



January 15, 2024

Ms. Lindley Campbell  
Oil Control Program  
Maryland Department of the Environment  
1800 Washington Blvd, Suite 620  
Baltimore, Maryland 21230

RE: **FOURTH QUARTER 2023 MONITORING REPORT**  
MDE Case No. 2021-0221-HA  
High's Store No. 86  
3711 Federal Hill Road, Jarrettsville, Harford County, Maryland

Dear Ms. Campbell:

Groundwater & Environmental Services, Inc. (GES), on behalf of High's of Baltimore, LLC (High's), is pleased to submit the attached Fourth Quarter 2023 Monitoring Report for the above-mentioned facility. For the Fourth Quarter 2023 monitoring period, the following activities were completed:

- gauging of monitoring wells MW-1, MW-3, and MW-4 was completed on November 30, 2023 (tank field observation pipes were gauged as dry this day);
- quarterly sampling of monitoring wells MW-1, MW-3, and MW-4 was completed on November 30, 2023; and,
- quarterly sampling of the onsite potable well for 3711 Federal Hill Road was completed on November 30, 2023.

For the Fourth Quarter 2023 monitoring event, GES collected the groundwater samples from the three onsite monitoring wells using low-flow sampling techniques. The low-flow sampling logs generated for the event are included with the field documentation as **Appendix A**. The gauging data from the event was incorporated with the historical gauging database for the Site and included as **Table 1**. A Site Location Map, Local Area Map, Site Map, and Groundwater Monitoring Map for the November 30, 2023 event are attached as **Figures 1** through **4**, respectively.

In compliance with the January 27, 2021 MDE directive, GES submitted the November 30, 2023 monitoring well samples for an analysis of full suite Volatile Organic Compounds (VOCs) with naphthalene and oxygenates, including methyl tert-butyl ether (MTBE), via USEPA Method 8260C. The monitoring well samples were also analyzed for Total Petroleum Hydrocarbons–Gasoline Range Organics (TPH-GRO) and Total Petroleum Hydrocarbons– Diesel Range Organics (TPH-DRO) via USEPA Method 8015D. The laboratory selected for the analysis was Eurofins Lancaster of Lancaster, Pennsylvania (Eurofins Lancaster).

The monitoring well analytical results from the November 2023 event were tabulated with the historical analytical database and included as **Table 1**. A copy of the Eurofins Lancaster analytical report is included as **Appendix B**.



GES has also prepared and attached a report outline for the November 30, 2023 monitoring event that is similar in format to previous monitoring reports submitted for the case.

A summary of benzene, MTBE, and TPH concentration results from the November 30, 2023 monitoring event is presented below.

**Table A – Analytical Summary – November 30, 2023**

Well	Benzene (µg/L)	MTBE (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-1	ND (0.10)	ND (0.08)	ND (23)	ND (55)
MW-3	ND (0.10)	ND (0.08)	ND (23)	ND (56)
MW-4	ND (0.10)	9.1	ND (23)	ND (56)

ND (0.10) = Non-Detect to the Method Detection Limit (MDL #)  
 µg/L = Micrograms per Liter

Review of **Table A** indicates the following:

- There was one detection of MTBE for the MW-4 groundwater sample at 9.1 µg/L which is below the MDE groundwater action level for the constituent at 20 µg/L.

Updated benzene and MTBE concentration hydrographs for monitoring wells MW-1, MW-3, and MW-4 are attached as **Appendix C**.

Further review of **Table 1** and **Appendix B** demonstrates detections of the following fuel oxygenate constituents at well MW-4:

- Di-isopropyl ether (DIPE) was detected at a concentration of 0.70 µg/L. Currently, there is no established MDE groundwater cleanup standard for DIPE.
- Tert-butyl alcohol (TBA) was detected at an estimated concentration of 3.5 J µg/L. There is no established MDE groundwater cleanup standard for TBA.

Per MDE directive requirements, the onsite potable supply well for the High's #86 facility was also sampled during the Fourth Quarter 2023 period, which occurred on November 30, 2023. The potable water sample was collected from the store's deli sink. The onsite potable well sample was analyzed by Eurofins Lancaster for a full suite VOC list with naphthalene and oxygenates, including MTBE, via USEPA Method 524.2. A copy of the Eurofins Lancaster analytical report for the potable well sample is included in **Appendix B**. The analytical results from the November 30, 2023 onsite potable sample were tabulated with the historical potable analytical database and included as **Table 2**.

Review of **Appendix B** and **Table 2** demonstrates an estimated MTBE concentration of 0.10 J for the onsite potable sample collected November 30, 2023. No remaining, analyzed VOC constituents were detected for the onsite potable water sample collected for the report period.



If you have any questions or would like additional information, please contact the undersigned at (800) 220-3606, extension 3726 or Herb Meade at (410) 261-5450.

Sincerely,

A handwritten signature in black ink, appearing to read 'Pete Reichardt'. The signature is fluid and cursive, with a large, sweeping flourish at the end.

Pete Reichardt  
Senior Project Manager

Enclosures

- c: Ellen Jackson – MDE (3 additional copies, e-copy)
- Herb Meade – High's of Baltimore (e-copy)
- John Resline – Harford County Health Dept. (Hardcopy)
- File – GES, MD (PSID 996643)



**Consultant Contact:** Pete Reichardt, Groundwater & Environmental Services, Inc.  
Greg Beal, Advanced Environmental Concepts, Inc.

**Client Contact:** Herb Meade, High's of Baltimore

**Site Use:** Active commercial store and service station that operates two 12,000-gallon compartmentalized gasoline/diesel USTs.

**Surrounding Area:** Residential, commercial, and agricultural

**Sensitive Receptors:** Potable Wells: This site is served by one onsite supply well. The surrounding commercial and residential properties are all served by potable wells.  
Schools/Daycare/Hospitals: Jarrettsville Elementary (0.5 mile to SW), Salem Lutheran Child Care (0.55 mile to WSW)  
Surface Water/Wetlands: East Branch Winters Run (615 ft to N)

**Date of Most Recent Regulatory Directive Correspondence:** November 2, 2021 – MDE extension granted for submission of Third Quarter 2023 Monitoring Report by November 20, 2023.

**REGULATORY INTERACTION**

Agency: Maryland Department of the Environment – Oil Control Program  
Agency Contact: Ellen Jackson, Lindley Campbell  
MDE Case #: 2021-0221-HA

**SCHEDULE OF ROUTINE ACTIVITIES**

**Groundwater Sampling:** Three monitoring wells: MW-1, MW-3, and MW-4; and two tank field observation pipes

**Sampling Frequency:** Revised to quarterly per 1/27/21 directive

**Sampling Methodology:** Low-Flow Sampling Procedures

**Laboratory Analyses:** Full-suite volatile organic compounds (VOCs), including oxygenates and naphthalene, via EPA Method 8260C and Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO) and TPH –Diesel Range Organics (DRO) via EPA Method 8015D.



## **GROUNDWATER DATA SUMMARY**

Groundwater Sampling Date:	November 30, 2023
# of Wells / # Sampled (including TF wells):	5 / 3 (TF wells not sampled due to insufficient water)
Groundwater Elevation Range:	626.71 feet (MW-1) to 626.97 feet (MW-4)
Maximum Benzene:	Non-Detect (MDL=0.10 µg/L)
Maximum Toluene:	Non-Detect (MDL=0.08 µg/L)
Maximum Ethylbenzene:	Non-Detect (MDL=0.08 µg/L)
Maximum Total Xylenes:	Non-Detect (MDL=0.07 µg/L)
Maximum Naphthalene:	Non-Detect (MDL=0.08 µg/L)
Maximum MTBE:	9.1 µg/L (MW-4)
Maximum TPH-GRO:	Non-Detect (MDL=23 µg/L)
Maximum TPH-DRO:	Non-Detect (MDL=55-56 µg/L)

µg/L = micrograms per liter  
MTBE = Methyl tert-butyl ether  
TF = Tank field wells/pipes  
MDL = Method Detection Limit  
TPH-GRO = Total Petroleum Hydrocarbons Gasoline Range Organics  
TPH-DRO = Total Petroleum Hydrocarbons Diesel Range Organics

## **ONSITE POTABLE WELL DATA SUMMARY**

Potable Supply Sampling Date:	November 30, 2023
Benzene Concentration:	Non-Detect to MDL of 0.10 µg/L
MTBE Concentration:	0.10 J µg/L

“J” = estimated analytical value existing between Method Detection Limit (MDL) and the Reporting Limit (RL)

## **FUTURE ACTIVITIES – First Quarter 2024**

- GES to conduct a First Quarter 2024 groundwater monitoring event with onsite potable supply well sampling



## **ATTACHMENTS**

### **FIGURES**

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Figure 1	Site Location Map
Figure 2	Local Area Map
Figure 3	Site Map
Figure 4	Groundwater Monitoring Map, November 30, 2023

### **TABLES**

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Table 1	Historical Gauging and Analytical Summary
Table 2	Historical Onsite Potable Well Analytical Summary

### **APPENDIX**

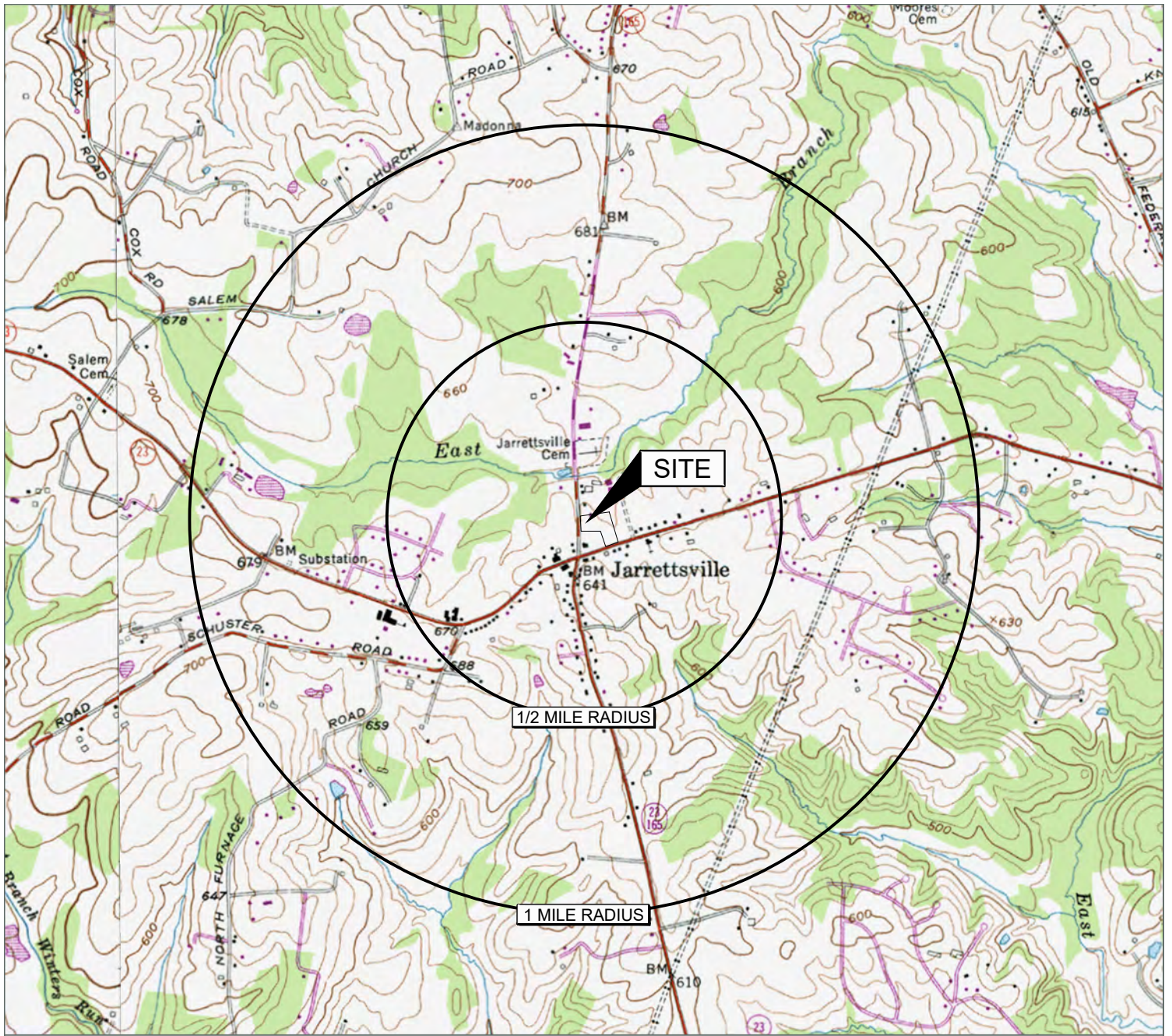
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Appendix A	Field Documentation
Appendix B	Laboratory Analytical Reports and Chain-of-Custody Documentation
Appendix C	Concentration Hydrographs

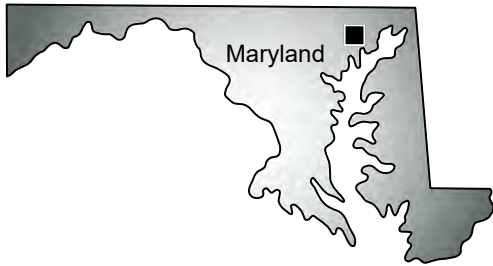
## Figures

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Source:  
 USGS 7.5 Minute Series  
 Topographic Quadrangle  
 Jarrettsville, Maryland  
 Contour Interval = 20 Feet



Quadrangle Location

Site Location Map

High's of Baltimore  
 Store #86  
 3711 Federal Hill Road  
 Jarrettsville, Maryland

Drawn  
 E.V.  
 Designed  
 E.V.  
 Approved  
 P.R.

