

TECHNICAL MEMORANDUM

TO: Jennifer Stanhope and William Grossett
Corrective Action Project Manager
USEPA, Region 5
77 West Jackson Boulevard, Chicago, Illinois 60604

CC: Pam Barnett – RACER

FROM: Jeffrey Crum, Nick Martin
Hamp, Mathews & Associates, Inc.

DATE: July 29, 2025

SUBJECT: June 2025 Sanitary Sewer Water Sampling Results
RACER Eckles Road Off-Site Residential AOI 31, Livonia, Michigan

Introduction

This memorandum provides a summary of results from the sewer water sampling investigation performed at the Off-Site Residential Area of Interest 31 (AOI 31), Eckles Road Site (the Site) on June 24, 2025, on behalf of the Revitalizing Auto Communities Environmental Response (RACER) Trust. The sampling was performed at manholes located along Grantland Street and Newburgh Road following the procedures outlined in the revised Sanitary Sewer Water Work Plan (SSW WP) that was provided to the United States Environmental Protection Agency (USEPA) via email correspondence on June 23, 2025, and approved by the USEPA via email on June 26, 2025. The sections below include a summary of the methods used during the investigation, a description and discussion of the sampling results, and a description of planned activities related to ongoing conduit vapor intrusion (VI) pathway monitoring and response actions at the Site.

Methods

Hamp, Mathews & Associates, Inc. (HMA) mobilized to the Site on June 24, 2025, to collect sewer water samples from five manholes located along Grantland Street and three manholes located along Newburgh Road. Both proposed methods described in the SSW WP were utilized to collect sewer water samples during the investigation. The primary method of sample collection utilized during the investigation involved use of clean, unused polyethylene tubing lowered into the base of each sanitary manhole at the location of the influent pipe using a stainless steel sampling weight, at which point a peristaltic pump was used to transfer water from the sewer to the surface for collection directly into the laboratory-provided sampling containers. This method was utilized at all but one manhole (MID-N13), where the high rate of sewer water flow precluded proper placement of the tubing into the influent pipe, and a telescoping sampling pole with clean

polyethylene bottle strapped to it was used for sample collection instead. One duplicate sewer water sample was collected at manhole MID-G8+74. All sewer water samples were collected between 10:30 AM and 1:30 PM during anticipated baseline flow conditions. Following sample collection at each manhole, the water depth within the influent pipe was measured using a telescoping pole marked with chalk as described in the SSW WP. All samples were stored on ice immediately after collection and were transported to Eurofins in Barberton, Ohio under chain of custody for laboratory analysis of the eight critical chemicals of concern¹ (COCs) using USEPA Method 8260.

Results and Discussion

The sanitary sewer sampling results from the June 24, 2025 event are presented in **Table 1** and a summary of the sampling results for trichloroethene (TCE), along with a summary of sanitary sewer vapor sampling results from 2024 and 2025, are presented in **Figure 1**. Detectable concentrations of TCE were found in sewer water samples collected from four of eight manhole locations, including the two easternmost manholes along Grantland Street (MID-G5+95 and MID-G2+93) and two manholes along Newburgh Road (MID-N13 and (MID-N12). Concentrations of TCE reported in the sewer water samples from these locations ranged from 0.55 micrograms per liter (µg/L) to 14 µg/L. The highest reported concentration (14 µg/L) of TCE was observed at manhole MID-G5+95. This manhole is the furthest upstream (with respect to sewer water flow direction) within the group of manholes with detectable TCE concentrations in sewer water samples, and all manholes downstream of this manhole contained progressively lower TCE concentrations. Detectable concentrations of 1,1,1-trichloroethane (TCA) were also identified in the samples collected from the four manholes where TCE was detected. The concentrations of TCA detected in these samples ranged from 3.2 µg/L to 0.53 µg/L, and also decreased moving further downstream from MID-G5+95. No other CVOCs were detected in sewer water samples collected from these four manholes. The sewer water samples collected from all three manholes located upstream of MID-G5+95 contained no detectable concentrations of TCE or other COCs. The laboratory analytical report associated with the sewer water samples is provided in **Attachment 1**.

