

November 18, 2022

Mr. Nick Psenicnik  
Oil Control Program  
Maryland Department of the Environment  
1800 Washington Blvd, Suite 620  
Baltimore, Maryland 21230

RE: **THIRD QUARTER 2022 MONITORING REPORT**  
Carroll Independent Fuel/Former Green Valley Citgo  
11791 Fingerboard Road  
Monrovia, Maryland  
OCP Case #2005-0834-FR

Dear Mr. Psenicnik,

Groundwater & Environmental Services, Inc. (GES), on behalf of Carroll Independent Fuel Company, Inc. (CIFC), is pleased to submit the Third Quarter 2022 Monitoring Report for the Carroll/Former Green Valley Citgo facility (Site). In summary, the following activities were conducted at the Site this monitoring period:

- Quarterly fluid-level gauging of nine (9) monitoring wells and six (6) tank field wells was completed August 16, 2022;
- Quarterly sampling of five (5) monitoring wells was completed August 16, 2022;
- Sampling of the potable well at the Green Valley Plaza (GVP) was completed on August 17, 2022; and,
- Sampling at four (4) residential POET systems and two (2) residential potable locations was completed August 17 and September 29, 2022.

On February 15, 2022, GES submitted the Annual Remedial Evaluation Report for 2021 for the Site. The annual report concluded with the request for several reductions to the monitoring program, which included potable sample locations at the Green Valley Plaza (GVP) POET System, 3996 Farm Lane, 3997 Farm Lane, and 3923 Rosewood Road. We look forward to the MDE's response regarding these proposed reductions to the current potable well monitoring program for the case. If you have any questions or would like additional information, please contact the undersigned at 800-220-3606, extension 3705 or 3726, respectively, or Herb Meade at 410-261-5450.

Sincerely,



Amelia Ryan, PE  
Project Engineer



Pete Reichardt  
Senior Project Manager

Enclosures

c: Nick Psenicnik – MDE (2 additional copies & CD)  
Ellen Jackson – MDE (additional copy)  
Herb Meade – Carroll (e-copy)  
Barry Glotfelty – Frederick County Health Department (CD)  
Jennifer and Samir Andrawos – Timbercrest Limited Partnership (CD)  
File – GES, MD (PSID# 953231)

<b>MDE Contact:</b>	Mr Nick Psenicnik, Maryland Department of the Environment
<b>Consultant Contact:</b>	Mr. Peter Reichardt, Groundwater & Environmental Services, Inc., Odenton, MD
<b>Client Contact:</b>	Mr. Herb Meade, Carroll Independent Fuel Company, Inc.
<b><u>SITE DESCRIPTION</u></b>	
<b>Site Use:</b>	Carroll Motor Fuels-Branded Retail Service Station adjacent to Green Valley Plaza (shopping center)
<b>Surrounding Area:</b>	Commercial shopping centers and residential properties
<b>Sensitive Receptors:</b>	Potable Wells – The Site has historically served up to nine (9) onsite supply wells. However, for the reported quarter, only one supply well was noted active (FR-13-0386).  Surrounding commercial and residential properties are all served by potable wells.  Basements/Underground Receptors – None onsite  Surface Water/Wetlands – Fahrney Branch is located approximately 2,400 feet to the south.  Hospitals/Childcare/Schools – Green Valley YMCA (Green Valley Plaza)  Date of Most Recent Regulatory Directive Correspondence: February 18, 2020, GES reported the configuration of the GVP system and the “GVP INF” analytical result to the MDE via email. The MDE responded on February 19, 2020 with a request for status regarding the pending Frederick County Health Department Certificate of Potability (Certificate) for supply well #FR-13-0386.  Regulatory correspondence is documented in <b>Appendix A – Historical Activities Summary</b> .

### **SCHEDULE OF ROUTINE ACTIVITIES**

<b>Groundwater Sampling:</b>	-Quarterly – Wells MW-7, MW-14D, MW-17, MW18S-R, and MW-18D  -Annually – Wells MW-1, MW-4, MW-5 and MW-13 (last sampled during Fourth Quarter of 2021)  *Wells MW-2, 6, 8, 9, 10, 11, 12, 14S, 15D, and MW-16 were abandoned and removed from the current monitoring program in 4Q 2017 with MDE approval granted October 17, 2017.
<b>Laboratory Analyses:</b>	Full-suite volatile organic compounds (VOCs), oxygenates including methyl tert-butyl ether (MTBE), and naphthalene via EPA Method 8260.

### **SCHEDULE OF ROUTINE ACTIVITIES (cont.)**

**Table 1** summarizes current and historical analytical results from monitoring wells in the sampling program. **Figure 1** presents a Site Map that includes the locations of the monitoring wells, adjacent residences, and important land features.

- Monitoring Well Field Data:**
- Dissolved Oxygen (DO)
  - Oxidation Reduction Potential (ORP)
  - pH
  - Temperature
  - Specific Conductivity

**Table 2** presents current and historical field parameters measurements from monitoring wells in the sampling program. The supporting Third Quarter 2022 monitoring well sampling data sheets are attached as **Appendix B**.

#### **Non-Transient, Non-Community Supply Well Sampling**

<b><u>Location</u></b>	<b><u>Well Number(s)</u></b>	<b><u>Sampling Frequency:</u></b>
Green Valley Plaza (GVP):	FR-13-0386 <sup>A</sup>	Quarterly
	FR-94-1281 <sup>B</sup>	Quarterly
	FR-94-1233 <sup>B</sup>	Quarterly

<sup>A</sup> Supply well FR-13-0386 appears to be single, active source well for GVP system and therefore is represented by the GVP “Influent” potable well sample.

<sup>B</sup> Historical GVP supply well offline during Third Quarter 2022.

- Laboratory Analyses:** Target VOCs List, including oxygenates and naphthalene, via EPA Method 524.2.

Note: FR-81-5955, FR-88-1394, FR-88-1366, FR-73-4918, FR-73-6674, and FR-73-7687 were removed from the current monitoring program with MDE approval granted July 29, 2015.

#### **Non-Transient, Non-Community Point-of-Entry Treatment (POET) System Sampling**

<b><u>Location</u></b>	<b><u>System Diagnostic Sample Locations</u></b>	<b><u>Sampling Frequency:</u></b>
Green Valley Plaza (GVP):	-Influent (“Inf”)*	Quarterly

\*Per CFC correspondence to GVP ownership and MDE dated 2/18/22, CFC will no longer be collecting Mid-fluent or Effluent samples nor will CFC be responsible for continued maintenance with the GVP POET system.

- Laboratory Analyses:** Target VOCs List, including oxygenates and naphthalene, via EPA Method 524.2.

**Table 3** summarizes current and historical analytical data for the Green Valley Plaza potable supply wells and the Influent, Midfluent, and Effluent diagnostic samples associated to the GVP POET treatment system.

### SCHEDULE OF ROUTINE ACTIVITIES (cont.)

#### Residential Potable Well POET System Sampling

<u>Location</u>	<u>Well Number(s)</u>	<u>Sampling Frequency:</u>
3990 Farm Lane:	FR-73-5449	Quarterly
3992 Farm Lane:	Unknown	Quarterly
3994 Farm Lane:	FR-73-2625	Quarterly
3996 Farm Lane:	FR-73-2625	Quarterly
<b>Laboratory Analyses:</b>	Target VOC list including oxygenates (with MTBE) and naphthalene via EPA Method 524.2.	

Note: Carroll Fuel was released from POET maintenance at 3997 Farm Lane and 3923 Rosewood Road by the MDE on May 24, 2018. The influent water at these locations is now sampled quarterly.

**Table 4** summarizes the current and historical analytical results for the offsite residential POET systems.

#### Residential Potable Well Sampling

<u>Location</u>	<u>Sampling Frequency:</u>
3997 Farm Lane:	Quarterly
3923 Rosewood Road:	Quarterly
<b>Laboratory Analyses:</b>	Target VOC list, including oxygenates (with MTBE), and naphthalene via EPA Method 524.2.

\*Note: Resident location 3829 Greenridge Road has been removed from the routine sampling schedule at the request of the property owner. The following residential potable well locations were removed from the current monitoring program with MDE approval granted July 29, 2015:

- 3979, 3981, 3983, 3984A, 3984, 3985, 3987, and 3989 Farm Lane
- 3833, 3835, and 3837 Greenridge Road
- 3737 and 3739 Blueberry Court
- 3992, 3994, 3996, and 3998 Rye Lane

The following residential potable well locations were removed from the current monitoring program with MDE approval granted September 11, 2018:

- 3991, 3993, 3995, and 3998 Farm Lane
- 3740 Blueberry Court

**Figure 2** presents a Local Area Map noting the various on and offsite potable and supply wells within the current study area. **Table 5** summarizes the current and historical analytical results for the offsite residential potable wells. All Third Quarter 2022 laboratory reports and chain-of-custody (COC) documentation are attached as **Appendix C**.

## **FIELD ACTIVITIES**

### **Quarterly Groundwater Sampling Data Summary:**

Quarterly Groundwater Sampling Dates:	August 16, 2022
# of Monitoring Wells in study area/# Sampled:	9/5 (5 quarterly-frequency wells)
Groundwater Sampling and Analyses Notes:	The revised routine sampling program outlined in the MDE's response letter, <i>Site Status and Modifications to Sampling Program</i> dated October 17, 2017 began implementation in the Fourth Quarter 2017.
Apparent Groundwater Flow Direction:	Local groundwater flow is mapped to move south to southwest across the site and interpreted to move regionally toward the south-southwest.

**Figure 3** presents an interpretation of groundwater contours based on water elevations gauged from overburden/weathered rock monitoring wells on August 16, 2022. **Figure 4** presents the Third Quarter 2022 MTBE concentration levels for onsite monitoring wells and both on and offsite potable supply wells. Groundwater well and potable well monitoring graphs are attached as **Appendix D** and **Appendix E** respectively. **Table 6** provides a summary of monitoring well construction details.

### **Maximum Monitoring Well Concentrations:**

Benzene: Non-detect (method detection limit of 0.10 µg/L)  
MTBE: 33 µg/L (MW-18S-R) on August 16, 2022  
Naphthalene: Non-detect (method detection limit of 0.080 µg/L)

## **REMEDIAL SYSTEM STATUS**

No remedial activities took place during the Third Quarter of 2022. Past remedial activities can be referenced in the *ISCO System Comprehensive Summary & Update to the Conceptual Site Model (CSM)* submitted to the MDE on September 28, 2012.

## **REMEDIAL PERMITS**

No remedial permits currently in effect.

## **FUTURE ACTIVITIES**

### **Fourth Quarter 2022:**

- GES to continue quarterly sampling of monitoring wells and potable well locations during the Fourth Quarter 2022 monitoring period, unless otherwise directed by the MDE.
- GES to continue annual sampling of monitoring wells during the Fourth Quarter 2022 monitoring period, unless otherwise directed by the MDE.
- GES to coordinate the proper disposal and treatment of groundwater waste generated from groundwater sampling, as needed.

## **ATTACHMENTS**

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### **LIST OF FIGURES**

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- Figure 1 Site Map
- Figure 2 Local Area Map
- Figure 3 Groundwater Contour Map, Third Quarter 2022
- Figure 4 Onsite and Residential POET System MTBE Concentration Map, Third Quarter 2022

### **LIST OF TABLES**

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- Table 1 Historical Monitoring Well Analytical Data Summary
- Table 2 Historical Monitoring Well Field Parameters Data Summary
- Table 3 Historical GVP Potable Well and POET System Data Summary
- Table 4 Historical Residential POET System Data Summary
- Table 5 Historical Residential Potable Well Data Summary
- Table 6 Monitoring Well Construction Details

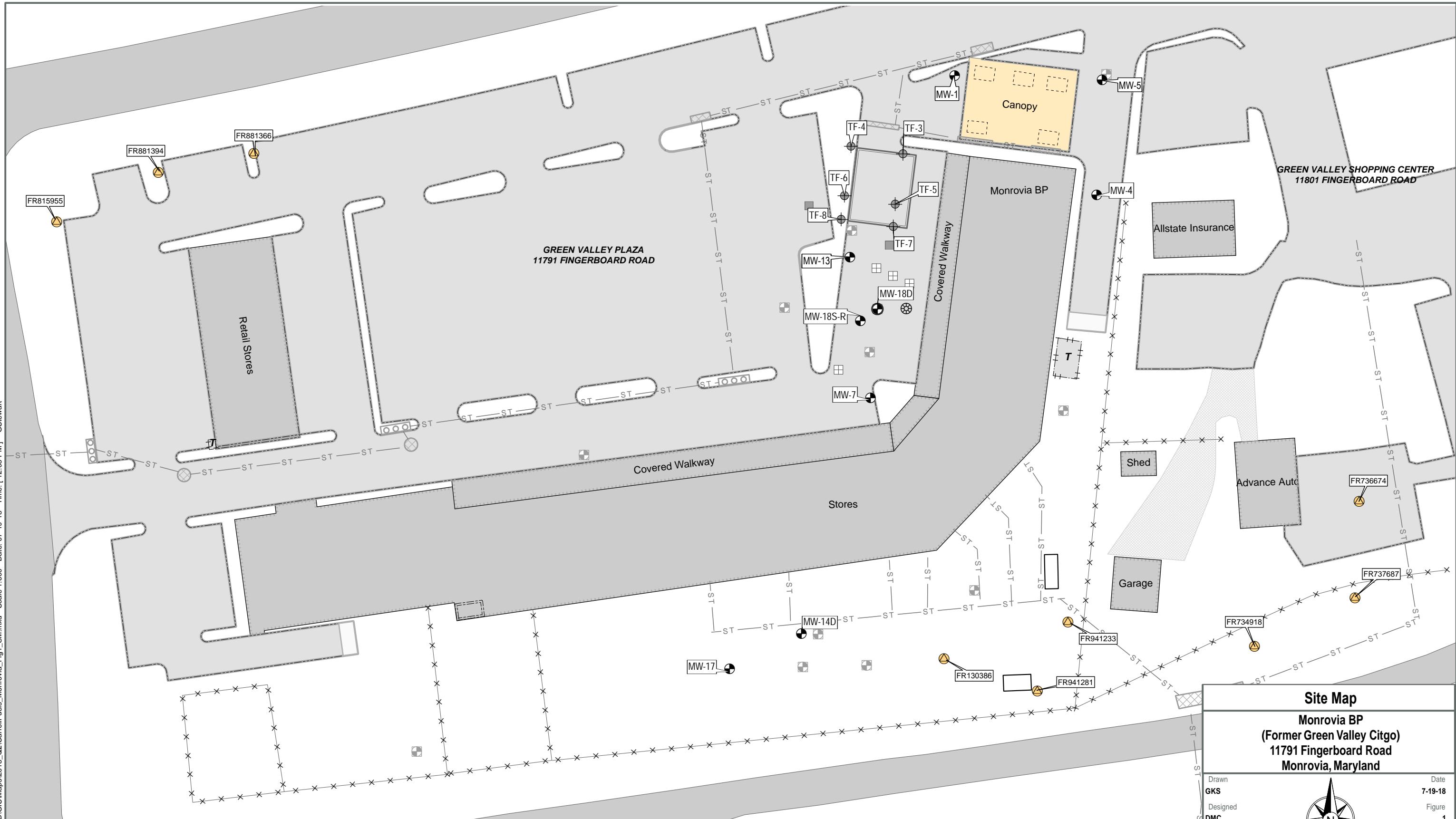
### **APPENDICES**

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- Appendix A Historical Activities Summary
- Appendix B Monitoring Well Sampling Data Sheets
- Appendix C Laboratory Reports and Chain of Custody Documentation (See Files on CD)
- Appendix D Monitoring Well Concentration Hydrographs
- Appendix E Supply Well Concentration Hydrographs

## **FIGURES**

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#### Legend

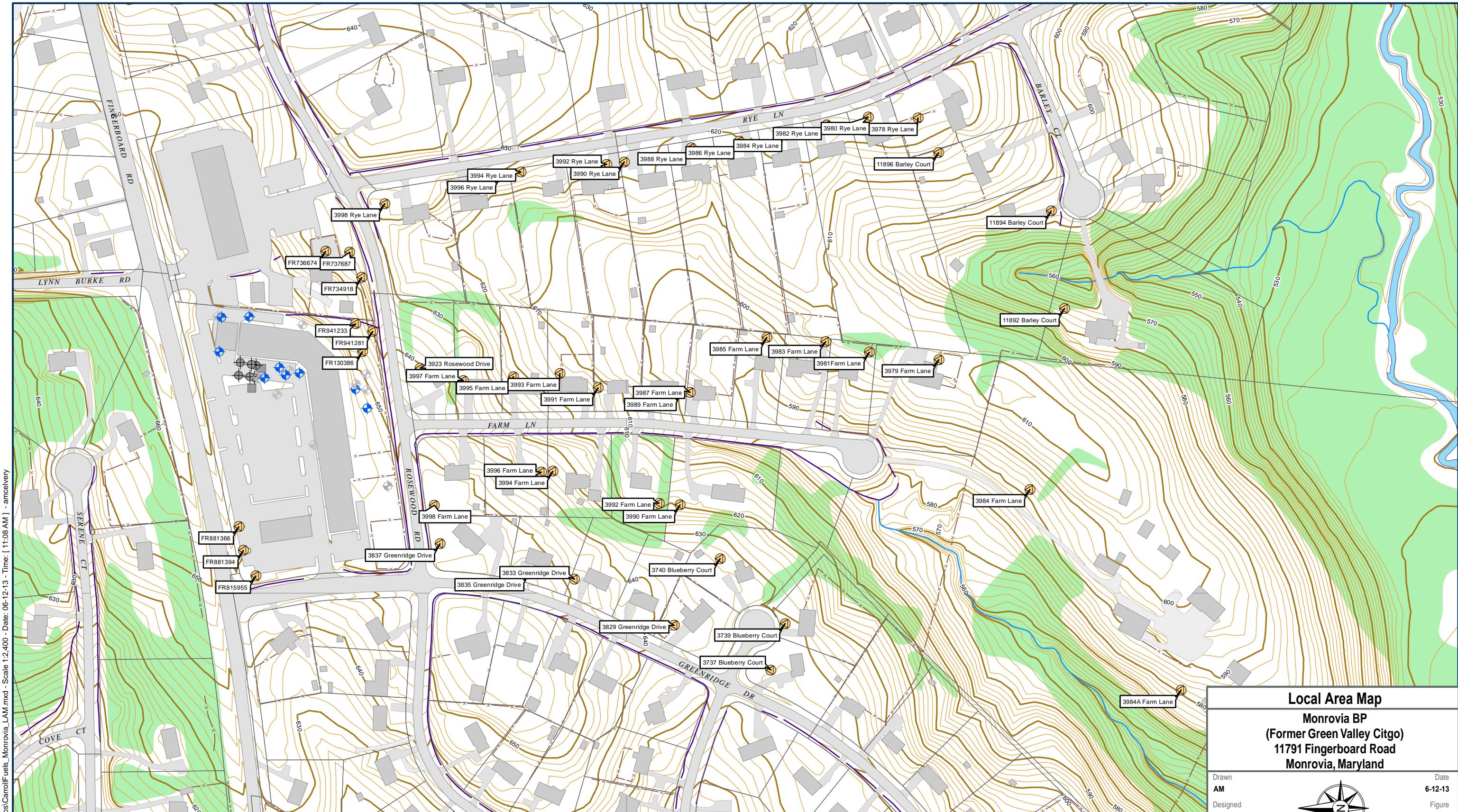
■ Abandoned Well	■ Abandoned Soil Vapor Point
● Monitoring Well	■ Abandoned Injection Well
○ Potable Well	● Nested Obs Well
● Tank Field Well	● Abandoned Vapor Extraction Well
×	— Fence
—	Building
—	Propane AST
—	Storm Sewer
—	Canopy
—	Pump Room
—	Dispenser
—	Tank Field
—	Transformer
—	Dumpster
□	Abandoned Curb Catch Basin
□	Catch Basin

Source:  
NAIP aerial photograph for Frederick Co. Based on GIS  
data provided by Environmental Alliance, Inc.

**Site Map**  
**Monrovia BP**  
**(Former Green Valley Citgo)**  
**11791 Fingerboard Road**  
**Monrovia, Maryland**

Drawn  
GKS  
Designed  
DMC  
Approved  
LK





### Local Area Map

**Monrovia BP  
(Former Green Valley Citgo)  
11791 Fingerboard Road  
Monrovia, Maryland**

Drawn  
AM

Designed  
JW

Approved  
GR

Date  
6-12-13

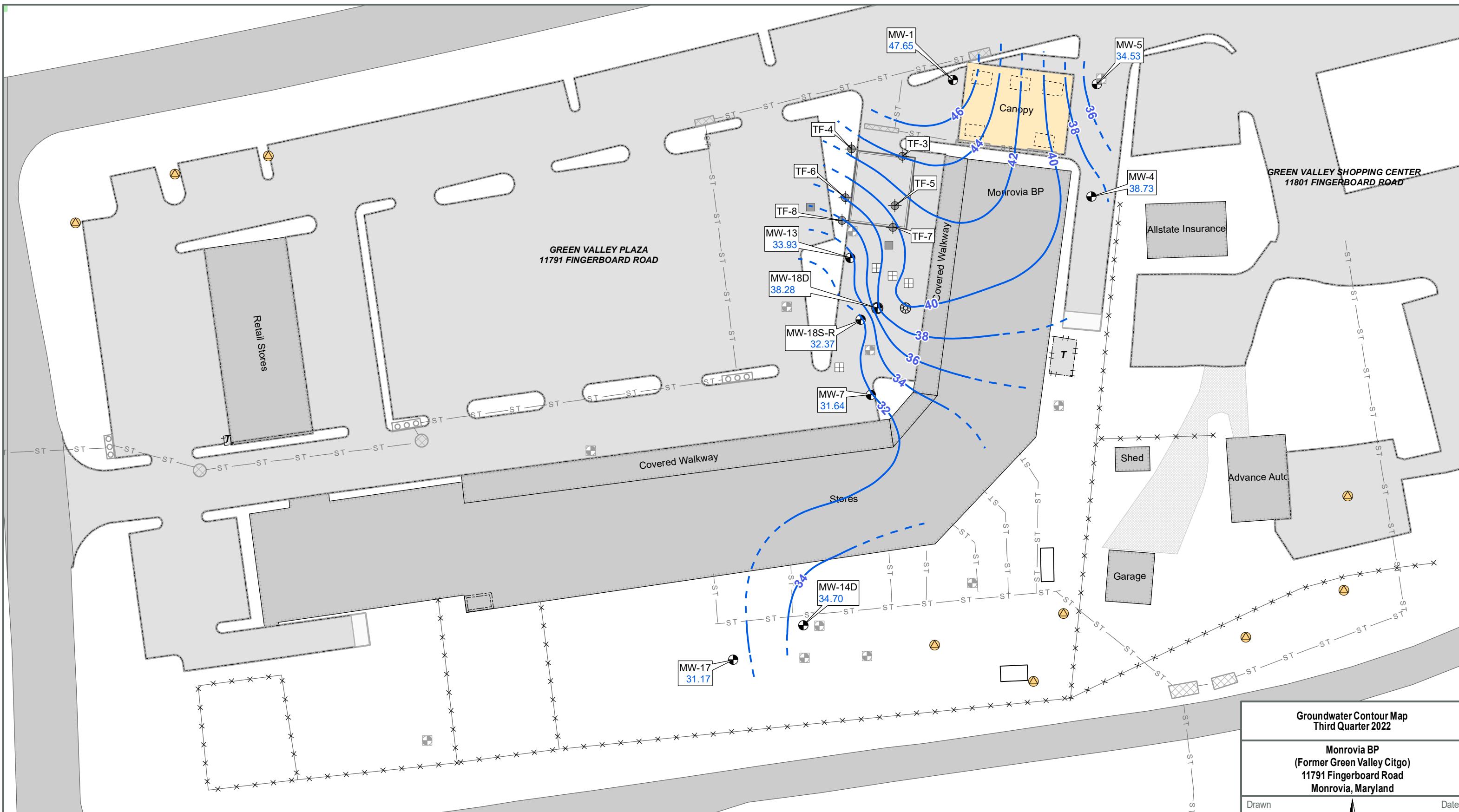
Figure  
2



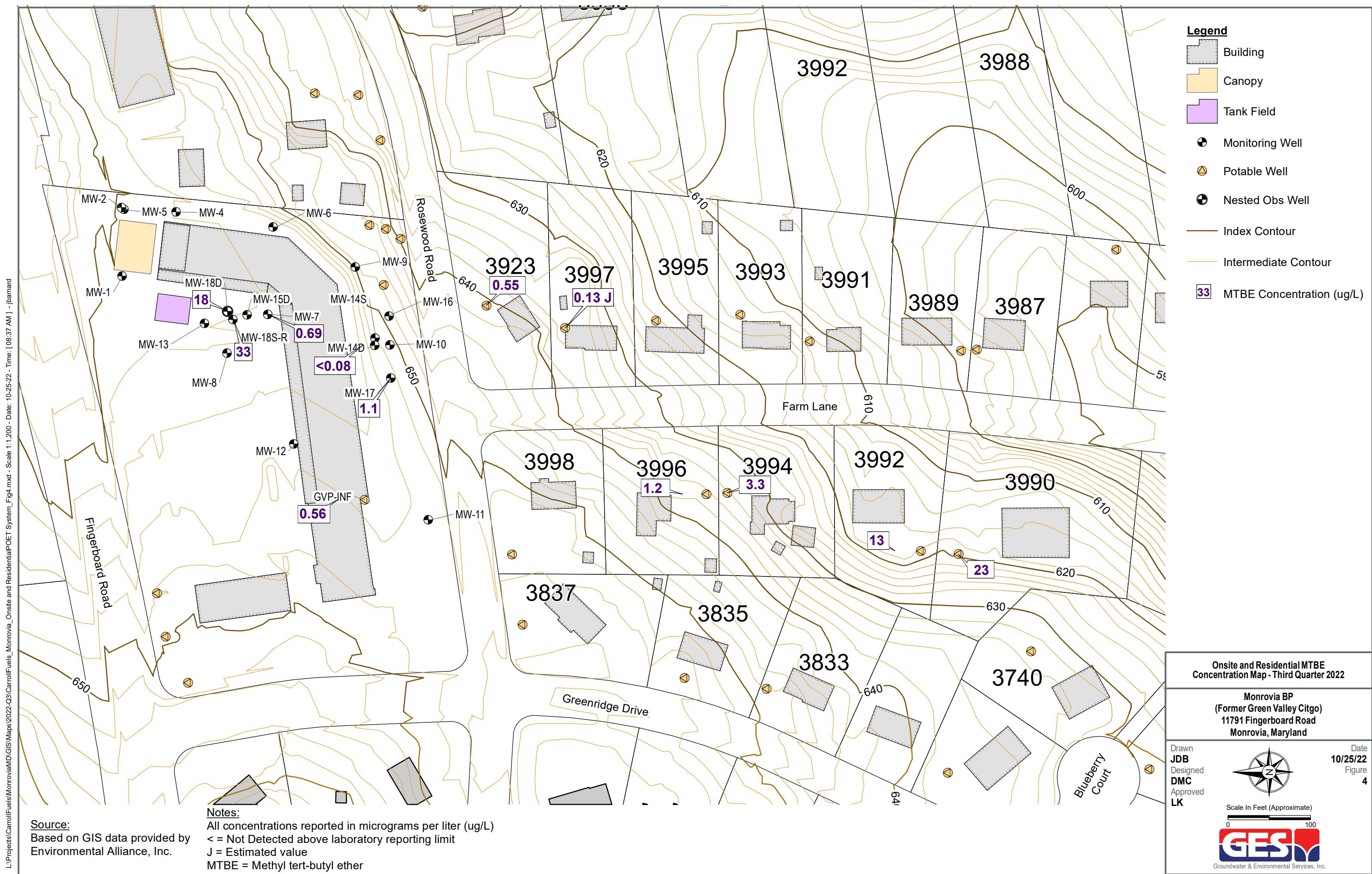
### Legend

- |                 |                            |                             |                  |            |             |
|-----------------|----------------------------|-----------------------------|------------------|------------|-------------|
| Abandoned Well  | Tank Field Well            | Topographic Contour (10 ft) | Building         | Stream     | Wooded Area |
| Monitoring Well | Abandoned Soil Vapor Point | Intermediate Contour (2 ft) | Paved Road/Drive | Ditch      |             |
| Potable Well    | Fence                      | Property Boundary           | Unpaved Drive    | Water Body |             |

Source:  
Frederick County GIS



Source:  
NAIP aerial photograph for Frederick Co. Based on GIS data provided by Environmental Alliance, Inc.



