	578.32	578.56	578.80	578.85	578.74	578.49	578.48	578.18	577.96	577.32	578.54	578.90	579.59	579.65
MW301D4	577.93	(5)	(5)	578.48	578.48	578.78	578.76	578.69	578.45	578.43	578.14	577.90	577.27	578.47	578.85	579.52	579.62
<u>Support Facilities Area (SFA)</u>																	
MSA5S	580.65	580.34	580.56	580.41	581.32	581.17	582.22	582.37	580.62	582.13	580.96	581.42	581.70	581.77	581.74	581.84	579.38
<u>Crotty Street Channel</u>																	
MW1-00	577.75	577.45	577.36	577.60	577.71	579.57	578.68	578.42	578.04	578.89	577.89	n/a	n/a	n/a	n/a	n/a	n/a
MW2-00	577.77	577.45	577.36	577.59	577.65	578.67	No Access	577.65	577.26	578.11	579.11	n/a	n/a	n/a	n/a	n/a	n/a
MW3-00	577.74	577.45	577.37	577.60	578.68	578.46	579.05	578.79	578.40	579.25	578.27	n/a	n/a	n/a	n/a	n/a	n/a
MW4-00	577.78	577.47	577.34	577.57	577.62	578.87	No Access	577.60	577.18	578.03	577.03	n/a	n/a	n/a	n/a	n/a	n/a
MW5-00	576.90	577.31	577.91	578.01	n/a (4)	n/a (4)	579.12	578.86	578.66	578.36	577.63	n/a	n/a	n/a	n/a	n/a	n/a
SG-1	577.33	577.43	577.93	578.05	Destroyed (3)	Destroyed (3)	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed
<u>Saginaw River (6)</u>																	
	577.02	577.23	577.49	577.76	578.27	577.81	577.48	577.42	577.37	577.24	577.14	577.15	576.54	577.35	578.04	578.59	578.87

Notes:

Elevations shown in ft AMSL

NM Not Measured

n/a Elevation not available

(1) Approximate value

(2) Lock Needs Replacing

(3) Gage needs to be relocated

(4) Could not open due to liner attachment

(5) Could not read due to accumulation of snow and ice

(6) Source of Saginaw River Elevation:

- NOAA (Essexville, MI) for prior to Nov 1, 2005.

- USGS Station (04157065) Nov 1, 2005 to Dec 4, 2011

- USGS Station (04157060) Dec 4, 2013 to 2018.

Attachment A
Historical Groundwater Elevations
1999 to 2014
Racer Trust - Bay City Industrial Land
Bay City, Michigan

Well Location	6/22/1999	5/20/1999	4/20/1999	3/19/1999	3/8/1999
<u>Machine Storage Area (MSA)</u>					
LMW13S	579.23	581.42	582.65	583.17	582.56
LMW17S	579.65	579.77	580.25	581.57	581.58
LMW18S	579.45	579.39	579.78	579.44	579.44
LMW19S	580.52	580.51	580.94	580.90	580.66
MW1S (formerly LW-1)	578.64	579.29	579.49	584.35	584.12
MW100S (formerly EW-2)	579.07	579.30	579.96	582.53	582.71
MW101S (formerly LW-2)	578.71	579.19	580.44	586.50	586.44
MW102D1	576.82	579.27	579.34	582.38	582.32
MW102D2	576.78	579.34	579.39	582.03	581.93
MW102D3	576.80	579.25	579.35	581.92	581.84
MW102D4 (replacement)	576.70	579.13	579.21	581.54	581.45
MW300S	579.95	579.51	579.86	579.37	579.51
LMW14SR	578.55	580.40	581.12	582.10	582.11
<u>Perimeter Banks (PB)</u>					
LMW15D	577.88	579.21	579.23	579.86	579.71
MW301D1	575.75	579.22	579.32	579.40	579.29
MW301D2	576.11	579.19	579.28	579.35	579.23
MW301D3 (formerly MW-33-A2)	576.13	579.18	579.25	579.38	579.23
MW301D4	576.08	579.17	579.26	579.37	579.18
<u>Support Facilities Area (SFA)</u>					
MSA5S	577.24	579.71	580.83	580.33	580.54
<u>Crotty Street Channel</u>					
MW1-00	n/a	n/a	n/a	n/a	n/a
MW2-00	n/a	n/a	n/a	n/a	n/a
MW3-00	n/a	n/a	n/a	n/a	n/a
MW4-00	n/a	n/a	n/a	n/a	n/a
MW5-00	n/a	n/a	n/a	n/a	n/a
SG-1	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed
<u>Saginaw River (6)</u>					
	578.51	578.37	578.32	578.55	578.34

Notes:

Elevations shown in ft AMSL

NM Not Measured

n/a Elevation not available

(1) Approximate value

(2) Lock Needs Replacing

(3) Gage needs to be relocated

(4) Could not open due to liner attachment

(5) Could not read due to accumulation of snow and ice

(6) Source of Saginaw River Elevation:

- NOAA (Essexville, MI) for prior to Nov 1, 2005.

- USGS Station (04157065) Nov 1, 2005 to Dec 4, 2013.

- USGS Station (04157060) Dec 4, 2013 to 2018.

Attachment B

Analytical Results Summary (2013 to 2024)

Analytical Results Summary
Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:													
Sample Location:													
Sample ID:													
Sample Date:													
	influent-GWTS	influent-GWTS	influent-GWTS	influent-GWTS	influent-GWTS	influent-GWTS	influent-GWTS	influent-GWTS	influent-GWTS	influent-GWTS			
	W-12610-022614-SSH-1402	GW-12610-082117-SSH-08-17	W-12610-043018-SSH-0118	W-12610-060118-SSH-18101	W-12610-060118-SSH-18102	GW-12610A-082018-SSH-18109	W-12610-053119-SSH-00519	W-12610-082819-SSH-01119	W-12610-012020-SSH-00220				
	2/26/2014	8/21/2017	4/30/2018	6/1/2018	6/1/2018	8/20/2018	5/31/2019	8/28/2019	1/20/2020				
	(Duplicate)												
Parameters	Units	EGLE Residential Drinking Water	EGLE Non-Residential Drinking Water	EGLE GSI									
VOAs		a	b	c									
Vinyl chloride	mg/L	0.002	0.002	0.013	-	-	-	0.001 U	0.001 U	-	-	-	-
03Metals													
Cadmium	mg/L	0.005	0.005	G,X	-	-	-	0.002 U	0.002 U	-	-	-	-
Chromium	mg/L	0.1	0.1	G,X	-	-	-	0.00083 J	0.0011 J	-	-	-	-
Copper	mg/L	1	1	G	-	-	-	0.02 U	0.02 U	-	-	-	-
Iron	mg/L	0.3	0.3	-	-	-	-	0.043 J	0.045 J	-	-	-	-
Lead	mg/L	0.004	0.004	G,X	-	-	-	0.003 U	0.003 U	-	-	-	-
Mercury	mg/L	0.002	0.002	0.0000013	-	-	-	0.0002 U	0.0002 U	-	-	-	-
Nickel	mg/L	0.1	0.1	G	-	-	-	0.043	0.043	-	-	-	-
Silver	mg/L	0.034	0.098	0.0002	-	-	-	0.005 U	0.005 U	-	-	-	-
PCBs													
Aroclor-1016 (PCB-1016)	mg/L	0.0005	0.0005	0.0002	-	0.0019 U	0.0002 U	0.000097 U	0.000097 U	0.00095 U	0.000095 U	0.000096 U	0.000096 U
Aroclor-1221 (PCB-1221)	mg/L	0.0005	0.0005	0.0002	-	0.0019 U	0.0002 U	0.000097 U	0.000097 U	0.00095 U	0.000095 U	0.000096 U	0.000096 U
Aroclor-1232 (PCB-1232)	mg/L	0.0005	0.0005	0.0002	-	0.0019 U	0.0002 U	0.000097 U	0.000097 U	0.00095 U	0.000095 U	0.000096 U	0.000096 U
Aroclor-1242 (PCB-1242)	mg/L	0.0005	0.0005	0.0002	-	0.0054 ^{abc}	0.0013 ^{abc}	0.000097 U	0.000097 U	0.0025 ^{abc}	0.0015 ^{abc}	0.000096 U	0.0002
Aroclor-1248 (PCB-1248)	mg/L	0.0005	0.0005	0.0002	-	0.0019 U	0.0002 U	0.000097 U	0.000097 U	0.00095 U	0.000095 U	0.000096 U	0.000096 U
Aroclor-1254 (PCB-1254)	mg/L	0.0005	0.0005	0.0002	-	0.0019 U	0.0002 U	0.000097 U	0.000097 U	0.00095 U	0.000095 U	0.000096 U	0.000096 U
Aroclor-1260 (PCB-1260)	mg/L	0.0005	0.0005	0.0002	-	0.0019 U	0.0002 U	0.000097 U	0.000097 U	0.00095 U	0.000095 U	0.000096 U	0.000096 U
PFAS													
Perfluorooctane sulfonic acid (PFOS)	mg/L	0.000016	0.000016	0.000012	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	0.000008	0.000008	0.000017	-	-	-	-	-	-	-	-	-
Wet													
Ammonia	mg/L	10	10	CC	6.7	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	0.30	0.28	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	2.0 U	2.0 U	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	10 U	10 U	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	4.8 U	4.9 U	-	-	-	-
pH, lab	s.u.	6.5-8.5	6.5-8.5	-	-	-	-	7.6 HF	7.6 HF	-	-	-	-
Phosphorus	mg/L	63	240	EE	-	-	-	0.10 U	0.10 U	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	4.0 U	4.0 U	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:												
Sample Location:	influent-GWTS		influent-GWTS		influent-GWTS		influent-GWTS		influent-GWTS		influent-GWTS	
Sample ID:	W-12610-040320-SSH-2001	GW-11208058-081020-SSH-2007	W-11208058-121020-SSH-2013	GW-11208058-032321-SSH-01021	GW-11208058-082721-SSH-21108	W-11208058-042122-SSH-2201	GW-11208058-082322-BW-010	GW-11208058-121922-JY-001	W-11208058-072623-JY-003	W-11208058-101623-JY-002		
Sample Date:	4/3/2020	8/10/2020	12/10/2020	3/23/2021	8/27/2021	4/21/2022	8/23/2022	12/19/2022	7/26/2023	10/16/2023		
Parameters	Units											
VOAs												
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-
03Metals												
Cadmium	mg/L	-	-	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-	-	-
PCBs												
Aroclor-1016 (PCB-1016)	mg/L	0.000095 U	0.000095 U	0.00048 U	0.00049 U	0.00097 U	0.000095 U	0.0005 U	0.00096 U	0.001 U	0.000095 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	0.000095 U	0.000095 U	0.00048 U	0.00049 U	0.00097 U	0.000095 U	0.0005 U	0.015 ^{abc}	0.015 ^{abc}	0.000095 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	0.000095 U	0.000095 U	0.00048 U	0.00049 U	0.00097 U	0.000095 U	0.0005 U	0.00096 U	0.001 U	0.000095 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	0.000095 U	0.001 ^{Jabc}	0.0026 ^{abc}	0.0033 ^{abc}	0.011 ^{abc}	0.000095 U	0.007 ^{Jabc}	0.00096 U	0.001 U	0.000095 U	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	0.0035 ^c	0.000095 U	0.00048 U	0.00049 U	0.00097 U	0.000095 U	0.0005 U	0.00096 U	0.001 U	0.000095 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	0.000095 U	0.000095 U	0.00048 U	0.00049 U	0.00097 U	0.000095 U	0.0005 U	0.00096 U	0.001 U	0.000095 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	0.000095 U	0.000095 U	0.00048 U	0.00049 U	0.00097 U	0.000095 U	0.0005 U	0.00096 U	0.001 U	0.000095 U	0.000095 U
PFAS												
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Wet												
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	influent-GWTS		influent-GWTS		influent-GWTS		Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel
Sample Location:	influent-GWTS		influent-GWTS		influent-GWTS		CB-2	CB-2	CB-2	CB-2	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge
Sample ID:	GW-11208058-111323-JY-005	W-11208058-011524-JY-001	GW-11208058-061024-JY-001	W-12610-041712-SSH-SA1202	GW-12610-080712-SSH-001	W-12610-040913-SSH-CB1213	W-12610-122914-SSH-1421	W-12610-041712-SSH-SA1201	GW-12610-080712-SSH-002	GW-12610-080514-SSH-1402	W-12610-122914-SSH-1420			
Sample Date:	11/13/2023	1/15/2024	6/10/2024	4/17/2012	8/7/2012	4/9/2013	12/29/2014	4/17/2012	8/7/2012	8/5/2014	12/29/2014			
Parameters	Units													
VOAs														
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
03Metals														
Cadmium	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs														
Aroclor-1016 (PCB-1016)	mg/L	0.00095 U	0.00095 U	0.001 U	0.000095 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.0002 U	0.00019 U	0.0002 U	0.0002 U
Aroclor-1221 (PCB-1221)	mg/L	0.00095 U	0.00095 U	0.013 ^{abc}	0.000095 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.0002 U	0.00019 U	0.0002 U	0.0002 U
Aroclor-1232 (PCB-1232)	mg/L	0.00095 U	0.00095 U	0.001 U	0.000095 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.0002 U	0.00019 U	0.0002 U	0.0002 U
Aroclor-1242 (PCB-1242)	mg/L	0.02 ^{abc}	0.012 ^{abc}	0.001 U	0.000095 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00062 ^{abc}	0.00086 ^{abc}	0.00068 ^{Jabc}	0.00022 ^c	0.00022 ^c
Aroclor-1248 (PCB-1248)	mg/L	0.00095 U	0.00095 U	0.001 U	0.000095 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.0002 U	0.00019 U	0.0002 U	0.0002 U
Aroclor-1254 (PCB-1254)	mg/L	0.00095 U	0.00095 U	0.001 U	0.000095 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.0002 U	0.00019 U	0.0002 U	0.0002 U
Aroclor-1260 (PCB-1260)	mg/L	0.00095 U	0.00095 U	0.001 U	0.000095 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.0002 U	0.00019 U	0.0002 U	0.0002 U
PFAS														
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Wet														
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	
Sample Location:	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	Crotty Street Channel effluent-GWTS	Crotty Street Channel effluent-GWTS	Crotty Street Channel effluent-GWTS	Crotty Street Channel effluent-GWTS	Crotty Street Channel effluent-GWTS	Crotty Street Channel effluent-GWTS	Crotty Street Channel effluent-GWTS	
Sample ID:	W-12610-040915-SSH-1502	GW-12610-082515-SSH-0115	W-12610-050916-SSH-1602	W-12610-082516-SSH-1606	W-12610-021214-SSH-1401	W-12610-022614-SSH-1403	W-12610-090514-SSH-1411	W-12610-031615-SSH-1501	W-12610-121015-SSH-1115	W-12610-050916-SSH-1601	W-12610-061416-SSH-1603	
Sample Date:	4/9/2015	8/25/2015	5/9/2016	8/25/2016	2/12/2014	2/26/2014	9/5/2014	3/16/2015	12/10/2015	5/9/2016	6/14/2016	
Parameters	Units											
VOAs												
Vinyl chloride	mg/L	-	-	-	-	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	-	0.001 U
03Metals												
Cadmium	mg/L	-	-	-	-	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	-	0.002 U
Chromium	mg/L	-	-	-	-	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	-	0.005 U
Copper	mg/L	-	-	-	-	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	-	0.02 U
Iron	mg/L	-	-	-	-	0.18	0.18	0.54 ^{ab}	0.1 U	0.1 U	-	0.39 ^{ab}
Lead	mg/L	-	-	-	-	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	-	0.003 U
Mercury	mg/L	-	-	-	-	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	-	0.0002 U
Nickel	mg/L	-	-	-	-	0.02 U	0.0078 J	0.02 U	0.02 U	0.02 U	-	0.02 U
Silver	mg/L	-	-	-	-	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	-	0.005 U
PCBs												
Aroclor-1016 (PCB-1016)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000098 U	0.000095 U	0.000095 U	0.0001 U	0.00019 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000098 U	0.000095 U	0.000098 U	0.0001 U	0.00019 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000098 U	0.000095 U	0.000095 U	0.0001 U	0.00019 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	0.00019 U	0.00056 ^{abc}	0.00019 U	0.00019 U	0.000096 U	0.000098 U	0.000095 U	0.000095 U	0.0001 U	0.00019 U	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000098 U	0.000095 U	0.000098 U	0.0001 U	0.00019 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	0.00019 U	0.00019 U	0.00019 U	R	0.000096 U	0.000098 U	0.000095 U	0.000095 U	0.0001 U	0.00019 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	0.00019 U	0.00019 U	0.00019 U	R	0.000096 U	0.000098 U	0.000095 U	0.000095 U	0.0001 U	0.00019 U	0.000095 U
PFAS												
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Wet												
Ammonia	mg/L	-	-	-	-	33 ^{ab}	4.4	2.0 U	6.8	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	3.4	-	2.0 U
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	17	2.3	2.0 U	2.3	9.3	-	2.0 U
Chemical oxygen demand (COD)	mg/L	-	-	-	-	20 U	10 U	10 U	10 U	10 U	-	18
Oil and grease (HEM), polar	mg/L	-	-	-	-	4.8 U	1.7 JB	4.9 U	4.7 U	4.8 U	-	4.7 U
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	8.00 HF	8.09 HF	7.98 HF	7.69 HF	7.75 HF	-	7.54 HF
Phosphorus	mg/L	-	-	-	-	0.22	0.20	0.10 U	0.10 U	0.10 U	-	0.10 U
Total suspended solids (TSS)	mg/L	-	-	-	-	4.0 U	4.0	4.0 U	4.0 U	4.0 U	-	4.0 U

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel
Sample Location:	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS
Sample ID:	W-12610-011617-SSH-1701	WT-12610-050917-SSH-01-17	WT-12610-113017-SSH-02-17	W-12610-121318-SSH-18112	W-12610-053119-SSH-00319	W-12610-120519-SSH-1519	W-12610-012020-SSH-00120	W-12610-052920-SSH-2002	W-11208058-121020-SSH-2012	W-11208058-062321-SSH-10121	W-11208058-122321-SSH-22021	
Sample Date:	1/16/2017	5/9/2017	11/30/2017	12/13/2018	5/31/2019	12/5/2019	1/20/2020	5/29/2020	12/10/2020	6/23/2021	12/23/2021	
Parameters	Units											
VOAs												
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	0.001 U	0.001 U
03Metals												
Cadmium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	-	0.002 U	0.002 U	0.0002 JB	0.013 ^{ab}	0.002 U
Chromium	mg/L	0.005 U	0.00056 J	0.005 U	0.005 U	0.0017 JB	-	0.0012 J	0.005 U	0.005 U	0.005 U	0.005 U
Copper	mg/L	0.067	0.0063 J	0.02 U	0.02 U	0.012 J	-	0.0074 J	0.01 J	0.02 U	0.008 J	0.01 J
Iron	mg/L	0.1 U	0.1 U	0.4 ^{ab}	0.07 J	0.11	-	0.028 J	0.058 J	0.057 J	0.1 U	0.42 ^{ab}
Lead	mg/L	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	-	0.003 U	0.003 U	0.003 U	0.003 U	0.0026 JB
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U*	-	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U*+
Nickel	mg/L	0.02 U	0.0028 J	0.074	0.0029 J	0.0059 J	-	0.0025 J	0.0072 J	0.0026 J	0.0057 J	0.011 J
Silver	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	0.005 U	0.005 U
PCBs												
Aroclor-1016 (PCB-1016)	mg/L	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000096 U	-	0.000096 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000096 U	-	0.000096 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000096 U	-	0.000096 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000096 U	-	0.000096 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000096 U	-	0.000096 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000096 U	-	0.000096 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	0.000095 U	0.000095 U	0.000096 U	0.000095 U	0.000096 U	-	0.000096 U	0.000095 U	0.000095 U	0.000096 U	0.000095 U
PFAS												
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	0.0000018 U	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	0.0000018 U	-	-	-	-	-
Wet												
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	2.2	2.0 U	0.20	0.20 U	0.20 U	-	0.20 U	0.20 U	0.32	3.8	0.32
Biochemical oxygen demand (BOD)	mg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	-	2.0 UH	2.0 U	2.0 U	2.0 U	2.0 U
Chemical oxygen demand (COD)	mg/L	24	21	13	10 U	10 U	-	10 U	6.7 J	10 U	10	16
Oil and grease (HEM), polar	mg/L	4.7 U	1.2 J	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	4.7 U	4.8 U	4.8 U	-	4.8 U	5.8 U	4.8 U	4.0 U	4.8 U
pH, lab	s.u.	7.7 HF	7.9 HF	7.2 HF	7.9 HF	7.5 HF	-	8.0 HF	7.7 HF	8.1 HF	8.1 HF	7.7 HF
Phosphorus	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	-	0.10 U	0.10 U	0.10 U	0.14	0.012
Total suspended solids (TSS)	mg/L	4.0 U	4.0 U	4.0 U	3.0 J	4.0 U	-	4.0 U	4.0 U	4.0 U	4.0 U	0.50 U