The flow rates shown in **Table 1** were estimated using the water depths measured at each manhole location and Manning's equation as described in the SSW WP. The estimated flow rates ranged between 3.6 and 198 gallons per minute from the furthest upstream manhole along Grantland Street (MID-G14+36) to the furthest downstream manhole along Newburgh Road (MID-N12), and generally increased moving downstream, as expected. The estimated flow rate at manhole MID-G5+95 was unexpectedly high relative to upstream and downstream manholes, and is likely the result of a localized weir effect caused by debris in the sewer segment downstream of MID-G5+95. This localized weir effect is unlikely to have had an adverse impact

¹ The eight COCs are defined in the *Vapor Intrusion Pathway Monitoring Work Plan Phase 2: Proposed Groundwater Extent and Soil Vapor Sampling Strategy*, dated July 3, 2024.

on TCE or TCA concentrations detected in the sample from manhole MID-G5+95 with respective to its representativeness of true sewer water conditions.

The TCE concentrations in sewer water samples collected during this investigation indicate that TCE impacted groundwater is primarily entering the sanitary sewer along Grantland Street between manhole locations MID-G8+74 and MID-G5+95. This segment of sewer overlaps with the eastern section of the TCE groundwater plume. Based on the estimated flow rates within the manholes and the absence of TCE detected in the sewer water sample (and duplicate sample) collected at MID-G8+74, it does not appear that a substantial quantity of groundwater is entering the sewer upstream of MID-G8+74.

Closing

As communicated in the Proposed Sanitary Sewer Lateral Vapor Sampling Work Plan (SSLVS WP), of which a revised version was submitted to USEPA on July 15, 2025 and approved by USEPA on July 22, 2025, additional work is planned to further evaluate the conduit VI pathway along Grantland Street. This additional work includes the collection of vapor samples from sanitary sewer lateral cleanout locations, and/or interior plumbing or indoor air at private residences along Grantland Street to evaluate potential VI risks, and sewer rehabilitation activities to mitigate infiltration of contaminated groundwater at laterals located between manholes MID-G8+74 and MID-G5+95. RACER is currently planning these activities and is in the process of obtaining access authorization at private residences along Grantland Street. RACER will continue to work with USEPA to address the conduit VI pathway.

If you have questions regarding the contents of this technical memorandum, then please contact HMA at (517) 641-7333 or via email at jcrum@hampmathews.com or nmartin@hampmathews.com.

Enclosures

FIGURES

Figure 1 TCE Sanitary Sewer Water and Vapor Sample Results (Summer 2024 – Summer 2025)