## **TABLES**

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Table 1

## HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC &amp; TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Diisopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-Butyl Alcohol (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Carbon Disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Naphthalene (µg/L)	Tetrachloroethylene (µg/L)
<b>GW Clean-up Standards*</b>																						
MW-1	08/18/2020	-	99.19	47.51	-	51.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	10/28/2020	LF(60)	99.19	51.78	-	47.41	<0.050	<0.070	<0.060	<0.15	0.88	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	0.20 J	<0.060	<0.050	<0.060
MW-1	01/20/2021	-	99.19	45.99	-	53.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	05/05/2021	-	99.19	47.91	-	51.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	08/03/2021	-	99.19	49.68	-	49.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	11/01/2021	LF(60)	99.19	47.63	-	51.56	<0.050	<0.070	<0.060	<0.15	0.18 J	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	0.30 J	<0.060	<0.050	<0.060
MW-1	02/07/2022	-	99.19	50.87	-	48.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	05/03/2022	-	99.19	48.80	-	50.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	08/16/2022	-	99.19	51.54	-	47.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	08/18/2020	-	97.84	56.38	-	41.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	10/28/2020	GRAB	97.84	58.97	60.62	38.87	<0.050	<0.070	<0.060	<0.15	<0.050	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-4	01/20/2021	-	97.84	53.60	-	44.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/05/2021	-	97.84	55.88	-	41.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	08/03/2021	-	97.84	59.02	-	38.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	11/01/2021	-	97.84	55.58	-	42.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	11/02/2021	P&S	97.84	55.58	60.65	42.26	<0.050	<0.070	<0.060	<0.15	0.096 J	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	<0.090	<0.060	<0.050	0.060 J
MW-4	02/07/2022	-	97.84	59.10	-	38.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/03/2022	-	97.84	58.47	-	39.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	08/16/2022	-	97.84	59.11	-	38.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	08/18/2020	-	99.60	56.17	-	43.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	10/28/2020	LF(68)	99.60	64.36	-	35.24	<0.050	<0.070	<0.060	<0.15	<0.050	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	0.19 J	<0.060	<0.050	0.11 J
MW-5	01/20/2021	-	99.60	50.07	-	49.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	05/05/2021	-	99.60	56.04	-	43.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	08/03/2021	-	99.60	62.88	-	36.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	11/01/2021	LF(68)	99.60	55.90	-	43.70	<0.050	<0.070	<0.060	<0.15	<0.050	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	0.13 J	<0.060	<0.050	0.072 J
MW-5	02/07/2022	-	99.60	64.46	-	35.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	05/03/2022	-	99.60	57.13	-	42.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	08/16/2022	-	99.60	65.07	-	34.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	08/18/2020	-	97.66	61.12	-	36.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	08/20/2020	LF(69)	97.66	61.18	-	36.48	<0.050	<0.070	<0.060	<0.15	1.4	0.12 J	<0.050	<0.20	<1.1	-	-	<0.060	0.30 J	0.14 J	0.056 J	<0.060
MW-7	10/28/2020	LF(69)	97.66	64.98	-	32.68	<0.050	<0.070	<0.060	<0.15	1.1	0.087 J	<0.050	<0.20	<1.1	-	-	<0.060	0.23 J	<0.060	<0.050	<0.060
MW-7	01/20/2021	-	97.66	57.10	-	40.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	01/21/2021	LF(69)	97.66	57.14	-	40.52	<0.050	<0.070	<0.060	<0.15	5.4	0.26 J	<0.050	<0.20	<1.1	-	-	<0.060	0.2 J	0.38 J	<0.050	<0.060

Table 1

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 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Diisopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-Butyl Alcohol (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Carbon Disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Naphthalene (µg/L)	Tetrachloroethylene (µg/L)
<b>GW Clean-up Standards*</b>																						
MW-7	05/05/2021	-	97.66	60.02	-	37.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	05/06/2021	LF(69)	97.66	60.36	-	37.30	<0.050	<0.070	<0.060	<0.15	1.6	0.13 J	<0.050	<0.20	<1.1	-	-	<0.060	0.25 J	<0.060	<0.050	<0.060
MW-7	08/03/2021	LF(69)	97.66	64.78	-	32.88	<0.050	<0.070	<0.060	<0.15	0.82	0.075 J	<0.050	<0.20	<1.1	-	-	<0.060	0.24 J	<0.060	<0.050	<0.060
MW-7	11/01/2021	LF(69)	97.66	59.12	-	38.54	<0.050	<0.070	<0.060	<0.15	2.3	0.13 J	<0.050	<0.20	<1.1	-	-	<0.060	0.27 J	<0.060	<0.050	<0.060
MW-7	02/07/2022	LF(69)	97.66	65.44	-	32.22	<0.050	<0.070	<0.060	<0.15	0.37 J	0.071 J	<0.050	<0.20	<1.1	-	-	<0.060	0.11 J	<0.060	<0.050	<0.060
MW-7	05/03/2022	LF(69)	97.66	62.71	-	34.95	<0.050	<0.070	<0.060	<0.15	0.85	0.13 J	<0.050	<0.20	<1.1	-	-	0.088 J	0.22 J	<0.060	<0.050	<0.060
MW-7	08/16/2022	LF(69)	97.66	66.02	-	31.64	<0.10	<0.080	<0.080	<0.070	0.69	<0.10	<0.080	<0.20	<3.0	-	-	<0.10	0.17 J	<0.10	<0.080	<0.20
MW-13	08/18/2020	-	98.11	59.39	-	38.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-13	10/28/2020	LF(73)	98.11	63.73	-	34.38	<0.050	<0.070	<0.060	<0.15	0.79	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	0.23 J	<0.060	<0.050	<0.060
MW-13	01/20/2021	-	98.11	55.73	-	42.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-13	05/05/2021	-	98.11	58.76	-	39.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-13	08/03/2021	-	98.11	62.96	-	35.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-13	11/01/2021	LF(73)	98.11	57.33	-	40.78	<0.050	<0.070	<0.060	<0.15	3.7	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	0.52	<0.060	<0.050	<0.060
MW-13	02/07/2022	-	98.11	63.22	-	34.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-13	05/03/2022	-	98.11	61.13	-	36.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-13	08/16/2022	-	98.11	64.18	-	33.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-14D	08/18/2020	-	92.07	52.65	-	39.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-14D	08/20/2020	LF(212)	92.07	53.08	-	38.99	<0.050	<0.070	<0.060	<0.15	24	0.53	<0.050	0.30 J	7.4 J	-	-	0.56 J	<0.090	0.13 J	<0.050	<0.060
MW-14D	10/28/2020	LF(212)	92.07	57.90	-	34.17	<0.050	<0.070	<0.060	<0.15	1.4	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-14D	01/20/2021	-	92.07	50.10	-	41.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-14D	01/20/2021	LF(212)	92.07	50.10	-	41.97	<0.050	<0.070	<0.060	<0.15	0.081 J	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-14D	05/05/2021	-	92.07	52.53	-	39.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-14D	05/06/2021	LF(212)	92.07	52.63	-	39.44	<0.050	<0.070	<0.060	<0.15	19	0.42 J	<0.050	0.26 J	7.3 J	-	-	0.16 J	<0.090	<0.060	<0.050	<0.060
MW-14D	08/03/2021	-	92.07	57.21	-	34.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-14D	08/04/2021	LF(212)	92.07	57.21	-	34.86	<0.050	<0.070	<0.060	<0.15	22	0.46 J	<0.050	0.35 J	4.6 J	-	-	0.38 J	<0.090	<0.060	<0.050	<0.060
MW-14D	11/01/2021	LF(212)	92.07	51.23	-	40.84	<0.050	<0.070	<0.060	<0.15	23	0.49 J	<0.050	0.32 J	5.9 J	-	-	0.46 J	<0.090	<0.060	<0.050	<0.060
MW-14D	02/08/2022	LF(212)	92.07	57.68	-	34.39	<0.050	<0.070	<0.060	<0.15	<0.050	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-14D	05/03/2022	-	92.07	56.16	-	35.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-14D	05/04/2022	LF(212)	92.07	56.01	-	36.06	<0.050	<0.070	<0.060	<0.15	21	0.48 J	<0.050	0.28 J	6.3 J	-	-	0.49 J	<0.090	<0.060	<0.050	<0.060
MW-14D	08/16/2022	LF(212)	92.07	57.37	-	34.70	<0.10	<0.080	<0.080	<0.070	<0.080	<0.10	<0.080	<0.20	<3.0	-	-	<0.10	<0.090	<0.10	<0.080	<0.20
MW-17	08/18/2020	-	92.84	55.89	-	36.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-17	08/20/2020	LF(68)	92.84	55.81	-	37.03	<0.050	<0.070	<0.060	<0.15	0.92	0.33 J	<0.050	<0.20	<1.1	-	-	<0.060	0.47 J	0.13 J	<0.050	<0.060
MW-17	10/28/2020	LF(68)	92.84	59.68	-	33.16	<0.050	<0.070	<0.060	<0.15	0.65	0.29 J	<0.050	<0.20	<1.1	-	-	0.20 J	0.38 J	<0.060	<0.050	<0.060

Table 1

## HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC &amp; TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Diisopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-Butyl Alcohol (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Carbon Disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Naphthalene (µg/L)	Tetrachloroethylene (µg/L)
<b>GW Clean-up Standards*</b>																						
MW-17	01/20/2021	-	92.84	51.81	-	41.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-17	01/20/2021	LF(68)	92.84	51.81	-	41.03	<0.050	<0.070	<0.060	<0.15	0.99	0.31 J	<0.050	<0.20	<1.1	-	-	<0.060	0.31 J	<0.060	<0.050	<0.060
MW-17	05/05/2021	-	92.84	54.64	-	38.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-17	05/06/2021	LF(68)	92.84	55.10	-	37.74	<0.050	<0.070	<0.060	<0.15	1.1	0.31 J	<0.050	<0.20	2.1 J	-	-	<0.060	0.34 J	<0.060	<0.050	<0.060
MW-17	08/03/2021	LF(68)	92.84	60.20	-	32.64	<0.050	<0.070	<0.060	<0.15	0.92	0.20 J	<0.050	<0.20	<1.1	-	-	<0.060	0.39 J	<0.060	<0.050	<0.060
MW-17	11/01/2021	LF(68)	92.84	53.77	-	39.07	<0.050	<0.070	<0.060	<0.15	0.70	0.24 J	<0.050	<0.20	<1.1	-	-	<0.060	0.36 J	<0.060	<0.050	<0.060
MW-17	02/07/2022	LF(68)	92.84	60.33	-	32.51	<0.050	<0.070	<0.060	<0.15	0.53	0.20 J	<0.050	<0.20	<1.1	-	-	<0.060	0.28 J	<0.060	<0.050	<0.060
MW-17	05/03/2022	-	92.84	57.41	-	35.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-17	05/04/2022	LF(68)	92.84	57.40	-	35.44	<0.050	<0.070	<0.060	<0.15	0.45 J	0.21 J	<0.050	<0.20	<1.1	-	-	<0.060	0.28 J	<0.060	<0.050	<0.060
MW-17	08/16/2022	LF(68)	92.84	61.67	-	31.17	<0.10	<0.080	<0.080	<0.070	1.1	0.22 J	<0.080	<0.20	<3.0	-	-	<0.10	0.35 J	<0.10	<0.080	<0.20
MW-18S-R	08/18/2020	-	97.72	60.49	-	37.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18S-R	08/20/2020	LF(68)	97.72	60.60	-	37.12	<0.050	<0.070	<0.060	<0.15	5.0	0.24 J	<0.050	<0.20	<1.1	-	-	<0.060	0.29 J	0.16 J	<0.050	<0.060
MW-18S-R	10/28/2020	LF(68)	97.72	64.59	-	33.13	<0.050	<0.070	<0.060	<0.15	300	2.6	<0.050	6.1	1.3 J	-	-	<0.060	0.23 J	<0.060	<0.050	<0.060
MW-18S-R	01/20/2021	-	97.72	56.51	-	41.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18S-R	01/21/2021	LF(68)	97.72	56.52	-	41.20	<0.050	<0.070	<0.060	<0.15	11	0.25 J	<0.050	<0.20	<1.1	-	-	<0.060	0.22 J	<0.060	<0.050	<0.060
MW-18S-R	05/05/2021	-	97.72	59.53	-	38.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18S-R	05/06/2021	LF(68)	97.72	59.79	-	37.93	<0.050	<0.070	<0.060	<0.15	23	0.39 J	<0.050	0.40 J	1.2 J	-	-	<0.060	0.24 J	<0.060	<0.050	<0.060
MW-18S-R	08/03/2021	-	97.72	64.35	-	33.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18S-R	08/04/2021	LF(68)	97.72	64.35	-	33.37	<0.050	<0.070	<0.060	<0.15	190	2.0	<0.050	3.8	<1.1	-	-	<0.060	0.24 J	<0.060	<0.050	<0.060
MW-18S-R	11/01/2021	-	97.72	58.56	-	39.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18S-R	11/02/2021	LF(68)	97.72	58.56	-	39.16	<0.050	<0.070	<0.060	<0.15	20	0.39 J	<0.050	0.24 J	<1.1	-	-	<0.060	0.21 J	<0.060	<0.050	<0.060
MW-18S-R	02/08/2022	LF(68)	97.72	64.73	-	32.99	<0.050	<0.070	<0.060	<0.15	89	1.3	<0.050	1.6	<1.1	-	-	<0.060	0.19 J	<0.060	<0.050	<0.060
MW-18S-R	05/03/2022	-	97.72	62.25	-	35.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18S-R	05/04/2022	LR(68)	97.72	62.23	-	35.49	<0.050	<0.070	<0.060	<0.15	9.4	0.31 J	<0.050	<0.20	<1.1	-	-	<0.060	0.19 J	<0.060	<0.050	<0.060
MW-18S-R	08/16/2022	LF(68)	97.72	65.35	-	32.37	<0.10	<0.080	<0.080	<0.070	33	0.56	<0.080	0.32 J	4.4 J	-	-	<0.10	0.19 J	<0.10	<0.080	<0.20
MW-18D	08/18/2020	-	98.31	55.30	-	43.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18D	08/20/2020	LF(125)	98.31	55.40	-	42.91	<0.050	<0.070	<0.060	<0.15	14	0.15 J	<0.050	0.27 J	3.6 J	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-18D	10/28/2020	LF(125)	98.31	59.90	-	38.41	<0.050	<0.070	<0.060	<0.15	1.2	<0.050	<0.050	<0.20	<1.1	-	-	0.21 J	<0.090	<0.060	<0.050	<0.060
MW-18D	01/20/2021	-	98.31	55.42	-	42.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18D	01/21/2021	LF(125)	98.31	55.35	-	42.96	<0.050	<0.070	<0.060	<0.15	11	0.068 J	<0.050	0.22 J	5.2 J	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-18D	05/05/2021	-	98.31	55.50	-	42.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18D	05/06/2021	LF(125)	98.31	55.55	-	42.76	<0.050	<0.070	<0.060	<0.15	47	0.41 J	<0.050	1.0	16	-	-	0.079 J	<0.090	<0.060	<0.050	<0.060

Table 1

## HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC &amp; TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Diisopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-Butyl Alcohol (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Carbon Disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Naphthalene (µg/L)	Tetrachloroethene (µg/L)
<b>GW Clean-up Standards*</b>																						
MW-18D	08/03/2021	-	98.31	60.13	-	38.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18D	08/04/2021	LF(125)	98.31	60.13	-	38.18	<0.050	<0.070	<0.060	<0.15	40	0.32 J	<0.050	0.95	11	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-18D	11/01/2021	-	98.31	54.70	-	43.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18D	11/02/2021	LF(125)	98.31	54.70	-	43.61	<0.050	<0.070	<0.060	<0.15	24	0.20 J	<0.050	0.42 J	5.9 J	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-18D	02/08/2022	LF(125)	98.31	59.55	-	38.76	<0.050	<0.070	<0.060	<0.15	<0.050	<0.050	<0.050	<0.20	<1.1	-	-	<0.060	<0.090	<0.060	<0.050	<0.060
MW-18D	05/03/2022	-	98.31	60.14	-	38.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18D	05/04/2022	LF(125)	98.31	60.08	-	38.23	<0.050	<0.070	<0.060	<0.15	17	0.17 J	<0.050	0.30 J	2.5 J	-	-	0.11 J	<0.090	<0.060	<0.050	<0.060
MW-18D	08/16/2022	LF(125)	98.31	60.03	-	38.28	<0.10	<0.080	<0.080	<0.070	18	0.16 J	<0.080	0.30 J	<3.0	-	-	<0.10	<0.090	<0.10	<0.080	<0.20
TF-3	08/18/2020	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-3	10/28/2020	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-3	01/20/2021	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-3	05/05/2021	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-3	08/03/2021	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-3	11/01/2021	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-3	02/07/2022	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-3	05/03/2022	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-3	08/16/2022	-	NR	DRY	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	08/18/2020	-	NR	DRY	14.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	10/28/2020	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	01/20/2021	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	05/05/2021	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	08/03/2021	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	11/01/2021	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	02/07/2022	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	05/03/2022	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-4	08/16/2022	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-5	08/18/2020	-	NR	13.85	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-5	10/28/2020	-	NR	14.02	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-5	01/20/2021	-	NR	14.04	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-5	05/05/2021	-	NR	14.05	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-5	08/03/2021	-	NR	14.08	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-5	11/01/2021	-	NR	14.20	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-5	02/07/2022	-	NR	14.22	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1

## HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC &amp; TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Diisopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-Butyl Alcohol (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Carbon Disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Naphthalene (µg/L)	Tetrachloroethylene (µg/L)
<b>GW Clean-up Standards*</b>																						
TF-5	05/03/2022	-	NR	14.21	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-5	08/16/2022	-	NR	14.21	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	08/18/2020	-	NR	13.49	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	10/28/2020	-	NR	13.52	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	01/20/2021	-	NR	13.52	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	05/05/2021	-	NR	13.35	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	08/03/2021	-	NR	13.38	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	11/01/2021	-	NR	13.45	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	02/07/2022	-	NR	13.48	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	05/03/2022	-	NR	13.45	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	08/16/2022	-	NR	13.44	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-7	10/28/2020	-	NR	DRY	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-7	01/20/2021	-	NR	DRY	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-7	05/05/2021	-	NR	DRY	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-7	08/03/2021	-	NR	DRY	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-7	11/01/2021	-	NR	DRY	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-7	02/07/2022	-	NR	DRY	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-7	05/03/2022	-	NR	DRY	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-7	08/16/2022	-	NR	DRY	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	10/28/2020	-	NR	11.45	11.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	01/20/2021	-	NR	11.45	11.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	05/05/2021	-	NR	11.48	11.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	08/03/2021	-	NR	11.52	11.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	11/01/2021	-	NR	11.45	11.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	02/07/2022	-	NR	11.47	11.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	05/03/2022	-	NR	11.47	11.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	08/16/2022	-	NR	11.47	11.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes: Compounds of concern and detected compounds are summarized in the data table and all analytical results can be found in the Laboratory Reports and Chain of Custody Documentation.

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

LF (##) = Low Flow ground water sampling method (depth that the sample was taken at in feet)

GRAB = Grab sample method

DRY = No water for sampling

Table 1

**HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS**

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Diisopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-Butyl Alcohol (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Carbon Disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Naphthalene (µg/L)	Tetrachloroethene (µg/L)
		GW Clean-up Standards*		5	1,000	700	10,000	20	NA	NA	NA	NA	NA	NA	47	47	81	80	19	0.17	5	

P&S = Purge & Sample method

<# = Less than the method detection limit

µg/L = Micrograms per liter

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

MTBE = Methyl Tertiary Butyl Ether

NA/(-) = Not Available or Not Analyzed for that specific compound

NR/(-) = Not recorded

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

VOC = Volatile Organic Compounds

Table 2

**HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY**

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

<b>Monitoring Well</b>	<b>Date</b>	<b>Well Temperature (°C)</b>	<b>Specific Conductance (µS/cm)</b>	<b>Dissolved Oxygen (mg/L)</b>	<b>Well pH</b>	<b>ORP (mV)</b>
MW-1	10/28/2020	16.68	778	7.67	4.95	334.4
MW-1	11/01/2021	15.27	857	7.55	5.26	227.3
MW-4	10/28/2020	17.10	367	6.46	5.22	314.6
MW-4	11/02/2021	15.50	300	7.20	4.92	237.0
MW-5	10/28/2020	16.68	812	7.86	5.17	334.6
MW-5	11/01/2021	15.96	668	7.54	5.39	231.5
MW-7	08/20/2020	16.84	1,260	2.45	5.11	256.9
MW-7	10/28/2020	16.57	918	4.38	5.37	314.2
MW-7	01/21/2021	14.74	1,015	2.60	5.23	164.5
MW-7	05/06/2021	15.18	893	3.72	5.12	179.3
MW-7	08/03/2021	18.59	934	5.93	4.61	186.0
MW-7	11/01/2021	15.34	916	3.27	5.27	178.6
MW-7	02/07/2022	14.70	806	8.02	5.88	240
MW-7	05/03/2022	15.86	892	4.30	6.19	93.7
MW-7	08/16/2022	17.72	1,014	7.46	6.07	179.1
MW-13	10/28/2020	16.94	1,059	3.98	5.00	316.2
MW-13	11/01/2021	17.14	982	4.59	4.93	235.0
MW-14D	08/20/2020	18.91	501	0.59	8.25	-133.9
MW-14D	10/30/2020	13.86	247	1.96	8.00	252.6
MW-14D	01/20/2021	14.95	325	0.45	6.92	130.2
MW-14D	05/06/2021	22.42	352	1.46	7.89	-80.2
MW-14D	08/04/2021	15.97	319	1.11	7.77	18.4
MW-14D	11/01/2021	15.49	295	0.37	8.33	-192.2
MW-14D	02/08/2022	15.04	250	2.98	7.03	208
MW-14D	05/04/2022	15.45	300	0.71	8.93	-115.9
MW-14D	08/16/2022	16.43	277	1.44	6.92	162.3
MW-17	08/20/2020	16.18	1,230	1.65	5.63	222.0
MW-17	10/30/2020	14.94	964	3.99	5.68	318.6
MW-17	01/20/2021	14.92	1,186	2.31	5.47	134.2
MW-17	05/06/2021	15.90	935	2.71	5.34	191.3
MW-17	08/03/2021	17.16	1,062	4.79	4.70	208.3
MW-17	11/01/2021	15.11	915	2.43	5.56	205.2
MW-17	02/07/2022	14.40	926	7.67	5.85	247
MW-17	05/04/2022	14.92	946	3.30	6.48	39.5
MW-17	08/16/2022	16.38	1,092	4.40	5.51	191.6
MW-18S-R	08/20/2020	17.17	1,143	4.21	4.89	244.6
MW-18S-R	10/30/2020	16.07	1,516	1.28	6.74	174.7
MW-18S-R	05/06/2021	17.52	1,087	2.82	5.08	176.2
MW-18S-R	08/04/2021	17.49	1,726	2.47	5.72	116.0
MW-18S-R	11/02/2021	15.30	834	4.58	5.23	246.0

Table 2

**HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY**

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

<b>Monitoring Well</b>	<b>Date</b>	<b>Well Temperature (°C)</b>	<b>Specific Conductance (µS/cm)</b>	<b>Dissolved Oxygen (mg/L)</b>	<b>Well pH</b>	<b>ORP (mV)</b>
MW-18S-R	02/08/2022	15.32	1,520	0.81	5.57	230
MW-18S-R	05/04/2022	17.54	1,056	3.35	6.03	103.2
MW-18S-R	08/16/2022	17.79	1,265	3.54	5.18	165.8
MW-18D	08/20/2020	19.26	6,242	0.72	8.01	-144.7
MW-18D	10/30/2020	15.44	612	1.49	7.50	111.3
MW-18D	01/21/2021	14.42	1,460	5.32	111.3	54.3
MW-18D	05/06/2021	18.34	4,951	0.33	7.79	-130.2
MW-18D	08/04/2021	18.89	4,987	0.64	7.68	-105.6
MW-18D	11/02/2021	14.85	4,115	2.23	7.85	-120.4
MW-18D	02/08/2022	14.38	4,260	2.86	7.30	199
MW-18D	05/04/2022	17.75	3,930	0.40	8.28	-15.0
MW-18D	08/16/2022	17.73	3,784	0.63	7.73	-116.9

## Notes:

As of Third Quarter 2015, this table will reflect stabilized ground water parameter readings measured and recorded during low flow sampling of select monitoring wells instead of down-well readings taken prior to sampling.