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Attachment B
Analytical Results Summary
Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	
Sample Location:	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	effluent-GWTS	
Sample ID:	W-11208058-052622-SSH-EFF2022	GW-11208058-082322-BW-008	GW-11208058-082322-BW-009	WT-11208058-122022-JY-002	GW-11208058-063023-JY-001	GW-11208058-063023-JY-002	W-11208058-101723-JY-003	W-11208058-101723-JY-004	GW-11208058-111323-JY-006	W-11208058-011624-JY-002	
Sample Date:	5/26/2022	8/23/2022	8/23/2022 (Duplicate)	12/20/2022	6/30/2023	6/30/2023	10/17/2023	10/17/2023 (Duplicate)	11/13/2023	1/16/2024	
Parameters	Units										
VOAs											
Vinyl chloride	mg/L	0.001 U	-	-	0.001 U	0.001 U	-	0.001 U	-	-	0.001 U
03Metals											
Cadmium	mg/L	0.00032 J	-	-	0.00028 J	-	0.002 U	-	0.002 U	-	-
Chromium	mg/L	0.005 U	-	-	0.005 U	-	0.0014 J	-	0.001 J	-	-
Copper	mg/L	0.025 B	-	-	0.02 U	-	0.02 U	-	0.02 U	-	-
Iron	mg/L	0.49 ^{ab}	-	-	0.1 U	-	5.3 ^{ab}	-	1 ^{ab}	-	-
Lead	mg/L	0.003 U	-	-	0.0035	-	0.003 U	-	0.003 U	-	-
Mercury	mg/L	0.0002 U	-	-	0.0002 U ⁺	-	0.00016 JB ^c	-	0.0002 U	-	-
Nickel	mg/L	0.007 J	-	-	0.02 U	-	0.0051 J	-	0.0037 J	-	-
Silver	mg/L	0.005 U	-	-	0.005 U	-	0.005 U	-	0.005 U	-	-
PCBs											
Aroclor-1016 (PCB-1016)	mg/L	0.000099 U	0.000095 U	0.000095 U	0.000096 U	-	0.000096 U	-	0.000098 U	0.000095 U	-
Aroclor-1221 (PCB-1221)	mg/L	0.000099 U	0.000095 U	0.000095 U	0.000096 U	-	0.000096 U	-	0.000098 U	0.000095 U	-
Aroclor-1232 (PCB-1232)	mg/L	0.000099 U	0.000095 U	0.000095 U	0.000096 U	-	0.000096 U	-	0.000098 U	0.000095 U	-
Aroclor-1242 (PCB-1242)	mg/L	0.000099 U	0.000095 U	0.000095 U	0.000096 U	-	0.000096 U	-	0.000098 U	0.000095 U	-
Aroclor-1248 (PCB-1248)	mg/L	0.000099 U	0.000095 U	0.000095 U	0.000096 U	-	0.000096 U	-	0.000098 U	0.000095 U	-
Aroclor-1254 (PCB-1254)	mg/L	0.000099 U	0.000095 U	0.000095 U	0.000096 U	-	0.000096 U	-	0.000098 U	0.000095 U	-
Aroclor-1260 (PCB-1260)	mg/L	0.000099 U	0.000095 U	0.000095 U	0.000096 U	-	0.000096 U	-	0.000098 U	0.000095 U	-
PFAS											
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-
Wet											
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	7.1	-	-	13	-	13	-	0.61	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	2.0 UH	-	2.0 U	-	2.0 U	-	-
Chemical oxygen demand (COD)	mg/L	34	-	-	7.1 J	-	15	-	10 U	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	5.5	-	-	1.1 JB	2.8 J	-	4.3 J	-	-	2.2 J
pH, lab	s.u.	7.4 HF	-	-	7.5 HF	7.1 HF	-	7.6 HF	-	-	7.2 HF
Phosphorus	mg/L	0.10 U	-	-	0.10 U	-	0.10 U	-	0.085 J	-	-
Total suspended solids (TSS)	mg/L	2.2 J	-	-	4.0 U	-	9.8	-	1.6 J	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	
Sample Location:	effluent-GWTS	effluent-GWTS	effluent-GWTS	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	
Sample ID:	W-11208058-011624-JY-003	GW-11208058-061124-JY-002	GW-11208058-061124-JY-003	W-12610-041712-SSH-SA1203	GW-12610-080712-SSH-003	W-12610-040913-SSH-MSA1313	W-12610-120913-SSH-010	GW-12610-080514-SSH-1401	W-12610-122914-SSH-1422	GW-12610-082515-SSH-0215	
Sample Date:	1/16/2024	6/11/2024	6/11/2024	4/17/2012	8/7/2012	4/9/2013	12/9/2013	8/5/2014	12/29/2014	8/25/2015	
Parameters	Units										
VOAs											
Vinyl chloride	mg/L	-	0.001 U	-	-	-	-	-	-	-	
03Metals											
Cadmium	mg/L	0.002 U	-	0.002 U	-	-	-	-	-	-	
Chromium	mg/L	0.005 U	-	0.005 U	-	-	-	-	-	-	
Copper	mg/L	0.02 U	-	0.02 U	-	-	-	-	-	-	
Iron	mg/L	0.1 U	-	0.17	-	-	-	-	-	-	
Lead	mg/L	0.003 U	-	0.003 U	-	-	-	-	-	-	
Mercury	mg/L	0.0002 U	-	0.0002 U	-	-	-	-	-	-	
Nickel	mg/L	0.0022 J	-	0.0029 J	-	-	-	-	-	-	
Silver	mg/L	0.005 U	-	0.005 U	-	-	-	-	-	-	
PCBs											
Aroclor-1016 (PCB-1016)	mg/L	0.000096 U	-	0.000095 U	0.000096 U	0.00019 U	0.0019 U	0.0002 U	0.00019 U	0.00019 UH	0.00038 U
Aroclor-1221 (PCB-1221)	mg/L	0.000096 U	-	0.000095 U	0.000096 U	0.00019 U	0.0019 U	0.0002 U	0.00019 U	0.00019 UH	0.00038 U
Aroclor-1232 (PCB-1232)	mg/L	0.000096 U	-	0.000095 U	0.000096 U	0.00019 U	0.0019 U	0.0002 U	0.00019 U	0.00019 UH	0.00038 U
Aroclor-1242 (PCB-1242)	mg/L	0.000096 U	-	0.000095 U	0.000096 U	0.00019 U	0.0019 U	0.0002 U	0.00019 U	0.00019 UH	0.00038 U
Aroclor-1248 (PCB-1248)	mg/L	0.000096 U	-	0.000095 U	0.000096 U	0.00019 U	0.0019 U	0.0002 U	0.00019 U	0.00019 UH	0.00038 U
Aroclor-1254 (PCB-1254)	mg/L	0.000096 U	-	0.000095 U	0.000096 U	0.00019 U	0.0019 U	0.0002 U	R	0.00019 UH	0.00038 U
Aroclor-1260 (PCB-1260)	mg/L	0.000096 U	-	0.000095 U	0.00018	0.00019 U	0.0086 ^{abc}	0.0002 U	R	0.00019 UH	0.00019 J
PFAS											
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-
Wet											
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	9.0	-	12	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	2.0 U	-	19	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	5.1 J	-	33	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	2.0 J	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	7.7 HF	-	-	-	-	-	-	-	-
Phosphorus	mg/L	0.10 U	-	0.10 U	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	4.0 U	-	0.90 J	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MSA GW Ext. Sys. Discharge	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1
Sample ID:	W-12610-082516-SSH-1607	GW-12610-080912-SSH-012	GW-12610-080713-JY-004	GW-12610-080614-SSH-1403	GW-12610-082615-SSH-0715	GW-12610-082615-SSH-0815	GW-12610-082716-SSH-1613	GW-12610-082716-SSH-1614	GW-12610-082117-SSH-02-17	GW-12610A-082118-SSH-18111	GW-12610-082919-SSH-01219	
Sample Date:	8/25/2016	8/9/2012	8/7/2013	8/6/2014	8/26/2015	8/26/2015	8/27/2016	8/27/2016	8/21/2017	8/21/2018	8/29/2019	
Parameters	Units											
VOAs												
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-
03Metals												
Cadmium	mg/L	-	-	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-	-	-
PCBs												
Aroclor-1016 (PCB-1016)	mg/L	0.0019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U
Aroclor-1221 (PCB-1221)	mg/L	0.0019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U
Aroclor-1232 (PCB-1232)	mg/L	0.0019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U
Aroclor-1242 (PCB-1242)	mg/L	0.0019 U	0.00043 ^c	0.00019 U	0.00041 J ^c	0.00034 ^c	0.00034 ^c	0.00019 U	0.00019 U	0.00026 ^c	0.00032 ^c	0.00037 J ^c
Aroclor-1248 (PCB-1248)	mg/L	0.0019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U
Aroclor-1254 (PCB-1254)	mg/L	0.0019 U	0.00019 U	R	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U
Aroclor-1260 (PCB-1260)	mg/L	0.0019 U	0.00019 U	R	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U
PFAS												
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Wet												
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1	MW102D1	MW102D2	MW102D2	MW102D2	MW102D2
Sample ID:	GW-11208058-081020-SSH-2006	GW-11208058-082721-SSH-21107	GW-11208058-082322-BW-007	GW-11208058-101423-BW-006	GW-11208058-101024-BW-001	GW-12610-080912-SSH-011	GW-12610-080713-JY-005	GW-12610-080614-SSH-1404	GW-12610-082615-SSH-0915	GW-12610-082616-SSH-1612
Sample Date:	8/10/2020	8/27/2021	8/23/2022	10/14/2023	10/10/2024	8/9/2012	8/7/2013	8/6/2014	8/26/2015	8/26/2016
Parameters	Units									
VOAs										
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-
03Metals										
Cadmium	mg/L	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-
PCBs										
Aroclor-1016 (PCB-1016)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U
Aroclor-1221 (PCB-1221)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U
Aroclor-1232 (PCB-1232)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U
Aroclor-1242 (PCB-1242)	mg/L	0.00024 J ^c	0.00027 ^c	0.0003 J ^c	0.00027 J ^c	0.00026 ^c	0.00019 U	0.00019 U	0.00013 J	0.00019 U
Aroclor-1248 (PCB-1248)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095	0.00013 J	0.00019 U	0.00019 U	0.00019 U
Aroclor-1254 (PCB-1254)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00045 J
Aroclor-1260 (PCB-1260)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.0002 U
PFAS										
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-
Wet										
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MW102D2	MW102D2	MW102D2	MW102D2	MW102D2	MW102D2	MW102D2	MW102D2	MW102D2	MW102D2
Sample ID:	GW-12610-082117-SSH-03-17	GW-12610A-082118-SSH-18110	GW-12610-082919-SSH-01319	GW-11208058-081020-SSH-2004	GW-11208058-081020-SSH-2005	GW-11208058-082721-SSH-21106	GW-11208058-082322-BW-006	GW-11208058-101423-BW-007	GW-11208058-101024-BW-002	GW-11208058-101024-BW-003
Sample Date:	8/21/2017	8/21/2018	8/29/2019	8/10/2020	8/10/2020 (Duplicate)	8/27/2021	8/23/2022	10/14/2023	10/10/2024	10/10/2024 (Duplicate)
Parameters	Units									
VOAs										
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-
03Metals										
Cadmium	mg/L	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-
PCBs										
Aroclor-1016 (PCB-1016)	mg/L	0.00019 U	0.00019 U	0.000097 U	0.000095 U	0.000095 U	0.000098 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	0.00019 U	0.00019 U	0.000097 U	0.000095 U	0.000095 U	0.000098 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	0.00019 U	0.00019 U	0.000097 U	0.000095 U	0.000095 U	0.000098 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	0.00048 ^c	0.00019 U	0.00009 J	0.00009 J	0.00079 J ^{abc}	0.000098 U	0.00031 J ^c	0.000095 U	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	0.00019 U	0.00019 U	0.000097 U	0.000095 U	0.000095 U	0.000098 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	0.00019 U	0.00019 U	0.000097 U	0.000095 U	0.000095 U	0.000098 U	0.000095 U	0.000095 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	0.00019 U	0.00019 U	0.000097 U	0.000095 U	0.000095 U	0.000098 U	0.000095 U	0.000095 U	0.000095 U
PFAS										
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-
Wet										
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MW102D4	MW102D4	MW102D4	MW102D4	MW102D4	MW102D4	MW102D4	MW102D4	MW102D4	MW102D4
Sample ID:	GW-12610-080912-SSH-010	GW-12610-080713-JY-006	GW-12610-080614-SSH-1405	GW-12610-080614-SSH-1406	GW-12610-082615-SSH-1015	GW-12610-082616-SSH-1611	GW-12610-082117-SSH-04-17	GW-12610-082117-SSH-05-17	GW-12610A-082018-SSH-18108	GW-12610-082919-SSH-01419
Sample Date:	8/9/2012	8/7/2013	8/6/2014	8/6/2014 (Duplicate)	8/26/2015	8/26/2016	8/21/2017	8/21/2017 (Duplicate)	8/20/2018	8/29/2019

Parameters	Units									
VOAs										
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-
03Metals										
Cadmium	mg/L	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-
PCBs										
Aroclor-1016 (PCB-1016)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U
Aroclor-1221 (PCB-1221)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U
Aroclor-1232 (PCB-1232)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U
Aroclor-1242 (PCB-1242)	mg/L	0.00019 U	0.00019	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000078 J	0.000096 U
Aroclor-1248 (PCB-1248)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U
Aroclor-1254 (PCB-1254)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U
Aroclor-1260 (PCB-1260)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U
PFAS										
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-
Wet										
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MW102D4	MW102D4	MW102D4	MW102D4	MW102D4	MW300S	MW300S	MW300S	MW300S	MW300S
Sample ID:	GW-11208058-081020-SSH-2003	GW-11208058-082721-SSH-21105	GW-11208058-082322-BW-005	GW-11208058-101423-BW-008	GW-11208058-101024-BW-004	GW-12610-080912-SSH-007	GW-12610-080912-SSH-008	GW-12610-080713-JY-001	GW-12610-080713-JY-002	GW-12610-080614-SSH-1407
Sample Date:	8/10/2020	8/27/2021	8/23/2022	10/14/2023	10/10/2024	8/9/2012	8/9/2012 (Duplicate)	8/7/2013	8/7/2013 (Duplicate)	8/6/2014

Parameters	Units									
VOAs										
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-
03Metals										
Cadmium	mg/L	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-
PCBs										
Aroclor-1016 (PCB-1016)	mg/L	0.000095 U	0.000097 U	0.000095 U	0.000097 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U
Aroclor-1221 (PCB-1221)	mg/L	0.000095 U	0.000097 U	0.000095 U	0.000097 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U
Aroclor-1232 (PCB-1232)	mg/L	0.000095 U	0.000097 U	0.000095 U	0.000097 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U
Aroclor-1242 (PCB-1242)	mg/L	0.000095 U	0.000097 U	0.000095 U	0.000097 U	0.000095	0.00019 U	0.000083 J	0.00019 U	0.00019 U
Aroclor-1248 (PCB-1248)	mg/L	0.000095 U	0.000097 U	0.000095 U	0.000097 U	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U
Aroclor-1254 (PCB-1254)	mg/L	0.000095 U	0.000097 U	0.000095 U	0.000097 U	0.000095	0.00019 U	0.00019 U	R	0.00019 U
Aroclor-1260 (PCB-1260)	mg/L	0.000095 U	0.000097 U	0.000095 U	0.000097 U	0.000095	0.00019 U	0.00019 U	R	0.00019 U
PFAS										
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-
Wet										
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	
Sample Location:	MW300S	MW300S	MW300S	MW300S	MW300S	MW300S	MW300S	MW300S	MW300S	MW300S	
Sample ID:	GW-12610-082615-SSH-0615	GW-12610-082616-SSH-1610	GW-12610-082117-SSH-07-17	GW-12610A-082018-SSH-18107	GW-12610-082819-SSH-00919	GW-12610-082819-SSH-01019	GW-11208058-081120-SSH-2009	GW-11208058-082321-SSH-21104	GW-11208058-082222-BW-001	GW-11208058-101423-BW-009	
Sample Date:	8/26/2015	8/26/2016	8/21/2017	8/20/2018	8/28/2019	8/28/2019	8/11/2020	8/23/2021	8/22/2022	10/14/2023	
Parameters	Units										
VOAs											
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-	
03Metals											
Cadmium	mg/L	-	-	-	-	-	-	-	-	-	
Chromium	mg/L	-	-	-	-	-	-	-	-	-	
Copper	mg/L	-	-	-	-	-	-	-	-	-	
Iron	mg/L	-	-	-	-	-	-	-	-	-	
Lead	mg/L	-	-	-	-	-	-	-	-	-	
Mercury	mg/L	-	-	-	-	-	-	-	-	-	
Nickel	mg/L	-	-	-	-	-	-	-	-	-	
Silver	mg/L	-	-	-	-	-	-	-	-	-	
PCBs											
Aroclor-1016 (PCB-1016)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.000096 U	0.000095 U	0.000097 U	0.0001 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.000096 U	0.000095 U	0.000097 U	0.0001 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.000096 U	0.000095 U	0.000097 U	0.0001 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	0.000095 J	0.00019 U	0.000084 J	0.00019 U	0.00011 J	0.000096 J	0.000095 J	0.000097 U	0.0001 U	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000097 U	0.000096 U	0.000095 U	0.000086 J	0.0001 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	0.00019 U	R	0.00019 U	0.00019 U	0.000097 U	0.000096 U	0.000095 U	0.000097 U	0.0001 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	0.00019 U	R	0.00019 U	0.00019 U	0.000097 U	0.000096 U	0.000095 U	0.000097 U	0.0001 U	0.000095 U
PFAS											
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-
Wet											
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-	-

Notes:

- U - Not detected at the associated reporting limit.
- J - Estimated concentration.
- UJ - Not detected; associated reporting limit is estimated.
- R - Rejected.
- H - Biased High
- B - Not detected substantially above the level reported in the laboratory or field blanks.
- HF - Field parameter with 15min holding time.
- ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Machine Storage Area	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:	MW300S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S
Sample ID:	GW-11208058-101724-BW-008	GW-12610-080812-SSH-004	GW-12610-080812-SSH-005	GW-12610-080813-JY-008	GW-12610-080614-SSH-1408	GW-12610-082615-SSH-0315	GW-12610-082616-SSH-1609	GW-12610-082217-SSH-09-17	GW-12610A-082018-SSH-18103	GW-12610-082819-SSH-00719	
Sample Date:	10/17/2024	8/8/2012	8/8/2012	8/8/2013	8/6/2014	8/26/2015	8/26/2016	8/22/2017	8/20/2018	8/28/2019	