Date  
 01/15/21  
 Figure  
 1



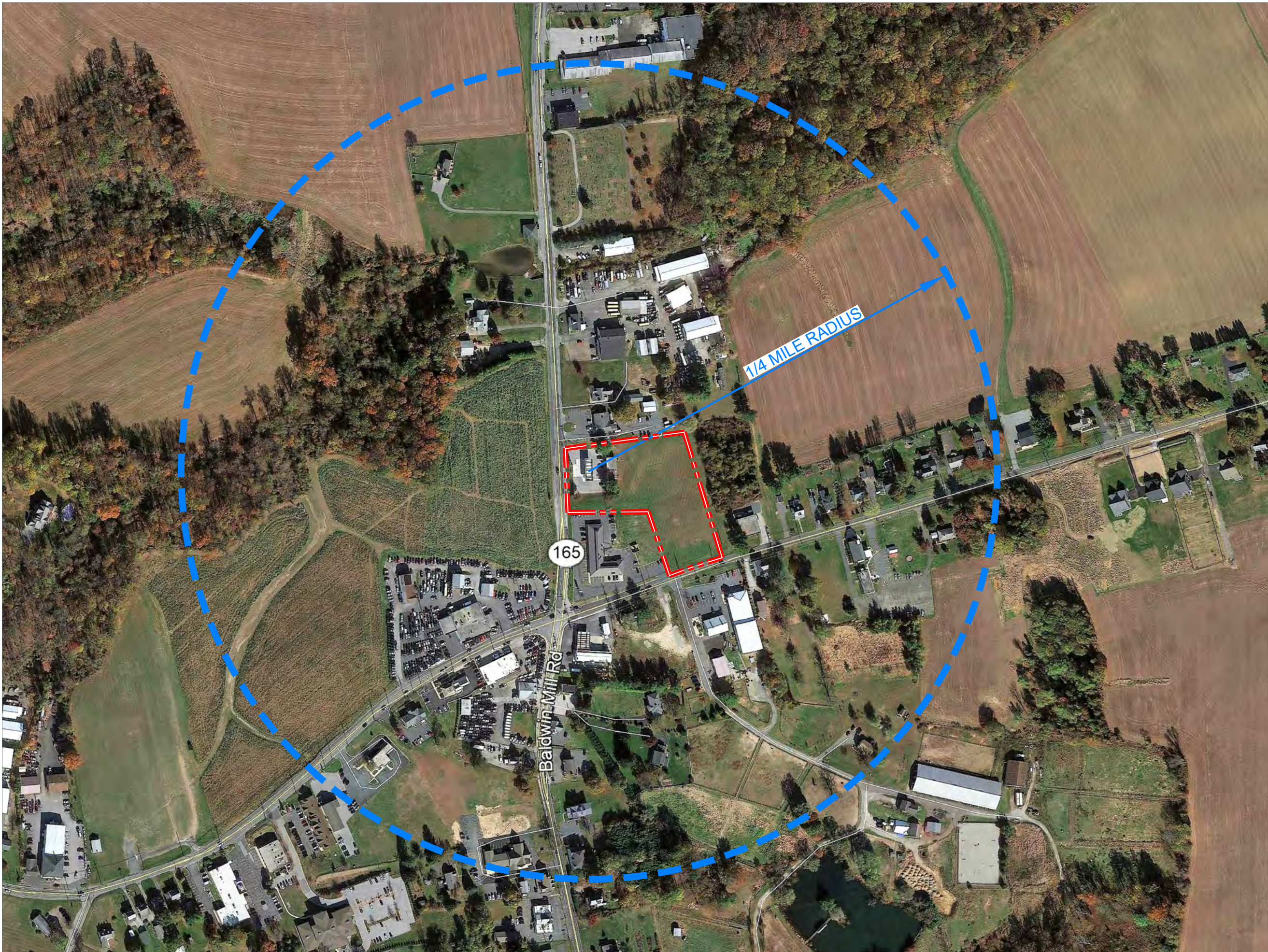
Scale In Feet



Groundwater & Environmental Services, Inc.



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**LEGEND**

==== PROPERTY BOUNDARY (APPROXIMATE)

Source:  
©2020 Google Earth Imagery  
November 5, 2019.  
Harford County WebGIS V3.0.

**Local Area Map**

High's of Baltimore  
Store #86  
3711 Federal Hill Road  
Jarrettsville, Maryland

Drawn  
E.V.  
Designed  
P.R.  
Approved  
P.R.

Date  
01/15/21  
Figure  
2







Scale In Feet (Approximate)



M:\Graphics\0400-Crofton\Misc\Carroll Fuels Jarrettsville (3711 Federal Hill Road)\Jarrettsville (3711 Federal Hill Road) SIM.dwg, B-30, WShea



**LEGEND**

-  PROPERTY BOUNDARY (APPROXIMATE)
-  MONITORING WELL
-  TANK FIELD WELL
-  POTABLE SUPPLY WELL

**Site Map**

High's of Baltimore  
Store #86  
3711 Federal Hill Road  
Jarrettsville, Maryland

Drawn  
W.G.S.  
Designed  
P.R.  
Approved  
P.R.

Date  
7/18/22  
Figure  
3



Scale In Feet  
0 (Approximate) 30



M:\Graphics\0400-Crofton\Misc\Carroll Fuels Jarrettsville (3711 Federal Hill Road)\Jarrettsville (3711 Federal Hill Road) SM.dwg, B-30, E.Vega



MW-4	
626.97	
B	ND<0.10
M	9.1
GRO	ND<23
DRO	ND<56

MW-1	
626.71	
B	ND<0.10
M	ND<0.08
GRO	ND<23
DRO	ND<55

MW-3	
626.93	
B	ND<0.10
M	ND<0.08
GRO	ND<23
DRO	ND<56

**LEGEND**

- PROPERTY BOUNDARY (APPROXIMATE)
  - MONITORING WELL
  - TANK FIELD WELL
  - POTABLE SUPPLY WELL
- | MW-1   |         |
|--------|---------|
| 626.71 |         |
| B      | ND<0.10 |
| M      | ND<0.08 |
| GRO    | ND<23   |
| DRO    | ND<55   |
- WELL IDENTIFICATION
  - GROUNDWATER ELEVATION (ft AMSL)
  - BENZENE CONCENTRATION (ug/L)
  - MTBE CONCENTRATION (ug/L)
  - GRO CONCENTRATION (ug/L)
  - DRO CONCENTRATION (ug/L)
- ug/L MICROGRAMS PER LITER
  - MTBE METHYL *tert*-BUTYL ETHER
  - TPH TOTAL PETROLEUM HYDROCARBON
  - GRO GASOLINE RANGE ORGANICS
  - DRO DIESEL RANGE ORGANICS
  - <# WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN
- GROUNDWATER CONTOUR (ft AMSL)
  - DASHED WHERE INFERRED

Groundwater Monitoring Map  
November 30, 2023

High's of Baltimore  
Store #86  
3711 Federal Hill Road  
Jarrettsville, Maryland

Drawn E.V. Designed P.A.P. Approved	Date 12/18/23 Figure 4
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Scale In Feet  
0 (Approximate) 30

Groundwater & Environmental Services, Inc.

# Tables

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Table 1

## HISTORICAL GAUGING AND ANALYTICAL SUMMARY

High's Store No. 86  
3711 Federal Hill Road  
Jarrettsville, MD

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Bottom (Measured Depth) (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Diisopropyl ether (µg/L)	tert-Amyl methyl ether (µg/L)	tert-Butyl alcohol (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Chloromethane (µg/L)	Ethyl tert-butyl ether (µg/L)	Isopropylbenzene (µg/L)	Methylene chloride (µg/L)	p-Isopropyltoluene (µg/L)
<b>GW Clean-up Standards*</b>						<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>20</b>	<b>0.17</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>	<b>47</b>	<b>47</b>	<b>19</b>	<b>NL</b>	<b>45</b>	<b>5.0</b>	<b>NL</b>
MW-1	7/13/2005	642.26	11.35	630.91	-	ND	ND	ND	ND	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/16/2005	642.26	12.41	629.85	-	ND	ND	ND	ND	43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	6/15/2006	642.26	12.83	629.43	-	ND	ND	ND	ND	62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	1/15/2007	642.26	11.19	631.07	-	ND	ND	ND	ND	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	5/17/2007	642.26	11.22	631.04	-	ND	ND	2.0	ND	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	9/26/2007	642.26	13.11	629.15	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/13/2007	642.26	14.81	627.45	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	3/31/2008	642.26	12.68	629.58	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	6/30/2008	642.26	12.74	629.52	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	9/24/2008	642.26	14.68	627.58	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/30/2008	642.26	14.36	627.90	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	3/12/2009	642.26	15.79	626.47	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	5/6/2009	642.26	12.69	629.57	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	9/14/2009	642.26	12.69	629.57	-	ND	ND	ND	ND	1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/14/2009	642.26	10.01	632.25	-	ND	ND	ND	ND	632.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	3/26/2010	642.26	8.90	633.36	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	6/29/2010	642.26	11.92	630.34	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	10/16/2010	642.26	11.55	630.71	-	ND	ND	ND	ND	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	1/31/2011	642.26	14.39	627.87	-	ND	ND	ND	ND	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	4/17/2011	642.26	11.33	630.93	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	3/19/2012	642.26	12.21	630.05	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	6/4/2012	642.26	11.97	630.29	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	9/28/2012	642.26	14.44	627.82	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/14/2012	642.26	14.82	627.44	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	3/18/2013	642.26	12.14	630.12	-	ND	ND	ND	ND	630.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	7/5/2013	642.26	12.93	629.33	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	9/27/2013	642.26	14.85	627.41	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	1/8/2014	642.26	13.08	629.18	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	3/12/2014	642.26	-	-	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	6/30/2014	642.26	10.17	632.09	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	9/4/2014	642.26	11.45	630.81	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/16/2014	642.26	15.82	626.44	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/9/2015	642.26	11.83	630.43	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	10/3/2016	642.26	13.65	628.61	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	10/6/2017	642.26	13.94	628.32	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	10/2/2018	642.26	8.85	633.41	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	10/25/2019	642.26	14.80	627.46	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	10/9/2020	642.26	12.83	629.43	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-1	12/22/2020	642.26	12.63	629.63	28.60	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.20)	ND(1.1)	-	-	0.20 J	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-1	02/15/2021	642.26	12.27	629.99	28.60	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.20)	ND(1.1)	42 J	1,200	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-1	05/24/2021	642.26	12.50	629.76	-	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.20)	ND(1.1)	ND(23)	920	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	0.055 J
MW-1	08/25/2021	642.26	13.85	628.41	-	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.20)	ND(1.1)	ND(23)	ND(58)	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-1	12/06/2021	642.26	14.77	627.49	-	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.2)	ND(1.1)	ND(23)	ND(57)	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-1	03/09/2022	642.26	14.56	627.70	-	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.20)	ND(1.1)	ND(23)	ND(58)	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-1	06/22/2022	642.26	13.17	629.09	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-1	09/16/2022	642.26	14.25	628.01	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-1	12/27/2022	642.26	11.97	630.29	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(58)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)

Table 1

## HISTORICAL GAUGING AND ANALYTICAL SUMMARY

High's Store No. 86  
3711 Federal Hill Road  
Jarrettsville, MD

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Bottom (Measured Depth) (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Diisopropyl ether (µg/L)	tert-Amyl methyl ether (µg/L)	tert-Butyl alcohol (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Chloromethane (µg/L)	Ethyl tert-butyl ether (µg/L)	Isopropylbenzene (µg/L)	Methylene chloride (µg/L)	p-Isopropyltoluene (µg/L)
GW Clean-up Standards*						5.0	1,000	700	10,000	20	0.17	NL	NL	NL	47	47	19	NL	45	5.0	NL
MW-1	03/09/2023	642.26	12.73	629.53	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-1	06/22/2023	642.26	14.46	627.80	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	66 J B	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-1	09/22/2023	642.26	15.37	626.89	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(58)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.20)	ND(0.08)
MW-1	11/30/2023	642.26	15.55	626.71	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(55)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.20)	ND(0.08)
MW-3	07/12/2005	644.13	13.88	630.25	-	ND	ND	ND	ND	14.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	12/16/2005	644.13	14.69	629.44	-	ND	ND	ND	ND	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	06/15/2006	644.13	14.50	629.63	-	ND	ND	ND	ND	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	01/15/2007	644.13	13.17	630.96	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	05/17/2007	644.13	13.22	630.91	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	09/26/2007	644.13	15.22	628.91	-	ND	ND	ND	ND	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	12/13/2007	644.13	16.61	627.52	-	ND	ND	ND	ND	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	03/31/2008	644.13	14.47	629.66	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	06/30/2008	644.13	14.19	629.94	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	09/24/2008	644.13	16.13	628.00	-	ND	ND	ND	ND	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	12/30/2008	644.13	16.94	627.19	-	ND	ND	ND	ND	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	03/12/2009	644.13	16.26	627.87	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	05/06/2009	644.13	15.35	628.78	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	09/14/2009	644.13	15.82	628.31	-	ND	ND	ND	ND	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	12/14/2009	644.13	12.96	631.17	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	03/26/2010	644.13	10.64	633.49	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	06/29/2010	644.13	13.89	630.24	-	ND	ND	ND	ND	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	10/16/2010	644.13	19.55	624.58	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	01/31/2011	644.13	15.77	628.36	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	04/17/2011	644.13	13.20	630.93	-	ND	1.0	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	03/19/2012	644.13	14.72	629.41	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	06/04/2012	644.13	19.47	624.66	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	09/28/2012	644.13	16.83	627.30	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	12/14/2012	644.13	15.64	628.49	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	03/18/2013	644.13	14.18	629.95	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	07/05/2013	644.13	14.89	629.24	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	09/27/2013	644.13	16.26	627.87	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	01/08/2014	644.13	14.59	629.54	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	03/12/2014	644.13	13.32	630.81	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	06/30/2014	644.13	12.39	631.74	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	09/04/2014	644.13	14.29	629.84	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	12/16/2014	644.13	15.60	628.53	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	12/09/2015	644.13	14.77	629.36	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	10/03/2016	644.13	16.16	627.97	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	10/06/2017	644.13	15.18	628.95	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	10/02/2018	644.13	10.62	633.51	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	10/25/2019	644.13	16.10	628.03	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	10/09/2020	644.13	16.52	627.61	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND