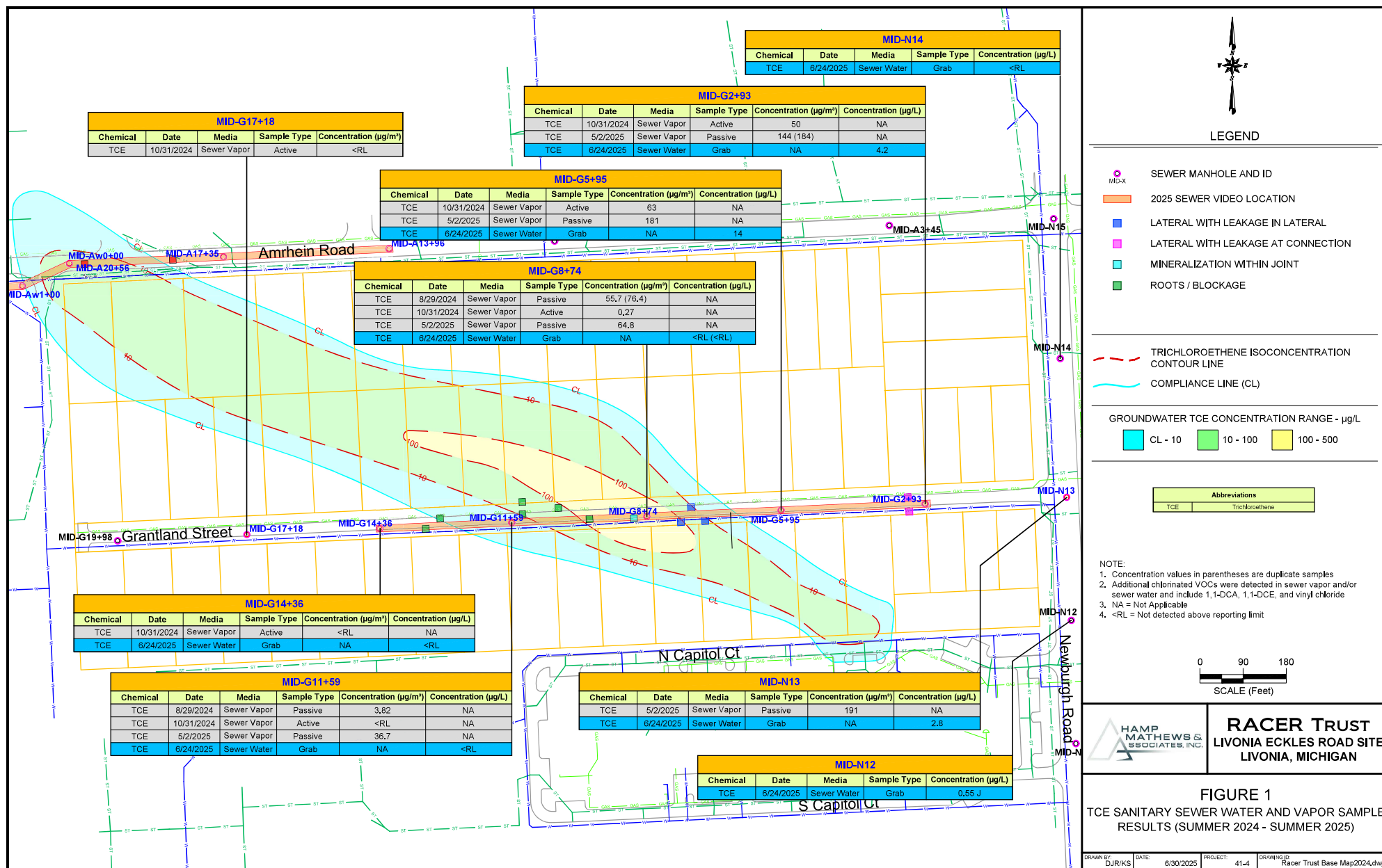
TABLES

Table 1 Summary of Sanitary Sewer Water Analytical Results

ATTACHMENTS

Attachment 1 Laboratory Analytical Report, Eurofins Cleveland, June 27, 2025

FIGURES



TABLES

Table 1
Summary of Sanitary Sewer Water Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)
RACER Trust - AOI 31 Eckles Road Site, Livonia, Michigan

Sample Information						Chlorinated Volatile Organic Compounds CVOCs µg/L							
Street and Flow Direction	Sample Location	Sample Method	Date	Manhole PID Reading (ppm)	Calculated Flow Rate (gal/min)*	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride
Grantland ↓	MID-G14+36	Grab	6/24/2025	1.9	3.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MID-G11+59	Grab	6/24/2025	0.0	10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MID-G8+74	Grab	6/24/2025	0.0	14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
		Grab (dup)	6/24/2025			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MID-G5+95	Grab	6/24/2025	0.0	81 ^x	<1.0	<1.0	<1.0	<1.0	<1.0	3.2	14	<1.0
	MID-G2+93	Grab	6/24/2025	0.7	44	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	4.2	<1.0
Newburgh ↓	MID-N14	Grab	6/24/2025	0.1	29	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MID-N13	Grab	6/24/2025	0.6	90	<1.0	<1.0	<1.0	<1.0	<1.0	0.86 J	2.8	<1.0
	MID-N12	Grab	6/24/2025	0.0	198	<1.0	<1.0	<1.0	<1.0	<1.0	0.53 J	0.55 J	<1.0

GRAY Indicates chemical not detected greater than Laboratory Reporting Limit

BOLD Indicates sample result is greater than Laboratory Reporting Limit

J = Laboratory estimated concentration less than Laboratory Reporting Limit

* = Flow rate within sewer pipe estimated using measured water depth and Manning's equation for estimating open channel flow (roughness coefficient of 0.018; pipe slopes as described on City of Livonia construction diagrams)

^x = Unexpected increase in flow rate (relative to downgradient manhole) likely due to presence of debris in pipe causing local weir effect

ATTACHMENT 1

Laboratory Analytical Report, Eurofins Cleveland, June
27, 2025



ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. James Abston
GHD Services Inc.
26850 Haggerty Rd.
Farmington Hills, Michigan 48331

Generated 6/27/2025 12:56:25 PM

JOB DESCRIPTION

12573440-AO31, Eckles

JOB NUMBER

240-227428-1

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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Authorized for release by
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Case Narrative

Client: GHD Services Inc.
Project: 12573440-AO31, Eckles

Job ID: 240-227428-1

Job ID: 240-227428-1

Eurofins Cleveland

Job Narrative 240-227428-1

Receipt

The samples were received on 6/25/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0°C and 2.4°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-661506 was outside the method criteria for the following analyte(s): Chloroethane and Vinyl chloride. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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: 12573440-AO31, Eckles