Parameters	Units										
VOAs											
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-	-
03Metals											
Cadmium	mg/L	-	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-	-
PCBs											
Aroclor-1016 (PCB-1016)	mg/L	0.000095	0.00019 U	0.00019 U	0.00019 UJ	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	0.000095	0.00019 U	0.00019 U	0.00019 UJ	0.00019 U	0.00019 UJ	0.00019 U	0.00019 U	0.00019 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	0.000095	0.00019 U	0.00019 U	0.00019 UJ	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	0.000095	0.00079 ^{abc}	0.00085 ^{abc}	0.00019 UJ	0.00019 U	0.00019 UJ	0.00019 U	0.00057 ^{abc}	0.00056 ^{abc}	0.0011 ^{Jabc}
Aroclor-1248 (PCB-1248)	mg/L	0.000095	0.00019 U	0.00019 U	0.001 ^{Jabc}	0.001 ^{abc}	0.00095 ^{abc}	0.00059 ^{abc}	0.00019 U	0.00019 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	0.000095	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U
PFAS											
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-
Wet											
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW13S	LMW15D	LMW15D
Sample ID:	GW-11208058-081120-SSH-2011	GW-11208058-082321-SSH-21101	GW-11208058-082321-SSH-21102	GW-11208058-082322-BW-002	GW-11208058-101323-BW-001	GW-11208058-101323-BW-002	GW-11208058-101124-BW-006	GW-11208058-101124-BW-006	GW-12610-080812-SSH-006	GW-12610-080813-JY-009
Sample Date:	8/11/2020	8/23/2021	8/23/2021 (Duplicate)	8/23/2022	10/13/2023	10/13/2023 (Duplicate)	10/11/2024	10/11/2024	8/8/2012	8/8/2013

Parameters	Units									
VOAs										
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-
03Metals										
Cadmium	mg/L	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-
PCBs										
Aroclor-1016 (PCB-1016)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0002	0.00019 U	0.00019 U
Aroclor-1221 (PCB-1221)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0013 ^{abc}	0.00019 U	0.00019 U
Aroclor-1232 (PCB-1232)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0002	0.00019 U	0.00019 U
Aroclor-1242 (PCB-1242)	mg/L	0.00095 ^{J^{abc}}	0.000095 U	0.000095 U	0.0014 ^{J^{abc}}	0.0011 ^{J^{abc}}	0.0016 ^{J^{abc}}	0.0002	0.00013 J	0.00014 J
Aroclor-1248 (PCB-1248)	mg/L	0.000095 U	0.0015 ^{abc}	0.0015 ^{abc}	0.000095 U	0.000095 U	0.000095 U	0.0002	0.00019 U	0.00019 U
Aroclor-1254 (PCB-1254)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0002	0.00019 U	0.00019 UJ
Aroclor-1260 (PCB-1260)	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0002	0.00019 U	0.00019 UJ
PFAS										
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-
Wet										
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:	LMW15D	LMW15D	LMW15D	LMW15D	LMW15D	LMW15D	LMW15D	LMW15D	LMW15D	LMW15D
Sample ID:	GW-12610-082615-SSH-0415	GW-12610-082616-SSH-1608	GW-12610-082217-SSH-10-17	GW-12610A-082018-SSH-18104	GW-12610A-082018-SSH-18105	GW-12610-082819-SSH-00819	GW-11208058-081120-SSH-2010	GW-11208058-082321-SSH-21100	GW-11208058-082322-BW-003	GW-11208058-101323-BW-004
Sample Date:	8/26/2015	8/26/2016	8/22/2017	8/20/2018	8/20/2018 (Duplicate)	8/28/2019	8/11/2020	8/23/2021	8/23/2022	10/13/2023

Parameters	Units									
VOAs										
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-
03Metals										
Cadmium	mg/L	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-
PCBs										
Aroclor-1016 (PCB-1016)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000095 U	0.000095 U	0.000099 U
Aroclor-1221 (PCB-1221)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000095 U	0.000095 U	0.000099 U
Aroclor-1232 (PCB-1232)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000095 U	0.000095 U	0.000099 U
Aroclor-1242 (PCB-1242)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.00016 J	0.000095 U	0.000099 U
Aroclor-1248 (PCB-1248)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000095 U	0.000095 U	0.000099 U
Aroclor-1254 (PCB-1254)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000095 U	0.000095 U	0.000099 U
Aroclor-1260 (PCB-1260)	mg/L	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.000096 U	0.000095 U	0.000095 U	0.000099 U
PFAS										
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-
Wet										
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Analytical Results Summary
 Sampling
 Racer Trust - Bay City Industrial Land
 Bay City, Michigan

AOI:	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:	LMW15D	MW301D2	MW301D2	MW301D2	MW301D2	MW301D2	MW301D2	MW301D2	MW301D2	MW301D2
Sample ID:	GW-11208058-101124-BW-005	GW-12610-080912-SSH-009	GW-12610-080713-JY-007	GW-12610-080614-SSH-1410	GW-12610-082615-SSH-0515	GW-12610-121416-SSH-1615	GW-12610-082117-SSH-06-17	GW-12610A-082018-SSH-18106	GW-12610-082819-SSH-00619	GW-11208058-081020-SSH-2008
Sample Date:	10/11/2024	8/9/2012	8/7/2013	8/6/2014	8/26/2015	12/14/2016	8/21/2017	8/20/2018	8/28/2019	8/10/2020

Parameters	Units										
VOAs											
Vinyl chloride	mg/L	-	-	-	-	-	-	-	-	-	-
03Metals											
Cadmium	mg/L	-	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-	-
PCBs											
Aroclor-1016 (PCB-1016)	mg/L	0.000098	0.00019 U	0.00019 U	0.00019 U	0.00038 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U	0.000095 U
Aroclor-1221 (PCB-1221)	mg/L	0.000098	0.00019 U	0.00019 U	0.00019 U	0.00038 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U	0.000095 U
Aroclor-1232 (PCB-1232)	mg/L	0.000098	0.00019 U	0.00019 U	0.00019 U	0.00038 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U	0.000095 U
Aroclor-1242 (PCB-1242)	mg/L	0.000098	0.00019 U	0.00019 U	0.00019 U	0.00038 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U	0.000095 U
Aroclor-1248 (PCB-1248)	mg/L	0.000098	0.00019 U	0.00019 U	0.00019 U	0.00038 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U	0.000095 U
Aroclor-1254 (PCB-1254)	mg/L	0.000098	0.00019 U	0.00019 U	0.00019 U	0.00038 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U	0.000095 U
Aroclor-1260 (PCB-1260)	mg/L	0.000098	0.00019 U	0.00019 U	0.00019 U	0.00038 U	0.00019 U	0.00019 U	0.00019 U	0.000095 U	0.000095 U
PFAS											
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-	-	-	-	-	-	-
Wet											
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia-N	mg/L	-	-	-	-	-	-	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-	-	-	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-	-	-	-	-	-	-
pH, lab	s.u.	-	-	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-	-	-	-	-	-	-

Notes:
 U - Not detected at the associated reporting limit.
 J - Estimated concentration.
 UJ - Not detected; associated reporting limit is estimated.
 R - Rejected.
 H - Biased High
 B - Not detected substantially above the level reported in the laboratory or field blanks.
 HF - Field parameter with 15min holding time.
 ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Attachment B
Analytical Results Summary
Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:	MW301D2	MW301D2	MW301D2	MW301D2
Sample ID:	GW-11208058-082321-SSH-21103	GW-11208058-082322-BW-004	GW-11208058-101323-BW-005	GW-11208058-101724-BW-007
Sample Date:	8/23/2021	8/23/2022	10/13/2023	10/17/2024

Parameters	Units				
VOAs					
Vinyl chloride	mg/L	-	-	-	-
03Metals					
Cadmium	mg/L	-	-	-	-
Chromium	mg/L	-	-	-	-
Copper	mg/L	-	-	-	-
Iron	mg/L	-	-	-	-
Lead	mg/L	-	-	-	-
Mercury	mg/L	-	-	-	-
Nickel	mg/L	-	-	-	-
Silver	mg/L	-	-	-	-
PCBs					
Aroclor-1016 (PCB-1016)	mg/L	0.000096 U	0.0001 U	0.000095 U	0.00011
Aroclor-1221 (PCB-1221)	mg/L	0.000096 U	0.0001 U	0.000095 U	0.00011
Aroclor-1232 (PCB-1232)	mg/L	0.000096 U	0.0001 U	0.000095 U	0.00011
Aroclor-1242 (PCB-1242)	mg/L	0.000096 U	0.0001 U	0.000095 U	0.00011
Aroclor-1248 (PCB-1248)	mg/L	0.000096 U	0.0001 U	0.000095 U	0.00011
Aroclor-1254 (PCB-1254)	mg/L	0.000096 U	0.0001 U	0.000095 U	0.00011
Aroclor-1260 (PCB-1260)	mg/L	0.000096 U	0.0001 U	0.000095 U	0.00011
PFAS					
Perfluorooctane sulfonic acid (PFOS)	mg/L	-	-	-	-
Perfluorooctanoic acid (PFOA)	mg/L	-	-	-	-
Wet					
Ammonia	mg/L	-	-	-	-
Ammonia-N	mg/L	-	-	-	-
Biochemical oxygen demand (BOD)	mg/L	-	-	-	-
Chemical oxygen demand (COD)	mg/L	-	-	-	-
Oil and grease (HEM), polar	mg/L	-	-	-	-
Oil and grease (HEM), total	mg/L	-	-	-	-
pH, lab	s.u.	-	-	-	-
Phosphorus	mg/L	-	-	-	-
Total suspended solids (TSS)	mg/L	-	-	-	-

Notes:

- U - Not detected at the associated reporting limit.
- J - Estimated concentration.
- UJ - Not detected; associated reporting limit is estimated.
- R - Rejected.
- H - Biased High
- B - Not detected substantially above the level reported in the laboratory or field blanks.
- HF - Field parameter with 15min holding time.
- ^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Attachment C

Laboratory Reports and Data Validation Memorandums



ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Ruth Mickle
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Generated 1/24/2024 4:08:06 PM

JOB DESCRIPTION

11208058, RACER Bay City

JOB NUMBER

240-198216-1

Eurofins Cleveland

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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Authorized for release by
Denise Heckler, Project Manager II
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(330)966-9477



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Case Narrative

Client: GHD Services Inc.
Project: 11208058, RACER Bay City

Job ID: 240-198216-1

Job ID: 240-198216-1

Eurofins Cleveland

Job Narrative 240-198216-1

Receipt

The samples were received on 1/17/2024 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC/MS VOA

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

PCBs

Method 608.3_PCB_PREC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-600571.

Method 608.3_PCB_PREC: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not directly match any of the laboratory's Aroclor standards used for instrument calibration: W-11208058-011524-JY-001 (240-198216-1). The sample has been quantified and reported using the best overall Aroclor/standard pattern match relative to the reference standards.

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

Metals

Method 200.7: Some requested practical quantitation limits (PQLs) fall below the laboratory's verified standard quantitation limit. The continuing calibration blanks and method blanks may not support the lower PQL.

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

General Chemistry

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

Eurofins Cleveland

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Qualifiers

GC/MS 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
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.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
s	Seeded Control Blank (SCB) Recovery High
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-198216-1	W-11208058-011524-JY-001	Water	01/15/24 09:30	01/17/24 10:40
240-198216-2	W-11208058-011624-JY-002	Water	01/16/24 08:30	01/17/24 10:40
240-198216-3	W-11208058-011624-JY-003	Water	01/16/24 09:00	01/17/24 10:40

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Detection Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Client Sample ID: W-11208058-011524-JY-001

Lab Sample ID: 240-198216-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	12		0.95	0.72	ug/L	10		608.3	Total/NA

Client Sample ID: W-11208058-011624-JY-002

Lab Sample ID: 240-198216-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM	2.2	J	4.9	1.0	mg/L	1		1664B	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		4500 H+ B-2000	Total/NA

Client Sample ID: W-11208058-011624-JY-003

Lab Sample ID: 240-198216-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	2.2	J	20	2.2	ug/L	1		200.7 Rev 4.4	Total Recoverable
Chemical Oxygen Demand	5.1	J	10	1.8	mg/L	1		410.4	Total/NA
Ammonia	9.0		0.20	0.076	mg/L	1		4500 NH3 H	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Method Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET CLE
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET CLE
245.1	Mercury (CVAA)	EPA	EET CLE
1664B	HEM and SGT-HEM	1664B	EET CLE
410.4	COD	EPA	EET CLE
4500 H+ B-2000	pH	SM	EET CLE
4500 NH3 H	Ammonia	SM	EET CLE
5210B-2001	BOD, 5-Day	SM	EET CLE
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CLE
SM4500 P E-1999	Phosphorus	SM	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1	Preparation, Mercury	EPA	EET CLE
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET CLE

Protocol References:

- 1664B = EPA-821-98-002
- EPA = US Environmental Protection Agency
- SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

- EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-11208058-011624-JY-002

Date Collected: 01/16/24 08:30

Date Received: 01/17/24 10:40

Lab Sample ID: 240-198216-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/19/24 16:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		62 - 137					01/19/24 16:29	1
4-Bromofluorobenzene (Surr)	103		56 - 136					01/19/24 16:29	1
Toluene-d8 (Surr)	101		78 - 122					01/19/24 16:29	1



Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-11208058-011524-JY-001

Lab Sample ID: 240-198216-1

Date Collected: 01/15/24 09:30

Matrix: Water

Date Received: 01/17/24 10:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.95	U	0.95	0.53	ug/L		01/18/24 08:24	01/19/24 16:04	10
Aroclor-1221	0.95	U	0.95	0.54	ug/L		01/18/24 08:24	01/19/24 16:04	10
Aroclor-1232	0.95	U	0.95	0.70	ug/L		01/18/24 08:24	01/19/24 16:04	10
Aroclor-1242	12		0.95	0.72	ug/L		01/18/24 08:24	01/19/24 16:04	10
Aroclor-1248	0.95	U	0.95	0.48	ug/L		01/18/24 08:24	01/19/24 16:04	10
Aroclor-1254	0.95	U	0.95	0.38	ug/L		01/18/24 08:24	01/19/24 16:04	10
Aroclor-1260	0.95	U	0.95	0.44	ug/L		01/18/24 08:24	01/19/24 16:04	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	36		10 - 174				01/18/24 08:24	01/19/24 16:04	10
<i>Tetrachloro-m-xylene</i>	68		10 - 149				01/18/24 08:24	01/19/24 16:04	10

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-11208058-011624-JY-003

Lab Sample ID: 240-198216-3

Date Collected: 01/16/24 09:00

Matrix: Water

Date Received: 01/17/24 10:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.096	U	0.096	0.054	ug/L	-	01/18/24 08:24	01/19/24 16:19	1
Aroclor-1221	0.096	U	0.096	0.055	ug/L	-	01/18/24 08:24	01/19/24 16:19	1
Aroclor-1232	0.096	U	0.096	0.071	ug/L	-	01/18/24 08:24	01/19/24 16:19	1
Aroclor-1242	0.096	U	0.096	0.073	ug/L	-	01/18/24 08:24	01/19/24 16:19	1
Aroclor-1248	0.096	U	0.096	0.048	ug/L	-	01/18/24 08:24	01/19/24 16:19	1
Aroclor-1254	0.096	U	0.096	0.038	ug/L	-	01/18/24 08:24	01/19/24 16:19	1
Aroclor-1260	0.096	U	0.096	0.044	ug/L	-	01/18/24 08:24	01/19/24 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	62	-	10 - 174	01/18/24 08:24	01/19/24 16:19	1
<i>Tetrachloro-m-xylene</i>	60	-	10 - 149	01/18/24 08:24	01/19/24 16:19	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: W-11208058-011624-JY-003

Date Collected: 01/16/24 09:00

Date Received: 01/17/24 10:40

Lab Sample ID: 240-198216-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.62	ug/L		01/18/24 14:00	01/19/24 08:03	1
Cadmium	2.0	U	2.0	0.45	ug/L		01/18/24 14:00	01/19/24 08:03	1
Chromium	5.0	U	5.0	0.76	ug/L		01/18/24 14:00	01/19/24 08:03	1
Copper	20	U	20	3.5	ug/L		01/18/24 14:00	01/19/24 08:03	1
Iron	100	U	100	83	ug/L		01/18/24 14:00	01/19/24 08:03	1
Nickel	2.2	J	20	2.2	ug/L		01/18/24 14:00	01/19/24 08:03	1
Lead	3.0	U	3.0	2.8	ug/L		01/18/24 14:00	01/19/24 08:03	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: W-11208058-011624-JY-003

Date Collected: 01/16/24 09:00

Date Received: 01/17/24 10:40

Lab Sample ID: 240-198216-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.13	ug/L		01/18/24 14:00	01/19/24 11:26	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

General Chemistry

Client Sample ID: W-11208058-011624-JY-002

Date Collected: 01/16/24 08:30

Date Received: 01/17/24 10:40

Lab Sample ID: 240-198216-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (1664B)	2.2	J	4.9	1.0	mg/L			01/24/24 08:55	1
pH (SM 4500 H+ B-2000)	7.2	HF	0.1	0.1	SU			01/23/24 04:48	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

General Chemistry

Client Sample ID: W-11208058-011624-JY-003

Date Collected: 01/16/24 09:00

Date Received: 01/17/24 10:40

Lab Sample ID: 240-198216-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	5.1	J	10	1.8	mg/L			01/22/24 11:16	1
Ammonia (SM 4500 NH3 H)	9.0		0.20	0.076	mg/L			01/23/24 14:00	1
Biochemical Oxygen Demand (SM 5210B-2001)	2.0	U	2.0	2.0	mg/L			01/17/24 13:43	1
Total Suspended Solids (SM 2540D)	4.0	U	4.0	0.40	mg/L			01/19/24 12:22	1
Total Phosphorus as P (SM4500 P E-1999)	0.10	U	0.10	0.076	mg/L			01/24/24 10:36	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

GC/MS VOA

Analysis Batch: 600689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-2	W-11208058-011624-JY-002	Total/NA	Water	624.1	
MB 240-600689/9	Method Blank	Total/NA	Water	624.1	
LCS 240-600689/5	Lab Control Sample	Total/NA	Water	624.1	

GC Semi VOA

Prep Batch: 600571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-1	W-11208058-011524-JY-001	Total/NA	Water	608	
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	608	
MB 240-600571/1-A	Method Blank	Total/NA	Water	608	
LCS 240-600571/2-A	Lab Control Sample	Total/NA	Water	608	
LCSD 240-600571/3-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 600687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-1	W-11208058-011524-JY-001	Total/NA	Water	608.3	600571
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	608.3	600571
MB 240-600571/1-A	Method Blank	Total/NA	Water	608.3	600571
LCS 240-600571/2-A	Lab Control Sample	Total/NA	Water	608.3	600571
LCSD 240-600571/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	600571

Metals

Prep Batch: 600612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total Recoverable	Water	200.7	
MB 240-600612/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-600612/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-198216-3 MS	W-11208058-011624-JY-003	Total Recoverable	Water	200.7	
240-198216-3 MSD	W-11208058-011624-JY-003	Total Recoverable	Water	200.7	

Prep Batch: 600618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	245.1	
MB 240-600618/1-A	Method Blank	Total/NA	Water	245.1	
LCS 240-600618/2-A	Lab Control Sample	Total/NA	Water	245.1	
240-198216-3 MS	W-11208058-011624-JY-003	Total/NA	Water	245.1	
240-198216-3 MSD	W-11208058-011624-JY-003	Total/NA	Water	245.1	

Analysis Batch: 600707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total Recoverable	Water	200.7 Rev 4.4	600612
MB 240-600612/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	600612
LCS 240-600612/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	600612
240-198216-3 MS	W-11208058-011624-JY-003	Total Recoverable	Water	200.7 Rev 4.4	600612
240-198216-3 MSD	W-11208058-011624-JY-003	Total Recoverable	Water	200.7 Rev 4.4	600612

Analysis Batch: 600750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	245.1	600618
MB 240-600618/1-A	Method Blank	Total/NA	Water	245.1	600618

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QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Metals (Continued)

Analysis Batch: 600750 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-600618/2-A	Lab Control Sample	Total/NA	Water	245.1	600618
240-198216-3 MS	W-11208058-011624-JY-003	Total/NA	Water	245.1	600618
240-198216-3 MSD	W-11208058-011624-JY-003	Total/NA	Water	245.1	600618