Table 1

## HISTORICAL GAUGING AND ANALYTICAL SUMMARY

High's Store No. 86  
3711 Federal Hill Road  
Jarrettsville, MD

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Bottom (Measured Depth) (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Diisopropyl ether (µg/L)	tert-Amyl methyl ether (µg/L)	tert-Butyl alcohol (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Chloromethane (µg/L)	Ethyl tert-butyl ether (µg/L)	Isopropylbenzene (µg/L)	Methylene chloride (µg/L)	p-Isopropyltoluene (µg/L)
GW Clean-up Standards*						5.0	1,000	700	10,000	20	0.17	NL	NL	NL	47	47	19	NL	45	5.0	NL
MW-3	12/22/2020	644.13	14.73	629.40	29.04	ND(0.05)	ND(0.07)	ND(0.06)	ND<0.15	ND(0.05)	ND(0.05)	ND(0.05)	ND<0.20	ND(1.1)	-	-	0.12 J	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-3	02/15/2021	644.13	13.67	630.46	29.04	ND(0.05)	ND(0.07)	ND(0.06)	ND<0.15	ND(0.05)	ND(0.05)	ND(0.05)	ND<0.20	ND(1.1)	ND(23)	ND(59)	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-3	05/24/2021	644.13	14.02	630.11	-	ND(0.05)	ND(0.07)	ND(0.06)	ND<0.15	ND(0.05)	ND(0.05)	ND(0.05)	ND<0.20	ND(1.1)	ND(23)	ND(56)	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-3	08/25/2021	644.13	16.02	628.11	-	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.20)	ND(1.1)	ND(23)	58 J	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-3	12/06/2021	644.13	16.24	627.89	-	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.2)	ND(1.1)	ND(23)	ND(57)	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-3	03/09/2022	644.13	16.16	627.97	-	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.20)	ND(1.1)	ND(23)	ND(57)	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)
MW-3	06/22/2022	644.13	14.65	629.48	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(58)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-3	09/16/2022	644.13	16.17	627.96	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(58)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-3	12/27/2022	644.13	14.93	629.20	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(56)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-3	03/09/2023	644.13	14.37	629.76	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-3	06/22/2023	644.13	16.06	628.07	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)
MW-3	09/22/2023	644.13	17.00	627.13	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.20)	ND(0.08)
MW-3	11/30/2023	644.13	17.20	626.93	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(56)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.20)	ND(0.08)
MW-4	09/26/2007	645.00	15.67	629.33	-	ND	ND	ND	ND	320,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	12/13/2007	645.00	17.53	627.47	-	ND	ND	ND	ND	57,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	03/31/2008	645.00	15.34	629.66	-	ND	ND	ND	ND	12,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	06/30/2008	645.00	15.28	629.72	-	ND	ND	ND	ND	55,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	09/24/2008	645.00	17.35	627.65	-	ND	ND	ND	ND	310,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	12/30/2008	645.00	16.94	628.06	-	ND	ND	ND	ND	49,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	03/12/2009	645.00	17.11	627.89	-	ND	ND	ND	ND	13,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	05/06/2009	645.00	16.09	628.91	-	ND	ND	ND	ND	19,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	09/14/2009	645.00	16.30	628.70	-	ND	ND	ND	ND	84,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	12/14/2009	645.00	13.68	631.32	-	ND	ND	ND	ND	520	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	03/26/2010	645.00	-	-	-	ND	ND	ND	ND	4,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	06/29/2010	645.00	-	-	-	ND	ND	ND	ND	160,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	10/06/2010	645.00	16.48	628.52	-	ND	ND	ND	ND	19,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	01/31/2011	645.00	16.82	628.18	-	ND	ND	ND	ND	58,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	04/17/2011	645.00	14.30	630.70	-	ND	ND	ND	ND	46,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	03/19/2012	645.00	15.72	629.28	-	88.1	24.8	ND	53.5	19,920	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	06/04/2012	645.00	15.96	629.04	-	94.1	20.5	30.1	23.6	43,560	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	09/28/2012	645.00	17.87	627.13	-	111	17.8	7.08	69.2	33,680	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	12/14/2012	645.00	16.58	628.42	-	ND	ND	ND	ND	8,140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	03/18/2013	645.00	15.08	629.92	-	ND	ND	ND	ND	1,920	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	07/05/2013	645.00	15.99	629.01	-	32.8	14.2	ND	ND	5,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	09/27/2013	645.00	17.36	627.64	-	70.5	5.28	ND	38.20	46,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	01/08/2014	645.00	15.38	629.62	-	ND	ND	ND	ND	63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	03/12/2014	645.00	14.13	630.87	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	06/30/2014	645.00	13.60	631.40	-	ND	ND	ND	ND	416	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	09/04/2014	645.00	15.54	629.46	-	86.0	ND	10.0	10.0	5,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	12/16/2014	645.00	16.49	628.51	-	ND	ND	ND	ND	83.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	12/09/2015	645.00	15.55	629.45	-	ND	ND	ND	ND	1,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	10/03/2016	645.00	17.22	627.78	-	90.4	ND	ND	ND	3,610	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	10/06/2017	645.00	16.20	628.80	-	ND	ND	ND	ND	164	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	10/02/2018	645.00	12.66	632.34	-	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	10/25/2019	645.00	17.10	627.90	-	235	ND	ND	ND	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	10/9/2020 <sup>A</sup>	645.00	16.57	628.43	-	139	ND	ND	ND	452	ND	128	ND	7,140	NA	NA	ND	ND<5	ND<5	ND<5	ND<5

Table 1

## HISTORICAL GAUGING AND ANALYTICAL SUMMARY

High's Store No. 86  
3711 Federal Hill Road  
Jarrettsville, MD

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Bottom (Measured Depth) (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Diisopropyl ether (µg/L)	tert-Amyl methyl ether (µg/L)	tert-Butyl alcohol (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Chloromethane (µg/L)	Ethyl tert-butyl ether (µg/L)	Isopropylbenzene (µg/L)	Methylene chloride (µg/L)	p-Isopropyltoluene (µg/L)	
<b>GW Clean-up Standards*</b>						<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>20</b>	<b>0.17</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>	<b>47</b>	<b>47</b>	<b>19</b>	<b>NL</b>	<b>45</b>	<b>5.0</b>	<b>NL</b>	
MW-4	11/19/2020 <sup>B</sup>	645.00	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4	11/20/2020 <sup>A</sup>	645.00	-	-	-	ND	ND	ND	ND	34.5	ND	ND	ND	169	ND	ND	ND	ND	ND	ND	ND	ND
MW-4	11/20/2020 <sup>B</sup>	645.00	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4	12/22/2020	645.00	15.54	629.46	24.30	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	1.6	ND(0.05)	0.19 J	ND(0.20)	2.6 J	-	-	0.13 J	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)	
MW-4	02/15/2021	645.00	14.73	630.27	24.30	16	ND(0.07)	ND(0.06)	0.23 J	35.0	0.060 J	18.0	1.6	1,100	300	ND(60)	0.38 J	0.63	0.057 J	0.11 J	0.35 J	
MW-4	05/24/2021	645.00	15.20	629.80	-	35	1.2	ND(0.12)	0.41 J	78	ND(0.10)	31.0	ND(0.40)	2,200	570	ND(57)	ND(0.12)	1.1	0.11 J	0.35 J	ND(0.10)	
MW-4	08/25/2021	645.00	17.10	627.90	-	45	2.0	ND(0.12)	0.88 J	130	0.23 J	38.0	4.5	3,100	700	130	ND(0.12)	1.7	0.16 J	0.58 J	ND(0.10)	
MW-4	12/06/2021	645.00	17.12	627.88	-	7.9	ND(0.07)	ND(0.06)	ND(0.15)	23	ND(0.05)	8.0	1.2	720	120	ND(57)	0.16 J	0.33 J	ND(0.05)	0.078 J	ND(0.05)	
MW-4	03/09/2022	645.00	16.84	628.16	-	ND(0.05)	ND(0.07)	ND(0.06)	ND(0.15)	0.20 J	ND(0.05)	ND(0.05)	ND(0.20)	ND(1.1)	ND(23)	ND(57)	ND(0.06)	ND(0.05)	ND(0.05)	ND(0.07)	ND(0.05)	
MW-4	06/22/2022	645.00	15.72	629.28	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	5.0	ND(0.08)	2.1	ND(0.20)	9.8 J	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)	
MW-4	09/16/2022	645.00	17.18	627.82	-	0.38 J	ND(0.08)	ND(0.08)	ND(0.07)	4.7	ND(0.08)	1.9	ND(0.20)	64	ND(23)	ND(58)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)	
MW-4	12/27/2022	645.00	15.71	629.29	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.20)	ND(3.0)	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)	
MW-4	03/09/2023	645.00	15.41	629.59	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	1.7	ND(0.08)	0.31 J	ND(0.20)	ND(3.0)	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)	
MW-4	06/22/2023	645.00	17.13	627.87	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	12	ND(0.08)	2.2	0.23 J	12	ND(23)	ND(57)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.10)	ND(0.08)	
MW-4	09/22/2023	645.00	17.97	627.03	-	1.2	ND(0.08)	ND(0.08)	ND(0.07)	23	ND(0.08)	5.3	0.70	150	69	ND(57)	ND(0.10)	0.18 J	ND(0.08)	ND(0.08)	ND(0.08)	
MW-4	11/30/2023	645.00	18.03	626.97	-	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.07)	9.1	ND(0.08)	0.70	ND(0.20)	3.5 J	ND(23)	ND(56)	ND(0.10)	ND(0.08)	ND(0.08)	ND(0.20)	ND(0.08)	
TF-1	12/22/2020	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	02/15/2021	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	05/24/2021	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	08/25/2021	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	12/06/2021	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	03/09/2022	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	06/22/2022	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	09/16/2022	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	12/27/2022	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	03/09/2023	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	06/22/2023	-	DRY	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	09/22/2023	-	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-1	11/30/2023	-	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	12/22/2020	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	02/15/2021	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	05/24/2021	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	08/25/2021	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	12/06/2021	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	03/09/2022	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	06/22/2022	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	09/16/2022	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	12/27/2022	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	03/09/2023	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	06/22/2023	-	DRY	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	09/22/2023	-	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-2	11/30/2023	-	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



## HISTORICAL GAUGING AND ANALYTICAL SUMMARY

High's Store No. 86  
3711 Federal Hill Road  
Jarrettsville, MD

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Bottom (Measured Depth) (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Diisopropyl ether (µg/L)	tert-Amyl methyl ether (µg/L)	tert-Butyl alcohol (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Chloromethane (µg/L)	Ethyl tert-butyl ether (µg/L)	Isopropylbenzene (µg/L)	Methylene chloride (µg/L)	p-Isopropyltoluene (µg/L)
<b>GW Clean-up Standards*</b>						<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>20</b>	<b>0.17</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>	<b>47</b>	<b>47</b>	<b>19</b>	<b>NL</b>	<b>45</b>	<b>5.0</b>	<b>NL</b>

## Notes:

\* GW Cleanup Standards are the Maryland Department of the Environment (MDE) Groundwater Clean-up Standards for Type I and II Aquifers

Analytical and gauging data prior to December 2020 was obtained by Advanced Environmental Concepts, Inc.

11/19/20<sup>A</sup> = sample collected during recharge

11/19/20<sup>B</sup> = sample collected after recharge

NA = analytical data not available at the time of this report

ND<# = Non-detect less than the Method Detection Limit of #

ND (#) = Not detected, concentration below Method Detection Limit (#)

µg/L = micrograms per liter

MTBE = Methyl Tertiary Butyl Ether

BTEX = Benzene, toluene, ethylbenzene, xylenes

PID = Photoionization detector

ppm = parts per million

ft = feet

- = Not analyzed

J = Detected between the Method Detection Limit (MDL) and Reporting Limit (RL); therefore the result is an estimated value.

B = Compound was found in the blank and sample

NL = No Limit established

TPH-GRO = Total Petroleum Hydrocarbons-Gasoline Range Organics

TPH-DRO = Total Petroleum Hydrocarbons-Diesel Range Organics

Table 2

## HISTORICAL POTABLE WELL ANALYTICAL SUMMARY

High's Store No. 86  
3711 Federal Hill Road  
Jarrettsville, MD

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Diisopropyl ether (µg/L)	tert-Amyl methyl ether (µg/L)	tert-Butyl alcohol (µg/L)	Ethyl tert-butyl ether (µg/L)
<b>GW Clean-up Standards*</b>		<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>20</b>	<b>0.17</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>
3711-Federal Hill (High's)	3/18/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	7/5/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	9/27/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	1/8/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	6/30/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	12/16/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	12/9/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	10/3/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	10/6/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	10/2/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	10/25/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10
	10/9/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10
	2/15/2021	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	0.10 J	ND(0.20)	ND(0.10)	ND(0.10)	ND(0.10)	ND(2.5)
	5/24/2021	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(2.5)
	8/25/2021	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(2.5)
	12/6/2021	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(5.0)
	3/9/2022	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(5.0)
	6/22/2022	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(5.0)
	9/16/2022	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(5.0)
	12/27/2022	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(5.0)
3/9/2023	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(5.0)	
6/22/2023	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(5.0)	
9/22/2023	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(2.5)	
9/22/2023	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.10)	ND(2.5)	
11/30/2023	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	0.10 J	ND(0.20)	ND(0.10)	ND(0.10)	ND(0.10)	ND(2.5)	

## Notes

\* GW Cleanup Standards are the Maryland Department of the Environment (MDE) Groundwater Clean-up Standards for Type I and II Aquifers (2018)

ND (#) = Not detected, concentration below Method Detection Limit (#)

µg/L = micrograms per liter

MTBE = Methyl Tertiary Butyl Ether

- = Not analyzed

J = Detected between the Method Detection Limit (MDL) and Reporting Limit (RL); therefore the result is an estimated value.