(##) = Depth to bottom of well (ft)

[##] = Length of the Screened Interval (ft)

{##} = Well Diameter (in)

°C = Degrees Celsius

µS/cm = Microsiemens per centimeter

mg/L = Milligrams per liter

mV = Millivolts

NR = Not Recorded

ppm = Parts per million

(#)<sup>1</sup> = Results for ORP from the October 2015 sampling event were determined to be anomalous, likely due to an equipment malfunction

(#)<sup>2</sup> = Results for dissolved oxygen were determined to be anomalous, likely due to an equipment malfunction

Table 3

## HISTORICAL GVP POTABLE WELL AND POET SYSTEM DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Carbon Change	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Diisopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-Butyl Alcohol (µg/L)	Naphthalene (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*				5	1,000	700	10,000	20	NL	NL	NL	NL	0.17	47	47
GVP-INF <sup>A</sup>	08/18/2020		-	<0.10	<0.10	<0.10	<0.10	0.48 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-INF <sup>A</sup>	10/30/2020		-	<0.10	<0.10	<0.10	<0.10	0.62	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-INF <sup>A</sup>	01/20/2021		-	<0.10	<0.10	<0.10	<0.10	0.36 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-INF <sup>A</sup>	05/05/2021		-	<0.10	<0.10	<0.10	<0.10	0.62	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-INF <sup>A</sup>	08/04/2021		-	<0.10	<0.10	<0.10	<0.10	0.54	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-INF <sup>A</sup>	10/28/2021		-	<0.10	<0.10	<0.10	<0.10	0.35 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-INF <sup>A</sup>	02/07/2022		-	<0.10	<0.10	<0.10	<0.10	0.30 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-INF <sup>A</sup>	05/03/2022		-	<0.10	<0.10	<0.10	<0.10	0.28 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-INF <sup>A</sup>	08/17/2022		-	<0.10	<0.10	<0.10	<0.10	0.56	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-MID	08/18/2020		-	<0.10	<0.10	<0.10	<0.10	0.52	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-MID	10/30/2020		-	<0.10	<0.10	<0.10	<0.10	0.50	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-MID	01/20/2021		-	<0.10	<0.10	<0.10	<0.10	0.42 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-MID	05/05/2021		-	<0.10	<0.10	<0.10	<0.10	0.54	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-MID	08/04/2021		-	<0.10	<0.10	<0.10	<0.10	0.50	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-MID	10/28/2021		-	<0.10	<0.10	<0.10	<0.10	0.50	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-MID	02/07/2022		-	<0.10	<0.10	<0.10	<0.10	0.33 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-MID	05/03/2022		-	<0.10	<0.10	<0.10	<0.10	0.40 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	08/18/2020		11,664,000	<0.10	<0.10	<0.10	<0.10	0.30 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	10/30/2020		11,805,506	<0.10	<0.10	<0.10	<0.10	0.28 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	01/20/2021		11,988,900	<0.10	<0.10	<0.10	<0.10	0.29 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	05/05/2021		12,303,055	<0.10	<0.10	<0.10	<0.10	0.40 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	08/04/2021		12,497,635	<0.10	<0.10	<0.10	<0.10	0.31 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	10/28/2021		12,642,500	<0.10	<0.10	<0.10	<0.10	0.48 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	02/07/2022		12,800,392	<0.10	<0.10	<0.10	<0.10	0.26 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	05/03/2022		12,954,323	<0.10	<0.10	<0.10	<0.10	0.43 J	<0.10	<0.10	<0.10	<2.5	<0.20	NA	NA
GVP-EFF	08/17/2022		13,171,000	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

Table 3

## HISTORICAL GVP POTABLE WELL AND POET SYSTEM DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Carbon Change	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Diisopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-Butyl Alcohol (ng/L)	Naphthalene (ng/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
			GW Clean-up Standards*	5	1,000	700	10,000	20	NL	NL	NL	NL	0.17	47	47

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

GVP-INF<sup>A</sup> = GVP INF conc. also reflects the conc. for GVP supply well FR-13-0386

<# = Less than the method detection limit of #

µg/L = Micrograms per liter

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylene. Total BTEX is a sum of detected concentrations of these chemicals, including estimated concentrations (identified with a "J"). If BTEX is non-detect, Total BTEX is the sum of the reporting limits.

EFF = Effluent sample location

gal = Gallons

GVP = Green Valley Plaza

INF = Influent sample location

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

mg/L = Milligrams per liter

MID = Midfluent sample location

MTBE = Methyl Tertiary Butyl Ether

NL = No Limit (Screening)

NR = Not Recorded

POET = Point of Entry Treatment

- = No Data Available

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

Table 4

## HISTORICAL RESIDENTIAL POET SYSTEM DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	CARBON CHANGE	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEx (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	Tetrachloroethene (µg/L)
GW Clean-up Standards*				5	1,000	700	10,000	NL	20	0.17	NL	NL	NL	NL	5
3923-ROSE-INF	08/20/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	0.34 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3923-ROSE-INF	10/30/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	0.71	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3923-ROSE-INF	01/20/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3923-ROSE-INF	05/05/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	0.32 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3923-ROSE-INF	08/03/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	0.56	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3923-ROSE-INF	10/28/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	0.39 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3923-ROSE-INF	02/07/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	0.29 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3923-ROSE-INF	05/03/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	0.52	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3923-ROSE-INF	08/17/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	0.55	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3990-FARM-INF	08/18/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	33	<0.20	<2.5	0.25 J	<0.10	0.60	<0.10
3990-FARM-INF	10/28/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	34	<0.20	<2.5	0.29 J	<0.10	0.57	<0.10
3990-FARM-INF	01/20/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.4	25	<0.20	<2.5	0.21 J	<0.10	0.55	<0.10
3990-FARM-INF	05/05/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	27	<0.20	<2.5	0.19 J	<0.10	0.45 J	<0.10
3990-FARM-INF	08/03/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	22	<0.20	4.1 J	<0.10	<0.10	0.49 J	<0.10
3990-FARM-INF	10/28/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	26	<0.20	<2.5	0.24 J	<0.10	0.37 J	<0.10
3990-FARM-INF	02/07/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	22	<0.20	<2.5	0.22 J	<0.10	0.57	<0.10
3990-FARM-INF	05/03/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	22	<0.20	<2.5	0.21 J	<0.10	0.42 J	<0.10
3990-FARM-INF	08/17/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	23	<0.20	<2.5	<0.10	<0.10	0.50	<0.10
3990-FARM-MID2	08/18/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3990-FARM-MID2	10/28/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3990-FARM-MID2	01/20/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3990-FARM-MID2	05/05/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	5.3 J	<0.10	<0.10	<0.10	<0.10
3990-FARM-MID2	08/03/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3990-FARM-MID2	10/28/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3990-FARM-MID2	02/07/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3990-FARM-MID2	05/03/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3990-FARM-MID2	08/17/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3990-FARM-EFF	08/18/2020	-	133,550	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10

Table 4

**HISTORICAL RESIDENTIAL POET SYSTEM DATA SUMMARY**

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	CARBON CHANGE	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEx (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	Tetrachloroethene (µg/L)	
GW Clean-up Standards*				5	1,000	700	10,000	NL	20	0.17	NL	NL	NL	NL	5	
3990-FARM-EFF	10/28/2020	CARBON CHANGE	137,555	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3990-FARM-EFF	01/20/2021		142,000	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3990-FARM-EFF	05/05/2021		147,594	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	3.5 J	<0.10	<0.10	<0.10	<0.10	
3990-FARM-EFF	05/20/2021		148,500	-	-	-	-	-	-	-	-	-	-	-	-	
3990-FARM-EFF	08/03/2021		148,936	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3990-FARM-EFF	10/28/2021		154,641	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3990-FARM-EFF	02/07/2022		158,808	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3990-FARM-EFF	05/03/2022		163,658	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3990-FARM-EFF	08/17/2022		169,801	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3992-FARM-INF	08/18/2020		-	<0.10	<0.10	<0.10	<0.10	<0.40	18	<0.20	<2.5	0.16 J	<0.10	0.34 J	<0.10	
3992-FARM-INF	11/11/2020		-	<0.10	<0.10	<0.10	<0.10	<0.40	20	<0.20	<2.5	0.16 J	<0.10	0.32 J	<0.10	
3992-FARM-INF	01/20/2021		-	<0.10	<0.10	<0.10	<0.10	<0.4	14	<0.20	<2.5	0.12 J	<0.10	0.28 J	<0.10	
3992-FARM-INF	05/05/2021		-	<0.10	<0.10	<0.10	<0.10	<0.40	14	<0.20	<2.5	0.13 J	<0.10	0.24 J	<0.10	
3992-FARM-INF	08/04/2021		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	14	<0.20	<2.5	0.11 J	<0.10	0.29 J	<0.10
3992-FARM-INF	10/28/2021		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	17	<0.20	<2.5	0.15 J	<0.10	0.23 J	<0.10
3992-FARM-INF	02/07/2022		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	12	<0.20	<2.5	0.11 J	<0.10	0.32 J	<0.10
3992-FARM-INF	05/03/2022		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	13	<0.20	<2.5	0.12 J	<0.10	0.24 J	<0.10
3992-FARM-INF	08/17/2022		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	13	<0.20	<2.5	0.11 J	<0.10	0.27 J	<0.10
3992-FARM-MID2	08/18/2020		-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3992-FARM-MID2	11/11/2020		-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3992-FARM-MID2	01/20/2021		-	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3992-FARM-MID2	05/05/2021		-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	
3992-FARM-MID2	08/04/2021		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	
3992-FARM-MID2	10/28/2021		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	
3992-FARM-MID2	02/07/2022		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	
3992-FARM-MID2	05/03/2022		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	
3992-FARM-MID2	08/17/2022		-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	
3992-FARM-EFF	08/18/2020		4.973	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	

Table 4

**HISTORICAL RESIDENTIAL POET SYSTEM DATA SUMMARY**

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	CARBON CHANGE	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEx (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	Tetrachloroethene (µg/L)
<b>GW Clean-up Standards*</b>				<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>NL</b>	<b>20</b>	<b>0.17</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>	<b>5</b>
3992-FARM-EFF	11/11/2020	-	10,551	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3992-FARM-EFF	01/20/2021	-	18,359	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3992-FARM-EFF	05/05/2021	-	28,349	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3992-FARM-EFF	08/04/2021	-	33,576	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3992-FARM-EFF	08/19/2021	CARBON CHANGE	-	-	-	-	-	-	-	-	-	-	-	-	-
3992-FARM-EFF	10/28/2021	-	39,012	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3992-FARM-EFF	02/07/2022	-	48,236	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3992-FARM-EFF	05/03/2022	-	55,775	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3992-FARM-EFF	08/17/2022	-	64,156	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-INF	08/18/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	9.3	<0.20	<2.5	<0.10	<0.10	0.19 J	<0.10
3994-FARM-INF	10/28/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	7.4	<0.20	<2.5	<0.10	<0.10	0.13 J	<0.10
3994-FARM-INF	01/20/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.4	5.9	<0.20	<2.5	<0.10	<0.10	0.14 J	<0.10
3994-FARM-INF	05/05/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	7.4	<0.20	3.3 J	<0.10	<0.10	<0.10	<0.10
3994-FARM-INF	08/03/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	5.3	<0.20	2.6 J	<0.10	<0.10	0.12 J	<0.10
3994-FARM-INF	11/02/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	8.3	<0.20	<2.5	<0.10	<0.10	0.12 J	<0.10
3994-FARM-INF	02/07/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	4.5	<0.20	<2.5	<0.10	<0.10	0.12 J	<0.10
3994-FARM-INF	05/03/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	4.6	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-INF	08/17/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	3.3	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-MID2	08/18/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-MID2	10/28/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	2.7 J	<0.10	<0.10	<0.10	<0.10
3994-FARM-MID2	01/20/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-MID2	05/05/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-MID2	08/03/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3994-FARM-MID2	11/02/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3994-FARM-MID2	02/07/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3994-FARM-MID2	05/03/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3994-FARM-MID2	08/17/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3994-FARM-EFF	08/18/2020	-	556,713	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10

Table 4

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Carroll - Monrovia MD - Green Valley Citgo  
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Monitoring Well	Date	CARBON CHANGE	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEx (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	Tetrachloroethene (µg/L)
GW Clean-up Standards*				5	1,000	700	10,000	NL	20	0.17	NL	NL	NL	NL	5
3994-FARM-EFF	10/28/2020	-	564,629	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-EFF	01/20/2021	-	573,893	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-EFF	05/05/2021	-	584,594	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-EFF	08/03/2021	-	592,235	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-EFF	11/02/2021	-	599,803	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-EFF	02/07/2022	-	609,053	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-EFF	05/03/2022	-	616,064	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3994-FARM-EFF	08/17/2022	-	628,757	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	2.7 J	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	08/18/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	1.9	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	10/28/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	1.6	<0.20	2.5 J	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	01/20/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.4	1.2	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	05/05/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	1.4	<0.20	3.4 J	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	08/03/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	0.97	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	10/28/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	1.3	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	02/07/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	0.88	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	05/03/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	0.91	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-INF	08/17/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	1.2	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	08/18/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	10/28/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	01/20/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	05/05/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	08/03/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	10/28/2021	-	-	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	2.8 J	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	02/07/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	05/03/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-MID2	08/17/2022	-	-	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-EFF	08/18/2020	-	1,109,105	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-EFF	10/28/2020	-	1,127,825	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	3.0 J	<0.10	<0.10	<0.10	<0.10

Table 4

**HISTORICAL RESIDENTIAL POET SYSTEM DATA SUMMARY**

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	CARBON CHANGE	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	Tetrachloroethene (µg/L)
<b>GW Clean-up Standards*</b>				<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>NL</b>	<b>20</b>	<b>0.17</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>	<b>NL</b>	<b>5</b>
3996-FARM-EFF	01/20/2021	-	1,140,500	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-EFF	05/05/2021	-	1,166,330	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-EFF	08/03/2021	-	1,196,186	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-EFF	10/28/2021	-	1,213,667	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-EFF	12/20/2021	CARBON CHANGE	1,219,100	-	-	-	-	-	-	-	-	-	-	-	-
3996-FARM-EFF	02/07/2022	-	1,225,594	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-EFF	05/03/2022	-	1,235,081	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3996-FARM-EFF	08/17/2022	-	1,258,964	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3997-FARM-INF	08/18/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3997-FARM-INF	10/28/2020	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	0.19 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3997-FARM-INF	01/20/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.4	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3997-FARM-INF	05/05/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.40	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10
3997-FARM-INF	08/03/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	0.12 J	<0.20	<2.5	<0.10	<0.10	<0.10
3997-FARM-INF	10/28/2021	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	0.14 J	<0.20	<2.5	<0.10	<0.10	<0.10
3997-FARM-INF	02/07/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10
3997-FARM-INF	05/03/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	0.11 J	<0.20	<2.5	<0.10	<0.10	<0.10
3997-FARM-INF	08/17/2022	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	NA	0.13 J	<0.20	<2.5	<0.10	<0.10	<0.10

Notes:

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

&lt;# = less than the method detection limit of #

µg/L = Micrograms/Liter

J = Result is between the method detection and reporting limits; therefore, result is estimated.

EFF = Effluent sample location

INF = Influent sample location

MID2 = Second midfluent sample location

MTBE = Methyl Tertiary Butyl Ether

NA = Not Available or Not Analyzed for that specific compound

Table 4

**HISTORICAL RESIDENTIAL POET SYSTEM DATA SUMMARY**

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	CARBON CHANGE	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	Tetrachloroethene (µg/L)
<b>GW Clean-up Standards*</b>			5	1,000	700	10,000	NL	20	0.17	NL	NL	NL	NL	NL	5

NL = No Limit (screening)

- = No Data Available

\* GW Clean-up Standards are the Maryland Department of the Environment (MDE) Groundwater Clean-up Standards for Type I and II Aquifers from MDE's "Cleanup Standards for Soil and Groundwater" June 2008

NA = Not Analyzed

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylene. Total BTEX is a sum of detected concentrations of these chemicals, including estimated concentrations (identified with a "J"). If BTEX is non-detect, total BTEX is sum of the reporting limits.

VOC = Volatile Organic Compounds

Table 5

## HISTORICAL RESIDENTIAL POTABLE WELL DATA SUMMARY- VOC PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Naphthalene ( $\mu\text{g/L}$ )	tert-Butyl Alcohol ( $\mu\text{g/L}$ )	Diisopropyl ether ( $\mu\text{g/L}$ )	ethyl tert-butyl ether ( $\mu\text{g/L}$ )	tert-amyl methyl ether ( $\mu\text{g/L}$ )	Tetrachloroethene ( $\mu\text{g/L}$ )	tert-amyI ethyl ether ( $\mu\text{g/L}$ )	tert-Butylbenzene ( $\mu\text{g/L}$ )
<b>GW Clean-up Standards*</b>		<b>5</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>	<b>5</b>	<b>NL</b>	<b>NL</b>
3923-ROSE-INF	10/30/2020	<0.10	<0.10	<0.10	<0.10	0.71	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3923-ROSE-INF	01/20/2021	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3923-ROSE-INF	05/05/2021	<0.10	<0.10	<0.10	<0.10	0.32 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3923-ROSE-INF	08/03/2021	<0.10	<0.10	<0.10	<0.10	0.56	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3923-ROSE-INF	10/28/2021	<0.10	<0.10	<0.10	<0.10	0.39 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3923-ROSE-INF	02/07/2022	<0.10	<0.10	<0.10	<0.10	0.29 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3923-ROSE-INF	05/03/2022	<0.10	<0.10	<0.10	<0.10	0.52	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3923-ROSE-INF	08/17/2022	<0.10	<0.10	<0.10	<0.10	0.55	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3990-FARM-INF	10/28/2020	<0.10	<0.10	<0.10	<0.10	34	<0.20	<2.5	0.29 J	<0.10	0.57	<0.10	NA	NA
3990-FARM-INF	01/20/2021	<0.10	<0.10	<0.10	<0.10	25	<0.20	<2.5	0.21 J	<0.10	0.55	<0.10	NA	NA
3990-FARM-INF	05/05/2021	<0.10	<0.10	<0.10	<0.10	27	<0.20	<2.5	0.19 J	<0.10	0.45 J	<0.10	NA	NA
3990-FARM-INF	08/03/2021	<0.10	<0.10	<0.10	<0.10	22	<0.20	4.1 J	<0.10	<0.10	0.49 J	<0.10	NA	NA
3990-FARM-INF	10/28/2021	<0.10	<0.10	<0.10	<0.10	26	<0.20	<2.5	0.24 J	<0.10	0.37 J	<0.10	NA	NA
3990-FARM-INF	02/07/2022	<0.10	<0.10	<0.10	<0.10	22	<0.20	<2.5	0.22 J	<0.10	0.57	<0.10	NA	NA
3990-FARM-INF	05/03/2022	<0.10	<0.10	<0.10	<0.10	22	<0.20	<2.5	0.21 J	<0.10	0.42	<0.10	NA	NA
3990-FARM-INF	08/17/2022	<0.10	<0.10	<0.10	<0.10	23	<0.20	<2.5	<0.10	<0.10	0.50	<0.10	NA	NA
3992-FARM-INF	11/11/2020	<0.10	<0.10	<0.10	<0.10	20	<0.20	<2.5	0.16 J	<0.10	0.32 J	<0.10	NA	NA
3992-FARM-INF	01/20/2021	<0.10	<0.10	<0.10	<0.10	14	<0.20	<2.5	0.12 J	<0.10	0.28 J	<0.10	NA	NA
3992-FARM-INF	05/05/2021	<0.10	<0.10	<0.10	<0.10	14	<0.20	<2.5	0.13 J	<0.10	0.24 J	<0.10	NA	NA
3992-FARM-INF	08/04/2021	<0.10	<0.10	<0.10	<0.10	14	<0.20	<2.5	0.11 J	<0.10	0.29 J	<0.10	NA	NA
3992-FARM-INF	10/28/2021	<0.10	<0.10	<0.10	<0.10	17	<0.20	<2.5	0.15 J	<0.10	0.23 J	<0.10	NA	NA
3992-FARM-INF	02/07/2022	<0.10	<0.10	<0.10	<0.10	12	<0.20	<2.5	0.11 J	<0.10	0.32 J	<0.10	NA	NA
3992-FARM-INF	05/03/2022	<0.10	<0.10	<0.10	<0.10	13	<0.20	<2.5	0.12 J	<0.10	0.24 J	<0.10	NA	NA

Table 5

## HISTORICAL RESIDENTIAL POTABLE WELL DATA SUMMARY- VOC PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	Tetrachloroethene (µg/L)	tert-amyI ethyl ether (µg/L)	tert-Butylbenzene (µg/L)
<b>GW Clean-up Standards*</b>		<b>5</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>5</b>	<b>NL</b>	<b>NL</b>	
3992-FARM-INF	08/17/2022	<0.10	<0.10	<0.10	<0.10	13	<0.20	<2.5	0.11 J	<0.10	0.27 J	<0.10	NA	NA
3994-FARM-INF	10/28/2020	<0.10	<0.10	<0.10	<0.10	7.4	<0.20	<2.5	<0.10	<0.10	0.13 J	<0.10	NA	NA
3994-FARM-INF	01/20/2021	<0.10	<0.10	<0.10	<0.10	5.9	<0.20	<2.5	<0.10	<0.10	0.14 J	<0.10	NA	NA
3994-FARM-INF	05/05/2021	<0.10	<0.10	<0.10	<0.10	7.4	<0.20	3.3 J	<0.10	<0.10	<0.10	<0.10	NA	NA
3994-FARM-INF	08/03/2021	<0.10	<0.10	<0.10	<0.10	5.3	<0.20	2.6 J	<0.10	<0.10	0.12 J	<0.10	NA	NA
3994-FARM-INF	11/02/2021	<0.10	<0.10	<0.10	<0.10	8.3	<0.20	<2.5	<0.10	<0.10	0.12 J	<0.10	NA	NA
3994-FARM-INF	02/07/2022	<0.10	<0.10	<0.10	<0.10	4.5	<0.20	<2.5	<0.10	<0.10	0.12 J	<0.10	NA	NA
3994-FARM-INF	05/03/2022	<0.10	<0.10	<0.10	<0.10	4.6	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3994-FARM-INF	09/29/2022	<0.10	<0.10	<0.10	<0.10	3.3	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3996-FARM-INF	10/28/2020	<0.10	<0.10	<0.10	<0.10	1.6	<0.20	2.5 J	<0.10	<0.10	<0.10	<0.10	NA	NA
3996-FARM-INF	01/20/2021	<0.10	<0.10	<0.10	<0.10	1.2	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3996-FARM-INF	05/05/2021	<0.10	<0.10	<0.10	<0.10	1.4	<0.20	3.4 J	<0.10	<0.10	<0.10	<0.10	NA	NA
3996-FARM-INF	08/03/2021	<0.10	<0.10	<0.10	<0.10	0.97	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3996-FARM-INF	10/28/2021	<0.10	<0.10	<0.10	<0.10	1.3	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3996-FARM-INF	02/07/2022	<0.10	<0.10	<0.10	<0.10	0.88	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3996-FARM-INF	05/03/2022	<0.10	<0.10	<0.10	<0.10	0.91	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3996-FARM-INF	08/17/2022	<0.10	<0.10	<0.10	<0.10	1.2	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3997-FARM-INF	10/28/2020	<0.10	<0.10	<0.10	<0.10	0.19 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3997-FARM-INF	01/20/2021	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3997-FARM-INF	05/05/2021	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3997-FARM-INF	08/03/2021	<0.10	<0.10	<0.10	<0.10	0.12 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3997-FARM-INF	10/28/2021	<0.10	<0.10	<0.10	<0.10	0.14 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3997-FARM-INF	02/07/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA

Table 5

## HISTORICAL RESIDENTIAL POTABLE WELL DATA SUMMARY- VOC PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	Tetrachloroethene (µg/L)	tert-amyI ethyl ether (µg/L)	tert-Butylbenzene (µg/L)
<b>GW Clean-up Standards*</b>		<b>5</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>	<b>5</b>	<b>NL</b>	<b>NL</b>
3997-FARM-INF	05/03/2022	<0.10	<0.10	<0.10	<0.10	0.11 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA
3997-FARM-INF	08/17/2022	<0.10	<0.10	<0.10	<0.10	0.13 J	<0.20	<2.5	<0.10	<0.10	<0.10	<0.10	NA	NA

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

\*\* Resident resampled on May 5, 2015 due to suspected mislabeling of samples

- = No Data Available

INF = Influent sample location

POU = Point-of-use sample location

<# = Less than the method detection limit of #

µg/L = Micrograms/Liter

MTBE = Methyl Tertiary Butyl Ether

NA = Not Analyzed

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

NT = Not Tabulated, historical laboratory analytical report available for specified date.

QB = The spike recovery was outside acceptance limits for the MS and/or MSD due to sample matrix interferences. The

BB = The method blank result was at or above the method reporting limit (MRL), therefore sample results may be biased

NL = No Limit (screening)

Table 6

**MONITORING WELL CONSTRUCTION DETAILS**

Carroll - Monrovia MD - Green Valley Citgo  
 11791 Fingerboard Road  
 Monrovia, MD

Monitoring Well	Well Permit #	Date Well Drilled	Date Well Installed	Well Diameter (inches)	TOC Elevation	Date of Last Survey	Total Depth of Well (from Ground Surface)	DTB of Steel Casing (feet)	TOS from Ground Surface	BOS from Ground Surface	Comments
MW-1	FR-94-5045	2/7/06	2/7/2006	2	99.19	2/27/2006	61.5	--	40	61.5	
MW-2	FR-94-5046	2/7/06	2/7/2006	2	99.47	2/27/2006	61.5	--	40	61.5	Well abandoned 12/21/17
MW-3	FR-94-5047	2/7/06	2/7/2006	2	99.16	2/27/2006	81.5	--	40	64	Drilled to 81.5 feet, backfilled and set at 64 feet; well abandoned 5/15/08
MW-4	FR-94-5048	2/7/06	2/7/2006	2	97.84	2/27/2006	61.5	--	40	61.5	
MW-5	FR-95-0982	5/12/08	2/23/2009	4	99.60	3/18/2009	70	14	40	70	
MW-6	FR-95-0983	5/12/08	2/23/2009	4	98.09	3/18/2009	59.5	14	40	59.5	boring caved to 59.5 feet; well abandoned 12/20/17
MW-7	FR-95-0984	5/12/08	2/24/2009	4	97.66	3/18/2009	80	19.5	53	80	
MW-8	FR-95-0985	5/12/08	2/23/2009	4	97.93	3/18/2009	70	15	45	70	Well abandoned 12/20/17
MW-9	FR-95-1216	2/26/09	3/11/2009	4	88.48	3/18/2009	78	10	48	78	Well abandoned 12/20/17
MW-10	FR-95-1217	2/26/09	3/11/2009	4	91.64	3/18/2009	80	10	40	80	Well abandoned 12/20/17
MW-11	FR-95-1219	2/27/09	3/11/2009	4	94.28	3/18/2009	77	10	47	77	Well abandoned 12/20/17
MW-12	FR-95-1218	3/2/09	3/12/2009	4	95.33	3/18/2009	84	10	44	82	Well abandoned 12/20/17
MW-13	FR-95-1215	3/2/09	3/12/2009	4	98.11	3/18/2009	84	10	49	84	
MW-14S	FR-95-1599	7/20/10	7/22/2010	4	91.21	7/22/2010	100	11.0	40	100	Well abandoned 12/20/17
MW-14D	FR-95-1418	9/24/09	7/22/2010	4	92.07	7/22/2010	221	10.5	201	221	
MW-15D	FR-95-1419	9/28/09	7/19/2010	4	97.67	7/22/2010	133.5	10	45.5	133.5	Well abandoned 12/20/17
MW-16	FR-95-1420	9/25/09	7/20/2010	4	89.78	7/22/2010	121	9.75	35.5	121	Well abandoned 12/20/17
MW-17	FR-95-1421	9/25/09	7/20/2010	4	92.84	7/22/2010	121	10.5	35	121	
MW-18S	FR-95-1674	11/17/10	11/17/2010	2	98.29	1/4/2011	70	--	45	70	MW-18S and MW-18D nested in one borehole; MW-18S abandoned on 11/10/15
MW-18D			11/18/2010	2	98.31	1/4/2011	130	--	120	130	
MW-18S-R	FR-95-2578	1/27/15	1/27/2015	4	97.72	1/27/2015	70	--	25	70	
VE-1	FR-95-1673	11/19/10	11/17/2010	4	98.40	1/4/2011	25	--	5	25	Abandoned 12/21/17
IW-1S	FR-95-1672	11/18/10	11/18/2010	0.60	98.52	1/4/2011	67	--	63	67	IW-1S and IW-1D nested in one borehole - stainless steel screen and casing; abandoned 12/21/17
IW-1D			11/19/2010	0.60	98.60	1/4/2011	73	--	69	73	
IW-2S	FR-95-1671	11/18/10	11/18/2010	0.60	98.63	1/4/2011	91	--	87	91	IW-2S and IW-2D nested in one borehole - stainless steel screen and casing; abandoned 12/21/17
IW-2D			11/19/2010	0.60	98.71	1/4/2011	103	--	99	103	
IW-3S	FR-95-1670	11/18/10	11/18/2010	0.60	98.51	1/4/2011	127	--	123	127	IW-3S and IW-3D nested in one borehole - stainless steel screen and casing; abandoned 12/21/17
IW-3D			11/19/2010	0.60	98.62	1/4/2011	134	--	130	134	
IW-4	FR-95-2019	5/30/12	5/30/12	0.75	NA	NA	92	--	85	89	Abandoned 12/21/17

BOS =Bottom of screen  
 NA = Not Available

TOS =Top of screen  
 TOC =Top of casing

U =Unknown

## **APPENDIX A**

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Historical Activities Summary

### **HISTORICAL ACTIVITY SUMMARY (key / relevant dates):**

- 1990 – 2000: The facility was operated by Timbercrest LP.
- 2000: Underground storage tanks (USTs) were registered to Carroll Independent Fuel Company (Carroll).
- June 13, 2001: Three soil borings (SB-1AR, SB-2AR and SB-3) were advanced onsite and soil samples were collected by ATC Associates (ATC) as part of a Phase II Environmental Assessment.
- July 24, 2001: ATC completed a *Phase II Environmental Assessment* report.
- January 28, 2005: The Maryland Department of the Environment (MDE) Oil Control Program (OCP) conducted a compliance inspection, during which elevated levels of petroleum vapors were detected in the vicinity of the tank field, around tank top components, and in the tank field monitoring wells.
- June 1, 2005: MDE correspondence required vapor leak testing, containment sump and catchment basin testing, the installation of groundwater monitoring wells to comply with High-Risk Groundwater Use Area (HRGUA) Regulations, and the submittal of a *Subsurface Investigation Work Plan* to assess the vertical and lateral extent of any contamination of soil and/or groundwater. OCP Case #2005-0834-FR was assigned to the site.
- July 8, 2005: A *Work Plan – Subsurface Investigation and Emergency Regulation Compliance* was submitted to the MDE by Environmental Alliance (Alliance), proposing a soil boring event, installation of four monitoring wells, groundwater sampling, slug tests, and a sensitive receptor search.
- August 18, 2005: The MDE approved the *Work Plan*, with modifications, and required a drinking water well survey within a half-mile radius of the site be conducted.
- September 14-15, 2005: Ten soil borings (GP-1 through GP-10) were advanced.
- February 6-7, 2006: Four bedrock monitoring wells (MW-1 through MW-4) were installed.
- March 28, 2006: Methyl-tertiary butyl ether (MTBE) was detected at a concentration of 14 micrograms per liter ( $\mu\text{g}/\text{L}$ ) in a blended influent sample collected from two onsite drinking water wells supplying the shopping center, Green Valley Plaza (GVP), which house the gas station.
- April 2006: Mr. Arshad Ranjha, doing business as Saaba Corporation, registered as the new UST owner.
- May 24, 2006: An *Assessment for the Emergency Regulations Compliance Report* was submitted to the MDE, detailing the soil boring event, the monitoring well installation, groundwater sampling, sampling of the onsite potable wells, and a sensitive receptor survey.
- July 7, 2006: The MDE responded to the *Assessment Report*, and required semi-annual sampling of the monitoring wells, the tank field wells, and the Site's supply wells, and submittal of boring logs for the onsite drinking water supply wells and the bedrock monitoring wells.
- September 19, 2006: MTBE was detected in a blended influent sample from the GVP's supply wells at a concentration of 42  $\mu\text{g}/\text{L}$ .
- November 17, 2006: A *Semi-Annual Sampling Report* was submitted to the MDE detailing the results of groundwater sampling and the potable well sampling, and the intention to install a point of entry treatment (POET) system on GVP's water supply.