General Chemistry

Analysis Batch: 600508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	5210B-2001	
SCB 240-600508/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-600508/1	Method Blank	Total/NA	Water	5210B-2001	
LCS 240-600508/3	Lab Control Sample	Total/NA	Water	5210B-2001	

Analysis Batch: 600753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	SM 2540D	
MB 240-600753/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 240-600753/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 600880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	410.4	
MB 240-600880/9	Method Blank	Total/NA	Water	410.4	
LCS 240-600880/10	Lab Control Sample	Total/NA	Water	410.4	
240-198216-3 MS	W-11208058-011624-JY-003	Total/NA	Water	410.4	
240-198216-3 MSD	W-11208058-011624-JY-003	Total/NA	Water	410.4	

Analysis Batch: 600950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-2	W-11208058-011624-JY-002	Total/NA	Water	4500 H+ B-2000	
LCS 240-600950/30	Lab Control Sample	Total/NA	Water	4500 H+ B-2000	
240-198216-2 DU	W-11208058-011624-JY-002	Total/NA	Water	4500 H+ B-2000	

Analysis Batch: 601051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	4500 NH3 H	
MB 240-601051/16	Method Blank	Total/NA	Water	4500 NH3 H	
LCS 240-601051/17	Lab Control Sample	Total/NA	Water	4500 NH3 H	

Analysis Batch: 601095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-2	W-11208058-011624-JY-002	Total/NA	Water	1664B	
MB 240-601095/1	Method Blank	Total/NA	Water	1664B	
LCS 240-601095/2	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 601137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198216-3	W-11208058-011624-JY-003	Total/NA	Water	SM4500 P E-1999	
MB 240-601137/3	Method Blank	Total/NA	Water	SM4500 P E-1999	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

General Chemistry (Continued)

Analysis Batch: 601137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-601137/4	Lab Control Sample	Total/NA	Water	SM4500 P E-1999	
240-198216-3 MS	W-11208058-011624-JY-003	Total/NA	Water	SM4500 P E-1999	
240-198216-3 MSD	W-11208058-011624-JY-003	Total/NA	Water	SM4500 P E-1999	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-600689/9
Matrix: Water
Analysis Batch: 600689

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/19/24 11:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	109		62 - 137				01/19/24 11:40	1	
4-Bromofluorobenzene (Surr)	103		56 - 136				01/19/24 11:40	1	
Toluene-d8 (Surr)	101		78 - 122				01/19/24 11:40	1	

Lab Sample ID: LCS 240-600689/5
Matrix: Water
Analysis Batch: 600689

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Vinyl chloride	20.0	16.4		ug/L		82	5 - 195
Surrogate	%Recovery	Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	104		62 - 137				
4-Bromofluorobenzene (Surr)	99		56 - 136				
Toluene-d8 (Surr)	100		78 - 122				

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 240-600571/1-A
Matrix: Water
Analysis Batch: 600687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 600571

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aroclor-1016	0.10	U	0.10	0.056	ug/L		01/18/24 08:24	01/19/24 12:47	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		01/18/24 08:24	01/19/24 12:47	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		01/18/24 08:24	01/19/24 12:47	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		01/18/24 08:24	01/19/24 12:47	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		01/18/24 08:24	01/19/24 12:47	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		01/18/24 08:24	01/19/24 12:47	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L		01/18/24 08:24	01/19/24 12:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
DCB Decachlorobiphenyl	86		10 - 174			01/18/24 08:24	01/19/24 12:47	1	
Tetrachloro-m-xylene	75		10 - 149			01/18/24 08:24	01/19/24 12:47	1	

Lab Sample ID: LCS 240-600571/2-A
Matrix: Water
Analysis Batch: 600687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 600571

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Aroclor-1016	2.50	1.79		ug/L		71	50 - 140
Aroclor-1260	2.50	1.72		ug/L		69	8 - 140

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 240-600571/2-A
Matrix: Water
Analysis Batch: 600687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 600571

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	79		10 - 174
Tetrachloro-m-xylene	68		10 - 149

Lab Sample ID: LCSD 240-600571/3-A
Matrix: Water
Analysis Batch: 600687

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 600571

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Aroclor-1016	2.50	1.89		ug/L		76	50 - 140	6	30	
Aroclor-1260	2.50	1.68		ug/L		67	8 - 140	3	30	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	83		10 - 174
Tetrachloro-m-xylene	71		10 - 149

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-600612/1-A
Matrix: Water
Analysis Batch: 600707

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 600612

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Silver	5.0	U	5.0	0.62	ug/L		01/18/24 14:00	01/19/24 07:55	1
Cadmium	2.0	U	2.0	0.45	ug/L		01/18/24 14:00	01/19/24 07:55	1
Chromium	5.0	U	5.0	0.76	ug/L		01/18/24 14:00	01/19/24 07:55	1
Copper	20	U	20	3.5	ug/L		01/18/24 14:00	01/19/24 07:55	1
Iron	100	U	100	83	ug/L		01/18/24 14:00	01/19/24 07:55	1
Nickel	20	U	20	2.2	ug/L		01/18/24 14:00	01/19/24 07:55	1
Lead	3.0	U	3.0	2.8	ug/L		01/18/24 14:00	01/19/24 07:55	1

Lab Sample ID: LCS 240-600612/2-A
Matrix: Water
Analysis Batch: 600707

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 600612

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	RPD
Silver	100	100		ug/L		100	85 - 115	
Cadmium	1000	1020		ug/L		102	85 - 115	
Chromium	1000	938		ug/L		94	85 - 115	
Copper	1000	975		ug/L		98	85 - 115	
Iron	10000	9870		ug/L		99	85 - 115	
Nickel	1000	1010		ug/L		101	85 - 115	
Lead	1000	947		ug/L		95	85 - 115	

Lab Sample ID: 240-198216-3 MS
Matrix: Water
Analysis Batch: 600707

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total Recoverable
Prep Batch: 600612

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Silver	5.0	U	100	98.2		ug/L		98	70 - 130	

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 240-198216-3 MS
Matrix: Water
Analysis Batch: 600707

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total Recoverable
Prep Batch: 600612

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	2.0	U	1000	1030		ug/L		103	70 - 130
Chromium	5.0	U	1000	918		ug/L		92	70 - 130
Copper	20	U	1000	953		ug/L		95	70 - 130
Iron	100	U	10000	9580		ug/L		96	70 - 130
Nickel	2.2	J	1000	1020		ug/L		102	70 - 130
Lead	3.0	U	1000	937		ug/L		94	70 - 130

Lab Sample ID: 240-198216-3 MSD
Matrix: Water
Analysis Batch: 600707

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total Recoverable
Prep Batch: 600612

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	5.0	U	100	95.1		ug/L		95	70 - 130	3	20
Cadmium	2.0	U	1000	988		ug/L		99	70 - 130	4	20
Chromium	5.0	U	1000	881		ug/L		88	70 - 130	4	20
Copper	20	U	1000	919		ug/L		92	70 - 130	4	20
Iron	100	U	10000	9330		ug/L		93	70 - 130	3	20
Nickel	2.2	J	1000	977		ug/L		97	70 - 130	4	20
Lead	3.0	U	1000	898		ug/L		90	70 - 130	4	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-600618/1-A
Matrix: Water
Analysis Batch: 600750

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 600618

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.13	ug/L		01/18/24 14:00	01/19/24 11:22	1

Lab Sample ID: LCS 240-600618/2-A
Matrix: Water
Analysis Batch: 600750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 600618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.25		ug/L		105	85 - 115

Lab Sample ID: 240-198216-3 MS
Matrix: Water
Analysis Batch: 600750

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total/NA
Prep Batch: 600618

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.20	U	1.00	1.08		ug/L		108	70 - 130

Lab Sample ID: 240-198216-3 MSD
Matrix: Water
Analysis Batch: 600750

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total/NA
Prep Batch: 600618

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	1.08		ug/L		108	70 - 130	0	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 240-601095/1
Matrix: Water
Analysis Batch: 601095

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	5.0	U	5.0	1.0	mg/L			01/24/24 08:55	1

Lab Sample ID: LCS 240-601095/2
Matrix: Water
Analysis Batch: 601095

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM	40.0	33.9		mg/L		85	78 - 114

Method: 410.4 - COD

Lab Sample ID: MB 240-600880/9
Matrix: Water
Analysis Batch: 600880

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10	1.8	mg/L			01/22/24 11:16	1

Lab Sample ID: LCS 240-600880/10
Matrix: Water
Analysis Batch: 600880

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	46.4	43.5		mg/L		94	90 - 110

Lab Sample ID: 240-198216-3 MS
Matrix: Water
Analysis Batch: 600880

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	5.1	J	50.0	59.8		mg/L		109	90 - 110

Lab Sample ID: 240-198216-3 MSD
Matrix: Water
Analysis Batch: 600880

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	5.1	J	50.0	58.1		mg/L		106	90 - 110	3	20

Method: 4500 H+ B-2000 - pH

Lab Sample ID: LCS 240-600950/30
Matrix: Water
Analysis Batch: 600950

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	9.14	9.2		SU		100	97 - 103

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: 4500 H+ B-2000 - pH (Continued)

Lab Sample ID: 240-198216-2 DU
Matrix: Water
Analysis Batch: 600950

Client Sample ID: W-11208058-011624-JY-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.2	HF	7.2		SU		0	20

Method: 4500 NH3 H - Ammonia

Lab Sample ID: MB 240-601051/16
Matrix: Water
Analysis Batch: 601051

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.20	U	0.20	0.076	mg/L			01/23/24 13:42	1

Lab Sample ID: LCS 240-601051/17
Matrix: Water
Analysis Batch: 601051

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	3.83	3.77		mg/L		98	90 - 110

Method: 5210B-2001 - BOD, 5-Day

Lab Sample ID: SCB 240-600508/2
Matrix: Water
Analysis Batch: 600508

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

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U s	2.0	2.0	mg/L			01/17/24 12:32	1

Lab Sample ID: USB 240-600508/1
Matrix: Water
Analysis Batch: 600508

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			01/17/24 12:29	1

Lab Sample ID: LCS 240-600508/3
Matrix: Water
Analysis Batch: 600508

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	181		mg/L		91	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-600753/1
Matrix: Water
Analysis Batch: 600753

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0	0.40	mg/L			01/19/24 12:22	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 240-600753/2
Matrix: Water
Analysis Batch: 600753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	60.1	49.0		mg/L		82	64 - 120

Method: SM4500 P E-1999 - Phosphorus

Lab Sample ID: MB 240-601137/3
Matrix: Water
Analysis Batch: 601137

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.076	mg/L			01/24/24 10:36	1

Lab Sample ID: LCS 240-601137/4
Matrix: Water
Analysis Batch: 601137

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.358	0.383		mg/L		107	77 - 120

Lab Sample ID: 240-198216-3 MS
Matrix: Water
Analysis Batch: 601137

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.10	U	0.500	0.601		mg/L		120	38 - 156

Lab Sample ID: 240-198216-3 MSD
Matrix: Water
Analysis Batch: 601137

Client Sample ID: W-11208058-011624-JY-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Phosphorus as P	0.10	U	0.500	0.564		mg/L		113	38 - 156	6	29

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	TOL
		(62-137)	(56-136)	(78-122)
240-198216-2	W-11208058-011624-JY-002	110	103	101
LCS 240-600689/5	Lab Control Sample	104	99	100
MB 240-600689/9	Method Blank	109	103	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1	TCX1
		(10-174)	(10-149)
240-198216-1	W-11208058-011524-JY-001	36	68
240-198216-3	W-11208058-011624-JY-003	62	60
LCS 240-600571/2-A	Lab Control Sample	79	68
LCSD 240-600571/3-A	Lab Control Sample Dup	83	71
MB 240-600571/1-A	Method Blank	86	75

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Lab Chronicle

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-198216-1

Client Sample ID: W-11208058-011524-JY-001

Lab Sample ID: 240-198216-1

Date Collected: 01/15/24 09:30

Matrix: Water

Date Received: 01/17/24 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	608			600571	GBS	EET CLE	01/18/24 08:24
Total/NA	Analysis	608.3		10	600687	MBB	EET CLE	01/19/24 16:04

Client Sample ID: W-11208058-011624-JY-002

Lab Sample ID: 240-198216-2

Date Collected: 01/16/24 08:30

Matrix: Water

Date Received: 01/17/24 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	600689	HMB	EET CLE	01/19/24 16:29
Total/NA	Analysis	1664B		1	601095	JMR	EET CLE	01/24/24 08:55
Total/NA	Analysis	4500 H+ B-2000		1	600950	MS	EET CLE	01/23/24 04:48

Client Sample ID: W-11208058-011624-JY-003

Lab Sample ID: 240-198216-3

Date Collected: 01/16/24 09:00

Matrix: Water

Date Received: 01/17/24 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	608			600571	GBS	EET CLE	01/18/24 08:24
Total/NA	Analysis	608.3		1	600687	MBB	EET CLE	01/19/24 16:19
Total Recoverable	Prep	200.7			600612	TQ6W	EET CLE	01/18/24 14:00
Total Recoverable	Analysis	200.7 Rev 4.4		1	600707	KLC	EET CLE	01/19/24 08:03
Total/NA	Prep	245.1			600618	TQ6W	EET CLE	01/18/24 14:00
Total/NA	Analysis	245.1		1	600750	GK	EET CLE	01/19/24 11:26
Total/NA	Analysis	410.4		1	600880	MS	EET CLE	01/22/24 11:16
Total/NA	Analysis	4500 NH3 H		1	601051	JMR	EET CLE	01/23/24 14:00
Total/NA	Analysis	5210B-2001		1	600508	C5SV	EET CLE	01/17/24 13:43
Total/NA	Analysis	SM 2540D		1	600753	C5SV	EET CLE	01/19/24 12:22
Total/NA	Analysis	SM4500 P E-1999		1	601137	BLW	EET CLE	01/24/24 10:36

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City


Job ID: 240-198216-1

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-30-24
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

Client Information		Sampler: <i>S. York</i>		Lab PM: Heckler, Denise D		COC No: 240-116270-40988.1	
Client Contact: Ms. Ruth Mickle		Phone: <i>734 231 6088</i>		E-Mail: Denise.Heckler@et.eurofins.com		Page: Page 1 of 1	
Company: GHD Services Inc.		PW/SID:		State of Origin: <i>Michigan</i>		Job #:	
Address: 26850 Haggerty Rd.		Due Date Requested:		Analysis Requested		Preservation Codes:	
City: Farmington Hills		TAT Requested (days): <i>5</i>		608.3 PCB.PREC - PCBs		A - HCL	
State, Zip: MI, 48331		Compliance Project: <i>SD S Day</i>		410.4, 4500_P_E, SM4500_NH3_H		M - Hexane	
Phone: 612-524-6872(Tel)		PO #:		200.7, 245.1		N - None	
Email: ruth.mickle@ghd.com		Purchase Order Requested		624.1_LL.PREC - Vinyl chloride		O - AsNaO2	
Project Name: 11208058, RACER Bay City		WO #: 11208058		5210B - BOD		P - Na2O4S	
Site: 11208058		Project #: 24006288		1664B_NP - HEM		Q - Na2SO3	
SSOW#: <i>11208058-104-00124-00440 Matrix</i>		Sample Date		2540D - TSS		R - Na2SO3	
Sample Identification		Sample Time		SM4500_H+ - pH		S - H2SO4	
W-11208058-011524-3Y-001		1-15-24 0930		624.1_LL.PREC - Vinyl chloride		T - TSP Dodecahydrate	
W-11208058-011624-3Y-002		1-16-24 0830		410.4, 4500_P_E, SM4500_NH3_H		U - Acetone	
W-11208058-011624-3Y-003		1-16-24 0900		608.3 PCB.PREC - PCBs		V - MCAA	
				Field Filtered Sample (Yes or No)		W - pH 4-5	
				Perform MS/MSD (Yes or No)		Y - Trizma	
				N S D A N S N		Z - other (specify)	
				Total Number of containers		Other:	
				Special Instructions/Note:		<i>LPN 24006288</i>	
				Special Instructions/Note:		<i>Inf.</i>	
				Special Instructions/Note:		<i>EFF</i>	
				Special Instructions/Note:		<i>EFF</i>	



240-198216 Chain of Custody

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

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:

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: *John Park* Date: *1-16-24* Time: *1000* Company: *GHD*

Relinquished by: *John Park* Date: *1/16/24* Time: *1110* Company: *GHD*

Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Custody Seals Intact: Yes No Custody Seal No.: _____

Received by: *Denise Heckler* Date/Time: *1/16/24 10:08* Company: *GHD*

Received by: *Denise Heckler* Date/Time: *1-17-24 1040* Company: *PETNS*

Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks:

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservation</u>	<u>Preservation</u>
			<u>pH</u>	<u>Temp</u>	<u>Added</u>	<u>Lot Number</u>
W-11208058-011524-JY-003	240-198216-A-3	Plastic 250ml - with Sulfuric Acid	<2	_____	_____	_____
W-11208058-011524-JY-003	240-198216-B-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Ruth Mickle
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Generated 6/26/2024 7:53:24 AM

JOB DESCRIPTION

11208058-E04-001Y24-001, RACER Bay City

JOB NUMBER

240-206021-1

Eurofins Cleveland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
6/26/2024 7:53:24 AM

Authorized for release by
Denise Heckler, Project Manager II
Denise.Heckler@et.eurofinsus.com
(330)966-9477



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Case Narrative

Client: GHD Services Inc.
Project: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Job ID: 240-206021-1

Eurofins Cleveland

Job Narrative 240-206021-1

Receipt

The samples were received on 6/12/2024 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C.

GC/MS VOA

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

PCBs

Method 608.3_PCB_PREC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-616726.

Method 608.3_PCB_PREC: The following samples appear to contain polychlorinated biphenyls (PCBs); however, the Aroclor patterns of the PCBs in the sample is altered and do not directly match the laboratory's individual Aroclor standards used for instrument calibration: GW-11208058-061024-JY-001 (240-206021-1). These altered PCB patterns may be caused by weathering, other environmental processes, and/or contributions from the presence of multiple Aroclors resulting in overlapping PCB patterns. The samples have been quantified and reported using the best overall Aroclor/standard pattern match.

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

Metals

Method 200.7 - Total Recoverable: Some requested practical quantitation limits (PQLs) fall below the laboratory's verified standard quantitation limit. The continuing calibration blanks and method blanks may not support the lower PQL.

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

General Chemistry

Method 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L. The associated sample results in batch 240-616353 are qualified and reported.

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

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Qualifiers

GC/MS 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
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.