Job ID: 240-227428-1

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: 12573440-AO31, Eckles

Job ID: 240-227428-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-227428-1	SWRW-MID-G14+36-25-06	Water	06/24/25 10:35	06/25/25 08:00
240-227428-2	SWRW-MID-G11+59-25-06	Water	06/24/25 11:15	06/25/25 08:00
240-227428-3	SWRW-MID-G8+74-25-06	Water	06/24/25 11:35	06/25/25 08:00
240-227428-4	SWRW-DUP001-25-06	Water	06/24/25 00:00	06/25/25 08:00
240-227428-5	SWRW-MID-G5+95-25-06	Water	06/24/25 12:00	06/25/25 08:00
240-227428-6	SWRW-MID-G2+93-25-06	Water	06/24/25 12:20	06/25/25 08:00
240-227428-7	SWRW-MID-N14-25-06	Water	06/24/25 12:45	06/25/25 08:00
240-227428-8	SWRW-MID-N13-25-06	Water	06/24/25 13:02	06/25/25 08:00
240-227428-9	SWRW-MID-N12-25-06	Water	06/24/25 13:22	06/25/25 08:00
240-227428-10	EQUIPMENT BLANK	Water	06/24/25 00:00	06/25/25 08:00
240-227428-11	TRIP BLANK	Water	06/24/25 00:00	06/25/25 08:00

Detection Summary

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Client Sample ID: SWRW-MID-G14+36-25-06

Lab Sample ID: 240-227428-1

No Detections.

Client Sample ID: SWRW-MID-G11+59-25-06

Lab Sample ID: 240-227428-2

No Detections.

Client Sample ID: SWRW-MID-G8+74-25-06

Lab Sample ID: 240-227428-3

No Detections.

Client Sample ID: SWRW-DUP001-25-06

Lab Sample ID: 240-227428-4

No Detections.

Client Sample ID: SWRW-MID-G5+95-25-06

Lab Sample ID: 240-227428-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3.2		1.0	0.48	ug/L	1		8260D	Total/NA
Trichloroethene	14		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SWRW-MID-G2+93-25-06

Lab Sample ID: 240-227428-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.0		1.0	0.48	ug/L	1		8260D	Total/NA
Trichloroethene	4.2		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SWRW-MID-N14-25-06

Lab Sample ID: 240-227428-7

No Detections.

Client Sample ID: SWRW-MID-N13-25-06

Lab Sample ID: 240-227428-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.86	J	1.0	0.48	ug/L	1		8260D	Total/NA
Trichloroethene	2.8		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SWRW-MID-N12-25-06

Lab Sample ID: 240-227428-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.53	J	1.0	0.48	ug/L	1		8260D	Total/NA
Trichloroethene	0.55	J	1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 240-227428-10

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-227428-11

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Method Summary

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CLE
5030C	Purge and Trap	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: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-MID-G14+36-25-06

Date Collected: 06/24/25 10:35

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.48	ug/L			06/26/25 15:16	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 15:16	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 15:16	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 15:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 15:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 15:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/26/25 15:16	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 15:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		78 - 122					06/26/25 15:16	1
Dibromofluoromethane (Surr)	113		73 - 120					06/26/25 15:16	1
4-Bromofluorobenzene (Surr)	87		56 - 136					06/26/25 15:16	1
1,2-Dichloroethane-d4 (Surr)	124		62 - 137					06/26/25 15:16	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-MID-G11+59-25-06

Lab Sample ID: 240-227428-2

Date Collected: 06/24/25 11:15

Matrix: Water

Date Received: 06/25/25 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.48	ug/L			06/26/25 15:40	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 15:40	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 15:40	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 15:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 15:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 15:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/26/25 15:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 15:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		78 - 122					06/26/25 15:40	1
Dibromofluoromethane (Surr)	113		73 - 120					06/26/25 15:40	1
4-Bromofluorobenzene (Surr)	93		56 - 136					06/26/25 15:40	1
1,2-Dichloroethane-d4 (Surr)	117		62 - 137					06/26/25 15:40	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-MID-G8+74-25-06

Date Collected: 06/24/25 11:35

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.48	ug/L			06/26/25 16:04	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 16:04	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 16:04	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 16:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 16:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 16:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/26/25 16:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 16:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		78 - 122					06/26/25 16:04	1
Dibromofluoromethane (Surr)	107		73 - 120					06/26/25 16:04	1
4-Bromofluorobenzene (Surr)	89		56 - 136					06/26/25 16:04	1
1,2-Dichloroethane-d4 (Surr)	114		62 - 137					06/26/25 16:04	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-DUP001-25-06