## **HISTORICAL ACTIVITY SUMMARY (Continued):**

- January 22, 2007: The MDE issued a *Request for Interim Corrective Action Plan (ICAP) and Supplemental Investigation*, requiring the submittal of an ICAP to reduce vapor concentrations in the tank field, including a soil-vapor extraction (SVE) test on the tank field and monitoring well MW-3, an investigation of surface drains, and increased frequency of monitoring well and tank field well sampling from semi-annually to quarterly. The submittal of a *Site Conceptual Model (SCM)* and a supplemental *Work Plan* to further develop the SCM were also required. Quarterly sampling of GVP's and the adjacent Green Valley Shopping Center's (GVSC's) potable wells, initial sampling of several private offsite potable wells, and a detailed drinking water well survey within a half-mile radius of the site was required.
- March 23, 2007: An extension request for the submittal of the ICAP was submitted to the MDE, noting that there was more than one potentially responsible party at the Site.
- April 5, 2007: MDE correspondence acknowledged that more than one potentially responsible party existed at the Site.
- April 5, 2007: The MDE issued *Notice of Violation (NOV) NV-2007-069* to all potentially responsible parties for failure to meet the requirements of the January 22, 2007 directive letter within the specified deadlines. The MDE also sent correspondence regarding the case to the Frederick County Health Department (FCHD).
- April 5-6, 2007: An initial round of samples was collected from select offsite residential potable wells.
- April 11, 2007: Alliance met with the MDE's Water Supply Division to discuss installing a POET system on GVP's water supply.
- April 12, 2007: Email correspondence to MDE proposed sampling of additional select residential potable wells. The proposal was approved.
- April 19, 2007: Email correspondence to MDE proposed sampling of additional select residential potable wells. The proposal was approved.
- April 25, 2007: An ICAP was submitted to the MDE proposing SVE feasibility testing.
- April 25, 2007: A *Sampling Results and Work Plan* was submitted to the MDE detailing the results of sampling of offsite residential potable wells, the GVP supply wells and the GVSC supply wells, and included plans for future sampling.
- April 30, 2007: A *Drinking Water Well Survey* detailing the results of a search for potable wells within a half-mile radius of the site was submitted to the MDE.
- April 30, 2007: Granular activated carbon (GAC) POET systems were installed at two residences (3996 and 3994 Farm Lane) where MTBE was detected above the MDE's action level of 20 µg/L.
- May 7, 2007: The MDE approved the ICAP, with modifications, and required monthly sampling of certain residential potable wells. Alliance submitted *Site Conceptual Model and Supplemental Work Plan* to the MDE. A POET system was installed at 3990 Farm Lane.
- May 11, 2007: A POET system was installed at 3923 Rosewood Road.
- May 17, 2007: A *Surface Drain Evaluation* was submitted to the MDE.
- May 22, 2007: *Modifications to the Work Plan and the ICAP* was submitted to the MDE via email.
- May 23, 2007: A POET system was installed at 3992 Farm Lane.
- May 31 – June 1, 2007: Soil vapor monitoring points SV-1, SV-2 and SV-3 were installed around the tank field in preparation for SVE testing. Soil boring SB-1 was also advanced.
- June 9, 2007: A POET system was installed at 3997 Farm Lane.

## **HISTORICAL ACTIVITY SUMMARY (Continued):**

- June 21-22, 2007: SVE feasibility testing was performed onsite.
- June 27, 2007: The MDE approved the *Supplemental Work Plan*.
- July 27, 2007: The MDE sent *Request to Sample Drinking Water Supply Well* notices to seven residences surrounding the Site.
- August 8, 2007: The MDE issued the directive *Off-Site Domestic Well Sampling Frequencies* requiring monthly sampling of 25 residences with potable wells and the submission of *Monthly Status Reports*, and quarterly sampling of 14 residences with potable wells and the submission of *Quarterly Drinking Water Supply Well Sampling Reports*.
- October 15, 2007: A *Potable Well Sampling Report* was submitted to the MDE. A *Quarterly Sampling Report* was also submitted, and included details of the SVE testing.
- March 27, 2008: The MDE issued *Modifications to Off-Site Domestic Well Sampling Frequencies and Request for Site Status*, reducing the reporting frequency for all data and the sampling frequency of certain potable wells to quarterly, but still required monthly sampling of wells outfitted with POET systems. The MDE requested an update on the proposed installation of a POET system on the GVSC supply wells, and the installation of five monitoring wells required in the April 5, 2007 NOV.
- May 6, 2008: A *Supplemental Work Plan Addendum* was submitted to the MDE proposing changes to the construction and installation of monitoring wells.
- May 12-15 2008: Four shallow groundwater monitoring wells (MW-5 through MW-8) were installed. The monitoring wells were left as open boreholes in the water-bearing zone. Monitoring well MW-3 was abandoned in anticipation of upcoming UST removal activities.
- May 28, 2008: The MDE approved the *Supplemental Work Plan Addendum*.
- June 2008: Down-hole geophysical testing of monitoring wells MW-6, MW-7 and MW-8, and drinking water wells FR-88-1356 and FR-94-1233 was conducted.
- June 20, 2008: A *Response to Directive* was submitted to the MDE, proposing the installation of four monitoring wells rather than five.
- July 21-25, 2008: One 2,000-gallon diesel UST and three 10,000-gallon gasoline USTs were removed from the Site. MDE was onsite to observe UST removal activities. Over 1,100 tons of soil, approximately 523 tons were petroleum-impacted, were removed from the Site. Soil vapor point SV-3 and tank field wells TF-1 and TF-2 were destroyed during UST removal activities. Site surface water discharge was reconfigured during Site upgrade activities.
- August 2008: A new UST system, consisting of two 10,000-gallon gasoline USTs, one 10,000-gallon diesel UST and one 4,000-gallon diesel UST, was installed at the Site. SVE piping was installed, connected to the tank field monitoring wells.
- August 2008: Water treatment permit was approved for modifications to the GVP supply well.
- August 22, 2008: A *UST System Closure Report* was submitted to the MDE.
- September 2008: A POET system was installed on the GVP water supply.
- September 16, 2008: A *Hydrogeologic Investigation Update Report and Work Plan* was submitted to the MDE, and included results of the down-hole geophysical well testing. The Work Plan proposed the installation of monitoring wells within the open boreholes of monitoring wells MW-5 through MW-8, installation of additional shallow monitoring wells, additional SVE testing, modifications to the potable well sampling plan, and preparation of an updated SCM.

### **HISTORICAL ACTIVITY SUMMARY (Continued):**

- December 12, 2008: The MDE approved the *Work Plan* with modifications. The MDE did not approve the installation of new shallow monitoring wells, but requested the evaluation of need for deep monitoring wells near the tank field and offsite to the south and southeast; frequency of sampling POET systems at three residential addresses was increased to semi-monthly, frequency of the other three residential POET systems remained monthly; frequency of sampling at certain residences with potable wells was changed to quarterly, and others were changed to semi-annually. The MDE sent letters to area residents to inform them of the sampling frequency change.
- December 16, 2008: The need for installation of shallow monitoring wells in order to better place deep monitoring wells was verbally discussed with Jim Richmond of MDE.
- December 17, 2008: Susan Bull of MDE approved, via email, the installation of shallow monitoring wells if the data from them was needed in order to place deep monitoring wells.
- December 30, 2008: A *Response to Directive* was sent to the MDE.
- January 16, 2009: SVE feasibility testing was conducted.
- February 3, 2009: The MDE issued *Work Plan Clarification*, approving the installation of shallow wells in order to better place deep monitoring wells, and clarified the frequency of monitoring of the GVP and CVSC supply wells and residential potable wells. Permanent screened monitoring wells were constructed in the open boreholes of monitoring wells MW-5 through MW-8.
- February 2009: Alliance submitted *Soil Vapor Extraction (SVE) Pilot Testing Results* to the MDE.
- March 12, 2009: Five shallow monitoring wells (MW-9 through MW-13) were installed.
- May 20, 2009: The MDE issued *Changes to Off-Site Sampling Frequency*, changing the frequency of sampling residential POET systems to quarterly, and restating the required frequency of sampling offsite residential potable wells. The MDE also sent letters to area residents to inform them of the sampling frequency changes.
- June 5, 2009: A *Hydrogeologic Investigation Update and Work Plan* was submitted to MDE, detailing recent monitoring well installation, groundwater and potable well sampling, and updating the SCM. The *Work Plan* proposed the installation and geophysical testing of one deep monitoring well, installation of five shallow monitoring wells to help monitoring pump testing, packer testing of the deep monitoring well, pump testing of monitoring well MW-10, installation of an injection well, and injection testing of that well.
- August 21, 2009: A meeting was conducted with representatives of Carroll, Alliance, and MDE to discuss monitoring well installation and aquifer testing activities proposed in the *Work Plan*. It was decided that additional investigation in the vicinity of the tank field was necessary, and that short-term and long-term aquifer testing would be completed on monitoring wells close to the tank field in order to determine hydraulic conductivity and determine if any of the selected wells could function as recovery wells.
- August 26, 2009: *Work Plan Update* was submitted to the MDE, proposing installation of two deep monitoring wells, installation of two shallow monitoring wells, down-hole geophysical testing, packer testing of deep monitoring well PMW-14D, a 72-hour pumping test on deep monitoring well PMW-15D, and 4-hour pumping tests on monitoring wells MW-10, MW-13, PMW-16, and PMW-17.
- September 22, 2009: The MDE approved the *Work Plan Update*, but required a brief report be submitted prior to packer testing, and a brief report be submitted prior to the short-term pumping tests.

### **HISTORICAL ACTIVITY SUMMARY (Continued):**

- September 21–25, 2009: Deep monitoring wells MW-14D and MW-15D and shallow monitoring wells MW-16 and MW-17 were installed. The monitoring wells were left as open boreholes.
- October 8, 2009: Alliance submitted *Response to September 22, 2009 Directive*, and included the required details of the planned short-term pumping tests.
- October 19, 2009: Pumping tests were performed onsite, including a step-drawdown test and subsequent 72-hour pumping test on monitoring well MW-15D.
- November 2, 2009: Geophysical testing of monitoring wells MW-14D, MW-16 and MW-17 was performed.
- November 4, 2009: *Packer Testing Work Plan* was submitted to the MDE.
- November 5-6, 2009: Packer testing was completed on monitoring well MW-14D.
- March 15, 2010: Alliance submitted *Update Report and Work Plan* to the MDE detailing monitoring well installation, step testing, pump testing, geophysical well testing and packer testing. The *Work Plan* proposed the installation of 2-inch wells within monitoring well MW-14D, conversion of monitoring wells MW-15D, MW-16 and MW-17 to permanent screened wells, and the submittal of a *Corrective Action Plan* (CAP).
- June 17, 2010: MDE issued *Request for Corrective Action Plan*, requiring the submittal of a CAP by August 6, 2010. The MDE also required that monitoring well MW-14D be finished as a 4-inch well, and a new 4-inch well, MW-14S be installed adjacent to it; and approved the completion of monitoring wells MW-15D, MW-16, and MW-17 as permanent screened wells, continued quarterly groundwater sampling, the initiation of quarterly sampling of the GVP POET system, continued quarterly sampling of residential POET systems, continued quarterly sampling of 14 residential potable wells, continued semi-annual sampling of 8 residential potable wells.
- July 9, 2010: Carroll submitted a response to the MDE's request for a CAP, requesting an extension of the deadline for the submittal of a CAP to October 31, 2010.
- July 19-21, 2010: Monitoring well MW-14S was installed onsite. Monitoring wells MW-15D, MW-16, and MW-17 were converted to permanent screened wells.
- August 9, 2010: The MDE approved the extension of the deadline for CAP submittal.
- August 10, 2010: A meeting was conducted between GES, Carroll, and the MDE.
- September 2010: The case was transferred from Alliance to GES.
- September 9, 2010: GES submitted *In Situ Chemical Oxidation (ISCO) Pilot Test Work Plan* to the MDE, proposing the installation of three nested injection wells, a nested observation well, and a vapor extraction well; and the injection of hydrogen peroxide and ozone at three subsurface intervals during a two-day pilot test.
- October 13, 2010: A *Proposed Groundwater and Potable Well Sampling Program* was submitted to the MDE, proposing low-flow sampling methods and the collection of field measurements to replace the current purge and sample method for groundwater sampling; and the removal of Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO) from the list of parameters analyzed for all monitoring and non-transient, non-community supply wells. All POET system sampling, non-transient, non-community supply well sampling and residential potable well sampling was to remain on the schedule previously followed.
- November 16-19, 2010: Nested monitoring wells MW-18S and MW-18D, vapor extraction well VE-1 and injection wells IW-1S/D, IW-2S/D and IW-3S/D were installed onsite.

### **HISTORICAL ACTIVITY SUMMARY (Continued):**

- November 18, 2010: The MDE approved the *ISCO Pilot Test Work Plan*, with slight modifications, and the use of low-flow sampling techniques at the Site. The MDE approved the elimination of TPH-DRO and TPH-Gasoline Range Organics (GRO) from analysis of samples collected from the GVP POET system, the GVP supply wells, and the GVSC supply wells. The MDE stated that the request to eliminate TPH-DRO from the analysis of groundwater would be considered pending a review of low-flow sampling data and pilot testing activities.
- November 30, 2010: ISCO pilot testing was conducted onsite.
- December 1, 2010: Carroll informed the MDE of the results of the pilot testing via email, and included a proposed plan to redevelop the injection wells and introduce air to see if they could be used for further injection testing. Carroll also requested to modify the post ISCO pilot test groundwater sampling plan proposed in the *ISCO Pilot Test Work Plan*. Monitoring wells sampled prior to the pilot testing (with the exception of MW-18S and MW-18D) would be omitted from additional groundwater sampling in December 2010. The MDE approved both proposals via email.
- December 8, 2010: Injection wells IW-1S/D, IW-2S/D and IW-3S/D were re-developed.
- December 15, 2010: Slug testing was conducted on monitoring wells MW-18S and MW-18D.
- January 4, 2011: Monitoring wells MW-18S and MW-18D, vapor extraction well VE-1 and injection wells IW-1S/D, IW-2S/D and IW-3S/D were surveyed into the existing well network.
- March 15, 2011: A CAP was submitted to the MDE proposing the installation of an ISCO remediation system, and an eight-week pilot program.
- June 1, 2011: The MDE issued *Extended Pilot Testing Approval* in response to the CAP, approving the ISCO pilot program, and requiring expanded groundwater monitoring during the pilot program.
- June 3, 2011: Carroll requested clarifications of two points in the *Extended Pilot Testing Approval* via email.
- June 6, 2011: The MDE responded via email to Carroll's questions, and issued an updated *Site Management Schedule*, requiring the submission of a *CAP Implementation Plan* by July 1, 2011.
- July 1, 2011: A *CAP Implementation Plan* was submitted to the MDE.
- August 28, 2011: The MDE approved the *CAP Implementation Plan* and required an *Extended ISCO Pilot Testing Reports* be submitted during operation of the system and after completion of the pilot test period.
- September 14, 2011: The ISCO system was activated and GES began groundwater and POET System monitoring as per the schedule outlined in the MDE approved *CAP Implementation Plan*.
- October 14, 2011: An *Extended ISCO Pilot Testing – Week 3 Operation Report* was submitted to the MDE.
- November 11, 2011: ISCO system operation stopped, completing the 8 week ISCO Pilot Test.
- November 18, 2011: An *Extended ISCO Pilot Testing – Week 7 Operation Report* was submitted to the MDE.
- December 19, 2011: An *Extended ISCO Pilot Testing – Comprehensive Summary Report* was submitted to the MDE.
- February 10, 2012: GES received from the MDE a *Corrective Action Plan (CAP) Approval* letter.
- February 20, 2012: The ISCO system was activated and GES began groundwater and POET System monitoring as per the schedule outlined in the MDE *Corrective Action Plan (CAP) Approval* letter and subsequent correspondence.

### **HISTORICAL ACTIVITY SUMMARY (Continued):**

- April 2, 2012: An *ISCO Injection Well Installation Work Plan* was submitted to the MDE.
- May 5, 2012: An *ISCO System Operation Report* was submitted to the MDE.
- May 21-30, 2012: Completion of a rock coring and hydraulic pressure testing investigation and the construction of injection well IW-4.
- May 31-June 5, 2012: Injection well IW-4 trenching, system connections, development and testing were completed, followed by the well being added to the injection well network for ISCO system operation.
- June 25, 2012: An *ISCO System Operation Report* was submitted to the MDE.
- July 31, 2012: The MDE requested that the ISCO system be shut down at the site pending further groundwater sampling.
- August 1, 2012: The ISCO system was deactivated.
- August 1, 2012: GES received from the MDE a *Modification to the Corrective Action Plan* letter.
- August 3, 2012: GES sent a letter to the MDE in response to the *Modification to the Corrective Action Plan* letter received.
- August 9-23 and September 4, 2012: GES emailed laboratory analytical results to the MDE that included hexavalent and chromium data.
- August 31, 2012: Monitoring well slug testing conducted at select monitoring wells.
- September 12, 2012: GES received from the MDE an email requesting additional information regarding lead analysis.
- September 18, 2012: GES received from the MDE an email regarding remediation system equipment removal.
- September 21, 2012: Carroll sent and email to the MDE regarding additional monitoring and sampling to be conducted during the 4<sup>th</sup> quarter sampling event and the timing of the event.
- September 27, 2012: The ISCO system trailer was removed from the site.
- September 28, 2012: An *ISCO System Comprehensive Summary Report and Update to the Conceptual Site Model and Supplemental Chromium and Lead Investigation Summary* were submitted to the MDE.
- November 21, 2012: GES submitted an *October 2012 Sampling Data Transmittal Letter* to the MDE.
- December 1, 2012: The FCHD and the MDE's contractor sampled the drinking water supply at 3833 Greenridge Drive.
- December 20, 2012: The MDE sent a letter to Mr. and Mrs. Gray in regards to the additional investigation of 11712 Serene Court.
- December 21, 2012: The MDE sent a letter to Mr. Schlessinger in regards to the sampling results for 3833 Greenridge Drive.
- March 1, 2013: GES submitted a *January 2013 Sampling Data Transmittal Letter* to the MDE.
- March 14, 2013: GES submitted an attachment to the January 2013 Sampling Data Transmittal Letter to the MDE.
- April 19, 2013: The MDE sent a letter to Mr. and Mrs. Gray in regards to the additional investigation of 11712 Serene Court.
- May 22, 2013: GES submitted a *Request to Revise the Monitoring Well Sampling Plan*.
- May 29, 2013: GES submitted an *April 2013 Sampling Data Transmittal Letter* to the MDE.
- June 17, 2013: GES submitted a *May 2013 Sampling Data Transmittal Letter* to the MDE.
- October 18, 2013: GES received a response from the MDE regarding the *Request to Revise Sampling Plan*. The MDE denied the request to eliminate TPH-DRO from the monitoring well sampling program. The MDE has requested an additional supplemental sampling event during the fourth quarter of 2013 and a *Revised CAP* by January 31, 2014.
- November 15, 2013: GES submitted an *October 2013 Sampling Data Transmittal Letter* to the MDE.

### **HISTORICAL ACTIVITY SUMMARY (Continued):**

- December 5, 2013: A conference call with the MDE to discuss metals analytical results from select wells collected during the fourth quarter 2013.
- December 18, 2013: MW-18S and potable well GVP-FR815955 were resampled for metals, including chromium and lead, as requested by the MDE.
- January 31, 2014: GES submitted a *Revised CAP* to the MDE.
- February 18, 2014: Based on a correspondence with the MDE, well FR-73-1687 may have been misidentified, and the actual well identification is FR-73-7687.
- May 2014: The MDE issued a *Report of Results for Lead and Hexavalent Chromium Groundwater Investigation*.
- September 16, 2014: The property owner of 3829 Greenridge Drive requested (via telephone) GES to discontinue all future sampling of their property. A confirmation letter of this request was sent to the resident on September 26, 2014.
- October 3, 2014: An approval response to the January 31, 2014 *Revised Corrective Action Plan (CAP)* was received from the MDE. The routine monitoring and potable well sampling program was revised.
- October 7, 2014: CFC issued a notice of dispute to the MDE regarding the requirement for additional metals sampling as outlined in the MDE approval of the Revised CAP.
- October 27, 2014: GES submitted a *Monitoring Well MW-18S Replacement Work Plan*.
- November 7, 2014: The MDE responded to the dispute regarding metals sampling, reducing the number of wells required for metals sampling and requiring that 2 sampling events occur six months apart. The letter also acknowledged that the property owner of 3829 Greenridge Drive requested to discontinue sampling at the property.
- November 12, 2014: The MDE confirmed with the property owner of 3829 Greenridge Drive that they would no longer like to be sampled in the future.
- December 12, 2014: A response from the MDE to the October 27, 2014 *Monitoring Well MW-18S Replacement Work Plan* was received.
- December 12, 2014: The MDE issued a letter to the property owner of 3829 Greenridge Drive regarding the discontinuation of potable sampling.
- January 14, 2015: A *Request for MW-18S-R Report Submittal Deadline Extension* was submitted to the MDE.
- January 27, 2015: The replacement monitoring well for MW-18S was installed and identified as MW-18S-R.
- February 10, 2015: The MDE approved the extension request for the MW-18S-R report.
- February 13, 2015: The annual *Data Trends Analysis & Revised Monitoring Plan* was submitted with the *Fourth Quarter 2014 Monitoring Report*.
- March 17, 2015: The *MW-18S Replacement Well Installation Report* was submitted to the MDE.
- May 12, 2015: The *First Quarter 2015 Monitoring Report* was submitted to the MDE.
- June 8, 2015: GES follows up with the MDE on sampling reduction requests discussed in the *Fourth Quarter 2014 Monitoring Report with Data Trend Analysis and Revised Monitoring Plan – February 15, 2015*, the *MW-18S-Replacement Well Installation Report – March 17, 2015*, and the *First Quarter 2015 Monitoring Report – May, 15, 2015*. The MDE responds to GES follow-up correspondence indicating a response letter is being drafted.
- July 14, 2015: GES requests and is permitted from the MDE postponement of the third quarter sampling event until August 2015 while waiting on the MDE's letter responding to GES's sampling reduction requests.

### **HISTORICAL ACTIVITY SUMMARY (Continued):**

- July 30, 2015: GES received MDE's response letter *Site Status and Modifications to Sampling Program – July 29, 2015*. GES was permitted to discontinue sampling several monitoring and potable wells.
- August 4, 2015: GES submitted correspondence *Response to Green Valley Citgo Letter – 07.29.15* regarding July 30, 2015 MDE letter requesting clarification.
- August 11, 2015: GES received MDE response to Aug. 4, 2015 GES correspondence.
- August 14, 2015: GES submitted *Second Quarter 2015 Monitoring Report* to the MDE, requesting MW-18S abandonment within the report.
- October 6, 2015: GES notifies the MDE of Michael Pensario's, owner of 3996 Farm Lane, potable sampling inquiry, and GES requests the MDE to confirm with Mr. Pensario that his well was removed from GES' sampling program.
- October 21, 2015: GES confirms receiving the MDE's notification (via phone call) of contact with Mr. Pensario, confirming his removal from GES's potable sampling program.
- October 30, 2015: GES received the MDE's *Approval for Monitoring Well Abandonment* letter, dated October 27, 2015, approving abandonment of well MW-18S.
- November 10, 2015: GES abandoned monitoring well MW-18S per the MDE's requirements stated in their *Approval for Monitoring Well Abandonment* letter.
- November 13, 2015: GES submitted *Third Quarter 2015 Monitoring Report* to the MDE.
- December 29, 2015: GES submitted *Completion of MW-18S Well Abandonment*, dated December 30, 2015, letter to the MDE.
- February 12, 2016: GES submitted *Fourth Quarter 2015 Monitoring Report* to the MDE with *Annual Monitored Natural Attenuation (MNA) Evaluation*. GES also requested, in this correspondence, reductions of specific monitoring points and sampling frequency for select monitoring and potable wells for the case.
- May 13, 2016: GES submitted *First Quarter 2016 Monitoring Report* to the MDE.
- June 23, 2016: The MDE confirms the Case Status Meeting with GES scheduled for August 9, 2016.
- August 9, 2016: GES met with the MDE at the MDE Headquarters in Baltimore to discuss future sampling reduction and monitoring well abandonment requests and required documents for the MDE to consider requests.
- August 11, 2016: GES submitted *Second Quarter 2016 Monitoring Report* to the MDE.
- September 9, 2016: The MDE sent a *Request for Potable Well Sampling – September 9, 2016* to 3991 Farm Lane.
- October 21, 2016: GES submitted *Request for Monitoring Reduction* letter and the *Third Quarter 2016 Monitoring Report* to the MDE.
- February 1, 2017: The MDE informed CFC that the Department was working on a response to the *Request for Monitoring Reduction* letter from GES and to supplement the response, the MDE requested individual time-series data tables for specific private residential properties, including the EPA Method 524.2 analytical results. GES confirmed the MDE's request.
- February 15, 2017: GES submitted the *Fourth Quarter 2016 Monitoring Report* and *2016 Annual Remedial Evaluation*.
- April 25, 2017: GES submits individual time-series data tables with EPA Method 524.2 analytical results, including First Quarter 2017 results, to the MDE.
- May 12, 2017: GES submitted the *First Quarter 2017 Monitoring Report* to the MDE.
- August 11, 2017: GES submitted the *Second Quarter 2017 Monitoring Report* to the MDE.
- October 17, 2017: GES received MDE's response letter *Site Status and Modifications to Sampling Program – October 17, 2017*.