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-206021-1	GW-11208058-061024-JY-001	Water	06/10/24 11:00	06/12/24 09:40
240-206021-2	GW-11208058-061124-JY-002	Water	06/11/24 08:15	06/12/24 09:40
240-206021-3	GW-11208058-061124-JY-003	Water	06/11/24 08:30	06/12/24 09:40
240-206021-4	TB-061124-11208058	Water	06/11/24 00:00	06/12/24 09:40

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Detection Summary

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Client Sample ID: GW-11208058-061024-JY-001

Lab Sample ID: 240-206021-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1221	13		1.0	0.57	ug/L	10		608.3	Total/NA

Client Sample ID: GW-11208058-061124-JY-002

Lab Sample ID: 240-206021-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM	2.0	J	4.7	0.97	mg/L	1		1664B	Total/NA
pH	7.7	HF	0.1	0.1	SU	1		4500 H+ B-2000	Total/NA

Client Sample ID: GW-11208058-061124-JY-003

Lab Sample ID: 240-206021-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	170		100	83	ug/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	2.9	J	20	2.2	ug/L	1		200.7 Rev 4.4	Total Recoverable
Chemical Oxygen Demand	33		10	1.8	mg/L	1		410.4	Total/NA
Ammonia	12		1.0	0.38	mg/L	5		4500 NH3 H	Total/NA
Biochemical Oxygen Demand	19	b	2.0	2.0	mg/L	1		5210B-2001	Total/NA
Total Suspended Solids	0.90	J	4.0	0.40	mg/L	1		SM 2540D	Total/NA

Client Sample ID: TB-061124-11208058

Lab Sample ID: 240-206021-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Method Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET CLE
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET CLE
245.1	Mercury (CVAA)	EPA	EET CLE
1664B	HEM and SGT-HEM	1664B	EET CLE
410.4	COD	EPA	EET CLE
4500 H+ B-2000	pH	SM	EET CLE
4500 NH3 H	Ammonia	SM	EET CLE
5210B-2001	BOD, 5-Day	SM	EET CLE
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CLE
SM4500 P E-1999	Phosphorus	SM	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1	Preparation, Mercury	EPA	EET CLE
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET CLE

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-11208058-061124-JY-002

Lab Sample ID: 240-206021-2

Date Collected: 06/11/24 08:15

Matrix: Water

Date Received: 06/12/24 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/21/24 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		62 - 137					06/21/24 16:46	1
4-Bromofluorobenzene (Surr)	83		56 - 136					06/21/24 16:46	1
Toluene-d8 (Surr)	99		78 - 122					06/21/24 16:46	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-061124-11208058

Date Collected: 06/11/24 00:00

Date Received: 06/12/24 09:40

Lab Sample ID: 240-206021-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/21/24 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		62 - 137					06/21/24 17:10	1
4-Bromofluorobenzene (Surr)	79		56 - 136					06/21/24 17:10	1
Toluene-d8 (Surr)	97		78 - 122					06/21/24 17:10	1



Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: GW-11208058-061024-JY-001

Lab Sample ID: 240-206021-1

Date Collected: 06/10/24 11:00

Matrix: Water

Date Received: 06/12/24 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	1.0	U	1.0	0.56	ug/L	-	06/17/24 09:20	06/19/24 10:04	10
Aroclor-1221	13		1.0	0.57	ug/L	-	06/17/24 09:20	06/19/24 10:04	10
Aroclor-1232	1.0	U	1.0	0.74	ug/L	-	06/17/24 09:20	06/19/24 10:04	10
Aroclor-1242	1.0	U	1.0	0.76	ug/L	-	06/17/24 09:20	06/19/24 10:04	10
Aroclor-1248	1.0	U	1.0	0.50	ug/L	-	06/17/24 09:20	06/19/24 10:04	10
Aroclor-1254	1.0	U	1.0	0.40	ug/L	-	06/17/24 09:20	06/19/24 10:04	10
Aroclor-1260	1.0	U	1.0	0.46	ug/L	-	06/17/24 09:20	06/19/24 10:04	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	43		10 - 174				06/17/24 09:20	06/19/24 10:04	10
<i>Tetrachloro-m-xylene</i>	60		10 - 149				06/17/24 09:20	06/19/24 10:04	10

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: GW-11208058-061124-JY-003

Date Collected: 06/11/24 08:30

Date Received: 06/12/24 09:40

Lab Sample ID: 240-206021-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.053	ug/L		06/17/24 09:20	06/18/24 16:33	1
Aroclor-1221	0.095	U	0.095	0.054	ug/L		06/17/24 09:20	06/18/24 16:33	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		06/17/24 09:20	06/18/24 16:33	1
Aroclor-1242	0.095	U	0.095	0.072	ug/L		06/17/24 09:20	06/18/24 16:33	1
Aroclor-1248	0.095	U	0.095	0.048	ug/L		06/17/24 09:20	06/18/24 16:33	1
Aroclor-1254	0.095	U	0.095	0.038	ug/L		06/17/24 09:20	06/18/24 16:33	1
Aroclor-1260	0.095	U	0.095	0.044	ug/L		06/17/24 09:20	06/18/24 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	66		10 - 174	06/17/24 09:20	06/18/24 16:33	1
Tetrachloro-m-xylene	58		10 - 149	06/17/24 09:20	06/18/24 16:33	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: GW-11208058-061124-JY-003

Date Collected: 06/11/24 08:30

Date Received: 06/12/24 09:40

Lab Sample ID: 240-206021-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.62	ug/L		06/13/24 14:00	06/14/24 13:09	1
Cadmium	2.0	U	2.0	0.45	ug/L		06/13/24 14:00	06/14/24 13:09	1
Chromium	5.0	U	5.0	0.76	ug/L		06/13/24 14:00	06/14/24 13:09	1
Copper	20	U	20	3.5	ug/L		06/13/24 14:00	06/14/24 13:09	1
Iron	170		100	83	ug/L		06/13/24 14:00	06/14/24 13:09	1
Nickel	2.9	J	20	2.2	ug/L		06/13/24 14:00	06/14/24 13:09	1
Lead	3.0	U	3.0	2.8	ug/L		06/13/24 14:00	06/14/24 13:09	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: GW-11208058-061124-JY-003

Date Collected: 06/11/24 08:30

Date Received: 06/12/24 09:40

Lab Sample ID: 240-206021-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.13	ug/L		06/13/24 14:00	06/14/24 09:41	1

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- 14

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

General Chemistry

Client Sample ID: GW-11208058-061124-JY-002

Date Collected: 06/11/24 08:15

Date Received: 06/12/24 09:40

Lab Sample ID: 240-206021-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (1664B)	2.0	J	4.7	0.97	mg/L			06/25/24 10:48	1
pH (SM 4500 H+ B-2000)	7.7	HF	0.1	0.1	SU			06/24/24 16:52	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

General Chemistry

Client Sample ID: GW-11208058-061124-JY-003

Date Collected: 06/11/24 08:30

Date Received: 06/12/24 09:40

Lab Sample ID: 240-206021-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	33		10	1.8	mg/L			06/24/24 09:27	1
Ammonia (SM 4500 NH3 H)	12		1.0	0.38	mg/L			06/20/24 15:15	5
Biochemical Oxygen Demand (SM 5210B-2001)	19	b	2.0	2.0	mg/L			06/12/24 15:45	1
Total Suspended Solids (SM 2540D)	0.90	J	4.0	0.40	mg/L			06/13/24 09:26	1
Total Phosphorus as P (SM4500 P E-1999)	0.10	U	0.10	0.076	mg/L			06/25/24 08:11	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

GC/MS VOA

Analysis Batch: 617368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-2	GW-11208058-061124-JY-002	Total/NA	Water	624.1	
240-206021-4	TB-061124-11208058	Total/NA	Water	624.1	
MB 240-617368/10	Method Blank	Total/NA	Water	624.1	
LCS 240-617368/34	Lab Control Sample	Total/NA	Water	624.1	

GC Semi VOA

Prep Batch: 616726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-1	GW-11208058-061024-JY-001	Total/NA	Water	608	
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	608	
MB 240-616726/1-A	Method Blank	Total/NA	Water	608	
LCS 240-616726/2-A	Lab Control Sample	Total/NA	Water	608	

Analysis Batch: 616965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	608.3	616726
MB 240-616726/1-A	Method Blank	Total/NA	Water	608.3	616726
LCS 240-616726/2-A	Lab Control Sample	Total/NA	Water	608.3	616726

Analysis Batch: 617076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-1	GW-11208058-061024-JY-001	Total/NA	Water	608.3	616726

Metals

Prep Batch: 616466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total Recoverable	Water	200.7	
MB 240-616466/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-616466/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 616469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	245.1	
MB 240-616469/1-A	Method Blank	Total/NA	Water	245.1	
LCS 240-616469/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 616596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	245.1	616469
MB 240-616469/1-A	Method Blank	Total/NA	Water	245.1	616469
LCS 240-616469/2-A	Lab Control Sample	Total/NA	Water	245.1	616469

Analysis Batch: 616603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total Recoverable	Water	200.7 Rev 4.4	616466
MB 240-616466/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	616466
LCS 240-616466/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	616466

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QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

General Chemistry

Analysis Batch: 616353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	5210B-2001	
SCB 240-616353/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-616353/1	Method Blank	Total/NA	Water	5210B-2001	
LCS 240-616353/3	Lab Control Sample	Total/NA	Water	5210B-2001	

Analysis Batch: 616418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	SM 2540D	
MB 240-616418/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 240-616418/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 617323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	4500 NH3 H	
MB 240-617323/76	Method Blank	Total/NA	Water	4500 NH3 H	
LCS 240-617323/77	Lab Control Sample	Total/NA	Water	4500 NH3 H	

Analysis Batch: 617592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	410.4	
MB 240-617592/9	Method Blank	Total/NA	Water	410.4	
LCS 240-617592/10	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 617727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-3	GW-11208058-061124-JY-003	Total/NA	Water	SM4500 P E-1999	
MB 240-617727/3	Method Blank	Total/NA	Water	SM4500 P E-1999	
LCS 240-617727/4	Lab Control Sample	Total/NA	Water	SM4500 P E-1999	

Analysis Batch: 617728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-2	GW-11208058-061124-JY-002	Total/NA	Water	4500 H+ B-2000	
240-206021-2 DU	GW-11208058-061124-JY-002	Total/NA	Water	4500 H+ B-2000	

Analysis Batch: 617792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-206021-2	GW-11208058-061124-JY-002	Total/NA	Water	1664B	
MB 240-617792/1	Method Blank	Total/NA	Water	1664B	
LCS 240-617792/2	Lab Control Sample	Total/NA	Water	1664B	

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-617368/10
Matrix: Water
Analysis Batch: 617368

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/21/24 13:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	100		62 - 137				06/21/24 13:10	1	
4-Bromofluorobenzene (Surr)	86		56 - 136				06/21/24 13:10	1	
Toluene-d8 (Surr)	101		78 - 122				06/21/24 13:10	1	

Lab Sample ID: LCS 240-617368/34
Matrix: Water
Analysis Batch: 617368

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Surrogate	%Recovery	Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	103		62 - 137				
4-Bromofluorobenzene (Surr)	87		56 - 136				
Toluene-d8 (Surr)	102		78 - 122				

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 240-616726/1-A
Matrix: Water
Analysis Batch: 616965

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616726

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aroclor-1016	0.10	U	0.10	0.056	ug/L		06/17/24 09:20	06/18/24 19:39	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		06/17/24 09:20	06/18/24 19:39	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		06/17/24 09:20	06/18/24 19:39	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		06/17/24 09:20	06/18/24 19:39	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		06/17/24 09:20	06/18/24 19:39	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		06/17/24 09:20	06/18/24 19:39	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L		06/17/24 09:20	06/18/24 19:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
DCB Decachlorobiphenyl	60		10 - 174			06/17/24 09:20	06/18/24 19:39	1	
Tetrachloro-m-xylene	47		10 - 149			06/17/24 09:20	06/18/24 19:39	1	

Lab Sample ID: LCS 240-616726/2-A
Matrix: Water
Analysis Batch: 616965

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor-1260	2.50	1.78		ug/L		71	8 - 140

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QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 240-616726/2-A
Matrix: Water
Analysis Batch: 616965

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616726

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	63		10 - 174
Tetrachloro-m-xylene	50		10 - 149

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-616466/1-A
Matrix: Water
Analysis Batch: 616603

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 616466

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Silver	5.0	U	5.0	0.62	ug/L		06/13/24 14:00	06/14/24 12:08	1
Cadmium	2.0	U	2.0	0.45	ug/L		06/13/24 14:00	06/14/24 12:08	1
Chromium	5.0	U	5.0	0.76	ug/L		06/13/24 14:00	06/14/24 12:08	1
Copper	20	U	20	3.5	ug/L		06/13/24 14:00	06/14/24 12:08	1
Iron	100	U	100	83	ug/L		06/13/24 14:00	06/14/24 12:08	1
Nickel	20	U	20	2.2	ug/L		06/13/24 14:00	06/14/24 12:08	1
Lead	3.0	U	3.0	2.8	ug/L		06/13/24 14:00	06/14/24 12:08	1

Lab Sample ID: LCS 240-616466/2-A
Matrix: Water
Analysis Batch: 616603

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 616466

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
Silver	100	92.0		ug/L		92		85 - 115
Cadmium	1000	925		ug/L		93		85 - 115
Chromium	1000	880		ug/L		88		85 - 115
Copper	1000	895		ug/L		90		85 - 115
Iron	10000	9130		ug/L		91		85 - 115
Nickel	1000	938		ug/L		94		85 - 115
Lead	1000	866		ug/L		87		85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-616469/1-A
Matrix: Water
Analysis Batch: 616596

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616469

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.20	U	0.20	0.13	ug/L		06/13/24 14:00	06/14/24 09:21	1

Lab Sample ID: LCS 240-616469/2-A
Matrix: Water
Analysis Batch: 616596

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616469

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
Mercury	5.00	4.69		ug/L		94		85 - 115

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QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 240-617792/1
 Matrix: Water
 Analysis Batch: 617792

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	5.0	U	5.0	1.0	mg/L			06/25/24 10:48	1

Lab Sample ID: LCS 240-617792/2
 Matrix: Water
 Analysis Batch: 617792

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM	40.0	33.2		mg/L		83	78 - 114

Method: 410.4 - COD

Lab Sample ID: MB 240-617592/9
 Matrix: Water
 Analysis Batch: 617592

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10	1.8	mg/L			06/24/24 09:27	1

Lab Sample ID: LCS 240-617592/10
 Matrix: Water
 Analysis Batch: 617592

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	41.2	41.3		mg/L		100	90 - 110

Method: 4500 H+ B-2000 - pH

Lab Sample ID: 240-206021-2 DU
 Matrix: Water
 Analysis Batch: 617728

Client Sample ID: GW-11208058-061124-JY-002
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.7	HF	7.7		SU		0.3	20

Method: 4500 NH3 H - Ammonia

Lab Sample ID: MB 240-617323/76
 Matrix: Water
 Analysis Batch: 617323

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.20	U	0.20	0.076	mg/L			06/20/24 13:54	1

Lab Sample ID: LCS 240-617323/77
 Matrix: Water
 Analysis Batch: 617323

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	8.50	8.27		mg/L		97	90 - 110

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QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: 5210B-2001 - BOD, 5-Day

Lab Sample ID: SCB 240-616353/2
Matrix: Water
Analysis Batch: 616353

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

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			06/12/24 14:25	1

Lab Sample ID: USB 240-616353/1
Matrix: Water
Analysis Batch: 616353

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			06/12/24 14:23	1

Lab Sample ID: LCS 240-616353/3
Matrix: Water
Analysis Batch: 616353

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	169		mg/L		85	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-616418/1
Matrix: Water
Analysis Batch: 616418

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0	0.40	mg/L			06/13/24 09:26	1

Lab Sample ID: LCS 240-616418/2
Matrix: Water
Analysis Batch: 616418

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	55.9	65.0		mg/L		116	64 - 120

Method: SM4500 P E-1999 - Phosphorus

Lab Sample ID: MB 240-617727/3
Matrix: Water
Analysis Batch: 617727

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.076	mg/L			06/25/24 08:11	1

Lab Sample ID: LCS 240-617727/4
Matrix: Water
Analysis Batch: 617727

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.358	0.317		mg/L		89	77 - 120

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (62-137)	BFB (56-136)	TOL (78-122)
240-206021-2	GW-11208058-061124-JY-002	97	83	99
240-206021-4	TB-061124-11208058	98	79	97
LCS 240-617368/34	Lab Control Sample	103	87	102
MB 240-617368/10	Method Blank	100	86	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (10-174)	TCX1 (10-149)
240-206021-1	GW-11208058-061024-JY-001	43	60
240-206021-3	GW-11208058-061124-JY-003	66	58
LCS 240-616726/2-A	Lab Control Sample	63	50
MB 240-616726/1-A	Method Blank	60	47

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Client Sample ID: GW-11208058-061024-JY-001

Lab Sample ID: 240-206021-1

Date Collected: 06/10/24 11:00

Matrix: Water

Date Received: 06/12/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	608			616726	GBS	EET CLE	06/17/24 09:20
Total/NA	Analysis	608.3		10	617076	LSH	EET CLE	06/19/24 10:04

Client Sample ID: GW-11208058-061124-JY-002

Lab Sample ID: 240-206021-2

Date Collected: 06/11/24 08:15

Matrix: Water

Date Received: 06/12/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	617368	HMB	EET CLE	06/21/24 16:46
Total/NA	Analysis	1664B		1	617792	JMR	EET CLE	06/25/24 10:48
Total/NA	Analysis	4500 H+ B-2000		1	617728	JMR	EET CLE	06/24/24 16:52

Client Sample ID: GW-11208058-061124-JY-003

Lab Sample ID: 240-206021-3

Date Collected: 06/11/24 08:30

Matrix: Water

Date Received: 06/12/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	608			616726	GBS	EET CLE	06/17/24 09:20
Total/NA	Analysis	608.3		1	616965	LSH	EET CLE	06/18/24 16:33
Total Recoverable	Prep	200.7			616466	S4FJ	EET CLE	06/13/24 14:00
Total Recoverable	Analysis	200.7 Rev 4.4		1	616603	AJC	EET CLE	06/14/24 13:09
Total/NA	Prep	245.1			616469	S4FJ	EET CLE	06/13/24 14:00
Total/NA	Analysis	245.1		1	616596	TQ6W	EET CLE	06/14/24 09:41
Total/NA	Analysis	410.4		1	617592	MS	EET CLE	06/24/24 09:27
Total/NA	Analysis	4500 NH3 H		5	617323	AJ	EET CLE	06/20/24 15:15
Total/NA	Analysis	5210B-2001		1	616353	BLW	EET CLE	06/12/24 15:45
Total/NA	Analysis	SM 2540D		1	616418	UWU2	EET CLE	06/13/24 09:26
Total/NA	Analysis	SM4500 P E-1999		1	617727	BLW	EET CLE	06/25/24 08:11

Client Sample ID: TB-061124-11208058

Lab Sample ID: 240-206021-4

Date Collected: 06/11/24 00:00

Matrix: Water

Date Received: 06/12/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	617368	HMB	EET CLE	06/21/24 17:10

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 11208058-E04-001Y24-001, RACER Bay City

Job ID: 240-206021-1

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	06-30-24
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-28-25
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client GHD Site Name _____ Cooler unpacked by _____
 Cooler Received on 6-12-24 Opened on 6-12-24
 FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC 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 # 17 (CF 0.2 °C) Observed Cooler Temp. 6.5 °C Corrected Cooler Temp. 1.7 °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1
 - Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 - Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
 - Were tamper/custody seals intact and uncompromised? Yes No NA
- 3 Shippers' packing slip attached to the cooler(s)? Yes No
- 4 Did custody papers accompany the sample(s)? Yes No
- 5 Were the custody papers relinquished & signed in the appropriate place? Yes No
- 6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- 7 Did all bottles arrive in good condition (Unbroken)? MS Yes No
- 8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
- 9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
- 10 Were correct bottle(s) used for the test(s) indicated? Yes No
- 11 Sufficient quantity received to perform indicated analyses? Yes No
- 12 Are these work share samples and all listed on the COC? MS Yes No
 If yes, Questions 13-17 have been checked at the originating laboratory
- 13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC339814
- 14 Were VOAs on the COC? Yes No
- 15 Were air bubbles >6 mm in any VOA vials? Yes No NA ← Larger than this.
- 16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
- 17 Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
 Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by _____
Sample #2 had a broken 1L Amber sul and I 40ml vial received broken in cooler

19 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)

20 SAMPLE PRESERVATION
 Sample(s) _____ were further preserved in the laboratory
 Time preserved. _____ Preservative(s) added/Lot number(s) _____
 VOA Sample Preservation - Date/Time VOAs Frozen _____

Temperature readings

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Temp</u>	<u>Preservation Added</u>	<u>Preservation Lot Number</u>
GW-11208058-061024-JY-001	240-206021-A-1	Amber Glass 1 liter - unpreserved				
GW-11208058-061024-JY-001	240-206021-B-1	Amber Glass 1 liter - unpreserved				
GW-11208058-061024-JY-002	240-206021-A-2	Voa Vial 40ml - Hydrochloric Acid				
GW-11208058-061024-JY-002	240-206021-B-2	Voa Vial 40ml - Hydrochloric Acid				
GW-11208058-061024-JY-002	240-206021-C-2	Plastic 125mL - unpreserved				
GW-11208058-061024-JY-002	240-206021-D-2	Amber Glass 1 liter - Sulfuric Acid				
GW-11208058-061024-JY-003	240-206021-A-3	Plastic 250ml - with Sulfuric Acid	<2			
GW-11208058-061024-JY-003	240-206021-B-3	Plastic 500ml - with Nitric Acid	<2			
GW-11208058-061024-JY-003	240-206021-C-3	Plastic 1 liter - unpreserved				
GW-11208058-061024-JY-003	240-206021-D-3	Plastic 1 liter - unpreserved				
GW-11208058-061024-JY-003	240-206021-E-3	Amber Glass 1 liter - unpreserved				
GW-11208058-061024-JY-003	240-206021-F-3	Amber Glass 1 liter - unpreserved				
TB-061124-11208058	240-206021-A-4	Voa Vial 40ml - Hydrochloric Acid				
TB-061124-11208058	240-206021-B-4	Voa Vial 40ml - Hydrochloric Acid				



ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Ruth Mickle
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Generated 10/23/2024 5:48:40 PM

JOB DESCRIPTION

11208058, RACER Bay City

JOB NUMBER

240-212982-1

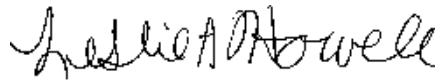
Eurofins Cleveland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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Case Narrative

Client: GHD Services Inc.
Project: 11208058, RACER Bay City

Job ID: 240-212982-1

Job ID: 240-212982-1

Eurofins Cleveland

Job Narrative 240-212982-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/12/2024 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C.