Date Collected: 06/24/25 00:00

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.48	ug/L			06/26/25 16:27	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 16:27	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 16:27	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 16:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 16:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 16:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/26/25 16:27	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		78 - 122					06/26/25 16:27	1
Dibromofluoromethane (Surr)	106		73 - 120					06/26/25 16:27	1
4-Bromofluorobenzene (Surr)	90		56 - 136					06/26/25 16:27	1
1,2-Dichloroethane-d4 (Surr)	119		62 - 137					06/26/25 16:27	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-MID-G5+95-25-06

Date Collected: 06/24/25 12:00

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	3.2		1.0	0.48	ug/L			06/26/25 16:50	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 16:50	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 16:50	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 16:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 16:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 16:50	1
Trichloroethene	14		1.0	0.44	ug/L			06/26/25 16:50	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 16:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		78 - 122					06/26/25 16:50	1
Dibromofluoromethane (Surr)	109		73 - 120					06/26/25 16:50	1
4-Bromofluorobenzene (Surr)	92		56 - 136					06/26/25 16:50	1
1,2-Dichloroethane-d4 (Surr)	122		62 - 137					06/26/25 16:50	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-MID-G2+93-25-06

Date Collected: 06/24/25 12:20

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0		1.0	0.48	ug/L			06/26/25 17:14	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 17:14	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 17:14	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 17:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 17:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 17:14	1
Trichloroethene	4.2		1.0	0.44	ug/L			06/26/25 17:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		78 - 122					06/26/25 17:14	1
Dibromofluoromethane (Surr)	110		73 - 120					06/26/25 17:14	1
4-Bromofluorobenzene (Surr)	91		56 - 136					06/26/25 17:14	1
1,2-Dichloroethane-d4 (Surr)	123		62 - 137					06/26/25 17:14	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-MID-N14-25-06

Date Collected: 06/24/25 12:45

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.48	ug/L			06/26/25 17:37	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 17:37	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 17:37	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 17:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 17:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 17:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/26/25 17:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 17:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		78 - 122					06/26/25 17:37	1
Dibromofluoromethane (Surr)	103		73 - 120					06/26/25 17:37	1
4-Bromofluorobenzene (Surr)	91		56 - 136					06/26/25 17:37	1
1,2-Dichloroethane-d4 (Surr)	116		62 - 137					06/26/25 17:37	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-MID-N13-25-06

Date Collected: 06/24/25 13:02

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.86	J	1.0	0.48	ug/L			06/26/25 18:00	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 18:00	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 18:00	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 18:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 18:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 18:00	1
Trichloroethene	2.8		1.0	0.44	ug/L			06/26/25 18:00	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		78 - 122					06/26/25 18:00	1
Dibromofluoromethane (Surr)	107		73 - 120					06/26/25 18:00	1
4-Bromofluorobenzene (Surr)	90		56 - 136					06/26/25 18:00	1
1,2-Dichloroethane-d4 (Surr)	118		62 - 137					06/26/25 18:00	1

Eurofins Cleveland

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: SWRW-MID-N12-25-06

Date Collected: 06/24/25 13:22

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.53	J	1.0	0.48	ug/L			06/26/25 18:23	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 18:23	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 18:23	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 18:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 18:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 18:23	1
Trichloroethene	0.55	J	1.0	0.44	ug/L			06/26/25 18:23	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 18:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		78 - 122					06/26/25 18:23	1
Dibromofluoromethane (Surr)	109		73 - 120					06/26/25 18:23	1
4-Bromofluorobenzene (Surr)	93		56 - 136					06/26/25 18:23	1
1,2-Dichloroethane-d4 (Surr)	119		62 - 137					06/26/25 18:23	1

Eurofins Cleveland

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: EQUIPMENT BLANK

Date Collected: 06/24/25 00:00

Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.48	ug/L			06/26/25 18:46	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 18:46	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 18:46	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 18:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 18:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 18:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/26/25 18:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		78 - 122					06/26/25 18:46	1
Dibromofluoromethane (Surr)	108		73 - 120					06/26/25 18:46	1
4-Bromofluorobenzene (Surr)	88		56 - 136					06/26/25 18:46	1
1,2-Dichloroethane-d4 (Surr)	121		62 - 137					06/26/25 18:46	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: TRIP BLANK
Date Collected: 06/24/25 00:00
Date Received: 06/25/25 08:00

Lab Sample ID: 240-227428-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.48	ug/L			06/26/25 19:09	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 19:09	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 19:09	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 19:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 19:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 19:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/26/25 19:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		78 - 122					06/26/25 19:09	1
Dibromofluoromethane (Surr)	103		73 - 120					06/26/25 19:09	1
4-Bromofluorobenzene (Surr)	90		56 - 136					06/26/25 19:09	1
1,2-Dichloroethane-d4 (Surr)	120		62 - 137					06/26/25 19:09	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