### **HISTORICAL ACTIVITY SUMMARY (Continued):**

- November 14, 2017: GES submitted the *Third Quarter 2017 Monitoring Report* to the MDE.
- December 20-21, 2017: GES abandoned MW-2, MW-6, MW-8, MW-10, MW-11, MW-12, MW-14S, MW-15D, MW16, IW-1S, IW-1D, IW-2S, IW-2D, IW-3S, IW-3D, IW-14, VE-1, SV-1 and SV-2 as approved in MDE correspondence dated October 17, 2017.
- February 15, 2018: GES submitted the *Fourth Quarter 2017 Monitoring Report* to the MDE.
- May 15, 2018: GES submitted the *First Quarter 2018 Monitoring Report* to the MDE.
- May 24, 2018: GES received MDE's response letter *POET Treatment System Discontinuation Approval – May 24, 2018*.
- May 25, 2018: GES submitted *Addendum - First Quarter 2018 Monitoring Report*
- July 13, 2018: The POET systems from 3997 Farm Lane and 3923 Rosewood Road were removed.
- August 15, 2018: GES submitted the *Second Quarter 2018 Monitoring Report* to the MDE.
- September 17, 2018: GES received MDE's response letter *Site Status and Modifications to Sampling Program, September 11, 2018*.
- November 14, 2018: GES submitted the *Third Quarter 2018 Monitoring Report* to the MDE.
- February 15, 2019: GES submitted the *Fourth Quarter 2018 Monitoring Report* and *2018 Annual Remedial Evaluation Report* to the MDE under separate cover.
- April 16, 2019: GES submitted the *Request for Release from POET System Maintenance Responsibility 3996 Farm Lane, Monrovia* to the MDE.
- April 29, 2019: GES submitted the *First Quarter 2019 Monitoring Report* to the MDE.
- May 1, 2019: GES received MDE's *Report of Observations* from site visit this day.
- May 10, 2019: GES received MDE's response letter *Poet System Maintenance Responsibility* dated May 7, 2019.
- August 5, 2019: GES submitted the *Second Quarter 2019 Monitoring Report* to the MDE.
- November 1, 2019: GES submitted the *Third Quarter 2019 Monitoring Report* to the MDE.
- December 10, 2019: GES received MDE's *Monitored Natural Attenuation Sampling Discontinuation Approval* date December 6, 2019.
- February 13, 2020: GES submitted the *Fourth Quarter 2019 Monitoring Report* to the MDE.
- April 30, 2020: GES submitted the *First Quarter 2020 Monitoring Report* to the MDE.
- August 14, 2020: GES submitted the *Second Quarter 2020 Monitoring Report* to the MDE.
- November 13, 2020: GES submitted the *Third Quarter 2020 Monitoring Report* to the MDE.
- February 12, 2021: GES submitted the *Fourth Quarter 2020 Monitoring Report* and the *Annual Remedial Evaluation - 2020* report to the MDE.
- May 14, 2021: GES submitted the *First Quarter 2021 Monitoring Report* to the MDE.
- August 13, 2021: GES submitted the *Second Quarter 2021 Monitoring Report* to the MDE.
- November 10, 2021: GES submitted the *Third Quarter 2021 Monitoring Report* to the MDE.
- February 15, 2022: GES submitted the *Fourth Quarter 2021 Monitoring Report* and the *Annual Remedial Evaluation - 2020* report to the MDE.
- February 18, 2022: GES submitted *Notification Regarding Cessation of GVP Treatment System Diagnostic Sampling and Maintenance* to Timbercrest LP and MDE.
- May 15, 2022: GES submitted the *First Quarter 2022 Monitoring Report* to the MDE.
- August 5, 2022: GES submitted the *Second Quarter 2022 Monitoring Report* to the MDE.

## **APPENDIX B**

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Monitoring Well Sampling Data

**GROUNDWATER SAMPLING/LIQUID LEVEL DATA SHEET****CLIENT/PROJECT:** Carroll Fuel - Monrovia**DATE:** 8-16-2022**ADDRESS/SITE NUMBER:** 11791 Fingerboard Road**GES PERSONNEL:** Jeff Plummer**WEATHER:** Partly cloudy 70-84°

WELL	DTW	DTP	TDW	Well Dia.	P	B	S	Vol	DO	pH	Temp °C	ORP	NTU	Cond.	Time	Comments
MW-1	51.54	—														
1	4 59.11	—														
3	65.01	—														
7	66.02	—														
13	64.18	—														
14D	57.37	—														
17	61.67	—														
18D	60.93	—														
185R	65.35	—														
TF-3	dry	—	14.35													
4	dry	—	14.02													
5	14.21	—	14.35													
6	13.44	—	13.60													
7	dry	—	12.16													
TF-8	11.47	—	11.62													

**KEY:**

DTW = depth to water

P = pump in well

S = sorbent sock in well

DTP = depth to product

B = bailer in well

Vol = volume bailed (gallons)

Additional Comments: \_\_\_\_\_

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# Groundwater Sampling Data Collection Sheet



Well ID:	MN-1		Site ID:	Carroll Fuel		Sample Date:	8-16-22				
Initial DTW / Time:			Address:	11741 Fingerboard Rd.							
Well Diameter:	4"	Sample Method (circle one)	Monrovia Md.								
Total Well Depth:			Sampling Tech(s):		J. Plummer						
Water Column Length:			Weather Conditions:		Partly cloudy						
Pump Intake depth:		Air Temp =		70°							
<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	MSM/M	Unit	NA	Unit					
		± 0.3 °C	± 3%	± 10%	± 0.1	± 10					
0910 6602		Just prior to lowering any equipment into well									
0910 6602		After lowering equipment into the well & before turning on the pump									
0910		Purge Start Time									
0915	6604	18.40	1.015	7.91	6.09	172.6	300 ml/min	clear			
0930	6604	18.21	1.014	7.90	6.05	176.8					
0935	6605	17.96	1.012	7.73	6.07	176.7					
0940	6605	17.72	1.014	7.46	6.07	179.1	↓	1/2 gallons			
0945		Sample Collection Time									
		Purge Stop Time									
<b>Data Collection: Purge and Sample / Grab Sampling</b>											
Time	DTW	If Applicable									Method Of Sampling
		Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water		
		Unit	Unit	Unit	NA	Unit					
± 0.3 °C	± 3%	± 10%	± 0.1	± 10							
		Just prior to lowering any equipment into well									
		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/etc./calibration info): 9 cycles min      10 sec fill / 5 sec discharge											

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:	MMW17		Site ID:	Carroll Fuel 11791 Fingerboard Rd. Monrovia Md.		Sample Date	8/16/22				
Initial DTW / Time:			Address:								
Well Diameter:	4"	Sample Method (circle one)									
Total Well Depth:		Low Flow									
Water Column Length:		Purge/sample									
Pump Intake depth:		Grab/No Pruge									
<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	mS/cm	Unit	NA	Unit					
		± 0.3 °C	± 3%	± 10%	± 0.1	± 10					
1000	101.67	Just prior to lowering any equipment into well									
1005	101.65	After lowering equipment into the well & before turning on the pump									
1005	101.65	Purge Start Time									
1010	61.69	18.59	1.092	9.50	6.05	193.1	300 ml/min	cycles			
1015	61.69	17.17	1.100	7.63	5.76	195.1					
1020	61.69	16.35	1.094	7.29	5.51	198.9					
1025	61.69	16.17	1.093	7.23	5.49	197.2					
1030	61.69	16.12	1.092	6.01	5.48	196.0					
1035	61.70	16.23	1.093	5.20	5.49	194.8					
1040	61.70	16.19	1.094	4.82	5.48	194.5					
1045	61.70	16.18	1.093	4.58	5.46	195.2					
1050	61.71	16.38	1.092	4.40	5.51	191.6	↓	3 1/2 gallons			
1055	Sample Collection Time										
	Purge Stop Time										
<b>Data Collection: Purge and Sample / Grab Sampling</b>											
Time	DTW	If Applicable									Method Of Sampling
		Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water		
		Unit	Unit	Unit	NA	Unit					
± 0.3 °C	± 3%	± 10%	± 0.1	± 10							
	Just prior to lowering any equipment into well										
	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/etc./calibration info):  4 cycles/min      10 sec fill / 5 sec discharge.											

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-14D		Site ID:	Carroll		Sample Date: 8-16-22				
Initial DTW / Time:			Address:	11791 Fingersboard Rd. Monrovia Md.						
Well Diameter:	4"	Sample Method (cycle one)  Low Flow  Purge/sample Grab/No Pruge	Sampling Tech(s):	J. Plummer						
Total Well Depth:			Weather Conditions:	Partly cloudy						
Water Column Length:			Air Temp =	78°						
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	mg/L	Unit	NA	Unit				
		± 0.3 °C	± 3%	± 10%	± 0.1	± 10				
1105	57.37	Just prior to lowering any equipment into well								
1115	57.35	After lowering equipment into the well & before turning on the pump								
1115	Purge Start Time									
1120	57.92	29.33	0.369	4.94	6.65	179.5	200 ml./min	clear		
1125	58.15	17.75	0.288	1.88	6.71	183.5				
1130	58.25	18.67	0.286	2.12	6.83	176.5				
1135	58.68	16.67	0.280	1.70	6.83	174.5				
1140	59.05	16.49	0.278	1.55	6.81	173.3				
1145	59.37	16.45	0.276	1.50	6.87	167.1				
1150	59.65	16.43	0.277	1.44	6.92	162.3	↓	1 3/4 gallons		
1155	Sample Collection Time									
	Purge Stop Time									
<b>Data Collection: Purge and Sample / Grab Sampling</b>										
Time	DTW	If Applicable								Method Of Sampling
		Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water	
		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								
<b>General Comment &amp; Type of Equipment Used (pumps/YSI meter/etc./calibration info):</b> <i>4 cycles/min</i>										

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-18D		Site ID:	Carroll 11791 Fingerboard Rd. Montgomery Md.		Sample Date 5-16-22				
Initial DTW / Time:			Address:							
Well Diameter:	2"	Sample Method (circle one)	Sampling Tech(s):	J. Plummer						
Total Well Depth:		Low Flow	Weather Conditions:	Partly Cloudy 82°						
Water Column Length:		Purge/sample	Air Temp =							
Pump Intake depth:		Grab/No Pruge								
<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	<del>mV/mF</del>	Unit	NA	Unit				
		± 0.3 °C	± 3%	± 10%	± 0.1	± 10				
1220	60.03	Just prior to lowering any equipment into well								
1230	57.85	After lowering equipment into the well & before turning on the pump								
1230	Purge Start Time									
1235	60.230	13.900	3.194	0.91	7.51	-54.8	300 mL/min clear			
1240	64.60	17.99	3.782	0.69	7.61	-89.0				
1245	66.60	17.75	3.782	0.65	7.67	-98.6				
1250	68.15	17.65	3.786	0.63	7.70	-107.7				
1255	70.30	17.13	3.784	0.63	7.73	-116.9				
1300	Sample Collection Time									
1300	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	Unit	Unit	NA	Unit				
		± 0.3 °C	± 3%	± 10%	± 0.1	± 10				
		Just prior to lowering any equipment into well								
		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/etc./calibration info):</b>										
4 cycles min 10 sec fill / 5 sec discharge										

Stabilization is achieved when three successive readings are within

$\pm 0.3$  °C for temperature,

$\pm 0.1$  for pH.

$\pm 3\%$  for specific conductivity

± 5% for specific conductivity,  
 ± 10 for reduction-oxidation potential

### Purge Volumes:

2-inch diameter well;

$$0.16 \text{ gal./ft.} \times \text{(linear feet of water)} = \text{gallons of water}$$

4-inch diameter well:

0.65 gal./ft. x (linear feet of water) = 11.5 gal.

# Groundwater Sampling Data Collection Sheet



Well ID:	MW-185R		Site ID:	Carroll Fuel 11791 Fingerboard Rd. Monrovia MD.		Sample Date:	8-16-22			
Initial DTW / Time:			Address:							
Well Diameter:	4"	Sample Method (circle one)	Low Flow		Sampling Tech(s):	Jeff Plummer				
Total Well Depth:		Purge/sample			Weather Conditions:	Partly cloudy 94°				
Water Column Length:		Grab/No Prunge	Air Temp =							
<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	Mil/cm <sup>6</sup>	Unit	NA	Unit				
		± 0.3 °C	± 3%	± 10%	± 0.1	± 10				
1310	65.35	Just prior to lowering any equipment into well								
1315	65.30	After lowering equipment into the well & before turning on the pump								
1315	Purge Start Time									
1320	65.47	20.15	1.840	3.67	5.98	1000	300 ml	1.1 min	clear	
1325	65.50	18.37	1.476	3.08	5.56	124.0				
1330	65.50	18.37	1.371	3.23	5.39	138.9				
1335	65.50	18.25	1.324	3.32	5.31	141.7				
1340	65.50	18.29	1.303	3.39	5.28	154.2				
1345	65.50	18.00	1.285	3.48	5.23	159.9				
1350	65.50	17.79	1.265	3.54	5.18	165.8			23 mgall. ✓	
1355	Sample Collection Time									
	Purge Stop Time									
<b>Data Collection: Purge and Sample / Grab Sampling</b>										
Time	DTW	If Applicable								Method Of Sampling
		Temp	Conductivity	D.O.	pH	ORP	Flow Rate	Cumulative Purge Volume	Appearance of Purge Water	
		Unit	Unit	Unit	NA	Unit				
± 0.3 °C	± 3%	± 10%	± 0.1	± 10						
	Just prior to lowering any equipment into well									
	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/etc./calibration info):</b> <i>4 cycles/min</i>										

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

Client/Site: Carroll Monrovia

NAME:Jeff Plummer

DATE:8-17-2022

COMPANY:

GES

## Potable Sampling Log

Address	Who granted access / Access letter Signed	Flush Location	Flush initiation time	Flush length (mins)	EFF (time)	MID (time)	INF / Non POET (time)	Totalizer Reading (gals)	Non POET Sample Location / General Notes
11791 Fingersboard GVR	Carroll Fuel	hose at Spigot	0900	10			0910	13171000	POET still online.
3990 Farm	Ms. Bradley	basement dropsink	0930	10	0910	0945	0950	169801	Confirmed POET online.
3923 Rose	Ms. Stevens	basement dropsink	1030	10			1040		Collected at dropsink.
3996 Farm	Mr. Ajala	basement dropsink	1300	10	1310	1315	1320	1298964	Confirmed POET online.
3997 Farm	Ms. Szeliga	Kitchen Sink	1330	10			1340		Collected at Kitchen Sink.
3992 Farm	Mr. Podliska	basement dropsink	1400	10	1410	1415	1420	64156	Confirmed POET online.
									*Small drip coming from gamlock gasket on influent of 3rd CGAC.
FINAL CHECK LIST:	Access Letters: [ ] DUPLICATE: [ ]	TRIP BLANK: TOTALIZER READINGS: [ ]	NOTES:						

Client/Site: Carroll Monrovia

## Potable Sampling Log

NAME: Jeff Phinney  
DATE: 9-29-22  
COMPANY: GES

## **APPENDIX C**

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Laboratory Reports and Chain of Custody Documentation  
(See Files on CD)

Eurofins Lancaster  
Laboratories ID Numbers:

410-94984-1  
410-94986-1  
410-99916-1



Environment Testing  
America



## ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC  
2425 New Holland Pike  
Lancaster, PA 17601  
Tel: (717)656-2300

Laboratory Job ID: 410-94984-1

Client Project/Site: Carroll Monrovia

For:

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

Attn: Peter Reichardt

*Amek Carter*

Authorized for release by:

8/24/2022 12:48:18 AM

Amek Carter, Project Manager

(717)556-7252

Loran.Carter@et.eurofinsus.com

### LINKS

Review your project  
results through



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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.

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**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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Amek Carter  
Project Manager  
8/24/2022 12:48:18 AM

# Table of Contents

Cover Page .....	1
Table of Contents .....	3
Definitions/Glossary .....	4
Case Narrative .....	5
Detection Summary .....	6
Client Sample Results .....	7
Surrogate Summary .....	17
QC Sample Results .....	18
QC Association Summary .....	28
Lab Chronicle .....	29
Certification Summary .....	30
Method Summary .....	32
Sample Summary .....	33
Chain of Custody .....	34
Receipt Checklists .....	35

## Definitions/Glossary

Client: Groundwater & Environmental Services Inc

Job ID: 410-94984-1

Project/Site: Carroll Monrovia

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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: Carroll Monrovia

Job ID: 410-94984-1

### Job ID: 410-94984-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

#### Narrative

Job Narrative  
410-94984-1

#### Receipt

The samples were received on 8/18/2022 5:00 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 1.6°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 410-288122 recovered outside acceptance criteria, low biased, for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Dichlorodifluoromethane, Hexachlorobutadiene, Naphthalene and t-Butyl alcohol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. 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-7 (410-94984-1), MW-17 (410-94984-2), MW-14D (410-94984-3), MW-18D (410-94984-4) and MW-18S-R (410-94984-5). 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.

## Detection Summary

Client: Groundwater & Environmental Services Inc

Job ID: 410-94984-1

Project/Site: Carroll Monrovia

### **Client Sample ID: MW-7**

### **Lab Sample ID: 410-94984-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	0.69		0.50	0.080	ug/L	1		8260C LL	Total/NA
Chloroform	0.17	J	0.50	0.090	ug/L	1		8260C LL	Total/NA

### **Client Sample ID: MW-17**

### **Lab Sample ID: 410-94984-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	1.1		0.50	0.080	ug/L	1		8260C LL	Total/NA
Chloroform	0.35	J	0.50	0.090	ug/L	1		8260C LL	Total/NA
di-Isopropyl ether	0.22	J	0.50	0.10	ug/L	1		8260C LL	Total/NA

### **Client Sample ID: MW-14D**

### **Lab Sample ID: 410-94984-3**

No Detections.

### **Client Sample ID: MW-18D**

### **Lab Sample ID: 410-94984-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	18		0.50	0.080	ug/L	1		8260C LL	Total/NA
di-Isopropyl ether	0.16	J	0.50	0.10	ug/L	1		8260C LL	Total/NA
t-Amyl methyl ether	0.30	J	0.50	0.20	ug/L	1		8260C LL	Total/NA

### **Client Sample ID: MW-18S-R**

### **Lab Sample ID: 410-94984-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.19	J	0.50	0.090	ug/L	1		8260C LL	Total/NA
di-Isopropyl ether	0.56		0.50	0.10	ug/L	1		8260C LL	Total/NA
t-Amyl methyl ether	0.32	J	0.50	0.20	ug/L	1		8260C LL	Total/NA
t-Butyl alcohol	4.4	J cn	10	3.0	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether - DL	33		5.0	0.80	ug/L	10		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: Carroll Monrovia

Job ID: 410-94984-1

**Client Sample ID: MW-7**  
**Date Collected: 08/16/22 09:45**  
**Date Received: 08/18/22 17:00**

**Lab Sample ID: 410-94984-1**  
**Matrix: Water**

**Method: 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			08/21/22 17:31	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 17:31	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Ethylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Styrene	ND		0.50	0.070	ug/L			08/21/22 17:31	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 17:31	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			08/21/22 17:31	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 17:31	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			08/21/22 17:31	1
1,2,3-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 17:31	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			08/21/22 17:31	1
Toluene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Chlorobenzene	ND		0.50	0.070	ug/L			08/21/22 17:31	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 17:31	1
Dibromochloromethane	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Xylenes, Total	ND		1.0	0.070	ug/L			08/21/22 17:31	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/21/22 17:31	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 17:31	1
<b>Methyl tertiary butyl ether</b>	<b>0.69</b>		0.50	0.080	ug/L			08/21/22 17:31	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 17:31	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			08/21/22 17:31	1
<b>Chloroform</b>	<b>0.17 J</b>		0.50	0.090	ug/L			08/21/22 17:31	1
Benzene	ND		0.50	0.10	ug/L			08/21/22 17:31	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Bromomethane	ND		0.50	0.10	ug/L			08/21/22 17:31	1
Chloromethane	ND		0.50	0.10	ug/L			08/21/22 17:31	1
Chloroethane	ND		0.50	0.10	ug/L			08/21/22 17:31	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 17:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/21/22 17:31	1
Methylene Chloride	ND		0.50	0.10	ug/L			08/21/22 17:31	1
Carbon disulfide	ND		1.0	0.10	ug/L			08/21/22 17:31	1
Bromoform	ND		1.0	0.30	ug/L			08/21/22 17:31	1
Bromodichloromethane	ND		0.50	0.080	ug/L			08/21/22 17:31	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			08/21/22 17:31	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 17:31	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/21/22 17:31	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Dichlorodifluoromethane	ND	cn	0.50	0.10	ug/L			08/21/22 17:31	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 17:31	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Acrylonitrile	ND	cn	5.0	0.40	ug/L			08/21/22 17:31	1
Trichloroethene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			08/21/22 17:31	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 17:31	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			08/21/22 17:31	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

## Client Sample ID: MW-7

Date Collected: 08/16/22 09:45  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94984-1**

Matrix: Water

### Method: 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			08/21/22 17:31	1
Bromoform	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Isopropylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Dibromomethane	ND		0.50	0.080	ug/L			08/21/22 17:31	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			08/21/22 17:31	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			08/21/22 17:31	1
Hexachlorobutadiene	ND	cn	0.50	0.080	ug/L			08/21/22 17:31	1
Naphthalene	ND	cn	0.50	0.080	ug/L			08/21/22 17:31	1
n-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
N-Propylbenzene	ND		0.50	0.10	ug/L			08/21/22 17:31	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			08/21/22 17:31	1
t-Amyl methyl ether	ND		0.50	0.20	ug/L			08/21/22 17:31	1
t-Butyl alcohol	ND	cn	10	3.0	ug/L			08/21/22 17:31	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:31	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			08/21/22 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120					08/21/22 17:31	1
Dibromofluoromethane (Surr)	104		80 - 120					08/21/22 17:31	1
4-Bromofluorobenzene (Surr)	93		80 - 120					08/21/22 17:31	1
Toluene-d8 (Surr)	99		80 - 120					08/21/22 17:31	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

**Client Sample ID: MW-17**  
**Date Collected: 08/16/22 10:55**  
**Date Received: 08/18/22 17:00**

**Lab Sample ID: 410-94984-2**  
**Matrix: Water**

**Method: 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			08/21/22 17:52	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 17:52	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Ethylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Styrene	ND		0.50	0.070	ug/L			08/21/22 17:52	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 17:52	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			08/21/22 17:52	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 17:52	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			08/21/22 17:52	1
1,2,3-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 17:52	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			08/21/22 17:52	1
Toluene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Chlorobenzene	ND		0.50	0.070	ug/L			08/21/22 17:52	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 17:52	1
Dibromochloromethane	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Xylenes, Total	ND		1.0	0.070	ug/L			08/21/22 17:52	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/21/22 17:52	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 17:52	1
<b>Methyl tertiary butyl ether</b>	<b>1.1</b>		0.50	0.080	ug/L			08/21/22 17:52	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 17:52	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			08/21/22 17:52	1
<b>Chloroform</b>	<b>0.35 J</b>		0.50	0.090	ug/L			08/21/22 17:52	1
Benzene	ND		0.50	0.10	ug/L			08/21/22 17:52	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Bromomethane	ND		0.50	0.10	ug/L			08/21/22 17:52	1
Chloromethane	ND		0.50	0.10	ug/L			08/21/22 17:52	1
Chloroethane	ND		0.50	0.10	ug/L			08/21/22 17:52	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 17:52	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/21/22 17:52	1
Methylene Chloride	ND		0.50	0.10	ug/L			08/21/22 17:52	1
Carbon disulfide	ND		1.0	0.10	ug/L			08/21/22 17:52	1
Bromoform	ND		1.0	0.30	ug/L			08/21/22 17:52	1
Bromodichloromethane	ND		0.50	0.080	ug/L			08/21/22 17:52	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			08/21/22 17:52	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 17:52	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/21/22 17:52	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Dichlorodifluoromethane	ND	cn	0.50	0.10	ug/L			08/21/22 17:52	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 17:52	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Acrylonitrile	ND	cn	5.0	0.40	ug/L			08/21/22 17:52	1
Trichloroethene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			08/21/22 17:52	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 17:52	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			08/21/22 17:52	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

**Client Sample ID: MW-17**  
**Date Collected: 08/16/22 10:55**  
**Date Received: 08/18/22 17:00**

**Lab Sample ID: 410-94984-2**  
**Matrix: Water**

**Method: 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			08/21/22 17:52	1
Bromoform	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Isopropylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Dibromomethane	ND		0.50	0.080	ug/L			08/21/22 17:52	1
<b>di-Isopropyl ether</b>	<b>0.22 J</b>		0.50	0.10	ug/L			08/21/22 17:52	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			08/21/22 17:52	1
Hexachlorobutadiene	ND cn		0.50	0.080	ug/L			08/21/22 17:52	1
Naphthalene	ND cn		0.50	0.080	ug/L			08/21/22 17:52	1
n-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
N-Propylbenzene	ND		0.50	0.10	ug/L			08/21/22 17:52	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			08/21/22 17:52	1
t-Amyl methyl ether	ND		0.50	0.20	ug/L			08/21/22 17:52	1
t-Butyl alcohol	ND cn		10	3.0	ug/L			08/21/22 17:52	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 17:52	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			08/21/22 17:52	1
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Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	102		80 - 120				08/21/22 17:52	1	
Dibromofluoromethane (Surr)	105		80 - 120				08/21/22 17:52	1	
4-Bromofluorobenzene (Surr)	90		80 - 120				08/21/22 17:52	1	
Toluene-d8 (Surr)	99		80 - 120				08/21/22 17:52	1	