PCBs

Method 8082A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-631000.

Method 8082A: The Aroclors in the continuing calibration verification (CCV) met criteria; however, the Decachlorobiphenyl surrogate failed to meet criteria at 27.3%. Surrogate recoveries for all samples were within control limits. After careful evaluation the data is reported. (CCVIS 240-631217/9)

Method 8082A: The Aroclors in the continuing calibration verification (CCV) met criteria; however, the Decachlorobiphenyl surrogate failed to meet criteria at 31.9%. Surrogate recoveries for all samples were within control limits. After careful evaluation the data is reported. (CCVIS 240-631217/28)

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: GW-11208058-101024-BW-001 (240-212982-1), GW-11208058-101024-BW-002 (240-212982-2), GW-11208058-101024-BW-003 (240-212982-3), GW-11208058-101024-BW-004 (240-212982-4) and GW-11208058-101124-BW-005 (240-212982-5).

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

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-212982-1	GW-11208058-101024-BW-001	Water	10/10/24 11:15	10/12/24 09:30
240-212982-2	GW-11208058-101024-BW-002	Water	10/10/24 12:11	10/12/24 09:30
240-212982-3	GW-11208058-101024-BW-003	Water	10/10/24 12:14	10/12/24 09:30
240-212982-4	GW-11208058-101024-BW-004	Water	10/10/24 13:16	10/12/24 09:30
240-212982-5	GW-11208058-101124-BW-005	Water	10/11/24 13:36	10/12/24 09:30
240-212982-6	GW-11208058-101124-BW-006	Water	10/11/24 15:10	10/12/24 09:30

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Detection Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Client Sample ID: GW-11208058-101024-BW-001

Lab Sample ID: 240-212982-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	0.26		0.095	0.072	ug/L	1		8082A	Total/NA

Client Sample ID: GW-11208058-101024-BW-002

Lab Sample ID: 240-212982-2

No Detections.

Client Sample ID: GW-11208058-101024-BW-003

Lab Sample ID: 240-212982-3

No Detections.

Client Sample ID: GW-11208058-101024-BW-004

Lab Sample ID: 240-212982-4

No Detections.

Client Sample ID: GW-11208058-101124-BW-005

Lab Sample ID: 240-212982-5

No Detections.

Client Sample ID: GW-11208058-101124-BW-006

Lab Sample ID: 240-212982-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1221	1.3		0.20	0.11	ug/L	2		8082A	Total/NA

This Detection Summary does not include radiochemical test results.

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Method Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CLE

Protocol References:

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

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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- 14

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-11208058-101024-BW-001

Lab Sample ID: 240-212982-1

Date Collected: 10/10/24 11:15

Matrix: Water

Date Received: 10/12/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.053	ug/L		10/16/24 08:25	10/17/24 13:45	1
Aroclor-1221	0.095	U	0.095	0.054	ug/L		10/16/24 08:25	10/17/24 13:45	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		10/16/24 08:25	10/17/24 13:45	1
Aroclor-1242	0.26		0.095	0.072	ug/L		10/16/24 08:25	10/17/24 13:45	1
Aroclor-1248	0.095	U	0.095	0.048	ug/L		10/16/24 08:25	10/17/24 13:45	1
Aroclor-1254	0.095	U	0.095	0.038	ug/L		10/16/24 08:25	10/17/24 13:45	1
Aroclor-1260	0.095	U	0.095	0.044	ug/L		10/16/24 08:25	10/17/24 13:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	56		10 - 149				10/16/24 08:25	10/17/24 13:45	1
DCB Decachlorobiphenyl	31		10 - 174				10/16/24 08:25	10/17/24 13:45	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-11208058-101024-BW-002

Lab Sample ID: 240-212982-2

Date Collected: 10/10/24 12:11

Matrix: Water

Date Received: 10/12/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.053	ug/L		10/16/24 08:25	10/17/24 13:57	1
Aroclor-1221	0.095	U	0.095	0.054	ug/L		10/16/24 08:25	10/17/24 13:57	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		10/16/24 08:25	10/17/24 13:57	1
Aroclor-1242	0.095	U	0.095	0.072	ug/L		10/16/24 08:25	10/17/24 13:57	1
Aroclor-1248	0.095	U	0.095	0.048	ug/L		10/16/24 08:25	10/17/24 13:57	1
Aroclor-1254	0.095	U	0.095	0.038	ug/L		10/16/24 08:25	10/17/24 13:57	1
Aroclor-1260	0.095	U	0.095	0.044	ug/L		10/16/24 08:25	10/17/24 13:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	57		10 - 149	10/16/24 08:25	10/17/24 13:57	1
DCB Decachlorobiphenyl	55		10 - 174	10/16/24 08:25	10/17/24 13:57	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-11208058-101024-BW-003

Lab Sample ID: 240-212982-3

Date Collected: 10/10/24 12:14

Matrix: Water

Date Received: 10/12/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.053	ug/L		10/16/24 08:25	10/17/24 14:43	1
Aroclor-1221	0.095	U	0.095	0.054	ug/L		10/16/24 08:25	10/17/24 14:43	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		10/16/24 08:25	10/17/24 14:43	1
Aroclor-1242	0.095	U	0.095	0.072	ug/L		10/16/24 08:25	10/17/24 14:43	1
Aroclor-1248	0.095	U	0.095	0.048	ug/L		10/16/24 08:25	10/17/24 14:43	1
Aroclor-1254	0.095	U	0.095	0.038	ug/L		10/16/24 08:25	10/17/24 14:43	1
Aroclor-1260	0.095	U	0.095	0.044	ug/L		10/16/24 08:25	10/17/24 14:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	52		10 - 149				10/16/24 08:25	10/17/24 14:43	1
<i>DCB Decachlorobiphenyl</i>	36		10 - 174				10/16/24 08:25	10/17/24 14:43	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-11208058-101024-BW-004

Lab Sample ID: 240-212982-4

Date Collected: 10/10/24 13:16

Matrix: Water

Date Received: 10/12/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.053	ug/L	-	10/16/24 08:25	10/17/24 14:55	1
Aroclor-1221	0.095	U	0.095	0.054	ug/L	-	10/16/24 08:25	10/17/24 14:55	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L	-	10/16/24 08:25	10/17/24 14:55	1
Aroclor-1242	0.095	U	0.095	0.072	ug/L	-	10/16/24 08:25	10/17/24 14:55	1
Aroclor-1248	0.095	U	0.095	0.048	ug/L	-	10/16/24 08:25	10/17/24 14:55	1
Aroclor-1254	0.095	U	0.095	0.038	ug/L	-	10/16/24 08:25	10/17/24 14:55	1
Aroclor-1260	0.095	U	0.095	0.044	ug/L	-	10/16/24 08:25	10/17/24 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	42	-	10 - 149	10/16/24 08:25	10/17/24 14:55	1
<i>DCB Decachlorobiphenyl</i>	33	-	10 - 174	10/16/24 08:25	10/17/24 14:55	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-11208058-101124-BW-005

Lab Sample ID: 240-212982-5

Date Collected: 10/11/24 13:36

Matrix: Water

Date Received: 10/12/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.098	U	0.098	0.055	ug/L		10/16/24 08:25	10/17/24 15:07	1
Aroclor-1221	0.098	U	0.098	0.056	ug/L		10/16/24 08:25	10/17/24 15:07	1
Aroclor-1232	0.098	U	0.098	0.073	ug/L		10/16/24 08:25	10/17/24 15:07	1
Aroclor-1242	0.098	U	0.098	0.075	ug/L		10/16/24 08:25	10/17/24 15:07	1
Aroclor-1248	0.098	U	0.098	0.049	ug/L		10/16/24 08:25	10/17/24 15:07	1
Aroclor-1254	0.098	U	0.098	0.039	ug/L		10/16/24 08:25	10/17/24 15:07	1
Aroclor-1260	0.098	U	0.098	0.045	ug/L		10/16/24 08:25	10/17/24 15:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	66		10 - 149				10/16/24 08:25	10/17/24 15:07	1
<i>DCB Decachlorobiphenyl</i>	59		10 - 174				10/16/24 08:25	10/17/24 15:07	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-11208058-101124-BW-006

Lab Sample ID: 240-212982-6

Date Collected: 10/11/24 15:10

Matrix: Water

Date Received: 10/12/24 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.20	U	0.20	0.11	ug/L	-	10/16/24 08:25	10/17/24 15:18	2
Aroclor-1221	1.3		0.20	0.11	ug/L	-	10/16/24 08:25	10/17/24 15:18	2
Aroclor-1232	0.20	U	0.20	0.15	ug/L	-	10/16/24 08:25	10/17/24 15:18	2
Aroclor-1242	0.20	U	0.20	0.15	ug/L	-	10/16/24 08:25	10/17/24 15:18	2
Aroclor-1248	0.20	U	0.20	0.099	ug/L	-	10/16/24 08:25	10/17/24 15:18	2
Aroclor-1254	0.20	U	0.20	0.079	ug/L	-	10/16/24 08:25	10/17/24 15:18	2
Aroclor-1260	0.20	U	0.20	0.091	ug/L	-	10/16/24 08:25	10/17/24 15:18	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	55		10 - 149				10/16/24 08:25	10/17/24 15:18	2
<i>DCB Decachlorobiphenyl</i>	61		10 - 174				10/16/24 08:25	10/17/24 15:18	2

QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

GC Semi VOA

Prep Batch: 631000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212982-1	GW-11208058-101024-BW-001	Total/NA	Water	3510C	
240-212982-2	GW-11208058-101024-BW-002	Total/NA	Water	3510C	
240-212982-3	GW-11208058-101024-BW-003	Total/NA	Water	3510C	
240-212982-4	GW-11208058-101024-BW-004	Total/NA	Water	3510C	
240-212982-5	GW-11208058-101124-BW-005	Total/NA	Water	3510C	
240-212982-6	GW-11208058-101124-BW-006	Total/NA	Water	3510C	
MB 240-631000/1-A	Method Blank	Total/NA	Water	3510C	
LCS 240-631000/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 631217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-212982-1	GW-11208058-101024-BW-001	Total/NA	Water	8082A	631000
240-212982-2	GW-11208058-101024-BW-002	Total/NA	Water	8082A	631000
240-212982-3	GW-11208058-101024-BW-003	Total/NA	Water	8082A	631000
240-212982-4	GW-11208058-101024-BW-004	Total/NA	Water	8082A	631000
240-212982-5	GW-11208058-101124-BW-005	Total/NA	Water	8082A	631000
240-212982-6	GW-11208058-101124-BW-006	Total/NA	Water	8082A	631000
MB 240-631000/1-A	Method Blank	Total/NA	Water	8082A	631000
LCS 240-631000/2-A	Lab Control Sample	Total/NA	Water	8082A	631000

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

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

Lab Sample ID: MB 240-631000/1-A
Matrix: Water
Analysis Batch: 631217

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631000

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.056	ug/L	-	10/16/24 08:25	10/17/24 11:03	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L	-	10/16/24 08:25	10/17/24 11:03	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L	-	10/16/24 08:25	10/17/24 11:03	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L	-	10/16/24 08:25	10/17/24 11:03	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L	-	10/16/24 08:25	10/17/24 11:03	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L	-	10/16/24 08:25	10/17/24 11:03	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L	-	10/16/24 08:25	10/17/24 11:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	39	-	10 - 149	10/16/24 08:25	10/17/24 11:03	1
DCB Decachlorobiphenyl	90	-	10 - 174	10/16/24 08:25	10/17/24 11:03	1

Lab Sample ID: LCS 240-631000/2-A
Matrix: Water
Analysis Batch: 631217

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631000

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor-1016	2.50	2.02	-	ug/L	-	81	28 - 140
Aroclor-1260	2.50	2.31	-	ug/L	-	92	39 - 153

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	69	-	10 - 149
DCB Decachlorobiphenyl	81	-	10 - 174

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(10-149)	(10-174)
240-212982-1	GW-11208058-101024-BW-001	56	31
240-212982-2	GW-11208058-101024-BW-002	57	55
240-212982-3	GW-11208058-101024-BW-003	52	36
240-212982-4	GW-11208058-101024-BW-004	42	33
240-212982-5	GW-11208058-101124-BW-005	66	59
240-212982-6	GW-11208058-101124-BW-006	55	61
LCS 240-631000/2-A	Lab Control Sample	69	81
MB 240-631000/1-A	Method Blank	39	90

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Client Sample ID: GW-11208058-101024-BW-001

Lab Sample ID: 240-212982-1

Date Collected: 10/10/24 11:15

Matrix: Water

Date Received: 10/12/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			631000	CR2J	EET CLE	10/16/24 08:25
Total/NA	Analysis	8082A		1	631217	LSH	EET CLE	10/17/24 13:45

Client Sample ID: GW-11208058-101024-BW-002

Lab Sample ID: 240-212982-2

Date Collected: 10/10/24 12:11

Matrix: Water

Date Received: 10/12/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			631000	CR2J	EET CLE	10/16/24 08:25
Total/NA	Analysis	8082A		1	631217	LSH	EET CLE	10/17/24 13:57

Client Sample ID: GW-11208058-101024-BW-003

Lab Sample ID: 240-212982-3

Date Collected: 10/10/24 12:14

Matrix: Water

Date Received: 10/12/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			631000	CR2J	EET CLE	10/16/24 08:25
Total/NA	Analysis	8082A		1	631217	LSH	EET CLE	10/17/24 14:43

Client Sample ID: GW-11208058-101024-BW-004

Lab Sample ID: 240-212982-4

Date Collected: 10/10/24 13:16

Matrix: Water

Date Received: 10/12/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			631000	CR2J	EET CLE	10/16/24 08:25
Total/NA	Analysis	8082A		1	631217	LSH	EET CLE	10/17/24 14:55

Client Sample ID: GW-11208058-101124-BW-005

Lab Sample ID: 240-212982-5

Date Collected: 10/11/24 13:36

Matrix: Water

Date Received: 10/12/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			631000	CR2J	EET CLE	10/16/24 08:25
Total/NA	Analysis	8082A		1	631217	LSH	EET CLE	10/17/24 15:07

Client Sample ID: GW-11208058-101124-BW-006

Lab Sample ID: 240-212982-6

Date Collected: 10/11/24 15:10

Matrix: Water

Date Received: 10/12/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			631000	CR2J	EET CLE	10/16/24 08:25
Total/NA	Analysis	8082A		2	631217	LSH	EET CLE	10/17/24 15:18

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-212982-1

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-24


Eurofins - Cleveland Sample Receipt Form/Narrative Login #: _____
Barberton Facility

Client GHD Site Name _____ Cooler unpacked by: JF
 Cooler Received on 10/17/24 Opened on 10/17/24

FedEx 1st Grd UPS FAS Waypoint Client Drop Off Eurofins Courier Other
 Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 22 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 # 17 (CF to 1 °C) Observed Cooler Temp 42 °C Corrected Cooler Temp 2-3 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
 -Were tamper/custody seals intact and uncompromised? Yes No NA
- 3 Shippers' packing slip attached to the cooler(s)? Yes No
- 4 Did custody papers accompany the sample(s)? Yes No
- 5 Were the custody papers relinquished & signed in the appropriate place? Yes No
- 6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- 7 Did all bottles arrive in good condition (Unbroken)? Yes No
- 8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
- 9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
- 10 Were correct bottle(s) used for the test(s) indicated? Yes No
- 11 Sufficient quantity received to perform indicated analyses? Yes No
12. Are these work share samples and all listed on the COC? Yes No
 If yes, Questions 13-17 have been checked at the originating laboratory
- 13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC447997
14. Were VOAs on the COC? Yes No
- 15 Were air bubbles >6 mm in any VOA vials? Yes No NA  Larger than this.
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
- 17 Was a LL Hg or Me Hg trip blank present? _____ Yes No

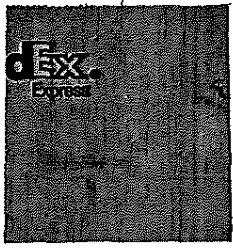
Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
 Concerning _____

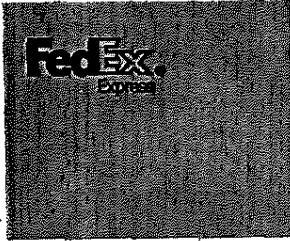
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by: _____
Missing sample BW-11208058-101024. BW 2 only has one label

19. 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)

20. SAMPLE PRESERVATION
 Sample(s) _____ were further preserved in the laboratory
 Time preserved. _____ Preservative(s) added/Lot number(s). _____
 VOA Sample Preservation - Date/Time VOAs Frozen. _____



SDR S



FedEx® Saturday Delivery

161968 10/04 MW1

FedEx® Saturday Delive

ORIGIN ID FNTA (734)-260-9865
BART WILLIAMS
GHD SERVICES INC.
28850 HAGGERTY RD

FARMINGTON, MI 48331
UNITED STATES US

SHIP DATE 11OCT24
ACTWGT 59 20 LB
CAO 6994104/SSFE2541
DIMS 23x12x13 IN

BILL THIRD PARTY

Part # 156297-333 RHDBZ EXP 08/24

TO EUROFINS

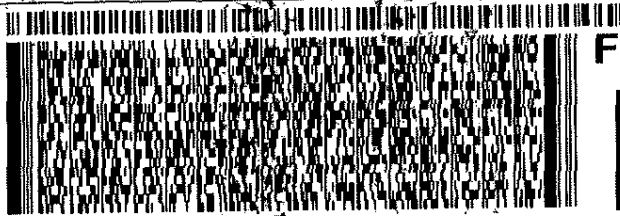
180 SOUTH VAN BUREN STREET

BARBERTON OH 44203

(000) 000-0000
TNU:
PO:

REF:

DEPT:



FedEx
Express



M1001807807207207

TRK# 2805 5051 0680
0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CAKA

44203
OH-US CLE





ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Ruth Mickle
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Generated 10/24/2024 6:59:10 AM

JOB DESCRIPTION

11208058, RACER Bay City

JOB NUMBER

240-213369-1

Eurofins Cleveland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
10/24/2024 6:59:10 AM

Authorized for release by
Denise Heckler, Project Manager II
Denise.Heckler@et.eurofinsus.com
(330)966-9477



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Case Narrative

Client: GHD Services Inc.
Project: 11208058, RACER Bay City

Job ID: 240-213369-1

Job ID: 240-213369-1

Eurofins Cleveland

Job Narrative 240-213369-1

Receipt

The samples were received on 10/19/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.9°C.

PCBs

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: GW-11208058-101724-BW-007 (240-213369-1), GW-11208058-101724-BW-007 (240-213369-1[MS]), GW-11208058-101724-BW-007 (240-213369-1[MSD]) and GW-11208058-101724-BW-008 (240-213369-2).