GC/MS VOA

Analysis Batch: 661506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227428-1	SWRW-MID-G14+36-25-06	Total/NA	Water	8260D	
240-227428-2	SWRW-MID-G11+59-25-06	Total/NA	Water	8260D	
240-227428-3	SWRW-MID-G8+74-25-06	Total/NA	Water	8260D	
240-227428-4	SWRW-DUP001-25-06	Total/NA	Water	8260D	
240-227428-5	SWRW-MID-G5+95-25-06	Total/NA	Water	8260D	
240-227428-6	SWRW-MID-G2+93-25-06	Total/NA	Water	8260D	
240-227428-7	SWRW-MID-N14-25-06	Total/NA	Water	8260D	
240-227428-8	SWRW-MID-N13-25-06	Total/NA	Water	8260D	
240-227428-9	SWRW-MID-N12-25-06	Total/NA	Water	8260D	
240-227428-10	EQUIPMENT BLANK	Total/NA	Water	8260D	
240-227428-11	TRIP BLANK	Total/NA	Water	8260D	
MB 240-661506/7	Method Blank	Total/NA	Water	8260D	
LCS 240-661506/4	Lab Control Sample	Total/NA	Water	8260D	

QC Sample Results

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-661506/7

Matrix: Water

Analysis Batch: 661506

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.48	ug/L			06/26/25 11:21	1
1,1-Dichloroethane	1.0	U	1.0	0.47	ug/L			06/26/25 11:21	1
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/26/25 11:21	1
Chloroethane	1.0	U	1.0	0.83	ug/L			06/26/25 11:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/26/25 11:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/26/25 11:21	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/26/25 11:21	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/26/25 11:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		78 - 122		06/26/25 11:21	1
Dibromofluoromethane (Surr)	106		73 - 120		06/26/25 11:21	1
4-Bromofluorobenzene (Surr)	87		56 - 136		06/26/25 11:21	1
1,2-Dichloroethane-d4 (Surr)	117		62 - 137		06/26/25 11:21	1

Lab Sample ID: LCS 240-661506/4

Matrix: Water

Analysis Batch: 661506

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	27.0		ug/L		108	64 - 131
1,1-Dichloroethane	25.0	25.1		ug/L		100	72 - 127
1,1-Dichloroethene	25.0	25.1		ug/L		100	63 - 134
Chloroethane	12.5	18.4		ug/L		147	38 - 152
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	77 - 123
trans-1,2-Dichloroethene	25.0	24.5		ug/L		98	75 - 124
Trichloroethene	25.0	25.9		ug/L		104	70 - 122
Vinyl chloride	12.5	11.4		ug/L		91	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	101		78 - 122
Dibromofluoromethane (Surr)	109		73 - 120
4-Bromofluorobenzene (Surr)	96		56 - 136
1,2-Dichloroethane-d4 (Surr)	117		62 - 137

Eurofins Cleveland

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (78-122)	DBFM (73-120)	BFB (56-136)	DCA (62-137)
240-227428-1	SWRW-MID-G14+36-25-06	97	113	87	124
240-227428-2	SWRW-MID-G11+59-25-06	100	113	93	117
240-227428-3	SWRW-MID-G8+74-25-06	98	107	89	114
240-227428-4	SWRW-DUP001-25-06	96	106	90	119
240-227428-5	SWRW-MID-G5+95-25-06	95	109	92	122
240-227428-6	SWRW-MID-G2+93-25-06	98	110	91	123
240-227428-7	SWRW-MID-N14-25-06	96	103	91	116
240-227428-8	SWRW-MID-N13-25-06	100	107	90	118
240-227428-9	SWRW-MID-N12-25-06	100	109	93	119
240-227428-10	EQUIPMENT BLANK	97	108	88	121
240-227428-11	TRIP BLANK	97	103	90	120
LCS 240-661506/4	Lab Control Sample	101	109	96	117
MB 240-661506/7	Method Blank	97	106	87	117

Surrogate Legend

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Client Sample ID: SWRW-MID-G14+36-25-06