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

**Client Sample ID: MW-14D**  
**Date Collected: 08/16/22 11:55**  
**Date Received: 08/18/22 17:00**

**Lab Sample ID: 410-94984-3**  
**Matrix: Water**

## Method: 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			08/21/22 18:13	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 18:13	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Ethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Styrene	ND		0.50	0.070	ug/L			08/21/22 18:13	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:13	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			08/21/22 18:13	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 18:13	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			08/21/22 18:13	1
1,2,3-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 18:13	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			08/21/22 18:13	1
Toluene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Chlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:13	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 18:13	1
Dibromochloromethane	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Xylenes, Total	ND		1.0	0.070	ug/L			08/21/22 18:13	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/21/22 18:13	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 18:13	1
Methyl tertiary butyl ether	ND		0.50	0.080	ug/L			08/21/22 18:13	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:13	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Chloroform	ND		0.50	0.090	ug/L			08/21/22 18:13	1
Benzene	ND		0.50	0.10	ug/L			08/21/22 18:13	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Bromomethane	ND		0.50	0.10	ug/L			08/21/22 18:13	1
Chloromethane	ND		0.50	0.10	ug/L			08/21/22 18:13	1
Chloroethane	ND		0.50	0.10	ug/L			08/21/22 18:13	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 18:13	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/21/22 18:13	1
Methylene Chloride	ND		0.50	0.10	ug/L			08/21/22 18:13	1
Carbon disulfide	ND		1.0	0.10	ug/L			08/21/22 18:13	1
Bromoform	ND		1.0	0.30	ug/L			08/21/22 18:13	1
Bromodichloromethane	ND		0.50	0.080	ug/L			08/21/22 18:13	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			08/21/22 18:13	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 18:13	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/21/22 18:13	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Dichlorodifluoromethane	ND	cn	0.50	0.10	ug/L			08/21/22 18:13	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 18:13	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Acrylonitrile	ND	cn	5.0	0.40	ug/L			08/21/22 18:13	1
Trichloroethene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			08/21/22 18:13	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:13	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			08/21/22 18:13	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc

Job ID: 410-94984-1

Project/Site: Carroll Monrovia

**Client Sample ID: MW-14D**

**Lab Sample ID: 410-94984-3**

Date Collected: 08/16/22 11:55

Matrix: Water

Date Received: 08/18/22 17:00

**Method: 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			08/21/22 18:13	1
Bromoform	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Isopropylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Dibromomethane	ND		0.50	0.080	ug/L			08/21/22 18:13	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			08/21/22 18:13	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			08/21/22 18:13	1
Hexachlorobutadiene	ND	cn	0.50	0.080	ug/L			08/21/22 18:13	1
Naphthalene	ND	cn	0.50	0.080	ug/L			08/21/22 18:13	1
n-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
N-Propylbenzene	ND		0.50	0.10	ug/L			08/21/22 18:13	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			08/21/22 18:13	1
t-Amyl methyl ether	ND		0.50	0.20	ug/L			08/21/22 18:13	1
t-Butyl alcohol	ND	cn	10	3.0	ug/L			08/21/22 18:13	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:13	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			08/21/22 18:13	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	104		80 - 120				08/21/22 18:13	1	
Dibromofluoromethane (Surr)	105		80 - 120				08/21/22 18:13	1	
4-Bromofluorobenzene (Surr)	92		80 - 120				08/21/22 18:13	1	
Toluene-d8 (Surr)	100		80 - 120				08/21/22 18:13	1	

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

**Client Sample ID: MW-18D**  
**Date Collected: 08/16/22 13:00**  
**Date Received: 08/18/22 17:00**

**Lab Sample ID: 410-94984-4**  
**Matrix: Water**

**Method: 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			08/21/22 18:34	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 18:34	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Ethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Styrene	ND		0.50	0.070	ug/L			08/21/22 18:34	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:34	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			08/21/22 18:34	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 18:34	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			08/21/22 18:34	1
1,2,3-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 18:34	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			08/21/22 18:34	1
Toluene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Chlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:34	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 18:34	1
Dibromochloromethane	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Xylenes, Total	ND		1.0	0.070	ug/L			08/21/22 18:34	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/21/22 18:34	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 18:34	1
<b>Methyl tertiary butyl ether</b>	<b>18</b>		0.50	0.080	ug/L			08/21/22 18:34	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:34	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Chloroform	ND		0.50	0.090	ug/L			08/21/22 18:34	1
Benzene	ND		0.50	0.10	ug/L			08/21/22 18:34	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Bromomethane	ND		0.50	0.10	ug/L			08/21/22 18:34	1
Chloromethane	ND		0.50	0.10	ug/L			08/21/22 18:34	1
Chloroethane	ND		0.50	0.10	ug/L			08/21/22 18:34	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 18:34	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/21/22 18:34	1
Methylene Chloride	ND		0.50	0.10	ug/L			08/21/22 18:34	1
Carbon disulfide	ND		1.0	0.10	ug/L			08/21/22 18:34	1
Bromoform	ND		1.0	0.30	ug/L			08/21/22 18:34	1
Bromodichloromethane	ND		0.50	0.080	ug/L			08/21/22 18:34	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			08/21/22 18:34	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 18:34	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/21/22 18:34	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Dichlorodifluoromethane	ND	cn	0.50	0.10	ug/L			08/21/22 18:34	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 18:34	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Acrylonitrile	ND	cn	5.0	0.40	ug/L			08/21/22 18:34	1
Trichloroethene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			08/21/22 18:34	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:34	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			08/21/22 18:34	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

**Client Sample ID: MW-18D**  
**Date Collected: 08/16/22 13:00**  
**Date Received: 08/18/22 17:00**

**Lab Sample ID: 410-94984-4**  
**Matrix: Water**

**Method: 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			08/21/22 18:34	1
Bromoform	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Isopropylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Dibromomethane	ND		0.50	0.080	ug/L			08/21/22 18:34	1
<b>di-Isopropyl ether</b>	<b>0.16 J</b>		0.50	0.10	ug/L			08/21/22 18:34	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			08/21/22 18:34	1
Hexachlorobutadiene	ND cn		0.50	0.080	ug/L			08/21/22 18:34	1
Naphthalene	ND cn		0.50	0.080	ug/L			08/21/22 18:34	1
n-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
N-Propylbenzene	ND		0.50	0.10	ug/L			08/21/22 18:34	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			08/21/22 18:34	1
<b>t-Amyl methyl ether</b>	<b>0.30 J</b>		0.50	0.20	ug/L			08/21/22 18:34	1
t-Butyl alcohol	ND cn		10	3.0	ug/L			08/21/22 18:34	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:34	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			08/21/22 18:34	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)		100		80 - 120				08/21/22 18:34	1
Dibromofluoromethane (Surr)		105		80 - 120				08/21/22 18:34	1
4-Bromofluorobenzene (Surr)		92		80 - 120				08/21/22 18:34	1
Toluene-d8 (Surr)		100		80 - 120				08/21/22 18:34	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

**Client Sample ID: MW-18S-R**

**Lab Sample ID: 410-94984-5**

**Matrix: Water**

Date Collected: 08/16/22 13:55  
 Date Received: 08/18/22 17:00

**Method: 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			08/21/22 18:55	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 18:55	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Ethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Styrene	ND		0.50	0.070	ug/L			08/21/22 18:55	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:55	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			08/21/22 18:55	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 18:55	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			08/21/22 18:55	1
1,2,3-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 18:55	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			08/21/22 18:55	1
Toluene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Chlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:55	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.070	ug/L			08/21/22 18:55	1
Dibromochloromethane	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Xylenes, Total	ND		1.0	0.070	ug/L			08/21/22 18:55	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/21/22 18:55	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 18:55	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:55	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			08/21/22 18:55	1
<b>Chloroform</b>	<b>0.19 J</b>		0.50	0.090	ug/L			08/21/22 18:55	1
Benzene	ND		0.50	0.10	ug/L			08/21/22 18:55	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Bromomethane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
Chloromethane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
Chloroethane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/21/22 18:55	1
Methylene Chloride	ND		0.50	0.10	ug/L			08/21/22 18:55	1
Carbon disulfide	ND		1.0	0.10	ug/L			08/21/22 18:55	1
Bromoform	ND		1.0	0.30	ug/L			08/21/22 18:55	1
Bromodichloromethane	ND		0.50	0.080	ug/L			08/21/22 18:55	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 18:55	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Dichlorodifluoromethane	ND	cn	0.50	0.10	ug/L			08/21/22 18:55	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Acrylonitrile	ND	cn	5.0	0.40	ug/L			08/21/22 18:55	1
Trichloroethene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 18:55	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			08/21/22 18:55	1
Bromobenzene	ND		0.50	0.080	ug/L			08/21/22 18:55	1

Eurofins Lancaster Laboratories Environment Testing, LLC

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

**Client Sample ID: MW-18S-R**

**Lab Sample ID: 410-94984-5**

**Matrix: Water**

Date Collected: 08/16/22 13:55

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Isopropylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Dibromomethane	ND		0.50	0.080	ug/L			08/21/22 18:55	1
<b>di-Isopropyl ether</b>	<b>0.56</b>		0.50	0.10	ug/L			08/21/22 18:55	1
Ethyl t-butyl ether	ND		0.50	0.080	ug/L			08/21/22 18:55	1
Hexachlorobutadiene	ND cn		0.50	0.080	ug/L			08/21/22 18:55	1
Naphthalene	ND cn		0.50	0.080	ug/L			08/21/22 18:55	1
n-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
N-Propylbenzene	ND		0.50	0.10	ug/L			08/21/22 18:55	1
p-Isopropyltoluene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
sec-Butylbenzene	ND		0.50	0.10	ug/L			08/21/22 18:55	1
<b>t-Amyl methyl ether</b>	<b>0.32 J</b>		0.50	0.20	ug/L			08/21/22 18:55	1
<b>t-Butyl alcohol</b>	<b>4.4 J cn</b>		10	3.0	ug/L			08/21/22 18:55	1
tert-Butylbenzene	ND		0.50	0.080	ug/L			08/21/22 18:55	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			08/21/22 18:55	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)	102			80 - 120				08/21/22 18:55	1
Dibromofluoromethane (Surr)	105			80 - 120				08/21/22 18:55	1
4-Bromofluorobenzene (Surr)	91			80 - 120				08/21/22 18:55	1
Toluene-d8 (Surr)	99			80 - 120				08/21/22 18:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methyl tertiary butyl ether</b>	<b>33</b>		5.0	0.80	ug/L			08/23/22 14:47	10
<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)	106			80 - 120				08/23/22 14:47	10
Dibromofluoromethane (Surr)	104			80 - 120				08/23/22 14:47	10
4-Bromofluorobenzene (Surr)	99			80 - 120				08/23/22 14:47	10
Toluene-d8 (Surr)	97			80 - 120				08/23/22 14:47	10

# Surrogate Summary

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

## 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)
410-94984-1	MW-7	104	104	93	99
410-94984-2	MW-17	102	105	90	99
410-94984-3	MW-14D	104	105	92	100
410-94984-4	MW-18D	100	105	92	100
410-94984-5	MW-18S-R	102	105	91	99
410-94984-5 - DL	MW-18S-R	106	104	99	97
LCS 410-288122/4	Lab Control Sample	97	99	103	101
LCS 410-288625/4	Lab Control Sample	105	104	101	97
LCSD 410-288122/5	Lab Control Sample Dup	96	100	100	101
LCSD 410-288625/5	Lab Control Sample Dup	105	103	100	97
MB 410-288122/7	Method Blank	99	102	93	100
MB 410-288625/7	Method Blank	107	103	97	96

### Surrogate Legend

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

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: MB 410-288122/7**

**Matrix: Water**

**Analysis Batch: 288122**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/21/22 12:12	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 12:12	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
Ethylbenzene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
Styrene	ND		0.50	0.070	ug/L			08/21/22 12:12	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 12:12	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			08/21/22 12:12	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			08/21/22 12:12	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			08/21/22 12:12	1
1,2,3-Trichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 12:12	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			08/21/22 12:12	1
Toluene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
Chlorobenzene	ND		0.50	0.070	ug/L			08/21/22 12:12	1
1,2,4-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
1,2,4-Trichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 12:12	1
Dibromochloromethane	ND		0.50	0.080	ug/L			08/21/22 12:12	1
Xylenes, Total	ND		1.0	0.070	ug/L			08/21/22 12:12	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/21/22 12:12	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 12:12	1
Methyl tertiary butyl ether	ND		0.50	0.080	ug/L			08/21/22 12:12	1
1,3,5-Trimethylbenzene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
1,3-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 12:12	1
1,3-Dichloropropane	ND		0.50	0.080	ug/L			08/21/22 12:12	1
Chloroform	ND		0.50	0.090	ug/L			08/21/22 12:12	1
Benzene	ND		0.50	0.10	ug/L			08/21/22 12:12	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 12:12	1
Bromomethane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
Chloromethane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
Chloroethane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
2,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/21/22 12:12	1
Methylene Chloride	ND		0.50	0.10	ug/L			08/21/22 12:12	1
Carbon disulfide	ND		1.0	0.10	ug/L			08/21/22 12:12	1
Bromoform	ND		1.0	0.30	ug/L			08/21/22 12:12	1
Bromodichloromethane	ND		0.50	0.080	ug/L			08/21/22 12:12	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
2-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/21/22 12:12	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
4-Chlorotoluene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
Dichlorodifluoromethane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			08/21/22 12:12	1
Acrylonitrile	ND		5.0	0.40	ug/L			08/21/22 12:12	1
Trichloroethene	ND		0.50	0.080	ug/L			08/21/22 12:12	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			08/21/22 12:12	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			08/21/22 12:12	1

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID:** MB 410-288122/7

**Matrix:** Water

**Analysis Batch:** 288122

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

Analyte	MB		Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
1,2-Dibromo-3-Chloropropane	ND		1	0.50	0.10	ug/L		08/21/22 12:12	
Bromobenzene	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
Bromochloromethane	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
Isopropylbenzene	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
Dibromomethane	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
di-Isopropyl ether	ND		1	0.50	0.10	ug/L		08/21/22 12:12	
Ethyl t-butyl ether	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
Hexachlorobutadiene	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
Naphthalene	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
n-Butylbenzene	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
N-Propylbenzene	ND		1	0.50	0.10	ug/L		08/21/22 12:12	
p-Isopropyltoluene	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
sec-Butylbenzene	ND		1	0.50	0.10	ug/L		08/21/22 12:12	
t-Amyl methyl ether	ND		1	0.50	0.20	ug/L		08/21/22 12:12	
t-Butyl alcohol	ND		1	10	3.0	ug/L		08/21/22 12:12	
tert-Butylbenzene	ND		1	0.50	0.080	ug/L		08/21/22 12:12	
trans-1,4-Dichloro-2-butene	ND		1	5.0	2.0	ug/L		08/21/22 12:12	

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		08/21/22 12:12	1
Dibromofluoromethane (Surr)	102		80 - 120		08/21/22 12:12	1
4-Bromofluorobenzene (Surr)	93		80 - 120		08/21/22 12:12	1
Toluene-d8 (Surr)	100		80 - 120		08/21/22 12:12	1

**Lab Sample ID:** LCS 410-288122/4

**Matrix:** Water

**Analysis Batch:** 288122

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

Analyte	Spike		LCS		Unit	D	%Rec	Limits	%Rec
	Added	Result	Qualifier	Unit					
1,1,1,2-Tetrachloroethane	5.00	5.18		ug/L		104	71 - 134		
cis-1,3-Dichloropropene	5.00	5.40		ug/L		108	67 - 121		
trans-1,3-Dichloropropene	5.00	5.85		ug/L		117	61 - 129		
Ethylbenzene	5.00	5.31		ug/L		106	80 - 120		
Styrene	5.00	5.73		ug/L		115	80 - 120		
1,4-Dichlorobenzene	5.00	5.27		ug/L		105	80 - 120		
1,2-Dibromoethane	5.00	5.44		ug/L		109	80 - 120		
1,1-Dichloropropene	5.00	5.38		ug/L		108	74 - 120		
1,2-Dichloroethane	5.00	5.33		ug/L		107	69 - 122		
1,2,3-Trichlorobenzene	5.00	4.51		ug/L		90	68 - 125		
1,2,3-Trichloropropane	5.00	5.70		ug/L		114	80 - 125		
Toluene	5.00	5.12		ug/L		102	80 - 120		
Chlorobenzene	5.00	5.21		ug/L		104	80 - 120		
1,2,4-Trimethylbenzene	5.00	5.54		ug/L		111	80 - 120		
1,2,4-Trichlorobenzene	5.00	4.73		ug/L		95	68 - 122		
Dibromochloromethane	5.00	5.45		ug/L		109	64 - 138		
Xylenes, Total	15.0	15.9		ug/L		106	80 - 120		
Tetrachloroethylene	5.00	4.91		ug/L		98	80 - 120		
cis-1,2-Dichloroethene	5.00	5.32		ug/L		106	80 - 122		

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: LCS 410-288122/4**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 288122**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits
trans-1,2-Dichloroethene	5.00	5.15		ug/L		103	80 - 122
Methyl tertiary butyl ether	5.00	5.26		ug/L		105	69 - 120
1,3,5-Trimethylbenzene	5.00	5.41		ug/L		108	80 - 120
1,3-Dichlorobenzene	5.00	5.26		ug/L		105	80 - 120
1,3-Dichloropropane	5.00	5.52		ug/L		110	80 - 120
Chloroform	5.00	5.32		ug/L		106	80 - 120
Benzene	5.00	5.24		ug/L		105	80 - 120
1,1,1-Trichloroethane	5.00	5.07		ug/L		101	78 - 126
Bromomethane	5.00	5.03		ug/L		101	60 - 136
Chloromethane	5.00	5.03		ug/L		101	56 - 124
Chloroethane	5.00	5.32		ug/L		106	63 - 120
2,2-Dichloropropane	5.00	5.50		ug/L		110	61 - 141
Vinyl chloride	5.00	5.05		ug/L		101	60 - 125
Methylene Chloride	5.00	5.08		ug/L		102	80 - 120
Carbon disulfide	5.00	5.49		ug/L		110	67 - 130
Bromoform	5.00	5.45		ug/L		109	49 - 144
Bromodichloromethane	5.00	5.54		ug/L		111	73 - 124
1,1-Dichloroethane	5.00	5.20		ug/L		104	74 - 120
2-Chlorotoluene	5.00	5.43		ug/L		109	80 - 120
1,1-Dichloroethene	5.00	5.06		ug/L		101	80 - 131
Trichlorofluoromethane	5.00	4.99		ug/L		100	62 - 136
4-Chlorotoluene	5.00	5.45		ug/L		109	80 - 120
Dichlorodifluoromethane	5.00	4.64		ug/L		93	43 - 123
1,2-Dichloropropane	5.00	5.34		ug/L		107	80 - 120
1,1,2-Trichloroethane	5.00	5.43		ug/L		109	80 - 120
Acrylonitrile	25.0	25.3		ug/L		101	64 - 139
Trichloroethene	5.00	5.16		ug/L		103	80 - 120
1,1,2,2-Tetrachloroethane	5.00	5.67		ug/L		113	75 - 123
1,2-Dichlorobenzene	5.00	5.16		ug/L		103	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.88		ug/L		98	56 - 148
Bromobenzene	5.00	5.47		ug/L		109	80 - 120
Bromochloromethane	5.00	5.25		ug/L		105	80 - 120
Isopropylbenzene	5.00	5.47		ug/L		109	80 - 120
Dibromomethane	5.00	5.34		ug/L		107	80 - 122
di-Isopropyl ether	5.00	5.54		ug/L		111	58 - 131
Ethyl t-butyl ether	5.00	5.51		ug/L		110	57 - 126
Hexachlorobutadiene	5.00	4.30		ug/L		86	72 - 132
Naphthalene	5.00	4.76		ug/L		95	64 - 122
n-Butylbenzene	5.00	5.57		ug/L		111	74 - 123
N-Propylbenzene	5.00	5.55		ug/L		111	74 - 122
p-Isopropyltoluene	5.00	5.50		ug/L		110	80 - 120
sec-Butylbenzene	5.00	5.49		ug/L		110	80 - 120
t-Amyl methyl ether	5.00	5.36		ug/L		107	65 - 125
t-Butyl alcohol	50.0	37.3		ug/L		75	62 - 138
tert-Butylbenzene	5.00	5.26		ug/L		105	79 - 120
trans-1,4-Dichloro-2-butene	25.0	26.4		ug/L		105	10 - 172

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: LCS 410-288122/4**

**Matrix: Water**

**Analysis Batch: 288122**

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

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97				80 - 120
Dibromofluoromethane (Surr)	99				80 - 120
4-Bromofluorobenzene (Surr)	103				80 - 120
Toluene-d8 (Surr)	101				80 - 120

**Lab Sample ID: LCSD 410-288122/5**

**Matrix: Water**

**Analysis Batch: 288122**

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

Analyte	Spike Added	LCSD			Unit	D	%Rec		RPD	Limit
		Result	Qualifier	%Rec			Limits	RPD		
1,1,1,2-Tetrachloroethane	5.00	5.10	ug/L	102	71 - 134	2	30			
cis-1,3-Dichloropropene	5.00	5.31	ug/L	106	67 - 121	2	30			
trans-1,3-Dichloropropene	5.00	5.63	ug/L	113	61 - 129	4	30			
Ethylbenzene	5.00	5.26	ug/L	105	80 - 120	1	30			
Styrene	5.00	5.52	ug/L	110	80 - 120	4	30			
1,4-Dichlorobenzene	5.00	5.22	ug/L	104	80 - 120	1	30			
1,2-Dibromoethane	5.00	5.30	ug/L	106	80 - 120	3	30			
1,1-Dichloropropene	5.00	5.34	ug/L	107	74 - 120	1	30			
1,2-Dichloroethane	5.00	5.40	ug/L	108	69 - 122	1	30			
1,2,3-Trichlorobenzene	5.00	4.21	ug/L	84	68 - 125	7	30			
1,2,3-Trichloropropane	5.00	5.52	ug/L	110	80 - 125	3	30			
Toluene	5.00	5.13	ug/L	103	80 - 120	0	30			
Chlorobenzene	5.00	5.14	ug/L	103	80 - 120	1	30			
1,2,4-Trimethylbenzene	5.00	5.50	ug/L	110	80 - 120	1	30			
1,2,4-Trichlorobenzene	5.00	4.58	ug/L	92	68 - 122	3	30			
Dibromochloromethane	5.00	5.36	ug/L	107	64 - 138	2	30			
Xylenes, Total	15.0	15.7	ug/L	105	80 - 120	1	30			
Tetrachloroethene	5.00	4.88	ug/L	98	80 - 120	1	30			
cis-1,2-Dichloroethene	5.00	5.23	ug/L	105	80 - 122	2	30			
trans-1,2-Dichloroethene	5.00	5.01	ug/L	100	80 - 122	3	30			
Methyl tertiary butyl ether	5.00	5.00	ug/L	100	69 - 120	5	30			
1,3,5-Trimethylbenzene	5.00	5.42	ug/L	108	80 - 120	0	30			
1,3-Dichlorobenzene	5.00	5.26	ug/L	105	80 - 120	0	30			
1,3-Dichloropropane	5.00	5.37	ug/L	107	80 - 120	3	30			
Chloroform	5.00	5.23	ug/L	105	80 - 120	2	30			
Benzene	5.00	5.25	ug/L	105	80 - 120	0	30			
1,1,1-Trichloroethane	5.00	5.05	ug/L	101	78 - 126	0	30			
Bromomethane	5.00	4.87	ug/L	97	60 - 136	3	30			
Chloromethane	5.00	4.94	ug/L	99	56 - 124	2	30			
Chloroethane	5.00	5.07	ug/L	101	63 - 120	5	30			
2,2-Dichloropropane	5.00	5.44	ug/L	109	61 - 141	1	30			
Vinyl chloride	5.00	4.91	ug/L	98	60 - 125	3	30			
Methylene Chloride	5.00	4.95	ug/L	99	80 - 120	2	30			
Carbon disulfide	5.00	5.46	ug/L	109	67 - 130	1	30			
Bromoform	5.00	5.24	ug/L	105	49 - 144	4	30			
Bromodichloromethane	5.00	5.49	ug/L	110	73 - 124	1	30			
1,1-Dichloroethane	5.00	5.15	ug/L	103	74 - 120	1	30			
2-Chlorotoluene	5.00	5.38	ug/L	108	80 - 120	1	30			

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: LCSD 410-288122/5**

**Matrix: Water**

**Analysis Batch: 288122**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD	Limit
	Added	Result	Qualifier				Limits			
1,1-Dichloroethene	5.00	5.01		ug/L		100	80 - 131	1	30	
Trichlorofluoromethane	5.00	4.70		ug/L		94	62 - 136	6	30	
4-Chlorotoluene	5.00	5.59		ug/L		112	80 - 120	2	30	
Dichlorodifluoromethane	5.00	4.60		ug/L		92	43 - 123	1	30	
1,2-Dichloropropane	5.00	5.28		ug/L		106	80 - 120	1	30	
1,1,2-Trichloroethane	5.00	5.35		ug/L		107	80 - 120	2	30	
Acrylonitrile	25.0	25.2		ug/L		101	64 - 139	0	30	
Trichloroethylene	5.00	5.10		ug/L		102	80 - 120	1	30	
1,1,2,2-Tetrachloroethane	5.00	5.50		ug/L		110	75 - 123	3	30	
1,2-Dichlorobenzene	5.00	5.13		ug/L		103	80 - 120	1	30	
1,2-Dibromo-3-Chloropropane	5.00	4.63		ug/L		93	56 - 148	5	30	
Bromobenzene	5.00	5.42		ug/L		108	80 - 120	1	30	
Bromochloromethane	5.00	5.14		ug/L		103	80 - 120	2	30	
Isopropylbenzene	5.00	5.23		ug/L		105	80 - 120	4	30	
Dibromomethane	5.00	5.32		ug/L		106	80 - 122	0	30	
di-Isopropyl ether	5.00	5.47		ug/L		109	58 - 131	1	30	
Ethyl t-butyl ether	5.00	5.36		ug/L		107	57 - 126	3	30	
Hexachlorobutadiene	5.00	4.28		ug/L		86	72 - 132	1	30	
Naphthalene	5.00	4.33		ug/L		87	64 - 122	9	30	
n-Butylbenzene	5.00	5.49		ug/L		110	74 - 123	1	30	
N-Propylbenzene	5.00	5.58		ug/L		112	74 - 122	1	30	
p-Isopropyltoluene	5.00	5.47		ug/L		109	80 - 120	1	30	
sec-Butylbenzene	5.00	5.49		ug/L		110	80 - 120	0	30	
t-Amyl methyl ether	5.00	5.22		ug/L		104	65 - 125	3	30	
t-Butyl alcohol	50.0	41.6		ug/L		83	62 - 138	11	30	
tert-Butylbenzene	5.00	5.28		ug/L		106	79 - 120	0	30	
trans-1,4-Dichloro-2-butene	25.0	27.0		ug/L		108	10 - 172	2	30	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: MB 410-288625/7**

**Matrix: Water**

**Analysis Batch: 288625**

**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			08/23/22 10:24	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/23/22 10:24	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			08/23/22 10:24	1
Ethylbenzene	ND		0.50	0.080	ug/L			08/23/22 10:24	1
Styrene	ND		0.50	0.070	ug/L			08/23/22 10:24	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			08/23/22 10:24	1
1,2-Dibromoethane	ND		0.50	0.080	ug/L			08/23/22 10:24	1
1,1-Dichloropropene	ND		0.50	0.10	ug/L			08/23/22 10:24	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			08/23/22 10:24	1