NL = No Limit established

NA = Analytical data not available at the time of this report

# Appendix A – Field Documentation

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# Groundwater Sampling Data Collection Sheet



Well ID: <u>MW-3</u>		Site ID: <u>Carroll Fuel</u>		Sample Date: <u>1/30/13</u>						
Initial DTW / Time: <u>4'</u>		Address: <u>Highs #86</u>		Sampling Tech(s): <u>J. Plummer</u>						
Well Diameter: <u>4"</u>		Sample Method (circle one) <u>Low Flow</u> Purge/sample Grab/No Pruge		Weather Conditions: <u>clear 43'</u>						
Total Well Depth:				Air Temp =						
Water Column Length:										
Pump Intake depth:										
Data Collection: Low Flow										
Time	DTW	Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water	Comment
		____ Unit ± 0.3 °C	____ Unit ± 3%	____ Unit ± 10%	NA ± 0.1	____ Unit ± 10				
<u>1000</u>	<u>1700</u>	Just prior to lowering any equipment into well								
<u>1010</u>	<u>1718</u>	After lowering equipment into the well & before turning on the pump								
<u>1010</u>	Purge Start Time									
<u>1015</u>	<u>1733</u>	<u>15.9</u>	<u>0.22</u>	<u>7.60</u>	<u>5.93</u>	<u>1980</u>	<u>300 ml/min clear</u> ↓ <u>2 gallons</u> ↓			
<u>1020</u>	<u>1733</u>	<u>16.18</u>	<u>0.214</u>	<u>7.49</u>	<u>5.90</u>	<u>2004</u>				
<u>1025</u>	<u>1733</u>	<u>16.05</u>	<u>0.215</u>	<u>7.32</u>	<u>5.88</u>	<u>2024</u>				
<u>1030</u>	<u>1733</u>	<u>16.03</u>	<u>0.215</u>	<u>7.16</u>	<u>5.89</u>	<u>2029</u>				
<u>1035</u>	<u>1733</u>	<u>16.00</u>	<u>0.215</u>	<u>7.10</u>	<u>5.87</u>	<u>2034</u>				
<u>1040</u>	Sample Collection Time									
	Purge Stop Time									
Data Collection: Purge and Sample / Grab Sampling										
Time	DTW	If Applicable					Flow Rate	Cumulative Purge Volume	Appearance of Purge Water	Method Of Sampling
		Temp ____ Unit ± 0.3 °C	Conductivity ____ Unit ± 3%	D.O. ____ Unit ± 10%	pH NA ± 0.1	ORP ____ Unit ± 10				
		Just prior to lowering any equipment into well								
		Sample Collection Time								
Note: Unless otherwise stated, field parameters collected during purge and sample or grab sampling were collected from the well with a sonde before purging or sampling.										
General Comment & Type of Equipment Used (pumps/YSI meter/ect./caibration info):										

Stabilization is achieved when three successive readings are within  
 ± 0.3 °C for temperature,  
 ± 0.1 for pH,  
 ± 3% for specific conductivity,  
 ± 10 for reduction-oxidation potential

Purge Volumes:  
 2-inch diameter well:  
 0.16 gal./ft x \_\_\_\_ (linear feet of water) = gallons of water  
 4-inch diameter well:  
 0.65 gal./ft x \_\_\_\_ (linear feet of water) = gallons of water

# Groundwater Sampling Data Collection Sheet



Well ID:	MW-1	Site ID:	Carroll Fuel	Sample Date:	4/30/23
Initial DTW / Time:		Address:			
Well Diameter:	4"	Sample Method (circle one) <input checked="" type="radio"/> Low Flow <input type="radio"/> Purge/sample <input type="radio"/> Grab/No Pruge	High #86 J. Plummer Sunny 45°		
Total Well Depth:					
Water Column Length:					
Pump Intake depth:					
<b>Data Collection: Low Flow</b>					

Time	DTW	Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water	Comment
		___ Unit	___ Unit	___ Unit	NA	___ Unit				
		± 0.3 °C	± 3%	± 10%	± 0.1	± 10				
1125	15.55	Just prior to lowering any equipment into well								
1130	15.57	After lowering equipment into the well & before turning on the pump								
1130	Purge Start Time									
1135	16.02	16.06	1.249	7.61	5.59	213.9	300 ml/min - lead			
1140	16.10	16.49	1.246	7.67	5.60	217.7				
1145	16.18	16.61	1.247	7.64	5.61	222.3				
1150	16.22	16.72	1.246	7.76	5.61	227.3				
1155	16.25	16.70	1.247	7.72	5.60	228.0				
1200	Sample Collection Time									
	Purge Stop Time									

<b>Data Collection: Purge and Sample / Grab Sampling</b>										
Time	DTW	Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water	Method Of Sampling
		___ Unit	___ Unit	___ Unit	NA	___ Unit				
		± 0.3 °C	± 3%	± 10%	± 0.1	± 10				
		Just prior to lowering any equipment into well								
		Sample Collection Time								
Note: Unless otherwise stated, field parameters collected during purge and sample or grab sampling were collected from the well with a sonde before purging or sampling.										

**General Comment & Type of Equipment Used (pumps/YSI meter/ect./caibration info):**

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Stabilization is achieved when three successive readings are within  
 ± 0.3 °C for temperature,  
 ± 0.1 for pH,  
 ± 3% for specific conductivity,  
 ± 10 for reduction-oxidation potential

Purge Volumes:  
 2-inch diameter well:  
 0.16 gal./ft x \_\_\_\_ (linear feet of water) = gallons of water  
 4-inch diameter well:  
 0.65 gal./ft x \_\_\_\_ (linear feet of water) = gallons of water

# Groundwater Sampling Data Collection Sheet



Well ID: <b>GW-4</b>		Site ID: <b>Carroll Fuel</b>		Sample Date: <b>11/30/23</b>						
Initial DTW / Time:		Address:		Highs #86						
Well Diameter: <b>2"</b>	Sample Method (circle one) <input checked="" type="radio"/> Low Flow <input type="radio"/> Purge/sample <input type="radio"/> Grab/No Pruge		Sampling Tech(s): <b>J. Plummer</b>		Weather Conditions: <b>Sunny 48°</b>					
Total Well Depth:			Air Temp =							
Water Column Length:										
Pump Intake depth:										
<b>Data Collection: Low Flow</b>										
Time	DTW	Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water	Comment
		____ Unit ± 0.3 °C	____ Unit ± 3%	____ Unit ± 10%	NA ± 0.1	____ Unit ± 10				
<b>1220</b>	<b>18.03</b>	Just prior to lowering any equipment into well								
<b>1230</b>	<b>17.43</b>	After lowering equipment into the well & before turning on the pump								
<b>1230</b>	Purge Start Time									
<b>1235</b>	<b>18.27</b>	<b>15.46</b>	<b>0.522</b>	<b>9.80</b>	<b>4.92</b>	<b>248.9</b>	<b>300</b>	<b>120.1</b>	<b>cloudy</b>	
<b>1240</b>	<b>18.32</b>	<b>16.72</b>	<b>0.487</b>	<b>8.52</b>	<b>4.91</b>	<b>262.1</b>			<b>cloudy</b>	
<b>1245</b>	<b>18.34</b>	<b>17.44</b>	<b>0.516</b>	<b>7.43</b>	<b>4.87</b>	<b>279.0</b>			<b>clear</b>	
<b>1250</b>	<b>18.40</b>	<b>17.24</b>	<b>0.563</b>	<b>6.38</b>	<b>4.80</b>	<b>292.5</b>				
<b>1255</b>	<b>18.42</b>	<b>17.45</b>	<b>0.570</b>	<b>5.81</b>	<b>4.82</b>	<b>296.5</b>				
<b>1300</b>	<b>18.44</b>	<b>17.47</b>	<b>0.584</b>	<b>5.75</b>	<b>4.80</b>	<b>299.1</b>				
<b>1305</b>	<b>18.46</b>	<b>17.53</b>	<b>0.596</b>	<b>5.49</b>	<b>4.78</b>	<b>303.8</b>				
<b>1310</b>	Sample Collection Time									
	Purge Stop Time									
<b>Data Collection: Purge and Sample / Grab Sampling</b>										
If Applicable										
Time	DTW	Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water	Method Of Sampling
		____ Unit ± 0.3 °C	____ Unit ± 3%	____ Unit ± 10%	NA ± 0.1	____ Unit ± 10				
		Just prior to lowering any equipment into well								
		Sample Collection Time								
Note: Unless otherwise stated, field parameters collected during purge and sample or grab sampling were collected from the well with a sonde before purging or sampling.										
<b>General Comment &amp; Type of Equipment Used (pumps/YSI meter/ect./caibration info):</b>										

Stabilization is achieved when three successive readings are within  
 ± 0.3 °C for temperature,  
 ± 0.1 for pH,  
 ± 3% for specific conductivity,  
 ± 10 for reduction-oxidation potential

Purge Volumes:  
 2-inch diameter well:  
 0.16 gal./ft x \_\_\_\_ (linear feet of water) = gallons of water  
 4-inch diameter well:  
 0.65 gal./ft x \_\_\_\_ (linear feet of water) = gallons of water

## **Appendix B – Lab Analytical Reports and COC Documentation**

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 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Peter Reichardt  
Groundwater & Environmental Services Inc  
1350 Blair Drive  
Suite H-2  
Odenton, Maryland 21113

Generated 12/5/2023 12:58:02 PM

**JOB DESCRIPTION**

High's Store No 86 - Jarrettsville

**JOB NUMBER**

410-153156-1



## 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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



Generated  
12/5/2023 12:58:02 PM

Authorized for release by  
Amek Carter, Project Manager  
[Loran.Carter@et.eurofinsus.com](mailto:Loran.Carter@et.eurofinsus.com)  
(717)556-7252

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is 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.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



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## Definitions/Glossary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

### 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.

### 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

# Case Narrative

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

**Job ID: 410-153156-1**

**Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC**

## Narrative

### Job Narrative 410-153156-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 sample was received on 12/1/2023 6:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

### Receipt Exceptions

A trip blank was not submitted for analysis with this sample shipment; and was not listed on the Chain of Custody (COC).

### GC/MS VOA

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



# Detection Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

**Client Sample ID: 3711-Federal Hill-INF**

**Lab Sample ID: 410-153156-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	0.10	J	0.50	0.10	ug/L	1		524.2	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC



# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

**Client Sample ID: 3711-Federal Hill-INF**

**Lab Sample ID: 410-153156-1**

Date Collected: 11/30/23 11:10

Matrix: Water

Date Received: 12/01/23 18:30

**Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,2,3-Trichlorobenzene	ND		0.50	0.20	ug/L			12/04/23 12:02	1
1,2,3-Trichloropropane	ND		0.50	0.20	ug/L			12/04/23 12:02	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			12/04/23 12:02	1
1,2,4-Trimethylbenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			12/04/23 12:02	1
1,2-Dibromoethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,2-Dichlorobenzene	ND		0.50	0.20	ug/L			12/04/23 12:02	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,3,5-Trimethylbenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,3-Dichloropropane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
1,4-Dichlorobenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
2,2-Dichloropropane	ND		0.50	0.20	ug/L			12/04/23 12:02	1
2-Chlorotoluene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			12/04/23 12:02	1
Acrylonitrile	ND		10	2.0	ug/L			12/04/23 12:02	1
Benzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Bromobenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Bromochloromethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Bromodichloromethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Bromoform	ND		0.50	0.20	ug/L			12/04/23 12:02	1
Bromomethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Carbon disulfide	ND		2.0	0.40	ug/L			12/04/23 12:02	1
Chlorobenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Chloroethane	ND		0.50	0.20	ug/L			12/04/23 12:02	1
Chloroform	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Chloromethane	ND		0.50	0.20	ug/L			12/04/23 12:02	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Dibromochloromethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Dibromomethane	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Dichlorodifluoromethane	ND		0.50	0.20	ug/L			12/04/23 12:02	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Ethylbenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Hexachlorobutadiene	ND		0.50	0.20	ug/L			12/04/23 12:02	1
Isopropylbenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
<b>Methyl tertiary butyl ether</b>	<b>0.10</b>	<b>J</b>	0.50	0.10	ug/L			12/04/23 12:02	1
Methylene Chloride	ND		0.50	0.20	ug/L			12/04/23 12:02	1
Naphthalene	ND		0.50	0.20	ug/L			12/04/23 12:02	1
n-Butylbenzene	ND		0.50	0.20	ug/L			12/04/23 12:02	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

**Client Sample ID: 3711-Federal Hill-INF**

**Lab Sample ID: 410-153156-1**

Date Collected: 11/30/23 11:10

Matrix: Water

Date Received: 12/01/23 18:30

**Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
p-Isopropyltoluene	ND		0.50	0.20	ug/L			12/04/23 12:02	1
sec-Butylbenzene	ND		0.50	0.20	ug/L			12/04/23 12:02	1
Styrene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
t-Amyl methyl ether	ND		0.50	0.10	ug/L			12/04/23 12:02	1
t-Butyl alcohol	ND		25	5.0	ug/L			12/04/23 12:02	1
tert-Butylbenzene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Tetrachloroethene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Toluene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
trans-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			12/04/23 12:02	1
Trichloroethene	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Trichlorofluoromethane	ND		0.50	0.20	ug/L			12/04/23 12:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/23 12:02	1
Xylenes, Total	ND		0.50	0.10	ug/L			12/04/23 12:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichlorobenzene-d4 (Surr)	97		80 - 120					12/04/23 12:02	1
4-Bromofluorobenzene (Surr)	89		80 - 120					12/04/23 12:02	1



# Surrogate Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCZ	BFB
		(80-120)	(80-120)
410-153156-1	3711-Federal Hill-INF	97	89
LCS 410-449687/4	Lab Control Sample	102	95
MB 410-449687/6	Method Blank	95	88

#### Surrogate Legend

DCZ = 1,2-Dichlorobenzene-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-449687/6

Matrix: Water

Analysis Batch: 449687

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,2,3-Trichlorobenzene	ND		0.50	0.20	ug/L			12/04/23 10:02	1
1,2,3-Trichloropropane	ND		0.50	0.20	ug/L			12/04/23 10:02	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			12/04/23 10:02	1
1,2,4-Trimethylbenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.40	ug/L			12/04/23 10:02	1
1,2-Dibromoethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,2-Dichlorobenzene	ND		0.50	0.20	ug/L			12/04/23 10:02	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,3,5-Trimethylbenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,3-Dichloropropane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
1,4-Dichlorobenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
2,2-Dichloropropane	ND		0.50	0.20	ug/L			12/04/23 10:02	1
2-Chlorotoluene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			12/04/23 10:02	1
Acrylonitrile	ND		10	2.0	ug/L			12/04/23 10:02	1
Benzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Bromobenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Bromochloromethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Bromodichloromethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Bromoform	ND		0.50	0.20	ug/L			12/04/23 10:02	1
Bromomethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Carbon disulfide	ND		2.0	0.40	ug/L			12/04/23 10:02	1
Chlorobenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Chloroethane	ND		0.50	0.20	ug/L			12/04/23 10:02	1
Chloroform	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Chloromethane	ND		0.50	0.20	ug/L			12/04/23 10:02	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Dibromochloromethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Dibromomethane	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Dichlorodifluoromethane	ND		0.50	0.20	ug/L			12/04/23 10:02	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Ethylbenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Hexachlorobutadiene	ND		0.50	0.20	ug/L			12/04/23 10:02	1
Isopropylbenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Methylene Chloride	ND		0.50	0.20	ug/L			12/04/23 10:02	1
Naphthalene	ND		0.50	0.20	ug/L			12/04/23 10:02	1

Eurofins Lancaster Laboratories Environment Testing, LLC

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-449687/6

Matrix: Water

Analysis Batch: 449687

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
n-Butylbenzene	ND		0.50	0.20	ug/L			12/04/23 10:02	1
N-Propylbenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
p-Isopropyltoluene	ND		0.50	0.20	ug/L			12/04/23 10:02	1
sec-Butylbenzene	ND		0.50	0.20	ug/L			12/04/23 10:02	1
Styrene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
t-Amyl methyl ether	ND		0.50	0.10	ug/L			12/04/23 10:02	1
t-Butyl alcohol	ND		25	5.0	ug/L			12/04/23 10:02	1
tert-Butylbenzene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Tetrachloroethene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Toluene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
trans-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			12/04/23 10:02	1
Trichloroethene	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Trichlorofluoromethane	ND		0.50	0.20	ug/L			12/04/23 10:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/23 10:02	1
Xylenes, Total	ND		0.50	0.10	ug/L			12/04/23 10:02	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichlorobenzene-d4 (Surr)	95		80 - 120		12/04/23 10:02	1
4-Bromofluorobenzene (Surr)	88		80 - 120		12/04/23 10:02	1