Lab Sample ID: 240-227428-1

Date Collected: 06/24/25 10:35

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 15:16

Client Sample ID: SWRW-MID-G11+59-25-06

Lab Sample ID: 240-227428-2

Date Collected: 06/24/25 11:15

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 15:40

Client Sample ID: SWRW-MID-G8+74-25-06

Lab Sample ID: 240-227428-3

Date Collected: 06/24/25 11:35

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 16:04

Client Sample ID: SWRW-DUP001-25-06

Lab Sample ID: 240-227428-4

Date Collected: 06/24/25 00:00

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 16:27

Client Sample ID: SWRW-MID-G5+95-25-06

Lab Sample ID: 240-227428-5

Date Collected: 06/24/25 12:00

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 16:50

Client Sample ID: SWRW-MID-G2+93-25-06

Lab Sample ID: 240-227428-6

Date Collected: 06/24/25 12:20

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 17:14

Client Sample ID: SWRW-MID-N14-25-06

Lab Sample ID: 240-227428-7

Date Collected: 06/24/25 12:45

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 17:37

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12573440-AO31, Eckles

Job ID: 240-227428-1

Client Sample ID: SWRW-MID-N13-25-06

Lab Sample ID: 240-227428-8

Date Collected: 06/24/25 13:02

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 18:00

Client Sample ID: SWRW-MID-N12-25-06

Lab Sample ID: 240-227428-9

Date Collected: 06/24/25 13:22

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 18:23

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 240-227428-10

Date Collected: 06/24/25 00:00

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 18:46

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-227428-11

Date Collected: 06/24/25 00:00

Matrix: Water

Date Received: 06/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	661506	LEE	EET CLE	06/26/25 19:09

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: 12573440-AO31, Eckles

Job ID: 240-227428-1

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
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
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	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-15-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Eurofins Cleveland

180 S. Van Buren Avenue

Barberton, OH 44203

Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

MICHIGAN
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Environment Testing

Client Information		Sampler: <u>Dylan Harter</u>		Lab PM: <u>Heckler, Denise D</u>		Carrier Tracking No(s):		COC No: <u>240-134297-46195.1</u>	
Client Contact: <u>Mr. James Abston</u>		Phone: <u>(517) 612-7641</u>		E-Mail: <u>Denise.Heckler@et.eurofinsus.com</u>		State of Origin:		Page: <u>Page 1 of 2</u>	
Company: <u>GHD Services Inc.</u>		PWSID:		Analysis Requested					
Address: <u>26850 Haggerty Rd.</u>		Due Date Requested: <u>6/26/2025</u>		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8260B - VOCs Site CVOC List					
City: <u>Farmingington Hills</u>		TAT Requested (days): <u>2 days</u>							
State, Zip: <u>MI, 48331</u>		Compliance Project: ☐ Yes ☐ No							
Phone:		PO #: <u>Purchase Order Requested</u>							
Email: <u>james.abston@ghd.com</u> / <u>j.crum@hampmatnews.com</u>		WO #: <u>12573440</u>							
Project Name: <u>12573440-AQ31, Eckles</u>		Project #: <u>24005880</u>		Total Number of containers					
Site: <u>12573440-T05Y25.03a</u>		SSOW#: <u>12573440-T05Y25.03a</u>							
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Water, Solid, Sewage, Oil, BT=Tissue, A=Air, DW=Drinking Water)	
								Preservation Code: <u>A</u>	
<u>SWRW-MID-G14+36-25-06</u>		<u>6/24/25</u>		<u>10:35</u>		<u>G</u>		<u>Water</u>	
<u>SWRW-MID-G11+59-25-06</u>		<u>6/24/25</u>		<u>11:15</u>		<u>G</u>		<u>Water</u>	
<u>SWRW-MID-G8+74-25-06</u>		<u>6/24/25</u>		<u>11:35</u>		<u>G</u>		<u>Water</u>	
<u>SWRW-Dup 001-25-06</u>		<u>6/24/25</u>		<u>—</u>		<u>G</u>		<u>Water</u>	
<u>SWRW-MID-G5+95-25-06</u>		<u>6/24/25</u>		<u>12:00</u>		<u>G</u>		<u>Water</u>	
<u>SWRW-MID-G2+93-25-06</u>		<u>6/24/25</u>		<u>12:20</u>		<u>G</u>		<u>Water</u>	
<u>SWRW-MID-N14-25-06</u>		<u>6/24/25</u>		<u>12:45</u>		<u>G</u>		<u>Water</u>	
<u>SWRW-MID-N13-25-06</u>		<u>6/24/25</u>		<u>13:02</u>		<u>G</u>		<u>Water</u>	
<u>SWRW-MID-N12-25-06</u>		<u>6/24/25</u>		<u>13:22</u>		<u>G</u>		<u>Water</u>	
<u>Equipment Blank</u>		<u>6/24/25</u>		<u>—</u>		<u>G</u>		<u>Water</u>	
<u>Trip Blank</u>		<u>6/24/25</u>		<u>—</u>		<u>G</u>		<u>Water</u>	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months									
Deliverable Requested: I, II, III, IV, Other (specify) <u>II</u>									
Special Instructions/QC Requirements:									
Empty Kit Relinquished by: <u>Dylan Harter</u>		Date: <u>6/24/25</u>		Time: <u>1412</u>		Method of Shipment:			
Relinquished by: <u>[Signature]</u>		Date/Time: <u>6/24/25 1412</u>		Company: <u>HMA</u>		Received by: <u>[Signature]</u>		Date/Time: <u>6/24/25 1413</u>	
Relinquished by: <u>[Signature]</u>		Date/Time: <u>6/24/25 1445</u>		Company: <u>ETA</u>		Received by: <u>JIMOROSKO</u>		Date/Time: <u>6/25/25 8W</u>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					