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: MB 410-288625/7**

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

**Matrix: Water**

**Analysis Batch: 288625**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer									
1,2,3-Trichlorobenzene	ND				0.50	0.070	ug/L			08/23/22 10:24	1
1,2,3-Trichloropropane	ND				1.0	0.10	ug/L			08/23/22 10:24	1
Toluene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Chlorobenzene	ND				0.50	0.070	ug/L			08/23/22 10:24	1
1,2,4-Trimethylbenzene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
1,2,4-Trichlorobenzene	ND				0.50	0.070	ug/L			08/23/22 10:24	1
Dibromochloromethane	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Xylenes, Total	ND				1.0	0.070	ug/L			08/23/22 10:24	1
Tetrachloroethene	ND				0.50	0.20	ug/L			08/23/22 10:24	1
cis-1,2-Dichloroethene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
trans-1,2-Dichloroethene	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Methyl tertiary butyl ether	ND				0.50	0.080	ug/L			08/23/22 10:24	1
1,3,5-Trimethylbenzene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
1,3-Dichlorobenzene	ND				0.50	0.070	ug/L			08/23/22 10:24	1
1,3-Dichloropropane	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Chloroform	ND				0.50	0.090	ug/L			08/23/22 10:24	1
Benzene	ND				0.50	0.10	ug/L			08/23/22 10:24	1
1,1,1-Trichloroethane	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Bromomethane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Chloromethane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Chloroethane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
2,2-Dichloropropane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Vinyl chloride	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Methylene Chloride	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Carbon disulfide	ND				1.0	0.10	ug/L			08/23/22 10:24	1
Bromoform	ND				1.0	0.30	ug/L			08/23/22 10:24	1
Bromodichloromethane	ND				0.50	0.080	ug/L			08/23/22 10:24	1
1,1-Dichloroethane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
2-Chlorotoluene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
1,1-Dichloroethene	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Trichlorofluoromethane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
4-Chlorotoluene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Dichlorodifluoromethane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
1,2-Dichloropropane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
1,1,2-Trichloroethane	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Acrylonitrile	ND				5.0	0.40	ug/L			08/23/22 10:24	1
Trichloroethene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
1,1,2,2-Tetrachloroethane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
1,2-Dichlorobenzene	ND				0.50	0.070	ug/L			08/23/22 10:24	1
1,2-Dibromo-3-Chloropropane	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Bromobenzene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Bromochloromethane	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Isopropylbenzene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Dibromomethane	ND				0.50	0.080	ug/L			08/23/22 10:24	1
di-Isopropyl ether	ND				0.50	0.10	ug/L			08/23/22 10:24	1
Ethyl t-butyl ether	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Hexachlorobutadiene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
Naphthalene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
n-Butylbenzene	ND				0.50	0.080	ug/L			08/23/22 10:24	1

Eurofins Lancaster Laboratories Environment Testing, LLC

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: MB 410-288625/7**

**Matrix: Water**

**Analysis Batch: 288625**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer									
N-Propylbenzene	ND				0.50	0.10	ug/L			08/23/22 10:24	1
p-Isopropyltoluene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
sec-Butylbenzene	ND				0.50	0.10	ug/L			08/23/22 10:24	1
t-Amyl methyl ether	ND				0.50	0.20	ug/L			08/23/22 10:24	1
t-Butyl alcohol	ND				10	3.0	ug/L			08/23/22 10:24	1
tert-Butylbenzene	ND				0.50	0.080	ug/L			08/23/22 10:24	1
trans-1,4-Dichloro-2-butene	ND				5.0	2.0	ug/L			08/23/22 10:24	1
<hr/>											
Surrogate		MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)		107				80 - 120				08/23/22 10:24	1
Dibromofluoromethane (Surr)		103				80 - 120				08/23/22 10:24	1
4-Bromofluorobenzene (Surr)		97				80 - 120				08/23/22 10:24	1
Toluene-d8 (Surr)		96				80 - 120				08/23/22 10:24	1

**Lab Sample ID: LCS 410-288625/4**

**Matrix: Water**

**Analysis Batch: 288625**

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

Analyte	Spike Added	LCs	LCs	Result	Qualifier	Unit	D	%Rec	Limits	%Rec
		Result	Qualifier							
1,1,1,2-Tetrachloroethane	5.00	5.76				ug/L		115	71 - 134	
cis-1,3-Dichloropropene	5.00	6.00				ug/L		120	67 - 121	
trans-1,3-Dichloropropene	5.00	5.93				ug/L		119	61 - 129	
Ethylbenzene	5.00	5.46				ug/L		109	80 - 120	
Styrene	5.00	5.65				ug/L		113	80 - 120	
1,4-Dichlorobenzene	5.00	5.52				ug/L		110	80 - 120	
1,2-Dibromoethane	5.00	5.99				ug/L		120	80 - 120	
1,1-Dichloropropene	5.00	5.79				ug/L		116	74 - 120	
1,2-Dichloroethane	5.00	6.12				ug/L		122	69 - 122	
1,2,3-Trichlorobenzene	5.00	5.11				ug/L		102	68 - 125	
1,2,3-Trichloropropane	5.00	5.93				ug/L		119	80 - 125	
Toluene	5.00	5.38				ug/L		108	80 - 120	
Chlorobenzene	5.00	5.65				ug/L		113	80 - 120	
1,2,4-Trimethylbenzene	5.00	5.21				ug/L		104	80 - 120	
1,2,4-Trichlorobenzene	5.00	5.13				ug/L		103	68 - 122	
Dibromochloromethane	5.00	6.01				ug/L		120	64 - 138	
Xylenes, Total	15.0	16.6				ug/L		111	80 - 120	
Tetrachloroethene	5.00	5.39				ug/L		108	80 - 120	
cis-1,2-Dichloroethene	5.00	6.01				ug/L		120	80 - 122	
trans-1,2-Dichloroethene	5.00	5.88				ug/L		118	80 - 122	
Methyl tertiary butyl ether	5.00	5.97				ug/L		119	69 - 120	
1,3,5-Trimethylbenzene	5.00	5.20				ug/L		104	80 - 120	
1,3-Dichlorobenzene	5.00	5.38				ug/L		108	80 - 120	
1,3-Dichloropropane	5.00	5.84				ug/L		117	80 - 120	
Chloroform	5.00	5.86				ug/L		117	80 - 120	
Benzene	5.00	5.76				ug/L		115	80 - 120	
1,1,1-Trichloroethane	5.00	5.73				ug/L		115	78 - 126	
Bromomethane	5.00	5.34				ug/L		107	60 - 136	
Chloromethane	5.00	5.50				ug/L		110	56 - 124	

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: LCS 410-288625/4**

**Matrix: Water**

**Analysis Batch: 288625**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits
Chloroethane	5.00	5.42		ug/L		108	63 - 120
2,2-Dichloropropane	5.00	5.96		ug/L		119	61 - 141
Vinyl chloride	5.00	5.19		ug/L		104	60 - 125
Methylene Chloride	5.00	6.00		ug/L		120	80 - 120
Carbon disulfide	5.00	6.56	*+	ug/L		131	67 - 130
Bromoform	5.00	6.26		ug/L		125	49 - 144
Bromodichloromethane	5.00	6.06		ug/L		121	73 - 124
1,1-Dichloroethane	5.00	5.69		ug/L		114	74 - 120
2-Chlorotoluene	5.00	5.42		ug/L		108	80 - 120
1,1-Dichloroethene	5.00	5.91		ug/L		118	80 - 131
Trichlorofluoromethane	5.00	5.36		ug/L		107	62 - 136
4-Chlorotoluene	5.00	5.55		ug/L		111	80 - 120
Dichlorodifluoromethane	5.00	5.14		ug/L		103	43 - 123
1,2-Dichloropropane	5.00	5.86		ug/L		117	80 - 120
1,1,2-Trichloroethane	5.00	5.81		ug/L		116	80 - 120
Acrylonitrile	25.0	22.2		ug/L		89	64 - 139
Trichloroethene	5.00	5.67		ug/L		113	80 - 120
1,1,2,2-Tetrachloroethane	5.00	5.87		ug/L		117	75 - 123
1,2-Dichlorobenzene	5.00	5.50		ug/L		110	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	6.13		ug/L		123	56 - 148
Bromobenzene	5.00	5.73		ug/L		115	80 - 120
Bromochloromethane	5.00	5.90		ug/L		118	80 - 120
Isopropylbenzene	5.00	5.55		ug/L		111	80 - 120
Dibromomethane	5.00	5.99		ug/L		120	80 - 122
di-Isopropyl ether	5.00	5.71		ug/L		114	58 - 131
Ethyl t-butyl ether	5.00	5.87		ug/L		117	57 - 126
Hexachlorobutadiene	5.00	3.83		ug/L		77	72 - 132
Naphthalene	5.00	5.33		ug/L		107	64 - 122
n-Butylbenzene	5.00	4.80		ug/L		96	74 - 123
N-Propylbenzene	5.00	5.19		ug/L		104	74 - 122
p-Isopropyltoluene	5.00	5.14		ug/L		103	80 - 120
sec-Butylbenzene	5.00	5.12		ug/L		102	80 - 120
t-Amyl methyl ether	5.00	5.89		ug/L		118	65 - 125
t-Butyl alcohol	50.0	58.2		ug/L		116	62 - 138
tert-Butylbenzene	5.00	5.09		ug/L		102	79 - 120
trans-1,4-Dichloro-2-butene	25.0	18.2		ug/L		73	10 - 172

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Toluene-d8 (Surr)	97		80 - 120

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: LCSD 410-288625/5**

**Matrix: Water**

**Analysis Batch: 288625**

**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	5.63		ug/L		113	71 - 134	2	30
cis-1,3-Dichloropropene	5.00	5.88		ug/L		118	67 - 121	2	30
trans-1,3-Dichloropropene	5.00	5.94		ug/L		119	61 - 129	0	30
Ethylbenzene	5.00	5.40		ug/L		108	80 - 120	1	30
Styrene	5.00	5.49		ug/L		110	80 - 120	3	30
1,4-Dichlorobenzene	5.00	5.36		ug/L		107	80 - 120	3	30
1,2-Dibromoethane	5.00	5.93		ug/L		119	80 - 120	1	30
1,1-Dichloropropene	5.00	5.70		ug/L		114	74 - 120	2	30
1,2-Dichloroethane	5.00	5.96		ug/L		119	69 - 122	3	30
1,2,3-Trichlorobenzene	5.00	4.77		ug/L		95	68 - 125	7	30
1,2,3-Trichloropropane	5.00	5.87		ug/L		117	80 - 125	1	30
Toluene	5.00	5.40		ug/L		108	80 - 120	0	30
Chlorobenzene	5.00	5.54		ug/L		111	80 - 120	2	30
1,2,4-Trimethylbenzene	5.00	5.13		ug/L		103	80 - 120	2	30
1,2,4-Trichlorobenzene	5.00	4.90		ug/L		98	68 - 122	5	30
Dibromochloromethane	5.00	5.86		ug/L		117	64 - 138	2	30
Xylenes, Total	15.0	16.4		ug/L		109	80 - 120	1	30
Tetrachloroethene	5.00	5.33		ug/L		107	80 - 120	1	30
cis-1,2-Dichloroethene	5.00	5.84		ug/L		117	80 - 122	3	30
trans-1,2-Dichloroethene	5.00	5.75		ug/L		115	80 - 122	2	30
Methyl tertiary butyl ether	5.00	5.78		ug/L		116	69 - 120	3	30
1,3,5-Trimethylbenzene	5.00	5.13		ug/L		103	80 - 120	1	30
1,3-Dichlorobenzene	5.00	5.30		ug/L		106	80 - 120	1	30
1,3-Dichloropropane	5.00	5.79		ug/L		116	80 - 120	1	30
Chloroform	5.00	5.75		ug/L		115	80 - 120	2	30
Benzene	5.00	5.67		ug/L		113	80 - 120	2	30
1,1,1-Trichloroethane	5.00	5.61		ug/L		112	78 - 126	2	30
Bromomethane	5.00	5.25		ug/L		105	60 - 136	2	30
Chloromethane	5.00	5.42		ug/L		108	56 - 124	1	30
Chloroethane	5.00	5.36		ug/L		107	63 - 120	1	30
2,2-Dichloropropane	5.00	5.87		ug/L		117	61 - 141	2	30
Vinyl chloride	5.00	5.12		ug/L		102	60 - 125	1	30
Methylene Chloride	5.00	5.90		ug/L		118	80 - 120	2	30
Carbon disulfide	5.00	6.43		ug/L		129	67 - 130	2	30
Bromoform	5.00	6.07		ug/L		121	49 - 144	3	30
Bromodichloromethane	5.00	5.96		ug/L		119	73 - 124	2	30
1,1-Dichloroethane	5.00	5.58		ug/L		112	74 - 120	2	30
2-Chlorotoluene	5.00	5.33		ug/L		107	80 - 120	2	30
1,1-Dichloroethene	5.00	5.87		ug/L		117	80 - 131	1	30
Trichlorofluoromethane	5.00	5.32		ug/L		106	62 - 136	1	30
4-Chlorotoluene	5.00	5.50		ug/L		110	80 - 120	1	30
Dichlorodifluoromethane	5.00	5.14		ug/L		103	43 - 123	0	30
1,2-Dichloropropane	5.00	5.69		ug/L		114	80 - 120	3	30
1,1,2-Trichloroethane	5.00	5.77		ug/L		115	80 - 120	1	30
Acrylonitrile	25.0	22.6		ug/L		91	64 - 139	2	30
Trichloroethene	5.00	5.58		ug/L		112	80 - 120	2	30
1,1,2,2-Tetrachloroethane	5.00	5.85		ug/L		117	75 - 123	0	30
1,2-Dichlorobenzene	5.00	5.40		ug/L		108	80 - 120	2	30

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

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

**Lab Sample ID: LCSD 410-288625/5**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 288625**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD	Limit
	Added	Result	Qualifier				Limits			
1,2-Dibromo-3-Chloropropane	5.00	6.30		ug/L	126	56 - 148	3	30		
Bromobenzene	5.00	5.66		ug/L	113	80 - 120	1	30		
Bromochloromethane	5.00	6.01		ug/L	120	80 - 120	2	30		
Isopropylbenzene	5.00	5.42		ug/L	108	80 - 120	2	30		
Dibromomethane	5.00	6.02		ug/L	120	80 - 122	0	30		
di-Isopropyl ether	5.00	5.55		ug/L	111	58 - 131	3	30		
Ethyl t-butyl ether	5.00	5.76		ug/L	115	57 - 126	2	30		
Hexachlorobutadiene	5.00	3.70		ug/L	74	72 - 132	4	30		
Naphthalene	5.00	5.09		ug/L	102	64 - 122	5	30		
n-Butylbenzene	5.00	4.72		ug/L	94	74 - 123	2	30		
N-Propylbenzene	5.00	5.20		ug/L	104	74 - 122	0	30		
p-Isopropyltoluene	5.00	5.02		ug/L	100	80 - 120	2	30		
sec-Butylbenzene	5.00	4.99		ug/L	100	80 - 120	3	30		
t-Amyl methyl ether	5.00	5.77		ug/L	115	65 - 125	2	30		
t-Butyl alcohol	50.0	54.8		ug/L	110	62 - 138	6	30		
tert-Butylbenzene	5.00	4.96		ug/L	99	79 - 120	2	30		
trans-1,4-Dichloro-2-butene	25.0	19.1		ug/L	76	10 - 172	5	30		

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Toluene-d8 (Surr)	97		80 - 120

# QC Association Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94984-1

## GC/MS VOA

### Analysis Batch: 288122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-94984-1	MW-7	Total/NA	Water	8260C LL	
410-94984-2	MW-17	Total/NA	Water	8260C LL	
410-94984-3	MW-14D	Total/NA	Water	8260C LL	
410-94984-4	MW-18D	Total/NA	Water	8260C LL	
410-94984-5	MW-18S-R	Total/NA	Water	8260C LL	
MB 410-288122/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-288122/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-288122/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

### Analysis Batch: 288625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-94984-5 - DL	MW-18S-R	Total/NA	Water	8260C LL	
MB 410-288625/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-288625/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-288625/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

## Lab Chronicle

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94984-1

### **Client Sample ID: MW-7**

Date Collected: 08/16/22 09:45  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94984-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C LL		1	288122	DVW2	ELLE	08/21/22 17:31

### **Client Sample ID: MW-17**

Date Collected: 08/16/22 10:55  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94984-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C LL		1	288122	DVW2	ELLE	08/21/22 17:52

### **Client Sample ID: MW-14D**

Date Collected: 08/16/22 11:55  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94984-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C LL		1	288122	DVW2	ELLE	08/21/22 18:13

### **Client Sample ID: MW-18D**

Date Collected: 08/16/22 13:00  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94984-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C LL		1	288122	DVW2	ELLE	08/21/22 18:34

### **Client Sample ID: MW-18S-R**

Date Collected: 08/16/22 13:55  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94984-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C LL	DL	10	288625	DVW2	ELLE	08/23/22 14:47
Total/NA	Analysis	8260C LL		1	288122	DVW2	ELLE	08/21/22 18:55

#### 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: Carroll Monrovia

Job ID: 410-94984-1

### 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	06-30-23
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	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
8260C LL		Water	Hexachlorobutadiene
8260C LL		Water	Isopropylbenzene

## Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94984-1

### 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	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: Carroll Monrovia

Job ID: 410-94984-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	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

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## Sample Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94984-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-94984-1	MW-7	Water	08/16/22 09:45	08/18/22 17:00
410-94984-2	MW-17	Water	08/16/22 10:55	08/18/22 17:00
410-94984-3	MW-14D	Water	08/16/22 11:55	08/18/22 17:00
410-94984-4	MW-18D	Water	08/16/22 13:00	08/18/22 17:00
410-94984-5	MW-18S-R	Water	08/16/22 13:55	08/18/22 17:00



410-94984 Chain of Custody

Page 1 of 1

# Environmental Analysis Request/Chain of Custody

**LANCaster LABoratory**  
**Environmental**

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

Client: <b>Groundwater &amp; Env. Services, Inc.</b>				Matrix					Analyses Requested										For Lab Use Only								
									Preservation Codes										SF #: _____								
																			SCR #: _____								
																			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>3</sub> PO <sub>4</sub>								
																			O = Other								
																			Remarks								
Sample Identification				Collection		Grab	Composite	Soil	Water	Potable	NPDES	Ground	Surface	Other:	Total # of Containers	Analyses Requested										EQEDD file name: _____	
				Date	Time	MW-7	8/16/22	9:45	x		x		x		3	Full Suite VOCs plus oxygenates and Naphthalene (8260)									Carroll Monrovia-lab report #.17953.		
				MW-17	8/16/22	10:55	x		x		x		x		3	x								EQEDD.zip			
				MW-14D	8/16/22	11:55	x		x		x		x		3	x								Send invoice to: ges-invoices@gesonline.com & include PO #			
				MW-18D	8/16/22	1300	x		x		x		x		3	x								MW-18S-R			
				MW-18S-R	8/16/22	1355	x		x		x		x		3	x								MW-18S-R			
Turnaround Time Requested (TAT) (please check):				Standard <input checked="" type="checkbox"/>	Rush <input type="checkbox"/>	Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____					Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____																
(Rush TAT is subject to laboratory approval and surcharges.)				Relinquished by: _____ Date: 8/18/22 Time: 0900 Received by: _____ Date: 8/18/22 Time: 0900					Relinquished by: _____ Date: 8/18/22 Time: 1322 Received by: _____ Date: 8/18/22 Time: 1322																		
Date results are needed:				Relinquished by: _____ Date: 8/18/22 Time: 1322 Received by: _____ Date: 8/18/22 Time: 1322					Relinquished by: _____ Date: 8/18/22 Time: 1630 Received by: _____ Date: 8/18/22 Time: 1630																		
Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>				Relinquished by: _____ Date: 8/18/22 Time: 1630 Received by: _____ Date: 8/18/22 Time: 1630					Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700																		
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: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700																		
Phone:				Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700																		
Data Package Options (please check if required)				Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					Relinquished by: Commercial Carrier: _____					Temperature upon receipt: 1.6 °C													
Type I (Validation/non-CLP) <input type="checkbox"/> MA MCP <input type="checkbox"/>				Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					UPS _____ FedEx _____ Other _____					Temperature upon receipt: 1.6 °C													
Type III (Reduced non-CLP) <input type="checkbox"/> CT RCP <input type="checkbox"/>				Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					UPS _____ FedEx _____ Other _____					Temperature upon receipt: 1.6 °C													
Type VI (Raw Data Only) <input type="checkbox"/> TX TRRP-13 <input type="checkbox"/>				Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					UPS _____ FedEx _____ Other _____					Temperature upon receipt: 1.6 °C													
NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B				Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					UPS _____ FedEx _____ Other _____					Temperature upon receipt: 1.6 °C													
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: GES EQEDD				Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					UPS _____ FedEx _____ Other _____					Temperature upon receipt: 1.6 °C													
EQEDD Name: Carroll Monrovia-lab report #.17953.EQEDD.zip				Relinquished by: _____ Date: 8/18/22 Time: 1700 Received by: _____ Date: 8/18/22 Time: 1700					UPS _____ FedEx _____ Other _____					Temperature upon receipt: 1.6 °C													

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## Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 410-94984-1

**Login Number:** 94984

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

**List Number:** 1

**Creator:** Kanagy, Nicholas

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 is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=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.	True	
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	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	



Environment Testing  
America



## ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC  
2425 New Holland Pike  
Lancaster, PA 17601  
Tel: (717)656-2300

Laboratory Job ID: 410-94986-1

Client Project/Site: Carroll Monrovia

For:

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

Attn: Peter Reichardt

*Amek Carter*

Authorized for release by:

8/28/2022 10:38:33 AM

Amek Carter, Project Manager

(717)556-7252

Loran.Carter@et.eurofinsus.com

### LINKS

Review your project  
results through



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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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.

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---

Amek Carter  
Project Manager  
8/28/2022 10:38:33 AM

# Table of Contents

Cover Page .....	1
Table of Contents .....	3
Definitions/Glossary .....	4
Case Narrative .....	5
Detection Summary .....	6
Client Sample Results .....	7
Surrogate Summary .....	19
QC Sample Results .....	20
QC Association Summary .....	22
Lab Chronicle .....	23
Certification Summary .....	25
Method Summary .....	26
Sample Summary .....	27
Chain of Custody .....	28
Receipt Checklists .....	30

# Definitions/Glossary

Client: Groundwater & Environmental Services Inc

Job ID: 410-94986-1

Project/Site: Carroll Monrovia

## 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.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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: Carroll Monrovia

Job ID: 410-94986-1

### Job ID: 410-94986-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

#### Narrative

##### Job Narrative 410-94986-1

#### Receipt

The samples were received on 8/18/2022 5:00 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 1.6°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 524.2\_Preserved: Volatile compounds have been detected above the RL for the following samples: GVP-INF (410-94986-1), 3990-FARM-INF (410-94986-4), 3923-ROSE-INF (410-94986-5), 3996-FARM-INF (410-94986-8) and 3992-FARM-INF (410-94986-12). Since a field reagent blank/trip blank was not submitted, any potential contamination from the sampling/transport process cannot be assessed.

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: Carroll Monrovia

Job ID: 410-94986-1

### **Client Sample ID: GVP-INF**

**Lab Sample ID: 410-94986-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	0.56	cn	0.50	0.10	ug/L	1		524.2	Total/NA

### **Client Sample ID: 3990-FARM-EFF**

**Lab Sample ID: 410-94986-2**

No Detections.

### **Client Sample ID: 3990-FARM-MID2**

**Lab Sample ID: 410-94986-3**

No Detections.

### **Client Sample ID: 3990-FARM-INF**

**Lab Sample ID: 410-94986-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Amyl methyl ether	0.50	cn	0.50	0.10	ug/L	1		524.2	Total/NA
Methyl tertiary butyl ether	23	cn	0.50	0.10	ug/L	1		524.2	Total/NA

### **Client Sample ID: 3923-ROSE-INF**

**Lab Sample ID: 410-94986-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	0.55	cn	0.50	0.10	ug/L	1		524.2	Total/NA

### **Client Sample ID: 3996-FARM-EFF**

**Lab Sample ID: 410-94986-6**

No Detections.

### **Client Sample ID: 3996-FARM-MID2**

**Lab Sample ID: 410-94986-7**

No Detections.

### **Client Sample ID: 3996-FARM-INF**

**Lab Sample ID: 410-94986-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	1.2	cn	0.50	0.10	ug/L	1		524.2	Total/NA

### **Client Sample ID: 3997-FARM-INF**

**Lab Sample ID: 410-94986-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	0.13	J	0.50	0.10	ug/L	1		524.2	Total/NA

### **Client Sample ID: 3992-FARM-EFF**

**Lab Sample ID: 410-94986-10**

No Detections.

### **Client Sample ID: 3992-FARM-MID2**

**Lab Sample ID: 410-94986-11**

No Detections.