Lab Sample ID: LCS 410-449687/4

Matrix: Water

Analysis Batch: 449687

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	5.00	5.10		ug/L		102	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.19		ug/L		104	70 - 130
1,1,2-Trichloroethane	5.00	5.30		ug/L		106	70 - 130
1,1-Dichloroethane	5.00	5.49		ug/L		110	70 - 130
1,1-Dichloroethene	5.00	5.57		ug/L		111	70 - 130
1,1-Dichloropropene	5.00	4.86		ug/L		97	70 - 130
1,2,3-Trichlorobenzene	5.00	5.01		ug/L		100	70 - 130
1,2,3-Trichloropropene	5.00	5.38		ug/L		108	70 - 130
1,2,4-Trichlorobenzene	5.00	4.81		ug/L		96	70 - 130
1,2,4-Trimethylbenzene	5.00	5.18		ug/L		104	70 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.92		ug/L		98	70 - 130
1,2-Dibromoethane	5.00	5.01		ug/L		100	70 - 130
1,2-Dichlorobenzene	5.00	5.15		ug/L		103	70 - 130
1,2-Dichloroethane	5.00	5.29		ug/L		106	70 - 130
1,2-Dichloropropane	5.00	5.20		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	5.00	5.05		ug/L		101	70 - 130
1,3-Dichlorobenzene	5.00	5.05		ug/L		101	70 - 130
1,3-Dichloropropane	5.00	5.17		ug/L		103	70 - 130
1,4-Dichlorobenzene	5.00	5.20		ug/L		104	70 - 130
2,2-Dichloropropane	5.00	5.32		ug/L		106	70 - 130

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-449687/4

Matrix: Water

Analysis Batch: 449687

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
2-Chlorotoluene	5.00	4.85		ug/L		97	70 - 130
4-Chlorotoluene	5.00	4.88		ug/L		98	70 - 130
Acrylonitrile	113	134		ug/L		119	70 - 130
Benzene	5.00	4.98		ug/L		100	70 - 130
Bromobenzene	5.00	4.84		ug/L		97	70 - 130
Bromochloromethane	5.00	5.26		ug/L		105	70 - 130
Bromodichloromethane	5.00	5.35		ug/L		107	70 - 130
Bromoform	5.00	5.29		ug/L		106	70 - 130
Bromomethane	2.00	2.27		ug/L		114	70 - 130
Carbon disulfide	5.00	5.25		ug/L		105	70 - 130
Chlorobenzene	5.00	4.87		ug/L		97	70 - 130
Chloroethane	2.00	2.27		ug/L		114	70 - 130
Chloroform	5.00	5.22		ug/L		104	70 - 130
Chloromethane	2.00	2.27		ug/L		113	70 - 130
cis-1,2-Dichloroethene	5.00	5.28		ug/L		106	70 - 130
cis-1,3-Dichloropropene	5.00	4.66		ug/L		93	70 - 130
Dibromochloromethane	5.00	5.36		ug/L		107	70 - 130
Dibromomethane	5.00	5.21		ug/L		104	70 - 130
Dichlorodifluoromethane	2.00	1.99		ug/L		100	70 - 130
di-Isopropyl ether	5.00	4.99		ug/L		100	70 - 130
Ethyl t-butyl ether	5.00	5.22		ug/L		104	70 - 130
Ethylbenzene	5.00	5.04		ug/L		101	70 - 130
Hexachlorobutadiene	5.00	4.99		ug/L		100	70 - 130
Isopropylbenzene	5.00	5.17		ug/L		103	70 - 130
Methyl tertiary butyl ether	5.00	5.16		ug/L		103	70 - 130
Methylene Chloride	5.00	5.34		ug/L		107	70 - 130
Naphthalene	5.00	5.08		ug/L		102	70 - 130
n-Butylbenzene	5.00	5.19		ug/L		104	70 - 130
N-Propylbenzene	5.00	4.99		ug/L		100	70 - 130
p-Isopropyltoluene	5.00	4.95		ug/L		99	70 - 130
sec-Butylbenzene	5.00	4.76		ug/L		95	70 - 130
Styrene	5.00	5.05		ug/L		101	70 - 130
t-Amyl methyl ether	5.00	4.63		ug/L		93	70 - 130
t-Butyl alcohol	50.0	56.0		ug/L		112	70 - 130
tert-Butylbenzene	5.00	4.73		ug/L		95	70 - 130
Tetrachloroethene	5.00	4.80		ug/L		96	70 - 130
Toluene	5.00	4.94		ug/L		99	70 - 130
trans-1,2-Dichloroethene	5.00	5.28		ug/L		106	70 - 130
trans-1,3-Dichloropropene	5.00	4.93		ug/L		99	70 - 130
trans-1,4-Dichloro-2-butene	25.0	25.3		ug/L		101	70 - 130
Trichloroethene	5.00	4.92		ug/L		98	70 - 130
Trichlorofluoromethane	2.00	2.18		ug/L		109	70 - 130
Vinyl chloride	2.00	2.14		ug/L		107	70 - 130
Xylenes, Total	15.0	14.8		ug/L		99	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichlorobenzene-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120

# QC Association Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

## GC/MS VOA

### Analysis Batch: 449687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-153156-1	3711-Federal Hill-INF	Total/NA	Water	524.2	
MB 410-449687/6	Method Blank	Total/NA	Water	524.2	
LCS 410-449687/4	Lab Control Sample	Total/NA	Water	524.2	

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# Lab Chronicle

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

**Client Sample ID: 3711-Federal Hill-INF**

**Lab Sample ID: 410-153156-1**

Date Collected: 11/30/23 11:10

Matrix: Water

Date Received: 12/01/23 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	449687	UJML	ELLE	12/04/23 12:02

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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# Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

## Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Maryland	State	100	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,1,2-Tetrachloroethane
524.2		Water	1,1,2,2-Tetrachloroethane
524.2		Water	1,1-Dichloroethane
524.2		Water	1,1-Dichloropropene
524.2		Water	1,2,3-Trichlorobenzene
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2,4-Trimethylbenzene
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	1,3,5-Trimethylbenzene
524.2		Water	1,3-Dichlorobenzene
524.2		Water	1,3-Dichloropropane
524.2		Water	2,2-Dichloropropane
524.2		Water	2-Chlorotoluene
524.2		Water	4-Chlorotoluene
524.2		Water	Acrylonitrile
524.2		Water	Bromobenzene
524.2		Water	Bromochloromethane
524.2		Water	Bromomethane
524.2		Water	Carbon disulfide
524.2		Water	Chloroethane
524.2		Water	Chloromethane
524.2		Water	cis-1,3-Dichloropropene
524.2		Water	Dibromomethane
524.2		Water	Dichlorodifluoromethane
524.2		Water	di-Isopropyl ether
524.2		Water	Ethyl t-butyl ether
524.2		Water	Hexachlorobutadiene
524.2		Water	Isopropylbenzene
524.2		Water	Methyl tertiary butyl ether
524.2		Water	Naphthalene
524.2		Water	n-Butylbenzene
524.2		Water	N-Propylbenzene
524.2		Water	p-Isopropyltoluene
524.2		Water	sec-Butylbenzene
524.2		Water	t-Amyl methyl ether
524.2		Water	t-Butyl alcohol
524.2		Water	tert-Butylbenzene
524.2		Water	trans-1,3-Dichloropropene
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Trichlorofluoromethane

# Method Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

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Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	ELLE

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**Protocol References:**

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300





# Sample Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153156-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-153156-1	3711-Federal Hill-INF	Water	11/30/23 11:10	12/01/23 18:30

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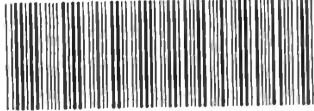
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410-153156 Chain of Custody

# Environmental Analysis Request/Chain of Custody

Acct. # \_\_\_\_\_ Group # \_\_\_\_\_ Sample # \_\_\_\_\_

<b>Client: Groundwater &amp; Env. Services, Inc.</b>				<b>Matrix</b> <input type="checkbox"/> Sediment <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Potable <input checked="" type="checkbox"/> Water <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Other: _____				<b>Analyses Requested</b>								<b>For Lab Use Only</b> SF #: _____ SCR #: _____		
Project Name/#: High's Store #86 - Jarrettsville		Site ID #: _____						<b>Preservation Codes</b>										
Project Manager: Peter Reichardt		P.O. #: 0403469-06-206						H    _____    _____    _____    _____    _____    _____    _____    _____								Preservation Codes H = HCl    T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>2</sub> PO <sub>4</sub> O = Other		
Sampler: Jeff Plummer		PWSID #: _____						Full Suite VOCs plus oxygenates and Naphthalene (524.2)								<b>Remarks</b>		
Phone #: 800-220-3606 x 3726		Quote #: _____																
State where sample(s) were collected: 3711 Federal Hill Rd, Jarrettsville MD				Total # of Containers														
<b>Collection</b>																		
<b>Sample Identification</b>		Date	Time	Grab	Composite	Soil	Water	Other:	Total # of Containers									
3711-Federal Hill-INF		11/30/23	11:10	X			X		3	X								
<b>Turnaround Time Requested (TAT)</b> (please check):    Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> (Rush TAT is subject to laboratory approval and surcharges.)				Relinquished by: <i>Jeff Plummer</i>		Date	Time	Received by: <i>Denise Woodin</i>		Date	Time							
						12-23	1130			12-23	1130							
Date results are needed: _____				Relinquished by: <i>Denise Woodin</i>		Date	Time	Received by: <i>[Signature]</i>		Date	Time							
Rush results requested by (please check):    E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>						12-23	1403			12/1/23	1403							
E-mail Address: <a href="mailto:midatlantic@gesonline.com">midatlantic@gesonline.com</a> & <a href="mailto:ges@equisonline.com">ges@equisonline.com</a>				Relinquished by: <i>[Signature]</i>		Date	Time	Received by: _____		Date	Time							
Phone: _____						12/1/23	1830			_____	_____							
<b>Data Package Options</b> (please check if required)				Relinquished by: _____		Date	Time	Received by: _____		Date	Time							
Type I (Validation/non-CLP) <input type="checkbox"/>		MA MCP <input type="checkbox"/>				_____	_____			_____	_____							
Type III (Reduced non-CLP) <input type="checkbox"/>		CT RCP <input type="checkbox"/>				_____	_____			_____	_____							
Type VI (Raw Data Only) <input type="checkbox"/>		TX TRRP-13 <input type="checkbox"/>				_____	_____			_____	_____							
NYSDEC Category <input type="checkbox"/> A    or <input type="checkbox"/> B				Relinquished by Commercial Carrier: _____		Date	Time	Received by: <i>[Signature]</i>		Date	Time							
EDD Required?    Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, format: <u>GES.EQEDD</u>						_____	_____			12/1/23	1830							
UPS _____    FedEx _____    Other _____								Temperature upon receipt: <i>2.3/21.0</i>										

## Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 410-153156-1

**Login Number: 153156**

**List Number: 1**

**Creator: Wrye, Shaun**

**List Source: Eurofins Lancaster Laboratories Environment Testing, LLC**

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required (<=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required (<=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Peter Reichardt  
Groundwater & Environmental Services Inc  
1350 Blair Drive  
Suite H-2  
Odenton, Maryland 21113

Generated 12/8/2023 12:38:46 PM

**JOB DESCRIPTION**

High's Store No 86 - Jarrettsville

**JOB NUMBER**

410-153161-1

## 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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



Generated  
12/8/2023 12:38:46 PM

Authorized for release by  
Amek Carter, Project Manager  
[Loran.Carter@et.eurofinsus.com](mailto:Loran.Carter@et.eurofinsus.com)  
(717)556-7252

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is 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.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



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## Definitions/Glossary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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



# Case Narrative

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

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## Job ID: 410-153161-1

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### Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

#### Narrative

#### Job Narrative 410-153161-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 12/1/2023 6:30 PM. 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

#### Receipt Exceptions

A trip blank was not submitted for analysis with this sample shipment; and was not listed on the Chain of Custody (COC).

#### GC/MS VOA

Method 8260C\_LL: The continuing calibration verification (CCV) associated with batch 410-450419 recovered above the upper control limit for Acrylonitrile. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260C\_LL: The preservative used in the sample containers provided is not compatible with the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MW-1 (410-153161-1), MW-3 (410-153161-2) and MW-4 (410-153161-3). The requested target analyte list includes Acrylonitrile, acid-labile compounds that degrade in an acidic medium.

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

#### Gasoline Range Organics

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

#### Diesel Range Organics

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

# Detection Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Client Sample ID: MW-1

Lab Sample ID: 410-153161-1

No Detections.

## Client Sample ID: MW-3

Lab Sample ID: 410-153161-2

No Detections.