Eurofins - Cleveland Sample Receipt Form/Narrative		Login # _____	
Barberton Facility		Cooler unpacked by: _____	
Client <u>AHD</u>	Site Name _____	Cooler Received on <u>08/21/25</u>	
Cooler Received on <u>08/21/25</u>	Opened on <u>08/21/25</u>	<u>JMOROSKO</u>	
FedEx: 1 st Grd Exp UPS FAS Waypoint	Client Drop Off	Eurofins Courier	Other _____
Receipt After-hours Drop-off Date/Time _____		Storage Location _____	
Eurofins Cooler # <u>EC</u>	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	Other _____	
1 Cooler temperature upon receipt ☒ See Multiple Cooler Form			
IR GUN # <u>17</u> (CF <u>TD 2</u> °C)		Observed Cooler Temp _____ °C	Corrected Cooler Temp _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u> Tests that are not checked for pH by Receiving VOA's Oil and Grease TOC			
-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 ☒ NA			
4. Did custody papers accompany the sample(s)? Yes ☒ No ☒ NA			
5 Were the custody papers relinquished & signed in the appropriate place? Yes ☒ No ☒ NA			
6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes ☒ No ☒ NA			
7 Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☒ NA			
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes ☒ No ☒ NA			
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 ☒ NA			
10 Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☒ NA			
11 Sufficient quantity received to perform indicated analyses? Yes ☒ No ☒ NA			
12 Are these work share samples and all listed on the COC? Yes ☒ No ☒ NA			
13 Were all preserved sample(s) at the correct pH upon receipt? Yes ☒ No ☒ NA			
14 Were VOA's on the COC? Yes ☒ No ☒ NA			
15 Were air bubbles >6 mm in any VOA vials? Yes ☒ No ☒ NA			
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # <u>63271</u> Yes ☒ No ☒ NA			
17 Was a LL Hg or Me Hg trip blank present? Yes ☒ No ☒ NA			
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____			
Concerning _____			
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page		Labeled by: _____	
		Labels Verified 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 _____			

Login #

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

[illegible]

Temperature readings							
Client Sample ID	Lab ID	Container Type	Container	Preservation	Preservation		
			pH	Temp	Added	Lot Number	
SWRW-MID-G14+36-25-06	240-227428-A-1	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G14+36-25-06	240-227428-B-1	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G14+36-25-06	240-227428-C-1	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW MID-G11+59-25-06	240-227428-A-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G11+59-25-06	240-227428-B-2	Voa Vial 40ml Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G11+59-25-06	240-227428-C-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G8+74-25-06	240-227428-A-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW MID-G8+74-25-06	240-227428-B-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G8+74-25-06	240-227428-C-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW DUP001-25-06	240-227428-A-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-DUP001-25-06	240-227428-B-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-DUP001-25-06	240-227428-C-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G5+95-25-06	240-227428-A-5	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW MID-G5+95-25-06	240-227428-B-5	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G5+95-25-06	240-227428-C-5	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G2+93-25-06	240-227428-A-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G2+93-25-06	240-227428-B-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-G2+93-25-06	240-227428-C-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-N14-25-06	240-227428-A-7	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW MID-N14-25-06	240-227428-B-7	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-N14-25-06	240-227428-C-7	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-N13-25-06	240-227428-A-8	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-N13-25-06	240-227428-B-8	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-N13-25-06	240-227428-C-8	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-N12 25-06	240-227428-A-9	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-N12-25-06	240-227428-B-9	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
SWRW-MID-N12-25-06	240-227428-C-9	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
EQUIPMENT BLANK	240-227428-A-10	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
EQUIPMENT BLANK	240-227428-B-10	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
EQUIPMENT BLANK	240-227428-C-10	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	
TRIP BLANK	240-227428-A-11	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____	