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

Eurofins Cleveland



Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-213369-1	GW-11208058-101724-BW-007	Water	10/17/24 15:16	10/19/24 08:00
240-213369-2	GW-11208058-101724-BW-008	Water	10/17/24 16:53	10/19/24 08:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

Client Sample ID: GW-11208058-101724-BW-007

Lab Sample ID: 240-213369-1

No Detections.

Client Sample ID: GW-11208058-101724-BW-008

Lab Sample ID: 240-213369-2

No Detections.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Method Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CLE

Protocol References:

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

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-11208058-101724-BW-007

Lab Sample ID: 240-213369-1

Date Collected: 10/17/24 15:16

Matrix: Water

Date Received: 10/19/24 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.062	ug/L	-	10/21/24 08:36	10/22/24 21:02	1
Aroclor-1221	0.11	U	0.11	0.063	ug/L	-	10/21/24 08:36	10/22/24 21:02	1
Aroclor-1232	0.11	U	0.11	0.081	ug/L	-	10/21/24 08:36	10/22/24 21:02	1
Aroclor-1242	0.11	U	0.11	0.084	ug/L	-	10/21/24 08:36	10/22/24 21:02	1
Aroclor-1248	0.11	U	0.11	0.055	ug/L	-	10/21/24 08:36	10/22/24 21:02	1
Aroclor-1254	0.11	U	0.11	0.044	ug/L	-	10/21/24 08:36	10/22/24 21:02	1
Aroclor-1260	0.11	U	0.11	0.051	ug/L	-	10/21/24 08:36	10/22/24 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	49	-	10 - 149	10/21/24 08:36	10/22/24 21:02	1
<i>DCB Decachlorobiphenyl</i>	62	-	10 - 174	10/21/24 08:36	10/22/24 21:02	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-11208058-101724-BW-008

Lab Sample ID: 240-213369-2

Date Collected: 10/17/24 16:53

Matrix: Water

Date Received: 10/19/24 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.053	ug/L	-	10/21/24 08:36	10/22/24 21:44	1
Aroclor-1221	0.095	U	0.095	0.054	ug/L	-	10/21/24 08:36	10/22/24 21:44	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L	-	10/21/24 08:36	10/22/24 21:44	1
Aroclor-1242	0.095	U	0.095	0.072	ug/L	-	10/21/24 08:36	10/22/24 21:44	1
Aroclor-1248	0.095	U	0.095	0.048	ug/L	-	10/21/24 08:36	10/22/24 21:44	1
Aroclor-1254	0.095	U	0.095	0.038	ug/L	-	10/21/24 08:36	10/22/24 21:44	1
Aroclor-1260	0.095	U	0.095	0.044	ug/L	-	10/21/24 08:36	10/22/24 21:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	49	-	10 - 149	10/21/24 08:36	10/22/24 21:44	1
<i>DCB Decachlorobiphenyl</i>	41	-	10 - 174	10/21/24 08:36	10/22/24 21:44	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

GC Semi VOA

Prep Batch: 631609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213369-1	GW-11208058-101724-BW-007	Total/NA	Water	3510C	
240-213369-2	GW-11208058-101724-BW-008	Total/NA	Water	3510C	
MB 240-631609/1-A	Method Blank	Total/NA	Water	3510C	
LCS 240-631609/2-A	Lab Control Sample	Total/NA	Water	3510C	
240-213369-1 MS	GW-11208058-101724-BW-007	Total/NA	Water	3510C	
240-213369-1 MSD	GW-11208058-101724-BW-007	Total/NA	Water	3510C	

Analysis Batch: 631772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-213369-1	GW-11208058-101724-BW-007	Total/NA	Water	8082A	631609
240-213369-2	GW-11208058-101724-BW-008	Total/NA	Water	8082A	631609
MB 240-631609/1-A	Method Blank	Total/NA	Water	8082A	631609
LCS 240-631609/2-A	Lab Control Sample	Total/NA	Water	8082A	631609
240-213369-1 MS	GW-11208058-101724-BW-007	Total/NA	Water	8082A	631609
240-213369-1 MSD	GW-11208058-101724-BW-007	Total/NA	Water	8082A	631609

QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

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

Lab Sample ID: MB 240-631609/1-A
Matrix: Water
Analysis Batch: 631772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631609

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aroclor-1016	0.10	U	0.10	0.056	ug/L		10/21/24 08:36	10/22/24 18:10	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		10/21/24 08:36	10/22/24 18:10	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		10/21/24 08:36	10/22/24 18:10	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		10/21/24 08:36	10/22/24 18:10	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		10/21/24 08:36	10/22/24 18:10	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		10/21/24 08:36	10/22/24 18:10	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L		10/21/24 08:36	10/22/24 18:10	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	53		10 - 149	10/21/24 08:36	10/22/24 18:10	1
DCB Decachlorobiphenyl	82		10 - 174	10/21/24 08:36	10/22/24 18:10	1

Lab Sample ID: LCS 240-631609/2-A
Matrix: Water
Analysis Batch: 631772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631609

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Aroclor-1016	2.50	1.53		ug/L		61	28 - 140
Aroclor-1260	2.50	1.66		ug/L		66	39 - 153

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	59		10 - 149
DCB Decachlorobiphenyl	70		10 - 174

Lab Sample ID: 240-213369-1 MS
Matrix: Water
Analysis Batch: 631772

Client Sample ID: GW-11208058-101724-BW-007
Prep Type: Total/NA
Prep Batch: 631609

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
Aroclor-1016	0.11	U	2.50	1.45		ug/L		58	50 - 120
Aroclor-1260	0.11	U	2.50	1.66		ug/L		66	39 - 135

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	55		10 - 149
DCB Decachlorobiphenyl	66		10 - 174

Lab Sample ID: 240-213369-1 MSD
Matrix: Water
Analysis Batch: 631772

Client Sample ID: GW-11208058-101724-BW-007
Prep Type: Total/NA
Prep Batch: 631609

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
Aroclor-1016	0.11	U	2.40	1.47		ug/L		61	50 - 120	2	25
Aroclor-1260	0.11	U	2.40	1.65		ug/L		69	39 - 135	1	26

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	57		10 - 149
DCB Decachlorobiphenyl	63		10 - 174

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(10-149)	(10-174)
240-213369-1	GW-11208058-101724-BW-007	49	62
240-213369-1 MS	GW-11208058-101724-BW-007	55	66
240-213369-1 MSD	GW-11208058-101724-BW-007	57	63
240-213369-2	GW-11208058-101724-BW-008	49	41
LCS 240-631609/2-A	Lab Control Sample	59	70
MB 240-631609/1-A	Method Blank	53	82

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

Client Sample ID: GW-11208058-101724-BW-007

Lab Sample ID: 240-213369-1

Date Collected: 10/17/24 15:16

Matrix: Water

Date Received: 10/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			631609	GBS	EET CLE	10/21/24 08:36
Total/NA	Analysis	8082A		1	631772	MBB	EET CLE	10/22/24 21:02

Client Sample ID: GW-11208058-101724-BW-008

Lab Sample ID: 240-213369-2

Date Collected: 10/17/24 16:53

Matrix: Water

Date Received: 10/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			631609	GBS	EET CLE	10/21/24 08:36
Total/NA	Analysis	8082A		1	631772	MBB	EET CLE	10/22/24 21:44

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-213369-1

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-24

Eurofins - Cleveland Sample Receipt Form/Narrative Login #: _____

Barberton Facility

Client GAD Site Name _____ Cooler unpacked by MALISSA LOAR

Cooler Received on 10-9-20 Opened on 10-9-20

FedEx: 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 42 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 # 1 (CF) 0.1 °C Observed Cooler Temp. 0.6 °C Corrected Cooler Temp 0.7 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity Yes No

-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA

-Were tamper/custody seals intact and uncompromised? Yes No NA

3 Shippers' packing slip attached to the cooler(s)? Yes No

4 Did custody papers accompany the sample(s)? Yes No

5 Were the custody papers relinquished & signed in the appropriate place? Yes No

6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No

7 Did all bottles arrive in good condition (Unbroken)? Yes No

8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No

9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No

10 Were correct bottle(s) used for the test(s) indicated? Yes No

11 Sufficient quantity received to perform indicated analyses? Yes No

12. Are these work share samples and all listed on the COC? Yes No

If yes, Questions 13-17 have been checked at the originating laboratory

13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC447997

14 Were VOAs on the COC? Yes No

15 Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.

16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

17 Was a LL Hg or Me Hg trip blank present? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by _____

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)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____



Temperature readings

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Temp</u>	<u>Preservation Added</u>	<u>Preservation Lot Number</u>
GW-11208058-101724-BW-007	240-213369-A-1	Amber Glass 1 liter - unpreserved				
GW-11208058-101724-BW-007	240-213369-A-1 MS	Amber Glass 1 liter - unpreserved				
GW-11208058-101724-BW-007	240-213369-A-1 MSD	Amber Glass 1 liter - unpreserved				
GW-11208058-101724-BW-007	240-213369-B-1	Amber Glass 1 liter - unpreserved				
GW-11208058-101724-BW-007	240-213369-B-1 MS	Amber Glass 1 liter - unpreserved				
GW-11208058-101724-BW-007	240-213369-B-1 MSD	Amber Glass 1 liter - unpreserved				
GW-11208058-101724-BW-008	240-213369-A-2	Amber Glass 1 liter - unpreserved				
GW-11208058-101724-BW-008	240-213369-B-2	Amber Glass 1 liter - unpreserved				

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Ruth Mickle
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Generated 12/27/2024 3:55:47 PM

JOB DESCRIPTION

11208058, RACER Bay City

JOB NUMBER

240-216491-1

Eurofins Cleveland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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12/27/2024 3:55:47 PM

Authorized for release by
Denise Heckler, Project Manager II
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(330)966-9477



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Case Narrative

Client: GHD Services Inc.
Project: 11208058, RACER Bay City

Job ID: 240-216491-1

Job ID: 240-216491-1

Eurofins Cleveland

Job Narrative 240-216491-1

Receipt

The samples were received on 12/12/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C.

GC/MS VOA

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

PCBs

Method 608.3_PCB_PREC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-638861.

Method 608.3_PCB_PREC: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: W-11208058-121124-JY-001 (240-216491-1) and W-11208058-121124-JY-002 (240-216491-3).

Method 608.3_PCB_PREC: The following sample was diluted due to the nature of the sample matrix: W-11208058-121124-JY-002 (240-216491-3). Elevated reporting limits (RLs) are provided.

Method 608.3_PCB_PREC: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not directly match any of the laboratory's Aroclor standards used for instrument calibration: W-11208058-121124-JY-001 (240-216491-1). The sample has been quantified and reported using the best overall Aroclor/standard pattern match relative to the reference standards.

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

Metals

Method 200.7 - Total Recoverable: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: W-11208058-121124-JY-002 (240-216491-3). 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

Method 2540D: Insufficient sample volume was provided to produce results within the specifications of SM 2540D which requires at least 2.5 mg dried residue with a sample volume not to exceed 1L. A sample volume less than 1L, that yielded less than 2.5 mg dried residue, was provided for the following sample: W-11208058-121124-JY-002 (240-216491-3).

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

Eurofins Cleveland

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Qualifiers

GC/MS 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
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-216491-1	W-11208058-121124-JY-001	Water	12/11/24 08:30	12/12/24 08:00
240-216491-2	W-11208058-121124-JY-002	Water	12/11/24 08:45	12/12/24 08:00
240-216491-3	W-11208058-121124-JY-002	Water	12/11/24 09:00	12/12/24 08:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Client Sample ID: W-11208058-121124-JY-001

Lab Sample ID: 240-216491-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1221	13		0.98	0.56	ug/L	10		608.3	Total/NA

Client Sample ID: W-11208058-121124-JY-002

Lab Sample ID: 240-216491-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM	1.3	J	4.8	0.98	mg/L	1		1664B	Total/NA
pH	7.3	HF	0.1	0.1	SU	1		4500-H+ B-2021	Total/NA

Client Sample ID: W-11208058-121124-JY-002

Lab Sample ID: 240-216491-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	2.4	J	16	1.6	mg/L	1		2540D-2020	Total/NA
Chemical Oxygen Demand	13		10	1.8	mg/L	1		410.4	Total/NA
Ammonia	16		2.0	0.76	mg/L	10		4500-NH3H-202 1	Total/NA

This Detection Summary does not include radiochemical test results.

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Method Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET CLE
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET CLE
245.1	Mercury (CVAA)	EPA	EET CLE
1664B	HEM and SGT-HEM	1664B	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
410.4	COD	EPA	EET CLE
4500-H+ B-2021	pH	SM	EET CLE
4500-NH3H-2021	Ammonia	SM	EET CLE
4500-P E-2021	Phosphorus	SM	EET CLE
5210B-2001	BOD, 5-Day	SM	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1	Preparation, Mercury	EPA	EET CLE
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET CLE

Protocol References:

- 1664B = EPA-821-98-002
- EPA = US Environmental Protection Agency
- SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

- EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 08:45

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/13/24 23:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		62 - 137					12/13/24 23:53	1
4-Bromofluorobenzene (Surr)	91		56 - 136					12/13/24 23:53	1
Toluene-d8 (Surr)	96		78 - 122					12/13/24 23:53	1

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-11208058-121124-JY-001

Date Collected: 12/11/24 08:30

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.98	U	0.98	0.55	ug/L	-	12/16/24 08:45	12/19/24 09:52	10
Aroclor-1221	13		0.98	0.56	ug/L	-	12/16/24 08:45	12/19/24 09:52	10
Aroclor-1232	0.98	U	0.98	0.73	ug/L	-	12/16/24 08:45	12/19/24 09:52	10
Aroclor-1242	0.98	U	0.98	0.75	ug/L	-	12/16/24 08:45	12/19/24 09:52	10
Aroclor-1248	0.98	U	0.98	0.49	ug/L	-	12/16/24 08:45	12/19/24 09:52	10
Aroclor-1254	0.98	U	0.98	0.39	ug/L	-	12/16/24 08:45	12/19/24 09:52	10
Aroclor-1260	0.98	U	0.98	0.45	ug/L	-	12/16/24 08:45	12/19/24 09:52	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	23		10 - 174				12/16/24 08:45	12/19/24 09:52	10
<i>Tetrachloro-m-xylene</i>	48		10 - 149				12/16/24 08:45	12/19/24 09:52	10

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 09:00

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.49	U	0.49	0.27	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1221	0.49	U	0.49	0.28	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1232	0.49	U	0.49	0.36	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1242	0.49	U	0.49	0.37	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1248	0.49	U	0.49	0.25	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1254	0.49	U	0.49	0.20	ug/L	-	12/16/24 08:45	12/19/24 10:04	5
Aroclor-1260	0.49	U	0.49	0.23	ug/L	-	12/16/24 08:45	12/19/24 10:04	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	43	-	10 - 174	12/16/24 08:45	12/19/24 10:04	5
<i>Tetrachloro-m-xylene</i>	40	-	10 - 149	12/16/24 08:45	12/19/24 10:04	5

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 09:00

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U F2	5.0	1.4	ug/L		12/13/24 14:00	12/16/24 13:22	1
Cadmium	2.0	U	2.0	0.45	ug/L		12/13/24 14:00	12/16/24 13:22	1
Chromium	5.0	U	5.0	0.76	ug/L		12/13/24 14:00	12/16/24 13:22	1
Copper	20	U	20	3.5	ug/L		12/13/24 14:00	12/16/24 13:22	1
Iron	100	U	100	83	ug/L		12/13/24 14:00	12/16/24 13:22	1
Nickel	20	U	20	2.2	ug/L		12/13/24 14:00	12/16/24 13:22	1
Lead	3.0	U	3.0	2.8	ug/L		12/13/24 14:00	12/16/24 13:22	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: EPA 245.1 - Mercury (CVAA)

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 09:00

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.13	ug/L		12/13/24 14:00	12/16/24 14:21	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

General Chemistry

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 08:45

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (1664B)	1.3	J	4.8	0.98	mg/L			12/20/24 09:31	1
pH (SM 4500-H+ B-2021)	7.3	HF	0.1	0.1	SU			12/16/24 09:32	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

General Chemistry

Client Sample ID: W-11208058-121124-JY-002

Date Collected: 12/11/24 09:00

Date Received: 12/12/24 08:00

Lab Sample ID: 240-216491-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D-2020)	2.4	J	16	1.6	mg/L			12/17/24 09:36	1
Chemical Oxygen Demand (EPA 410.4)	13		10	1.8	mg/L			12/17/24 12:30	1
Ammonia (SM 4500-NH3H-2021)	16		2.0	0.76	mg/L			12/19/24 11:06	10
Total Phosphorus as P (SM 4500-P E-2021)	0.10	U	0.10	0.076	mg/L			12/26/24 08:10	1
Biochemical Oxygen Demand (SM 5210B-2001)	2.0	U	2.0	2.0	mg/L			12/12/24 12:32	1



QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

GC/MS VOA

Analysis Batch: 638705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-2	W-11208058-121124-JY-002	Total/NA	Water	624.1	
MB 240-638705/10	Method Blank	Total/NA	Water	624.1	
LCS 240-638705/5	Lab Control Sample	Total/NA	Water	624.1	

GC Semi VOA

Prep Batch: 638861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-1	W-11208058-121124-JY-001	Total/NA	Water	608	
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	608	
MB 240-638861/1-A	Method Blank	Total/NA	Water	608	
LCS 240-638861/2-A	Lab Control Sample	Total/NA	Water	608	

Analysis Batch: 639016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-638861/1-A	Method Blank	Total/NA	Water	608.3	638861
LCS 240-638861/2-A	Lab Control Sample	Total/NA	Water	608.3	638861

Analysis Batch: 639396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-1	W-11208058-121124-JY-001	Total/NA	Water	608.3	638861
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	608.3	638861

Metals

Prep Batch: 638679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total Recoverable	Water	200.7	
MB 240-638679/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-638679/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-216491-3 MS	W-11208058-121124-JY-002	Total Recoverable	Water	200.7	
240-216491-3 MSD	W-11208058-121124-JY-002	Total Recoverable	Water	200.7	

Prep Batch: 638685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	245.1	
MB 240-638685/1-A	Method Blank	Total/NA	Water	245.1	
LCS 240-638685/2-A	Lab Control Sample	Total/NA	Water	245.1	
240-216491-3 MS	W-11208058-121124-JY-002	Total/NA	Water	245.1	
240-216491-3 MSD	W-11208058-121124-JY-002	Total/NA	Water	245.1	

Analysis Batch: 638990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	245.1	638685
MB 240-638685/1-A	Method Blank	Total/NA	Water	245.1	638685
LCS 240-638685/2-A	Lab Control Sample	Total/NA	Water	245.1	638685
240-216491-3 MS	W-11208058-121124-JY-002	Total/NA	Water	245.1	638685
240-216491-3 MSD	W-11208058-121124-JY-002	Total/NA	Water	245.1	638685

Analysis Batch: 639007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total Recoverable	Water	200.7 Rev 4.4	638679

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QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Metals (Continued)

Analysis Batch: 639007 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-638679/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	638679
LCS 240-638679/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	638679
240-216491-3 MS	W-11208058-121124-JY-002	Total Recoverable	Water	200.7 Rev 4.4	638679
240-216491-3 MSD	W-11208058-121124-JY-002	Total Recoverable	Water	200.7 Rev 4.4	638679

General Chemistry

Analysis Batch: 638564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	5210B-2001	
SCB 240-638564/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-638564/1	Method Blank	Total/NA	Water	5210B-2001	
LCS 240-638564/3	Lab Control Sample	Total/NA	Water	5210B-2001	
240-216491-3 DU	W-11208058-121124-JY-002	Total/NA	Water	5210B-2001	

Analysis Batch: 638881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-2	W-11208058-121124-JY-002	Total/NA	Water	4500-H+ B-2021	
LCS 240-638881/26	Lab Control Sample	Total/NA	Water	4500-H+ B-2021	