## Client Sample ID: MW-4

Lab Sample ID: 410-153161-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	9.1		0.50	0.080	ug/L	1		8260C LL	Total/NA
di-Isopropyl ether	0.70		0.50	0.10	ug/L	1		8260C LL	Total/NA
t-Butyl alcohol	3.5	J	10	3.0	ug/L	1		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

**Client Sample ID: MW-1**

**Lab Sample ID: 410-153161-1**

Date Collected: 11/30/23 12:00

Matrix: Water

Date Received: 12/01/23 18:30

**Method: SW846 8260C LL - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/06/23 05:25	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/06/23 05:25	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Styrene	ND		0.50	0.070	ug/L			12/06/23 05:25	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:25	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			12/06/23 05:25	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			12/06/23 05:25	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/06/23 05:25	1
1,2,3-Trichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:25	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			12/06/23 05:25	1
Toluene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:25	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
1,2,4-Trichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:25	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/06/23 05:25	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/06/23 05:25	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/06/23 05:25	1
Methyl tertiary butyl ether	ND		0.50	0.080	ug/L			12/06/23 05:25	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:25	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Chloroform	ND		0.50	0.090	ug/L			12/06/23 05:25	1
Benzene	ND		0.50	0.10	ug/L			12/06/23 05:25	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Bromomethane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
Chloromethane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
Chloroethane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/06/23 05:25	1
Methylene Chloride	ND		0.50	0.20	ug/L			12/06/23 05:25	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/06/23 05:25	1
Bromoform	ND		1.0	0.30	ug/L			12/06/23 05:25	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/06/23 05:25	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/06/23 05:25	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Dichlorodifluoromethane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Acrylonitrile	ND	cn	5.0	0.40	ug/L			12/06/23 05:25	1
Trichloroethene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/06/23 05:25	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:25	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/06/23 05:25	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

**Client Sample ID: MW-1**

**Lab Sample ID: 410-153161-1**

Date Collected: 11/30/23 12:00

Matrix: Water

Date Received: 12/01/23 18:30

**Method: SW846 8260C LL - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Isopropylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Dibromomethane	ND		0.50	0.080	ug/L			12/06/23 05:25	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			12/06/23 05:25	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Hexachlorobutadiene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
Naphthalene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
n-Butylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
N-Propylbenzene	ND		0.50	0.10	ug/L			12/06/23 05:25	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			12/06/23 05:25	1
t-Amyl methyl ether	ND		0.50	0.20	ug/L			12/06/23 05:25	1
t-Butyl alcohol	ND		10	3.0	ug/L			12/06/23 05:25	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:25	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			12/06/23 05:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120					12/06/23 05:25	1
Dibromofluoromethane (Surr)	99		80 - 120					12/06/23 05:25	1
4-Bromofluorobenzene (Surr)	90		80 - 120					12/06/23 05:25	1
Toluene-d8 (Surr)	97		80 - 120					12/06/23 05:25	1

**Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	ND		0.050	0.023	mg/L			12/04/23 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	99		63 - 135					12/04/23 17:09	1

**Method: SW846 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		100	55	ug/L		12/06/23 07:48	12/07/23 20:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	117		37 - 153				12/06/23 07:48	12/07/23 20:48	1

**Client Sample ID: MW-3**

**Lab Sample ID: 410-153161-2**

Date Collected: 11/30/23 10:40

Matrix: Water

Date Received: 12/01/23 18:30

**Method: SW846 8260C LL - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/06/23 05:46	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/06/23 05:46	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Styrene	ND		0.50	0.070	ug/L			12/06/23 05:46	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:46	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			12/06/23 05:46	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			12/06/23 05:46	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

**Client Sample ID: MW-3**

**Lab Sample ID: 410-153161-2**

**Date Collected: 11/30/23 10:40**

**Matrix: Water**

**Date Received: 12/01/23 18:30**

**Method: SW846 8260C LL - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/06/23 05:46	1
1,2,3-Trichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:46	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			12/06/23 05:46	1
Toluene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:46	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
1,2,4-Trichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:46	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/06/23 05:46	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/06/23 05:46	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/06/23 05:46	1
Methyl tertiary butyl ether	ND		0.50	0.080	ug/L			12/06/23 05:46	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:46	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Chloroform	ND		0.50	0.090	ug/L			12/06/23 05:46	1
Benzene	ND		0.50	0.10	ug/L			12/06/23 05:46	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Bromomethane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
Chloromethane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
Chloroethane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/06/23 05:46	1
Methylene Chloride	ND		0.50	0.20	ug/L			12/06/23 05:46	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/06/23 05:46	1
Bromoform	ND		1.0	0.30	ug/L			12/06/23 05:46	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/06/23 05:46	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/06/23 05:46	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Dichlorodifluoromethane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Acrylonitrile	ND	cn	5.0	0.40	ug/L			12/06/23 05:46	1
Trichloroethene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 05:46	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/06/23 05:46	1
Bromobenzene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Isopropylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Dibromomethane	ND		0.50	0.080	ug/L			12/06/23 05:46	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			12/06/23 05:46	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Hexachlorobutadiene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
Naphthalene	ND		0.50	0.080	ug/L			12/06/23 05:46	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

**Client Sample ID: MW-3**

**Lab Sample ID: 410-153161-2**

Date Collected: 11/30/23 10:40

Matrix: Water

Date Received: 12/01/23 18:30

**Method: SW846 8260C LL - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
N-Propylbenzene	ND		0.50	0.10	ug/L			12/06/23 05:46	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			12/06/23 05:46	1
t-Amyl methyl ether	ND		0.50	0.20	ug/L			12/06/23 05:46	1
t-Butyl alcohol	ND		10	3.0	ug/L			12/06/23 05:46	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			12/06/23 05:46	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			12/06/23 05:46	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	98		80 - 120					12/06/23 05:46	1
Dibromofluoromethane (Surr)	98		80 - 120					12/06/23 05:46	1
4-Bromofluorobenzene (Surr)	91		80 - 120					12/06/23 05:46	1
Toluene-d8 (Surr)	95		80 - 120					12/06/23 05:46	1

**Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	ND		0.050	0.023	mg/L			12/04/23 17:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene (fid) (1C)	99		63 - 135					12/04/23 17:35	1

**Method: SW846 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		110	56	ug/L		12/06/23 07:48	12/07/23 21:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-terphenyl (Surr)	119		37 - 153				12/06/23 07:48	12/07/23 21:12	1

**Client Sample ID: MW-4**

**Lab Sample ID: 410-153161-3**

Date Collected: 11/30/23 13:10

Matrix: Water

Date Received: 12/01/23 18:30

**Method: SW846 8260C LL - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/06/23 06:06	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/06/23 06:06	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Styrene	ND		0.50	0.070	ug/L			12/06/23 06:06	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 06:06	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			12/06/23 06:06	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			12/06/23 06:06	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/06/23 06:06	1
1,2,3-Trichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 06:06	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			12/06/23 06:06	1
Toluene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/06/23 06:06	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
1,2,4-Trichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 06:06	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/06/23 06:06	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

**Client Sample ID: MW-4**

**Lab Sample ID: 410-153161-3**

Date Collected: 11/30/23 13:10

Matrix: Water

Date Received: 12/01/23 18:30

**Method: SW846 8260C LL - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.070	ug/L			12/06/23 06:06	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/06/23 06:06	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/06/23 06:06	1
<b>Methyl tertiary butyl ether</b>	<b>9.1</b>		0.50	0.080	ug/L			12/06/23 06:06	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 06:06	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Chloroform	ND		0.50	0.090	ug/L			12/06/23 06:06	1
Benzene	ND		0.50	0.10	ug/L			12/06/23 06:06	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Bromomethane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
Chloromethane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
Chloroethane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/06/23 06:06	1
Methylene Chloride	ND		0.50	0.20	ug/L			12/06/23 06:06	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/06/23 06:06	1
Bromoform	ND		1.0	0.30	ug/L			12/06/23 06:06	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/06/23 06:06	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/06/23 06:06	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Dichlorodifluoromethane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Acrylonitrile	ND	cn	5.0	0.40	ug/L			12/06/23 06:06	1
Trichloroethene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			12/06/23 06:06	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/06/23 06:06	1
Bromobenzene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Isopropylbenzene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Dibromomethane	ND		0.50	0.080	ug/L			12/06/23 06:06	1
<b>di-Isopropyl ether</b>	<b>0.70</b>		0.50	0.10	ug/L			12/06/23 06:06	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Hexachlorobutadiene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
Naphthalene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
n-Butylbenzene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
N-Propylbenzene	ND		0.50	0.10	ug/L			12/06/23 06:06	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			12/06/23 06:06	1
t-Amyl methyl ether	ND		0.50	0.20	ug/L			12/06/23 06:06	1
<b>t-Butyl alcohol</b>	<b>3.5 J</b>		10	3.0	ug/L			12/06/23 06:06	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			12/06/23 06:06	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			12/06/23 06:06	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

**Client Sample ID: MW-4**

**Lab Sample ID: 410-153161-3**

Date Collected: 11/30/23 13:10

Matrix: Water

Date Received: 12/01/23 18:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/06/23 06:06	1
Dibromofluoromethane (Surr)	98		80 - 120		12/06/23 06:06	1
4-Bromofluorobenzene (Surr)	87		80 - 120		12/06/23 06:06	1
Toluene-d8 (Surr)	94		80 - 120		12/06/23 06:06	1

**Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	ND		0.050	0.023	mg/L			12/04/23 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	100		63 - 135		12/04/23 18:00	1

**Method: SW846 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		100	56	ug/L		12/06/23 07:48	12/07/23 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	119		37 - 153	12/06/23 07:48	12/07/23 21:36	1



# Surrogate Summary

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	DBFM (80-120)	BFB (80-120)	TOL (80-120)
410-153161-1	MW-1	99	99	90	97
410-153161-2	MW-3	98	98	91	95
410-153161-3	MW-4	101	98	87	94
LCS 410-450419/5	Lab Control Sample	98	96	95	96
LCSD 410-450419/6	Lab Control Sample Dup	97	96	94	97
MB 410-450419/10	Method Blank	96	97	92	96

**Surrogate Legend**  
 DCA = 1,2-Dichloroethane-d4 (Surr)  
 DBFM = Dibromofluoromethane (Surr)  
 BFB = 4-Bromofluorobenzene (Surr)  
 TOL = Toluene-d8 (Surr)

## Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		TFT-F1 (63-135)
410-153161-1	MW-1	99
410-153161-2	MW-3	99
410-153161-3	MW-4	100
LCS 410-449734/6	Lab Control Sample	91
LCSD 410-449734/7	Lab Control Sample Dup	91
MB 410-449734/5	Method Blank	99

**Surrogate Legend**  
 TFT-F = a,a,a-Trifluorotoluene (fid)

## Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		OTP (37-153)
410-153161-1	MW-1	117
410-153161-2	MW-3	119
410-153161-3	MW-4	119
LCS 410-450568/2-A	Lab Control Sample	120
LCSD 410-450568/3-A	Lab Control Sample Dup	120
MB 410-450568/1-A	Method Blank	128

**Surrogate Legend**  
 OTP = o- terphenyl (Surr)

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Method: 8260C LL - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 410-450419/10**

**Matrix: Water**

**Analysis Batch: 450419**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/05/23 21:43	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/05/23 21:43	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Styrene	ND		0.50	0.070	ug/L			12/05/23 21:43	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/05/23 21:43	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			12/05/23 21:43	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			12/05/23 21:43	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/05/23 21:43	1
1,2,3-Trichlorobenzene	ND		0.50	0.070	ug/L			12/05/23 21:43	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			12/05/23 21:43	1
Toluene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/05/23 21:43	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
1,2,4-Trichlorobenzene	ND		0.50	0.070	ug/L			12/05/23 21:43	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/05/23 21:43	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/05/23 21:43	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/05/23 21:43	1
Methyl tertiary butyl ether	ND		0.50	0.080	ug/L			12/05/23 21:43	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			12/05/23 21:43	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Chloroform	ND		0.50	0.090	ug/L			12/05/23 21:43	1
Benzene	ND		0.50	0.10	ug/L			12/05/23 21:43	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Bromomethane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
Chloromethane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
Chloroethane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/05/23 21:43	1
Methylene Chloride	ND		0.50	0.20	ug/L			12/05/23 21:43	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/05/23 21:43	1
Bromoform	ND		1.0	0.30	ug/L			12/05/23 21:43	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/05/23 21:43	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/05/23 21:43	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Dichlorodifluoromethane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Acrylonitrile	ND		5.0	0.40	ug/L			12/05/23 21:43	1
Trichloroethene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			12/05/23 21:43	1

Eurofins Lancaster Laboratories Environment Testing, LLC

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 410-450419/10**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 450419**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/05/23 21:43	1
Bromobenzene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Isopropylbenzene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Dibromomethane	ND		0.50	0.080	ug/L			12/05/23 21:43	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			12/05/23 21:43	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Hexachlorobutadiene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
Naphthalene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
n-Butylbenzene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
N-Propylbenzene	ND		0.50	0.10	ug/L			12/05/23 21:43	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			12/05/23 21:43	1
t-Amyl methyl ether	ND		0.50	0.20	ug/L			12/05/23 21:43	1
t-Butyl alcohol	ND		10	3.0	ug/L			12/05/23 21:43	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			12/05/23 21:43	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			12/05/23 21:43	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		12/05/23 21:43	1
Dibromofluoromethane (Surr)	97		80 - 120		12/05/23 21:43	1
4-Bromofluorobenzene (Surr)	92		80 - 120		12/05/23 21:43	1
Toluene-d8 (Surr)	96		80 - 120		12/05/23 21:43	1

**Lab Sample ID: LCS 410-450419/5**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 450419**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,3-Dichloropropene	5.00	4.79		ug/L		96	67 - 121
trans-1,3-Dichloropropene	5.00	5.05		ug/L		101	61 - 129
Ethylbenzene	5.00	4.94		ug/L		99	80 - 120
Styrene	5.00	4.86		ug/L		97	80 - 120
1,4-Dichlorobenzene	5.00	5.06		ug/L		101	80 - 120
1,2-Dibromoethane	5.00	5.27		ug/L		105	80 - 120
1,1-Dichloropropene	5.00	4.90		ug/L		98	74 - 120
1,2-Dichloroethane	5.00	4.99		ug/L		100	69 - 122
1,2,3-Trichlorobenzene	5.00	5.04		ug/L		101	68 - 125
1,2,3-Trichloropropane	5.00	5.14		ug/L		103	80 - 125
Toluene	5.00	4.87		ug/L		97	80 - 120
Chlorobenzene	5.00	5.02		ug/L		100	80 - 120
1,2,4-Trimethylbenzene	5.00	4.68		ug/L		94	80 - 120
1,2,4-Trichlorobenzene	5.00	5.19		ug/L		104	68 - 122
Dibromochloromethane	5.00	5.22		ug/L		104	64 - 138
Xylenes, Total	15.0	14.5		ug/L		97	80 - 120
Tetrachloroethene	5.00	5.14		ug/L		103	80 - 120
cis-1,2-Dichloroethene	5.00	5.00		ug/L		100	80 - 122