Analysis Batch: 639070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	2540D-2020	
MB 240-639070/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-639070/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 639131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	410.4	
MB 240-639131/3	Method Blank	Total/NA	Water	410.4	
LCS 240-639131/4	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 639484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	4500-NH3H-202 1	
MB 240-639484/14	Method Blank	Total/NA	Water	4500-NH3H-202 1	
LCS 240-639484/15	Lab Control Sample	Total/NA	Water	4500-NH3H-202 1	

Analysis Batch: 639592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-2	W-11208058-121124-JY-002	Total/NA	Water	1664B	
MB 240-639592/1	Method Blank	Total/NA	Water	1664B	
LCS 240-639592/2	Lab Control Sample	Total/NA	Water	1664B	
240-216491-2 MS	W-11208058-121124-JY-002	Total/NA	Water	1664B	

Analysis Batch: 639891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-216491-3	W-11208058-121124-JY-002	Total/NA	Water	4500-P E-2021	
MB 240-639891/3	Method Blank	Total/NA	Water	4500-P E-2021	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

General Chemistry (Continued)

Analysis Batch: 639891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-639891/4	Lab Control Sample	Total/NA	Water	4500-P E-2021	

- 1
- 2
- 3
- 4
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- 13
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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-638705/10
Matrix: Water
Analysis Batch: 638705

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/13/24 15:35	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		62 - 137					12/13/24 15:35	1
4-Bromofluorobenzene (Surr)	106		56 - 136					12/13/24 15:35	1
Toluene-d8 (Surr)	109		78 - 122					12/13/24 15:35	1

Lab Sample ID: LCS 240-638705/5
Matrix: Water
Analysis Batch: 638705

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	17.6		ug/L		88	5 - 195
Surrogate	%Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	87		62 - 137				
4-Bromofluorobenzene (Surr)	92		56 - 136				
Toluene-d8 (Surr)	97		78 - 122				

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 240-638861/1-A
Matrix: Water
Analysis Batch: 639016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638861

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.056	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1221	0.10	U	0.10	0.057	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1242	0.10	U	0.10	0.076	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1248	0.10	U	0.10	0.050	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1254	0.10	U	0.10	0.040	ug/L		12/16/24 08:44	12/17/24 09:03	1
Aroclor-1260	0.10	U	0.10	0.046	ug/L		12/16/24 08:44	12/17/24 09:03	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	80		10 - 174				12/16/24 08:44	12/17/24 09:03	1
Tetrachloro-m-xylene	63		10 - 149				12/16/24 08:44	12/17/24 09:03	1

Lab Sample ID: LCS 240-638861/2-A
Matrix: Water
Analysis Batch: 639016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor-1016	2.50	1.29		ug/L		52	50 - 140
Aroclor-1260	2.50	2.07		ug/L		83	8 - 140

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 240-638861/2-A
Matrix: Water
Analysis Batch: 639016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638861

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	60		10 - 174
Tetrachloro-m-xylene	38		10 - 149

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-638679/1-A
Matrix: Water
Analysis Batch: 639007

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 638679

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
	Result	Qualifier								
Silver	5.0	U	5.0	1.4	ug/L		12/13/24 14:00	12/16/24 13:05		1
Cadmium	2.0	U	2.0	0.45	ug/L		12/13/24 14:00	12/16/24 13:05		1
Chromium	5.0	U	5.0	0.76	ug/L		12/13/24 14:00	12/16/24 13:05		1
Copper	20	U	20	3.5	ug/L		12/13/24 14:00	12/16/24 13:05		1
Iron	100	U	100	83	ug/L		12/13/24 14:00	12/16/24 13:05		1
Nickel	20	U	20	2.2	ug/L		12/13/24 14:00	12/16/24 13:05		1
Lead	3.0	U	3.0	2.8	ug/L		12/13/24 14:00	12/16/24 13:05		1

Lab Sample ID: LCS 240-638679/2-A
Matrix: Water
Analysis Batch: 639007

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 638679

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
Silver	100	100		ug/L		100		85 - 115
Cadmium	1000	973		ug/L		97		85 - 115
Chromium	1000	972		ug/L		97		85 - 115
Copper	1000	961		ug/L		96		85 - 115
Iron	10000	9470		ug/L		95		85 - 115
Nickel	1000	978		ug/L		98		85 - 115
Lead	1000	932		ug/L		93		85 - 115

Lab Sample ID: 240-216491-3 MS
Matrix: Water
Analysis Batch: 639007

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total Recoverable
Prep Batch: 638679

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec	Limits
	Result	Qualifier		Result	Qualifier					
Silver	5.0	U F2	100	103		ug/L		103		70 - 130
Cadmium	2.0	U	1000	988		ug/L		99		70 - 130
Chromium	5.0	U	1000	981		ug/L		98		70 - 130
Copper	20	U	1000	976		ug/L		98		70 - 130
Iron	100	U	10000	9630		ug/L		96		70 - 130
Nickel	20	U	1000	991		ug/L		99		70 - 130
Lead	3.0	U	1000	932		ug/L		93		70 - 130

QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 240-216491-3 MSD
Matrix: Water
Analysis Batch: 639007

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total Recoverable
Prep Batch: 638679

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
Silver	5.0	U F2	100	82.4	F2	ug/L		82	70 - 130	22	20
Cadmium	2.0	U	1000	993		ug/L		99	70 - 130	1	20
Chromium	5.0	U	1000	982		ug/L		98	70 - 130	0	20
Copper	20	U	1000	975		ug/L		98	70 - 130	0	20
Iron	100	U	10000	9560		ug/L		96	70 - 130	1	20
Nickel	20	U	1000	990		ug/L		99	70 - 130	0	20
Lead	3.0	U	1000	937		ug/L		94	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-638685/1-A
Matrix: Water
Analysis Batch: 638990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638685

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.20	U	0.20	0.13	ug/L		12/13/24 14:00	12/16/24 14:14	1

Lab Sample ID: LCS 240-638685/2-A
Matrix: Water
Analysis Batch: 638990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638685

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Mercury	5.00	4.65		ug/L		93	85 - 115

Lab Sample ID: 240-216491-3 MS
Matrix: Water
Analysis Batch: 638990

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total/NA
Prep Batch: 638685

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier		Result	Qualifier				Limits
Mercury	0.20	U	1.00	0.999		ug/L		100	70 - 130

Lab Sample ID: 240-216491-3 MSD
Matrix: Water
Analysis Batch: 638990

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total/NA
Prep Batch: 638685

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
Mercury	0.20	U	1.00	0.992		ug/L		99	70 - 130	1	20

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 240-639592/1
Matrix: Water
Analysis Batch: 639592

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
HEM	5.0	U	5.0	1.0	mg/L			12/20/24 09:31	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 240-639592/2
Matrix: Water
Analysis Batch: 639592

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM	40.0	32.3		mg/L		81	78 - 114

Lab Sample ID: 240-216491-2 MS
Matrix: Water
Analysis Batch: 639592

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM	1.3	J	41.1	34.5		mg/L		81	78 - 114

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-639070/1
Matrix: Water
Analysis Batch: 639070

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0	0.40	mg/L			12/17/24 09:36	1

Lab Sample ID: LCS 240-639070/2
Matrix: Water
Analysis Batch: 639070

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	72.7	72.0		mg/L		99	64 - 120

Method: 410.4 - COD

Lab Sample ID: MB 240-639131/3
Matrix: Water
Analysis Batch: 639131

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10	1.8	mg/L			12/17/24 12:30	1

Lab Sample ID: LCS 240-639131/4
Matrix: Water
Analysis Batch: 639131

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	27.0	24.4		mg/L		90	90 - 110

Method: 4500-H+ B-2021 - pH

Lab Sample ID: LCS 240-638881/26
Matrix: Water
Analysis Batch: 638881

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	9.14	9.1		SU		99	97 - 103

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 4500-NH3H-2021 - Ammonia

Lab Sample ID: MB 240-639484/14
Matrix: Water
Analysis Batch: 639484

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.20	U	0.20	0.076	mg/L			12/19/24 10:06	1

Lab Sample ID: LCS 240-639484/15
Matrix: Water
Analysis Batch: 639484

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	8.50	8.14		mg/L		96	90 - 110

Method: 4500-P E-2021 - Phosphorus

Lab Sample ID: MB 240-639891/3
Matrix: Water
Analysis Batch: 639891

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.076	mg/L			12/26/24 08:10	1

Lab Sample ID: LCS 240-639891/4
Matrix: Water
Analysis Batch: 639891

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.448	0.394		mg/L		88	77 - 120

Method: 5210B-2001 - BOD, 5-Day

Lab Sample ID: SCB 240-638564/2
Matrix: Water
Analysis Batch: 638564

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

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			12/12/24 12:06	1

Lab Sample ID: USB 240-638564/1
Matrix: Water
Analysis Batch: 638564

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			12/12/24 12:04	1

Lab Sample ID: LCS 240-638564/3
Matrix: Water
Analysis Batch: 638564

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	187		mg/L		95	85 - 115

Eurofins Cleveland

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 5210B-2001 - BOD, 5-Day (Continued)

Lab Sample ID: 240-216491-3 DU
Matrix: Water
Analysis Batch: 638564

Client Sample ID: W-11208058-121124-JY-002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	2.0	U	2.0	U	mg/L		NC	15

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (62-137)	BFB (56-136)	TOL (78-122)
240-216491-2	W-11208058-121124-JY-002	81	91	96
LCS 240-638705/5	Lab Control Sample	87	92	97
MB 240-638705/10	Method Blank	97	106	109

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP2 (10-174)	TCX2 (10-149)
240-216491-1	W-11208058-121124-JY-001	23	48
240-216491-3	W-11208058-121124-JY-002	43	40

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (10-174)	TCX1 (10-149)
LCS 240-638861/2-A	Lab Control Sample	60	38
MB 240-638861/1-A	Method Blank	80	63

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Lab Chronicle

Client: GHD Services Inc.
 Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Client Sample ID: W-11208058-121124-JY-001

Lab Sample ID: 240-216491-1

Date Collected: 12/11/24 08:30

Matrix: Water

Date Received: 12/12/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	608			638861	CR2J	EET CLE	12/16/24 08:45
Total/NA	Analysis	608.3		10	639396	LSH	EET CLE	12/19/24 09:52

Client Sample ID: W-11208058-121124-JY-002

Lab Sample ID: 240-216491-2

Date Collected: 12/11/24 08:45

Matrix: Water

Date Received: 12/12/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	638705	HMB	EET CLE	12/13/24 23:53
Total/NA	Analysis	1664B		1	639592	AAP	EET CLE	12/20/24 09:31
Total/NA	Analysis	4500-H+ B-2021		1	638881	SC3B	EET CLE	12/16/24 09:32

Client Sample ID: W-11208058-121124-JY-002

Lab Sample ID: 240-216491-3

Date Collected: 12/11/24 09:00

Matrix: Water

Date Received: 12/12/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	608			638861	CR2J	EET CLE	12/16/24 08:45
Total/NA	Analysis	608.3		5	639396	LSH	EET CLE	12/19/24 10:04
Total Recoverable	Prep	200.7			638679	GK	EET CLE	12/13/24 14:00
Total Recoverable	Analysis	200.7 Rev 4.4		1	639007	KLC	EET CLE	12/16/24 13:22
Total/NA	Prep	245.1			638685	GK	EET CLE	12/13/24 14:00
Total/NA	Analysis	245.1		1	638990	GK	EET CLE	12/16/24 14:21
Total/NA	Analysis	2540D-2020		1	639070	TAV2	EET CLE	12/17/24 09:36
Total/NA	Analysis	410.4		1	639131	AAP	EET CLE	12/17/24 12:30
Total/NA	Analysis	4500-NH3H-2021		10	639484	AJ	EET CLE	12/19/24 11:06
Total/NA	Analysis	4500-P E-2021		1	639891	BLW	EET CLE	12/26/24 08:10
Total/NA	Analysis	5210B-2001		1	638564	C5SV	EET CLE	12/12/24 12:32

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: 11208058, RACER Bay City

Job ID: 240-216491-1

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.


Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-24
Wisconsin	State	399167560	08-31-25

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client GHD Site Name _____ Cooler unpacked by _____
Cooler Received on 12/12/24 Opened on 12/12/24 JMOROSCO
FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
Receipt After-hours Drop-off Date/Time _____ Storage Location _____
Eurofins Cooler # EC 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 # 17 (CF TD °C) Observed Cooler Temp. 10 °C Corrected Cooler Temp 11 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
-Were tamper/custody seals intact and uncompromised? Yes No NA

3 Shippers' packing slip attached to the cooler(s)? Yes No
4 Did custody papers accompany the sample(s)? Yes No
5 Were the custody papers relinquished & signed in the appropriate place? Yes No
6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7 Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
10 Were correct bottle(s) used for the test(s) indicated? Yes No
11 Sufficient quantity received to perform indicated analyses? Yes No
12. Are these work share samples and all listed on the COC? Yes No
If yes, Questions 13-17 have been checked at the originating laboratory

13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC450408
14 Were VOAs on the COC? Yes No NA
15 Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17 Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
Concerning _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by _____

19. 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)

20. SAMPLE PRESERVATION
Sample(s) _____ were further preserved in the laboratory
Time preserved. _____ Preservative(s) added/Lot number(s) _____
VOA Sample Preservation - Date/Time VOAs Frozen _____

Temperature readings _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservation</u>	<u>Preservation</u>
			<u>pH</u>	<u>Temp</u>	<u>Added</u>	<u>Lot Number</u>
W-11208058-121124-JY-001	240-216491-A-1	Amber Glass 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-001	240-216491-B-1	Amber Glass 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-A-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-B-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-C-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-D-2	Plastic 125mL - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-E-2	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-F-2	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-A-3	Plastic 250ml - with Sulfuric Acid	<2	_____	_____	_____
W-11208058-121124-JY-002	240-216491-B-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
W-11208058-121124-JY-002	240-216491-C-3	Plastic 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-D-3	Plastic 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-E-3	Amber Glass 1 liter - unpreserved	_____	_____	_____	_____
W-11208058-121124-JY-002	240-216491-F-3	Amber Glass 1 liter - unpreserved	_____	_____	_____	_____



Data Verification Report

January 29, 2025

To	John-Eric Pardys	Project No.	11208058
Copy to	Jessica Gallaway	Email	Alicia.ferber@ghd.com
From	Alicia Ferber/cs/7-NF	Contact No.	720-245-2755
Project Name	RACER: GMPT Bay City		
Subject	Analytical Results and Data Verification Annual Groundwater Sampling RACER: GMPT Bay City Bay City, Michigan October 2024		

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

1. Introduction

This document details a data verification of analytical results for water samples collected in support of the Annual Groundwater Sampling at the RACER Bay City site during October 2024. Samples were submitted to Eurofins Cleveland located in Barberton, 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:

1. "National Functional Guidelines for Organic Superfund Methods Data Review", United States Environmental Protection Agency (USEPA) 540-R-20-005, November 2020.

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 the 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 (0-6°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 one per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Surrogate Spike Recoveries

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 analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for polychlorinated biphenyl (PCB) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and analysis.

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

5. Laboratory Control Sample 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 one per analytical batch.

The LCS contained all compounds of interest. All LCS recoveries were within the laboratory 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 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 MS/MSD samples were spiked with all compounds of interest. All 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 one field duplicate sample set.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample set 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 criterion is one times the RL value.

All field duplicate results met the above criteria, demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's sample-specific method detection limit (MDL) for each analyte. No positive analyte detections less than the RL but greater than the sample-specific MDL were reported. 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.

Regards,



Alicia Ferber
Digital Intelligence - Data Management - Data Validator

Table 1

**Sample Collection and Analysis Summary
Annual Groundwater Sampling
RACER: GMPT Bay City
Bay City, Michigan
October 2024**

Sample Delivery Group	Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters		Comments
						PCBs		
2402129821	GW-11208058-101024-BW-001	MW102D1	Water	10/10/2024	11:15	X		
	GW-11208058-101024-BW-002	MW102D2	Water	10/10/2024	12:11	X		
	GW-11208058-101024-BW-003	MW102D2	Water	10/10/2024	12:14	X		FD(GW-11208058-101024-BW-002)
	GW-11208058-101024-BW-004	MW102D4	Water	10/10/2024	13:16	X		
	GW-11208058-101124-BW-005	LMW15D	Water	10/11/2024	13:36	X		
	GW-11208058-101124-BW-006	LMW13S	Water	10/11/2024	15:10	X		
2402133691	GW-11208058-101724-BW-007	MW301D2	Water	10/17/2024	15:16	X		MS/MSD
	GW-11208058-101724-BW-008	MW300S	Water	10/17/2024	16:53	X		

Notes:

- FD - Field Duplicate Sample of sample in parenthesis
- MS/MSD - Matrix Spike/Matrix Spike Duplicate
- PCBs - Polychlorinated Biphenyls

Table 2

Analytical Results Summary
 Annual Groundwater Sampling
 RACER: GMPT Bay City
 Bay City, Michigan
 October 2024

Location ID:	LMW13S	LMW15D	MW102D1
Sample Name:	GW-11208058-101124-BW-006	GW-11208058-101124-BW-005	GW-11208058-101024-BW-001
Sample Date:	10/11/2024	10/11/2024	10/10/2024

Parameters

Unit

PCBs

Parameters	Unit	LMW13S	LMW15D	MW102D1
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.098 U	0.095 U
Aroclor-1221 (PCB-1221)	µg/L	1.3	0.098 U	0.095 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.098 U	0.095 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.098 U	0.26
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.098 U	0.095 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.098 U	0.095 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.098 U	0.095 U

Table 2

Analytical Results Summary
 Annual Groundwater Sampling
 RACER: GMPT Bay City
 Bay City, Michigan
 October 2024

Location ID:	MW102D2	MW102D2	MW102D4
Sample Name:	GW-11208058-101024-BW-002	GW-11208058-101024-BW-003	GW-11208058-101024-BW-004
Sample Date:	10/10/2024	10/10/2024 Duplicate	10/10/2024

Parameters

Unit

Parameters	Unit	MW102D2	MW102D2	MW102D4
PCBs				
Aroclor-1016 (PCB-1016)	µg/L	0.095 U	0.095 U	0.095 U
Aroclor-1221 (PCB-1221)	µg/L	0.095 U	0.095 U	0.095 U
Aroclor-1232 (PCB-1232)	µg/L	0.095 U	0.095 U	0.095 U
Aroclor-1242 (PCB-1242)	µg/L	0.095 U	0.095 U	0.095 U
Aroclor-1248 (PCB-1248)	µg/L	0.095 U	0.095 U	0.095 U
Aroclor-1254 (PCB-1254)	µg/L	0.095 U	0.095 U	0.095 U
Aroclor-1260 (PCB-1260)	µg/L	0.095 U	0.095 U	0.095 U

Table 2

**Analytical Results Summary
Annual Groundwater Sampling
RACER: GMPT Bay City
Bay City, Michigan
October 2024**

Location ID:	MW300S	MW301D2
Sample Name:	GW-11208058-101724-BW-008	GW-11208058-101724-BW-007
Sample Date:	10/17/2024	10/17/2024

Parameters	Unit		
PCBs			
Aroclor-1016 (PCB-1016)	µg/L	0.095 U	0.11 U
Aroclor-1221 (PCB-1221)	µg/L	0.095 U	0.11 U
Aroclor-1232 (PCB-1232)	µg/L	0.095 U	0.11 U
Aroclor-1242 (PCB-1242)	µg/L	0.095 U	0.11 U
Aroclor-1248 (PCB-1248)	µg/L	0.095 U	0.11 U
Aroclor-1254 (PCB-1254)	µg/L	0.095 U	0.11 U
Aroclor-1260 (PCB-1260)	µg/L	0.095 U	0.11 U

Notes:

U - Not detected at the associated reporting limit

PCBs - Polychlorinated Biphenyls

Table 3

**Analytical Methods
Annual Groundwater Sampling
RACER: GMPT Bay City
Bay City, Michigan
October 2024**

Parameter	Method	Matrix	Holding Time	
			Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
Polychlorinated Biphenyls (PCBs)	SW-846 8082	Water	7	40

Method Reference:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods",
SW-846, Third Edition, 1986, with subsequent revisions