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-450419/5

Matrix: Water

Analysis Batch: 450419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	5.00	4.93		ug/L		99	80 - 122
Methyl tertiary butyl ether	5.00	4.57		ug/L		91	69 - 120
1,3,5-Trimethylbenzene	5.00	4.76		ug/L		95	80 - 120
1,3-Dichlorobenzene	5.00	5.02		ug/L		100	80 - 120
1,3-Dichloropropane	5.00	5.15		ug/L		103	80 - 120
Chloroform	5.00	4.91		ug/L		98	80 - 120
Benzene	5.00	4.96		ug/L		99	80 - 120
1,1,1-Trichloroethane	5.00	4.88		ug/L		98	78 - 126
Bromomethane	5.00	4.84		ug/L		97	60 - 136
Chloromethane	5.00	4.39		ug/L		88	56 - 124
Chloroethane	5.00	5.13		ug/L		103	63 - 120
2,2-Dichloropropane	5.00	4.66		ug/L		93	61 - 141
Vinyl chloride	5.00	4.48		ug/L		90	60 - 125
Methylene Chloride	5.00	4.94		ug/L		99	80 - 120
Carbon disulfide	5.00	4.51		ug/L		90	67 - 130
Bromoform	5.00	5.12		ug/L		102	49 - 144
Bromodichloromethane	5.00	5.07		ug/L		101	73 - 124
1,1-Dichloroethane	5.00	5.05		ug/L		101	74 - 120
2-Chlorotoluene	5.00	4.87		ug/L		97	80 - 120
1,1-Dichloroethene	5.00	5.01		ug/L		100	80 - 131
Trichlorofluoromethane	5.00	5.14		ug/L		103	62 - 136
4-Chlorotoluene	5.00	4.93		ug/L		99	80 - 120
Dichlorodifluoromethane	5.00	3.53		ug/L		71	43 - 123
1,2-Dichloropropane	5.00	5.21		ug/L		104	80 - 120
1,1,2-Trichloroethane	5.00	5.24		ug/L		105	80 - 120
Acrylonitrile	25.0	27.2		ug/L		109	64 - 139
Trichloroethene	5.00	4.87		ug/L		97	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.04		ug/L		101	75 - 123
1,2-Dichlorobenzene	5.00	4.99		ug/L		100	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.52		ug/L		90	56 - 148
Bromobenzene	5.00	5.18		ug/L		104	80 - 120
Bromochloromethane	5.00	5.23		ug/L		105	80 - 120
Isopropylbenzene	5.00	5.13		ug/L		103	80 - 120
Dibromomethane	5.00	5.35		ug/L		107	80 - 122
di-Isopropyl ether	5.00	4.79		ug/L		96	58 - 131
Ethyl t-butyl ether	5.00	4.62		ug/L		92	57 - 126
Hexachlorobutadiene	5.00	5.62		ug/L		112	72 - 132
Naphthalene	5.00	4.69		ug/L		94	64 - 122
n-Butylbenzene	5.00	5.01		ug/L		100	74 - 123
N-Propylbenzene	5.00	4.91		ug/L		98	74 - 122
p-Isopropyltoluene	5.00	4.83		ug/L		97	80 - 120
sec-Butylbenzene	5.00	4.84		ug/L		97	80 - 120
t-Amyl methyl ether	5.00	4.67		ug/L		93	65 - 125
t-Butyl alcohol	50.0	44.4		ug/L		89	62 - 138
tert-Butylbenzene	5.00	4.47		ug/L		89	79 - 120
trans-1,4-Dichloro-2-butene	25.0	22.7		ug/L		91	10 - 172

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-450419/5

Matrix: Water

Analysis Batch: 450419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: LCSD 410-450419/6

Matrix: Water

Analysis Batch: 450419

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD
									Limit
1,1,1,2-Tetrachloroethane	5.00	5.32		ug/L		106	71 - 134	7	30
cis-1,3-Dichloropropene	5.00	5.22		ug/L		104	67 - 121	9	30
trans-1,3-Dichloropropene	5.00	5.56		ug/L		111	61 - 129	10	30
Ethylbenzene	5.00	5.35		ug/L		107	80 - 120	8	30
Styrene	5.00	5.28		ug/L		106	80 - 120	8	30
1,4-Dichlorobenzene	5.00	5.48		ug/L		110	80 - 120	8	30
1,2-Dibromoethane	5.00	5.79		ug/L		116	80 - 120	10	30
1,1-Dichloropropene	5.00	5.34		ug/L		107	74 - 120	8	30
1,2-Dichloroethane	5.00	5.16		ug/L		103	69 - 122	3	30
1,2,3-Trichlorobenzene	5.00	5.49		ug/L		110	68 - 125	9	30
1,2,3-Trichloropropane	5.00	5.61		ug/L		112	80 - 125	9	30
Toluene	5.00	5.32		ug/L		106	80 - 120	9	30
Chlorobenzene	5.00	5.45		ug/L		109	80 - 120	8	30
1,2,4-Trimethylbenzene	5.00	5.13		ug/L		103	80 - 120	9	30
1,2,4-Trichlorobenzene	5.00	5.43		ug/L		109	68 - 122	5	30
Dibromochloromethane	5.00	5.70		ug/L		114	64 - 138	9	30
Xylenes, Total	15.0	15.8		ug/L		105	80 - 120	8	30
Tetrachloroethene	5.00	5.55		ug/L		111	80 - 120	8	30
cis-1,2-Dichloroethene	5.00	5.40		ug/L		108	80 - 122	8	30
trans-1,2-Dichloroethene	5.00	5.17		ug/L		103	80 - 122	5	30
Methyl tertiary butyl ether	5.00	4.99		ug/L		100	69 - 120	9	30
1,3,5-Trimethylbenzene	5.00	5.16		ug/L		103	80 - 120	8	30
1,3-Dichlorobenzene	5.00	5.43		ug/L		109	80 - 120	8	30
1,3-Dichloropropane	5.00	5.73		ug/L		115	80 - 120	11	30
Chloroform	5.00	5.27		ug/L		105	80 - 120	7	30
Benzene	5.00	5.38		ug/L		108	80 - 120	8	30
1,1,1-Trichloroethane	5.00	5.26		ug/L		105	78 - 126	7	30
Bromomethane	5.00	5.18		ug/L		104	60 - 136	7	30
Chloromethane	5.00	4.75		ug/L		95	56 - 124	8	30
Chloroethane	5.00	5.61		ug/L		112	63 - 120	9	30
2,2-Dichloropropane	5.00	5.02		ug/L		100	61 - 141	7	30
Vinyl chloride	5.00	5.03		ug/L		101	60 - 125	12	30
Methylene Chloride	5.00	5.38		ug/L		108	80 - 120	9	30
Carbon disulfide	5.00	4.81		ug/L		96	67 - 130	7	30
Bromoform	5.00	5.63		ug/L		113	49 - 144	10	30
Bromodichloromethane	5.00	5.42		ug/L		108	73 - 124	7	30
1,1-Dichloroethane	5.00	5.43		ug/L		109	74 - 120	7	30
2-Chlorotoluene	5.00	5.26		ug/L		105	80 - 120	8	30

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-450419/6

Matrix: Water

Analysis Batch: 450419

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier				Limits		Limit
1,1-Dichloroethene	5.00	5.45		ug/L		109	80 - 131	9	30
Trichlorofluoromethane	5.00	5.40		ug/L		108	62 - 136	5	30
4-Chlorotoluene	5.00	5.40		ug/L		108	80 - 120	9	30
Dichlorodifluoromethane	5.00	3.88		ug/L		78	43 - 123	9	30
1,2-Dichloropropane	5.00	5.59		ug/L		112	80 - 120	7	30
1,1,2-Trichloroethane	5.00	5.60		ug/L		112	80 - 120	7	30
Acrylonitrile	25.0	30.3		ug/L		121	64 - 139	11	30
Trichloroethene	5.00	5.26		ug/L		105	80 - 120	8	30
1,1,1,2-Tetrachloroethane	5.00	5.46		ug/L		109	75 - 123	8	30
1,2-Dichlorobenzene	5.00	5.40		ug/L		108	80 - 120	8	30
1,2-Dibromo-3-Chloropropane	5.00	4.96		ug/L		99	56 - 148	9	30
Bromobenzene	5.00	5.54		ug/L		111	80 - 120	7	30
Bromochloromethane	5.00	5.71		ug/L		114	80 - 120	9	30
Isopropylbenzene	5.00	5.54		ug/L		111	80 - 120	8	30
Dibromomethane	5.00	5.74		ug/L		115	80 - 122	7	30
di-Isopropyl ether	5.00	5.27		ug/L		105	58 - 131	9	30
Ethyl t-butyl ether	5.00	5.03		ug/L		101	57 - 126	8	30
Hexachlorobutadiene	5.00	6.05		ug/L		121	72 - 132	7	30
Naphthalene	5.00	5.14		ug/L		103	64 - 122	9	30
n-Butylbenzene	5.00	5.23		ug/L		105	74 - 123	4	30
N-Propylbenzene	5.00	5.20		ug/L		104	74 - 122	6	30
p-Isopropyltoluene	5.00	5.20		ug/L		104	80 - 120	7	30
sec-Butylbenzene	5.00	5.19		ug/L		104	80 - 120	7	30
t-Amyl methyl ether	5.00	5.04		ug/L		101	65 - 125	8	30
t-Butyl alcohol	50.0	44.3		ug/L		89	62 - 138	0	30
tert-Butylbenzene	5.00	4.72		ug/L		94	79 - 120	5	30
trans-1,4-Dichloro-2-butene	25.0	23.5		ug/L		94	10 - 172	3	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	94		80 - 120
Toluene-d8 (Surr)	97		80 - 120

## Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 410-449734/5

Matrix: Water

Analysis Batch: 449734

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
GRO (1C)	ND		0.050	0.023	mg/L			12/04/23 11:31	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
a,a,a-Trifluorotoluene (fid) (1C)	99		63 - 135		12/04/23 11:31	1

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Method: 8015D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: LCS 410-449734/6

Matrix: Water

Analysis Batch: 449734

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
GRO (1C)	1.10	0.986		mg/L		90	70 - 123
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
a,a,a-Trifluorotoluene (fid) (1C)	91		63 - 135				

Lab Sample ID: LCSD 410-449734/7

Matrix: Water

Analysis Batch: 449734

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
GRO (1C)	1.10	0.992		mg/L		90	70 - 123	1	30
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
a,a,a-Trifluorotoluene (fid) (1C)	91		63 - 135						

## Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 410-450568/1-A

Matrix: Water

Analysis Batch: 451352

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 450568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		110	56	ug/L		12/06/23 07:48	12/07/23 16:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>						
o-terphenyl (Surr)	128		37 - 153						

Lab Sample ID: LCS 410-450568/2-A

Matrix: Water

Analysis Batch: 451352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 450568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
DRO (C10-C28)	2650	2730		ug/L		103	78 - 133
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
o-terphenyl (Surr)	120		37 - 153				

Lab Sample ID: LCSD 410-450568/3-A

Matrix: Water

Analysis Batch: 451352

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 450568

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
DRO (C10-C28)	2600	2560		ug/L		98	78 - 133	7	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
o-terphenyl (Surr)	120		37 - 153						

# QC Association Summary

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## GC/MS VOA

### Analysis Batch: 450419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-153161-1	MW-1	Total/NA	Water	8260C LL	
410-153161-2	MW-3	Total/NA	Water	8260C LL	
410-153161-3	MW-4	Total/NA	Water	8260C LL	
MB 410-450419/10	Method Blank	Total/NA	Water	8260C LL	
LCS 410-450419/5	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-450419/6	Lab Control Sample Dup	Total/NA	Water	8260C LL	

## GC VOA

### Analysis Batch: 449734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-153161-1	MW-1	Total/NA	Water	8015D	
410-153161-2	MW-3	Total/NA	Water	8015D	
410-153161-3	MW-4	Total/NA	Water	8015D	
MB 410-449734/5	Method Blank	Total/NA	Water	8015D	
LCS 410-449734/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 410-449734/7	Lab Control Sample Dup	Total/NA	Water	8015D	

## GC Semi VOA

### Prep Batch: 450568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-153161-1	MW-1	Total/NA	Water	3511	
410-153161-2	MW-3	Total/NA	Water	3511	
410-153161-3	MW-4	Total/NA	Water	3511	
MB 410-450568/1-A	Method Blank	Total/NA	Water	3511	
LCS 410-450568/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 410-450568/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

### Analysis Batch: 451352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-153161-1	MW-1	Total/NA	Water	8015D	450568
410-153161-2	MW-3	Total/NA	Water	8015D	450568
410-153161-3	MW-4	Total/NA	Water	8015D	450568
MB 410-450568/1-A	Method Blank	Total/NA	Water	8015D	450568
LCS 410-450568/2-A	Lab Control Sample	Total/NA	Water	8015D	450568
LCSD 410-450568/3-A	Lab Control Sample Dup	Total/NA	Water	8015D	450568



# Lab Chronicle

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

**Client Sample ID: MW-1**

**Lab Sample ID: 410-153161-1**

Date Collected: 11/30/23 12:00

Matrix: Water

Date Received: 12/01/23 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C LL		1	450419	JS6E	ELLE	12/06/23 05:25
Total/NA	Analysis	8015D		1	449734	SE8S	ELLE	12/04/23 17:09
Total/NA	Prep	3511			450568	UMAD	ELLE	12/06/23 07:48
Total/NA	Analysis	8015D		1	451352	UHEW	ELLE	12/07/23 20:48

**Client Sample ID: MW-3**

**Lab Sample ID: 410-153161-2**

Date Collected: 11/30/23 10:40

Matrix: Water

Date Received: 12/01/23 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C LL		1	450419	JS6E	ELLE	12/06/23 05:46
Total/NA	Analysis	8015D		1	449734	SE8S	ELLE	12/04/23 17:35
Total/NA	Prep	3511			450568	UMAD	ELLE	12/06/23 07:48
Total/NA	Analysis	8015D		1	451352	UHEW	ELLE	12/07/23 21:12

**Client Sample ID: MW-4**

**Lab Sample ID: 410-153161-3**

Date Collected: 11/30/23 13:10

Matrix: Water

Date Received: 12/01/23 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C LL		1	450419	JS6E	ELLE	12/06/23 06:06
Total/NA	Analysis	8015D		1	449734	SE8S	ELLE	12/04/23 18:00
Total/NA	Prep	3511			450568	UMAD	ELLE	12/06/23 07:48
Total/NA	Analysis	8015D		1	451352	UHEW	ELLE	12/07/23 21:36

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

# Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Maryland	State	100	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015D		Water	GRO (1C)
8015D	3511	Water	DRO (C10-C28)
8260C LL		Water	1,1,1,2-Tetrachloroethane
8260C LL		Water	1,1,1-Trichloroethane
8260C LL		Water	1,1,2,2-Tetrachloroethane
8260C LL		Water	1,1,2-Trichloroethane
8260C LL		Water	1,1-Dichloroethane
8260C LL		Water	1,1-Dichloroethene
8260C LL		Water	1,1-Dichloropropene
8260C LL		Water	1,2,3-Trichlorobenzene
8260C LL		Water	1,2,3-Trichloropropane
8260C LL		Water	1,2,4-Trichlorobenzene
8260C LL		Water	1,2,4-Trimethylbenzene
8260C LL		Water	1,2-Dibromo-3-Chloropropane
8260C LL		Water	1,2-Dibromoethane
8260C LL		Water	1,2-Dichlorobenzene
8260C LL		Water	1,2-Dichloroethane
8260C LL		Water	1,2-Dichloropropane
8260C LL		Water	1,3,5-Trimethylbenzene
8260C LL		Water	1,3-Dichlorobenzene
8260C LL		Water	1,3-Dichloropropane
8260C LL		Water	1,4-Dichlorobenzene
8260C LL		Water	2,2-Dichloropropane
8260C LL		Water	2-Chlorotoluene
8260C LL		Water	4-Chlorotoluene
8260C LL		Water	Acrylonitrile
8260C LL		Water	Benzene
8260C LL		Water	Bromobenzene
8260C LL		Water	Bromochloromethane
8260C LL		Water	Bromodichloromethane
8260C LL		Water	Bromoform
8260C LL		Water	Bromomethane
8260C LL		Water	Carbon disulfide
8260C LL		Water	Chlorobenzene
8260C LL		Water	Chloroethane
8260C LL		Water	Chloroform
8260C LL		Water	Chloromethane
8260C LL		Water	cis-1,2-Dichloroethene
8260C LL		Water	cis-1,3-Dichloropropene
8260C LL		Water	Dibromochloromethane
8260C LL		Water	Dibromomethane
8260C LL		Water	Dichlorodifluoromethane
8260C LL		Water	di-Isopropyl ether
8260C LL		Water	Ethyl t-butyl ether
8260C LL		Water	Ethylbenzene

# Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc  
 Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

## Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260C LL		Water	Hexachlorobutadiene
8260C LL		Water	Isopropylbenzene
8260C LL		Water	Methyl tertiary butyl ether
8260C LL		Water	Methylene Chloride
8260C LL		Water	Naphthalene
8260C LL		Water	n-Butylbenzene
8260C LL		Water	N-Propylbenzene
8260C LL		Water	p-Isopropyltoluene
8260C LL		Water	sec-Butylbenzene
8260C LL		Water	Styrene
8260C LL		Water	t-Amyl methyl ether
8260C LL		Water	t-Butyl alcohol
8260C LL		Water	tert-Butylbenzene
8260C LL		Water	Tetrachloroethene
8260C LL		Water	Toluene
8260C LL		Water	trans-1,2-Dichloroethene
8260C LL		Water	trans-1,3-Dichloropropene
8260C LL		Water	trans-1,4-Dichloro-2-butene
8260C LL		Water	Trichloroethene
8260C LL		Water	Trichlorofluoromethane
8260C LL		Water	Vinyl chloride
8260C LL		Water	Xylenes, Total



# Method Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
8015D	Gasoline Range Organics (GRO) (GC)	SW846	ELLE
8015D	Diesel Range Organics (DRO) (GC)	SW846	ELLE
3511	Microextraction of Organic Compounds	SW846	ELLE
5030B	Purge and Trap	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

**Protocol References:**

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

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

# Sample Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: High's Store No 86 - Jarrettsville

Job ID: 410-153161-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-153161-1	MW-1	Water	11/30/23 12:00	12/01/23 18:30
410-153161-2	MW-3	Water	11/30/23 10:40	12/01/23 18:30
410-153161-3	MW-4	Water	11/30/23 13:10	12/01/23 18:30

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## Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 410-153161-1

**Login Number: 153161**

**List Number: 1**

**Creator: Wrye, Shaun**

**List Source: Eurofins Lancaster Laboratories Environment Testing, LLC**

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	



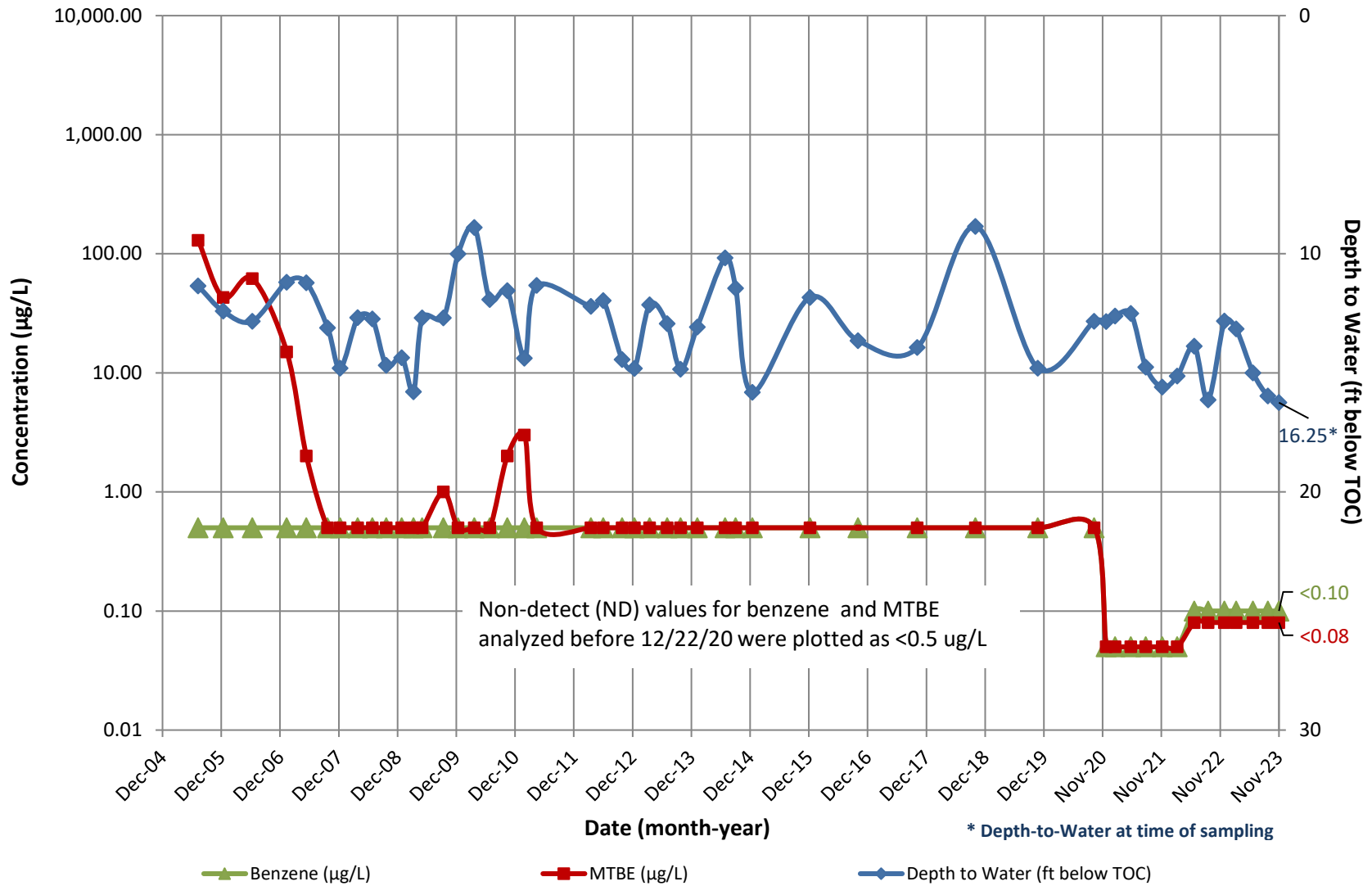
## Appendix C – Concentration Hydrographs

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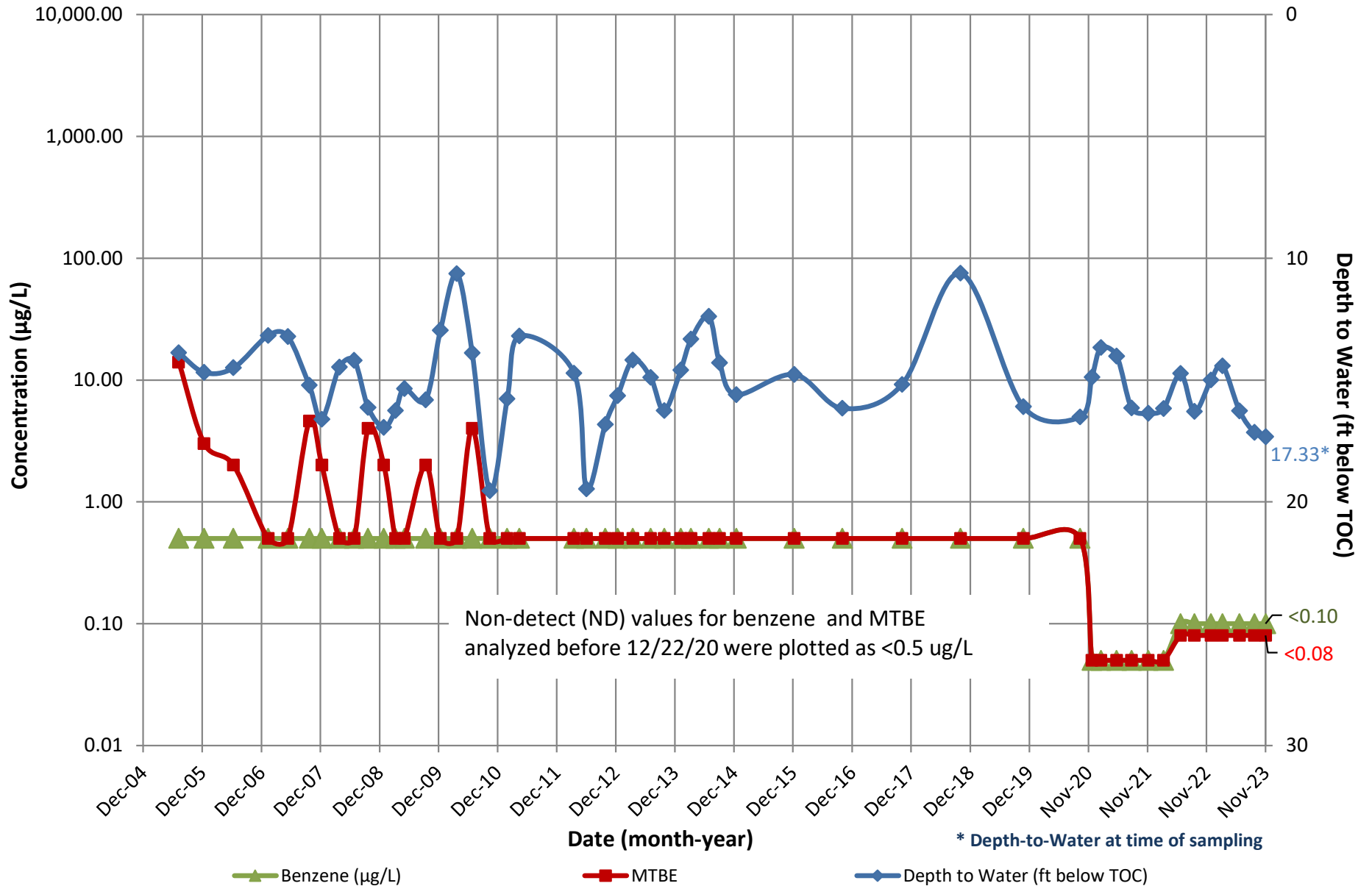
CONCENTRATION HYDROGRAPH FOR BENZENE AND MTBE - MW-1

High's Store No. 86  
 3711 Federal Hill Road  
 Jarrettsville, MD



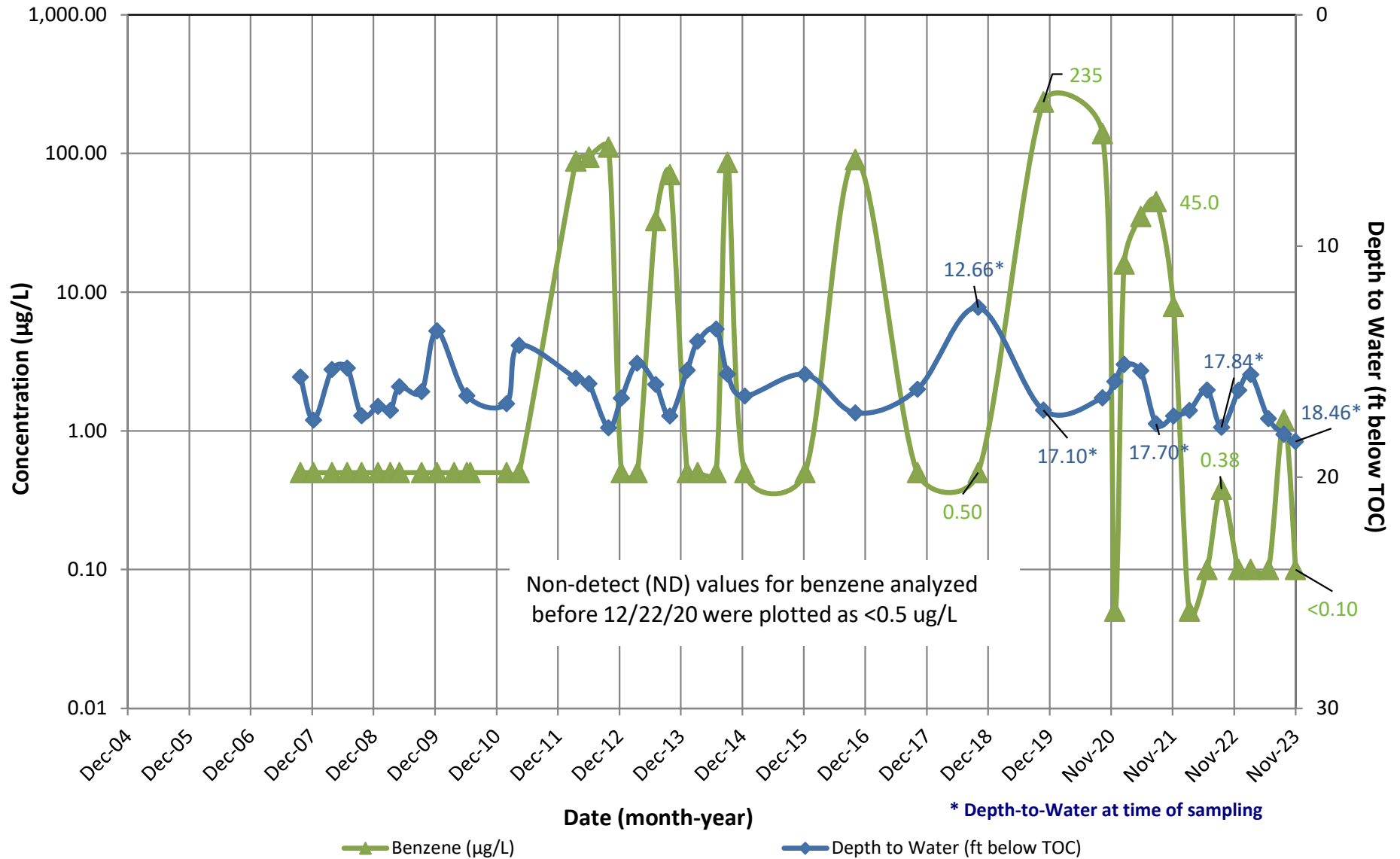
**CONCENTRATION HYDROGRAPH FOR BENZENE & MTBE - MW-3**

High's Store No. 86  
3711 Federal Hill Rd.  
Jarrettsville, MD



**CONCENTRATION HYDROGRAPH FOR BENZENE - MW-4**

High's Store No. 86  
 3711 Federal Hill Rd.  
 Jarrettsville, MD



CONCENTRATION HYDROGRAPH FOR MTBE - MW-4

High's Store No. 86  
3711 Federal Hill Road  
Jarrettsville, MD