### **Client Sample ID: 3992-FARM-INF**

**Lab Sample ID: 410-94986-12**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Amyl methyl ether	0.27	J cn	0.50	0.10	ug/L	1		524.2	Total/NA
di-Isopropyl ether	0.11	J cn	0.50	0.10	ug/L	1		524.2	Total/NA
Methyl tertiary butyl ether	13	cn	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

Job ID: 410-94986-1

Project/Site: Carroll Monrovia

**Client Sample ID: GVP-INF**

**Lab Sample ID: 410-94986-1**

Date Collected: 08/17/22 09:10

Matrix: Water

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Benzene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
t-Butyl alcohol	ND	cn	25	2.5	ug/L			08/23/22 12:44	1
Carbon tetrachloride	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Chlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
1,2-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
1,3-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
1,2-Dichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
1,1-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
cis-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
trans-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
1,2-Dichloropropane	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Ethyl t-butyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Ethylbenzene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
di-Isopropyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
<b>Methyl tertiary butyl ether</b>	<b>0.56</b>	<b>cn</b>	0.50	0.10	ug/L			08/23/22 12:44	1
Methylene Chloride	ND	cn	0.50	0.20	ug/L			08/23/22 12:44	1
Naphthalene	ND	cn	0.50	0.20	ug/L			08/23/22 12:44	1
Styrene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Tetrachloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Toluene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.20	ug/L			08/23/22 12:44	1
1,1,1-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
1,1,2-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Trichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Vinyl chloride	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
Xylenes, Total	ND	cn	0.50	0.10	ug/L			08/23/22 12:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	94	cn		80 - 120				08/23/22 12:44	1
1,2-Dichlorobenzene-d4 (Surr)	99	cn		80 - 120				08/23/22 12:44	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

**Client Sample ID: 3990-FARM-EFF**

**Lab Sample ID: 410-94986-2**

**Matrix: Water**

Date Collected: 08/17/22 09:40  
 Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Benzene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
t-Butyl alcohol	ND		25	2.5	ug/L			08/23/22 13:07	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Chlorobenzene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			08/23/22 13:07	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Methylene Chloride	ND		0.50	0.20	ug/L			08/23/22 13:07	1
Naphthalene	ND		0.50	0.20	ug/L			08/23/22 13:07	1
Styrene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Tetrachloroethene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Toluene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			08/23/22 13:07	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 13:07	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Trichloroethene	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/23/22 13:07	1
Xylenes, Total	ND		0.50	0.10	ug/L			08/23/22 13:07	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95			80 - 120				08/23/22 13:07	1
1,2-Dichlorobenzene-d4 (Surr)	97			80 - 120				08/23/22 13:07	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

**Client Sample ID: 3990-FARM-MID2**

**Lab Sample ID: 410-94986-3**

Date Collected: 08/17/22 09:45

Matrix: Potable Water

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Benzene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
t-Butyl alcohol	ND		25	2.5	ug/L			08/23/22 13:31	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Chlorobenzene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			08/23/22 13:31	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Methylene Chloride	ND		0.50	0.20	ug/L			08/23/22 13:31	1
Naphthalene	ND		0.50	0.20	ug/L			08/23/22 13:31	1
Styrene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Tetrachloroethene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Toluene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			08/23/22 13:31	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 13:31	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Trichloroethene	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/23/22 13:31	1
Xylenes, Total	ND		0.50	0.10	ug/L			08/23/22 13:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95			80 - 120				08/23/22 13:31	1
1,2-Dichlorobenzene-d4 (Surr)	98			80 - 120				08/23/22 13:31	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc

Job ID: 410-94986-1

Project/Site: Carroll Monrovia

**Client Sample ID: 3990-FARM-INF**

**Lab Sample ID: 410-94986-4**

Date Collected: 08/17/22 09:50

Matrix: Potable Water

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	0.50	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Benzene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
t-Butyl alcohol	ND	cn	25	2.5	ug/L			08/23/22 13:54	1
Carbon tetrachloride	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Chlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
1,2-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
1,3-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
1,2-Dichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
1,1-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
cis-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
trans-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
1,2-Dichloropropane	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Ethyl t-butyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Ethylbenzene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
di-Isopropyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
<b>Methyl tertiary butyl ether</b>	<b>23</b>	<b>cn</b>	0.50	0.10	ug/L			08/23/22 13:54	1
Methylene Chloride	ND	cn	0.50	0.20	ug/L			08/23/22 13:54	1
Naphthalene	ND	cn	0.50	0.20	ug/L			08/23/22 13:54	1
Styrene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Tetrachloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Toluene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.20	ug/L			08/23/22 13:54	1
1,1,1-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
1,1,2-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Trichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Vinyl chloride	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
Xylenes, Total	ND	cn	0.50	0.10	ug/L			08/23/22 13:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95	cn		80 - 120				08/23/22 13:54	1
1,2-Dichlorobenzene-d4 (Surr)	98	cn		80 - 120				08/23/22 13:54	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc

Job ID: 410-94986-1

Project/Site: Carroll Monrovia

**Client Sample ID: 3923-ROSE-INF**

**Lab Sample ID: 410-94986-5**

**Matrix: Water**

Date Collected: 08/17/22 10:40

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Benzene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
t-Butyl alcohol	ND	cn	25	2.5	ug/L			08/23/22 14:17	1
Carbon tetrachloride	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Chlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
1,2-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
1,3-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
1,2-Dichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
1,1-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
cis-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
trans-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
1,2-Dichloropropane	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Ethyl t-butyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Ethylbenzene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
di-Isopropyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
<b>Methyl tertiary butyl ether</b>	<b>0.55</b>	<b>cn</b>	0.50	0.10	ug/L			08/23/22 14:17	1
Methylene Chloride	ND	cn	0.50	0.20	ug/L			08/23/22 14:17	1
Naphthalene	ND	cn	0.50	0.20	ug/L			08/23/22 14:17	1
Styrene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Tetrachloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Toluene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.20	ug/L			08/23/22 14:17	1
1,1,1-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
1,1,2-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Trichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Vinyl chloride	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
Xylenes, Total	ND	cn	0.50	0.10	ug/L			08/23/22 14:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96	cn		80 - 120				08/23/22 14:17	1
1,2-Dichlorobenzene-d4 (Surr)	99	cn		80 - 120				08/23/22 14:17	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

**Client Sample ID: 3996-FARM-EFF**

**Lab Sample ID: 410-94986-6**

**Matrix: Water**

Date Collected: 08/17/22 13:10  
 Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Benzene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
t-Butyl alcohol	ND		25	2.5	ug/L		08/23/22 14:40		1
Carbon tetrachloride	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Chlorobenzene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
1,2-Dichloroethane	ND		0.50	0.10	ug/L		08/23/22 14:40		1
1,1-Dichloroethene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
1,2-Dichloropropane	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Ethylbenzene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
di-Isopropyl ether	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Methylene Chloride	ND		0.50	0.20	ug/L		08/23/22 14:40		1
Naphthalene	ND		0.50	0.20	ug/L		08/23/22 14:40		1
Styrene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Tetrachloroethene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Toluene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L		08/23/22 14:40		1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L		08/23/22 14:40		1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Trichloroethene	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Vinyl chloride	ND		0.50	0.10	ug/L		08/23/22 14:40		1
Xylenes, Total	ND		0.50	0.10	ug/L		08/23/22 14:40		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	94			80 - 120			08/23/22 14:40		1
1,2-Dichlorobenzene-d4 (Surr)	98			80 - 120			08/23/22 14:40		1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

**Client Sample ID: 3996-FARM-MID2**

**Lab Sample ID: 410-94986-7**

Date Collected: 08/17/22 13:15

Matrix: Potable Water

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Benzene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
t-Butyl alcohol	ND		25	2.5	ug/L			08/23/22 15:04	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Chlorobenzene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			08/23/22 15:04	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Methylene Chloride	ND		0.50	0.20	ug/L			08/23/22 15:04	1
Naphthalene	ND		0.50	0.20	ug/L			08/23/22 15:04	1
Styrene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Tetrachloroethene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Toluene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			08/23/22 15:04	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 15:04	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Trichloroethene	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/23/22 15:04	1
Xylenes, Total	ND		0.50	0.10	ug/L			08/23/22 15:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95			80 - 120				08/23/22 15:04	1
1,2-Dichlorobenzene-d4 (Surr)	97			80 - 120				08/23/22 15:04	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc

Job ID: 410-94986-1

Project/Site: Carroll Monrovia

**Client Sample ID: 3996-FARM-INF**

**Lab Sample ID: 410-94986-8**

Date Collected: 08/17/22 13:20

Matrix: Potable Water

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Benzene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
t-Butyl alcohol	ND	cn	25	2.5	ug/L			08/23/22 15:27	1
Carbon tetrachloride	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Chlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
1,2-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
1,3-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
1,2-Dichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
1,1-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
cis-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
trans-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
1,2-Dichloropropane	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Ethyl t-butyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Ethylbenzene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
di-Isopropyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
<b>Methyl tertiary butyl ether</b>	<b>1.2</b>	<b>cn</b>	0.50	0.10	ug/L			08/23/22 15:27	1
Methylene Chloride	ND	cn	0.50	0.20	ug/L			08/23/22 15:27	1
Naphthalene	ND	cn	0.50	0.20	ug/L			08/23/22 15:27	1
Styrene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Tetrachloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Toluene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.20	ug/L			08/23/22 15:27	1
1,1,1-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
1,1,2-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Trichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Vinyl chloride	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
Xylenes, Total	ND	cn	0.50	0.10	ug/L			08/23/22 15:27	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	94	cn		80 - 120				08/23/22 15:27	1
1,2-Dichlorobenzene-d4 (Surr)	99	cn		80 - 120				08/23/22 15:27	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

**Client Sample ID: 3997-FARM-INF**

**Lab Sample ID: 410-94986-9**

**Matrix: Water**

Date Collected: 08/17/22 13:40  
 Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Benzene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
t-Butyl alcohol	ND		25	2.5	ug/L			08/23/22 15:50	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Chlorobenzene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			08/23/22 15:50	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			08/23/22 15:50	1
<b>Methyl tertiary butyl ether</b>	<b>0.13 J</b>		0.50	0.10	ug/L			08/23/22 15:50	1
Methylene Chloride	ND		0.50	0.20	ug/L			08/23/22 15:50	1
Naphthalene	ND		0.50	0.20	ug/L			08/23/22 15:50	1
Styrene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Tetrachloroethene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Toluene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			08/23/22 15:50	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 15:50	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Trichloroethene	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/23/22 15:50	1
Xylenes, Total	ND		0.50	0.10	ug/L			08/23/22 15:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95			80 - 120				08/23/22 15:50	1
1,2-Dichlorobenzene-d4 (Surr)	98			80 - 120				08/23/22 15:50	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94986-1

**Client Sample ID: 3992-FARM-EFF**

**Lab Sample ID: 410-94986-10**

**Matrix: Water**

Date Collected: 08/17/22 14:10  
Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Benzene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
t-Butyl alcohol	ND		25	2.5	ug/L			08/23/22 16:13	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Chlorobenzene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			08/23/22 16:13	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Methylene Chloride	ND		0.50	0.20	ug/L			08/23/22 16:13	1
Naphthalene	ND		0.50	0.20	ug/L			08/23/22 16:13	1
Styrene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Tetrachloroethene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Toluene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			08/23/22 16:13	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 16:13	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Trichloroethene	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/23/22 16:13	1
Xylenes, Total	ND		0.50	0.10	ug/L			08/23/22 16:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	93			80 - 120				08/23/22 16:13	1
1,2-Dichlorobenzene-d4 (Surr)	97			80 - 120				08/23/22 16:13	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

**Client Sample ID: 3992-FARM-MID2**

**Lab Sample ID: 410-94986-11**

Date Collected: 08/17/22 14:15

Matrix: Potable Water

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Benzene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
t-Butyl alcohol	ND		25	2.5	ug/L		08/23/22 16:36		1
Carbon tetrachloride	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Chlorobenzene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
1,2-Dichloroethane	ND		0.50	0.10	ug/L		08/23/22 16:36		1
1,1-Dichloroethene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
1,2-Dichloropropane	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Ethylbenzene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
di-Isopropyl ether	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Methylene Chloride	ND		0.50	0.20	ug/L		08/23/22 16:36		1
Naphthalene	ND		0.50	0.20	ug/L		08/23/22 16:36		1
Styrene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Tetrachloroethene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Toluene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L		08/23/22 16:36		1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L		08/23/22 16:36		1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Trichloroethene	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Vinyl chloride	ND		0.50	0.10	ug/L		08/23/22 16:36		1
Xylenes, Total	ND		0.50	0.10	ug/L		08/23/22 16:36		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95			80 - 120			08/23/22 16:36		1
1,2-Dichlorobenzene-d4 (Surr)	99			80 - 120			08/23/22 16:36		1

# Client Sample Results

Client: Groundwater & Environmental Services Inc

Job ID: 410-94986-1

Project/Site: Carroll Monrovia

**Client Sample ID: 3992-FARM-INF**

**Lab Sample ID: 410-94986-12**

Date Collected: 08/17/22 14:20

Matrix: Potable Water

Date Received: 08/18/22 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	0.27	J cn	0.50	0.10	ug/L			08/23/22 17:00	1
Benzene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
t-Butyl alcohol	ND	cn	25	2.5	ug/L			08/23/22 17:00	1
Carbon tetrachloride	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Chlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
1,2-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
1,3-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
1,2-Dichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
1,1-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
cis-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
trans-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
1,2-Dichloropropane	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Ethyl t-butyl ether	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Ethylbenzene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
di-Isopropyl ether	0.11	J cn	0.50	0.10	ug/L			08/23/22 17:00	1
Methyl tertiary butyl ether	13	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Methylene Chloride	ND	cn	0.50	0.20	ug/L			08/23/22 17:00	1
Naphthalene	ND	cn	0.50	0.20	ug/L			08/23/22 17:00	1
Styrene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Tetrachloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Toluene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.20	ug/L			08/23/22 17:00	1
1,1,1-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
1,1,2-Trichloroethane	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Trichloroethene	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Vinyl chloride	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
Xylenes, Total	ND	cn	0.50	0.10	ug/L			08/23/22 17:00	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)		94	cn	80 - 120			08/23/22 17:00	1	
1,2-Dichlorobenzene-d4 (Surr)		98	cn	80 - 120			08/23/22 17:00	1	

## Surrogate Summary

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

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

Matrix: Potable Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DCZ (80-120)	
410-94986-3	3990-FARM-MID2	95	98	
410-94986-4	3990-FARM-INF	95 cn	98 cn	
410-94986-7	3996-FARM-MID2	95	97	
410-94986-8	3996-FARM-INF	94 cn	99 cn	
410-94986-11	3992-FARM-MID2	95	99	
410-94986-12	3992-FARM-INF	94 cn	98 cn	

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)  
 DCZ = 1,2-Dichlorobenzene-d4 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DCZ (80-120)	
410-94986-1	GVP-INF	94 cn	99 cn	
410-94986-2	3990-FARM-EFF	95	97	
410-94986-5	3923-ROSE-INF	96 cn	99 cn	
410-94986-6	3996-FARM-EFF	94	98	
410-94986-9	3997-FARM-INF	95	98	
410-94986-10	3992-FARM-EFF	93	97	
LCS 410-288697/5	Lab Control Sample	99	107	
MB 410-288697/7	Method Blank	96	97	

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)  
 DCZ = 1,2-Dichlorobenzene-d4 (Surr)

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

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

**Lab Sample ID:** MB 410-288697/7

**Matrix:** Water

**Analysis Batch:** 288697

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Benzene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
t-Butyl alcohol	ND		25	2.5	ug/L			08/23/22 12:20	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Chlorobenzene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			08/23/22 12:20	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Ethylbenzene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Methylene Chloride	ND		0.50	0.20	ug/L			08/23/22 12:20	1
Naphthalene	ND		0.50	0.20	ug/L			08/23/22 12:20	1
Styrene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Tetrachloroethene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Toluene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			08/23/22 12:20	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 12:20	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Trichloroethene	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/23/22 12:20	1
Xylenes, Total	ND		0.50	0.10	ug/L			08/23/22 12:20	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		80 - 120		08/23/22 12:20	1
1,2-Dichlorobenzene-d4 (Surr)	97		80 - 120		08/23/22 12:20	1

**Lab Sample ID:** LCS 410-288697/5

**Matrix:** Water

**Analysis Batch:** 288697

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

Analyte	Spike Added	LCS			D	%Rec	Limits
		Result	Qualifier	Unit			
t-Amyl methyl ether	5.00	4.74		ug/L		95	70 - 130
Benzene	5.00	5.08		ug/L		102	70 - 130
t-Butyl alcohol	50.0	64.9		ug/L		130	70 - 130
Carbon tetrachloride	5.00	4.49		ug/L		90	70 - 130
Chlorobenzene	5.00	5.17		ug/L		103	70 - 130
1,2-Dichlorobenzene	5.00	5.20		ug/L		104	70 - 130
1,3-Dichlorobenzene	5.00	5.06		ug/L		101	70 - 130
1,2-Dichloroethane	5.00	5.10		ug/L		102	70 - 130
1,1-Dichloroethene	5.00	5.47		ug/L		109	70 - 130
cis-1,2-Dichloroethene	5.00	5.09		ug/L		102	70 - 130
trans-1,2-Dichloroethene	5.00	5.21		ug/L		104	70 - 130

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

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

**Lab Sample ID: LCS 410-288697/5**

**Matrix: Water**

**Analysis Batch: 288697**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits
1,2-Dichloropropane	5.00	5.20		ug/L	104	70 - 130	
Ethyl t-butyl ether	5.00	4.88		ug/L	98	70 - 130	
Ethylbenzene	5.00	4.93		ug/L	99	70 - 130	
di-Isopropyl ether	5.00	4.97		ug/L	99	70 - 130	
Methyl tertiary butyl ether	5.00	5.30		ug/L	106	70 - 130	
Methylene Chloride	5.00	5.32		ug/L	106	70 - 130	
Naphthalene	5.00	4.74		ug/L	95	70 - 130	
Styrene	5.00	4.98		ug/L	100	70 - 130	
Tetrachloroethene	5.00	5.01		ug/L	100	70 - 130	
Toluene	5.00	5.00		ug/L	100	70 - 130	
1,2,4-Trichlorobenzene	5.00	4.91		ug/L	98	70 - 130	
1,1,1-Trichloroethane	5.00	4.82		ug/L	96	70 - 130	
1,1,2-Trichloroethane	5.00	5.29		ug/L	106	70 - 130	
Trichloroethene	5.00	4.88		ug/L	98	70 - 130	
Vinyl chloride	2.00	2.20		ug/L	110	70 - 130	
Xylenes, Total	15.0	14.8		ug/L	99	70 - 130	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
1,2-Dichlorobenzene-d4 (Surr)	107		80 - 120

# QC Association Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94986-1

## GC/MS VOA

Analysis Batch: 288697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-94986-1	GVP-INF	Total/NA	Water	524.2	1
410-94986-2	3990-FARM-EFF	Total/NA	Water	524.2	2
410-94986-3	3990-FARM-MID2	Total/NA	Potable Water	524.2	3
410-94986-4	3990-FARM-INF	Total/NA	Potable Water	524.2	4
410-94986-5	3923-ROSE-INF	Total/NA	Water	524.2	5
410-94986-6	3996-FARM-EFF	Total/NA	Water	524.2	6
410-94986-7	3996-FARM-MID2	Total/NA	Potable Water	524.2	7
410-94986-8	3996-FARM-INF	Total/NA	Potable Water	524.2	8
410-94986-9	3997-FARM-INF	Total/NA	Water	524.2	9
410-94986-10	3992-FARM-EFF	Total/NA	Water	524.2	10
410-94986-11	3992-FARM-MID2	Total/NA	Potable Water	524.2	11
410-94986-12	3992-FARM-INF	Total/NA	Potable Water	524.2	12
MB 410-288697/7	Method Blank	Total/NA	Water	524.2	13
LCS 410-288697/5	Lab Control Sample	Total/NA	Water	524.2	14

## Lab Chronicle

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-94986-1

### **Client Sample ID: GVP-INF**

Date Collected: 08/17/22 09:10  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94986-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 12:44

### **Client Sample ID: 3990-FARM-EFF**

Date Collected: 08/17/22 09:40  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94986-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 13:07

### **Client Sample ID: 3990-FARM-MID2**

Date Collected: 08/17/22 09:45  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94986-3**

Matrix: Potable Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 13:31

### **Client Sample ID: 3990-FARM-INF**

Date Collected: 08/17/22 09:50  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94986-4**

Matrix: Potable Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 13:54

### **Client Sample ID: 3923-ROSE-INF**

Date Collected: 08/17/22 10:40  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94986-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 14:17

### **Client Sample ID: 3996-FARM-EFF**

Date Collected: 08/17/22 13:10  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94986-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 14:40

### **Client Sample ID: 3996-FARM-MID2**

Date Collected: 08/17/22 13:15  
 Date Received: 08/18/22 17:00

**Lab Sample ID: 410-94986-7**

Matrix: Potable Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 15:04

## Lab Chronicle

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94986-1

### Client Sample ID: 3996-FARM-INF

Date Collected: 08/17/22 13:20  
Date Received: 08/18/22 17:00

Lab Sample ID: 410-94986-8  
Matrix: Potable Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 15:27

### Client Sample ID: 3997-FARM-INF

Date Collected: 08/17/22 13:40  
Date Received: 08/18/22 17:00

Lab Sample ID: 410-94986-9  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 15:50

### Client Sample ID: 3992-FARM-EFF

Date Collected: 08/17/22 14:10  
Date Received: 08/18/22 17:00

Lab Sample ID: 410-94986-10  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 16:13

### Client Sample ID: 3992-FARM-MID2

Date Collected: 08/17/22 14:15  
Date Received: 08/18/22 17:00

Lab Sample ID: 410-94986-11  
Matrix: Potable Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 16:36

### Client Sample ID: 3992-FARM-INF

Date Collected: 08/17/22 14:20  
Date Received: 08/18/22 17:00

Lab Sample ID: 410-94986-12  
Matrix: Potable Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	288697	UJML	ELLE	08/23/22 17:00

#### 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: Carroll Monrovia

Job ID: 410-94986-1

### 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	06-30-23

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		Potable Water	1,3-Dichlorobenzene
524.2		Potable Water	di-Isopropyl ether
524.2		Potable Water	Ethyl t-butyl ether
524.2		Potable Water	Methyl tertiary butyl ether
524.2		Potable Water	Naphthalene
524.2		Potable Water	t-Amyl methyl ether
524.2		Potable Water	t-Butyl alcohol
524.2		Water	1,3-Dichlorobenzene
524.2		Water	di-Isopropyl ether
524.2		Water	Ethyl t-butyl ether
524.2		Water	Methyl tertiary butyl ether
524.2		Water	Naphthalene
524.2		Water	t-Amyl methyl ether
524.2		Water	t-Butyl alcohol

## Method Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94986-1

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

**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

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## Sample Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-94986-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
410-94986-1	GVP-INF	Water	08/17/22 09:10	08/18/22 17:00	1
410-94986-2	3990-FARM-EFF	Water	08/17/22 09:40	08/18/22 17:00	2
410-94986-3	3990-FARM-MID2	Potable Water	08/17/22 09:45	08/18/22 17:00	3
410-94986-4	3990-FARM-INF	Potable Water	08/17/22 09:50	08/18/22 17:00	4
410-94986-5	3923-ROSE-INF	Water	08/17/22 10:40	08/18/22 17:00	5
410-94986-6	3996-FARM-EFF	Water	08/17/22 13:10	08/18/22 17:00	6
410-94986-7	3996-FARM-MID2	Potable Water	08/17/22 13:15	08/18/22 17:00	7
410-94986-8	3996-FARM-INF	Potable Water	08/17/22 13:20	08/18/22 17:00	8
410-94986-9	3997-FARM-INF	Water	08/17/22 13:40	08/18/22 17:00	9
410-94986-10	3992-FARM-EFF	Water	08/17/22 14:10	08/18/22 17:00	10
410-94986-11	3992-FARM-MID2	Potable Water	08/17/22 14:15	08/18/22 17:00	11
410-94986-12	3992-FARM-INF	Potable Water	08/17/22 14:20	08/18/22 17:00	12



410-94986 Chain of Custody

Page 1 of 2

# Environmental Analysis Request/Chain of Custody

**Lancaster Laboratories**  
**Environmental**

Acct. # \_\_\_\_\_

Group # \_\_\_\_\_

Sample # \_\_\_\_\_

Client: <b>Groundwater &amp; Env. Services, Inc.</b>				Analyses Requested										For Lab Use Only			
Project Name/#: Carroll Monrovia		Site ID #: _____		Matrix		Preservation Codes								SF #: _____			
Project Manager: Peter Reichardt		P.O. #: 0403342/06/209		Sediment		H		Target VOCs List plus oxygenates and Naphthalene (524.2)								SCR #: _____	
Sampler: <i>Jeff Plummer</i>		PWSID #: _____		Soil		Ground		Preservation Codes								Preservation Codes	
Phone #: 800-220-3606 x 3726		Quote #: _____		Water		Potable		HCl      Thiosulfate								H = HCl      T = Thiosulfate	
State where sample(s) were collected: 11791 Fingerboard Rd, Monrovia, MD				NPDES		NPDES		HNO <sub>3</sub> NaOH								N = HNO <sub>3</sub> B = NaOH	
Sample Identification				Composite		Other:		H <sub>2</sub> SO <sub>4</sub> H <sub>3</sub> PO <sub>4</sub>								S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>3</sub> PO <sub>4</sub>	
<i>GVR-INF</i>				Date 8-17-22		Time 0910		Grab X		Composite		Total # of Containers 3		Other: X		Remarks	
<i>3990-FARM-EFF</i>				Date 0940		Time 1		X								EQEDD file name:	
<i>3990-FARM-MID2</i>				Date 0945		Time 1										Carroll Monrovia-lab	
<i>3990-FARM-INF</i>				Date 0950		Time 1										report #.17953.	
<i>3923-ROSE-INF</i>				Date 1040		Time 1										EQEDD.zip	
<i>3996-FARM-EFF</i>				Date 1310		Time 1										Send invoice to:	
<i>3996-FARM-MID2</i>				Date 1315		Time 1										ges-invoices@	
<i>3996-FARM-INF</i>				Date 1320		Time 1										gesonline.com &	
<i>3997-FARM-INF</i>				Date 1340		Time 1		↓		↓		↓				include PO #	
<i>3992-FARM-EFF</i>				Date 8-17-22		Time 1410		X		X		3		X			
Turnaround Time Requested (TAT) (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 8-18-22 Time 0900								Received by: <i>Denise Weidner</i> Date 8-18-22 Time 0900	
Date results are needed:								Relinquished by: <i>Denise Weidner</i> Date 8-18-22 Time 1322								Received by: <i>C. J. H.</i> Date 8/18/22 Time 13:22	
Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/> E-mail Address: <a href="mailto:midatlantic@gesonline.com">midatlantic@gesonline.com</a> & <a href="mailto:ges@equisonline.com">ges@equisonline.com</a> Phone:								Relinquished by: <i>Denise Weidner</i> Date 8/18/22 Time 16:38								Received by: <i>C. J. H.</i> Date 8/18/22 Time 16:38	
Data Package Options (please check if required)								Relinquished by: <i>J. M.</i> Date _____ Time _____								Received by: _____ Date _____ Time _____	
Type I (Validation/non-CLP) <input type="checkbox"/> MA MCP <input type="checkbox"/>								Relinquished by: <i>J. M.</i> Date _____ Time _____								Received by: _____ Date _____ Time _____	
Type III (Reduced non-CLP) <input type="checkbox"/> CT RCP <input type="checkbox"/>								Relinquished by: <i>J. M.</i> Date _____ Time _____								Received by: _____ Date _____ Time _____	
Type VI (Raw Data Only) <input type="checkbox"/> TX TRRP-13 <input type="checkbox"/>								Relinquished by: <i>J. M.</i> Date _____ Time _____								Received by: _____ Date _____ Time _____	
NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B								Relinquished by Commercial Carrier: _____								Temperature upon receipt <i>1.6</i> °C	
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: GES EQEDD								UPS _____ FedEx _____ Other _____								Temperature upon receipt <i>1.6</i> °C	
EQEDD Name: Carroll Monrovia-lab report #.17953.EQEDD.zip																7045 0614	

# Environmental Analysis Request/Chain of Custody



Lancaster Laboratories  
Environmental

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

Client: <b>Groundwater &amp; Env. Services, Inc.</b>				<b>Analyses Requested</b> <b>Preservation Codes</b> <b>H</b> <small>Target VOCs List plus oxygenates and Naphthalene (524.2)</small>										<b>For Lab Use Only</b>														
Project Name/#: Carroll Monrovia      Site ID #: _____ Project Manager: Peter Reichardt      P.O. #: 0403342/06/209 Sampler: <i>Jeff Plummer</i> PWSID #: _____ Phone #: 800-220-3606 x 3726      Quote #: _____ State where sample(s) were collected: 11791 Fingerboard Rd, Monrovia, MD				<input type="checkbox"/> Sediment <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Other:  <b>Total # of Containers</b>											SF #: _____	SCR #: _____												
															<b>Preservation Codes</b> <small>H = HCl      T = Thiosulfate N = HNO<sub>3</sub>      B = NaOH S = H<sub>2</sub>SO<sub>4</sub>      P = H<sub>3</sub>PO<sub>4</sub> O = Other</small>													
															<b>Remarks</b> <small>EQEDD file name: Carroll Monrovia-lab report #.17953. EQEDD.zip Send invoice to: ges-invoices@ gesonline.com &amp; include PO #</small>													
<b>Sample Identification</b> <i>3992-FARM-MDZ</i> <i>3992-FARM-INF</i>				<b>Collection</b> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th>Date</th> <th>Time</th> <th>Grab</th> <th>Composite</th> </tr> <tr> <td>8-17-22</td> <td>1415</td> <td>X</td> <td></td> </tr> <tr> <td>8-17-22</td> <td>1420</td> <td>X</td> <td></td> </tr> </table>	Date	Time	Grab	Composite	8-17-22	1415	X		8-17-22	1420	X													
Date	Time	Grab	Composite																									
8-17-22	1415	X																										
8-17-22	1420	X																										
<b>Turnaround Time Requested (TAT)</b> (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> <small>(Rush TAT is subject to laboratory approval and surcharges.)</small>				<b>Relinquished by:</b> <i>Jeff Plummer</i> <b>Date</b> <i>8-18-22 0900</i>	<b>Date</b> <i>8-18-22 0900</i>	<b>Time</b> <i>0900</i>	<b>Received by:</b> <i>Denise Wandering</i>	<b>Date</b> <i>8-18-22</i>	<b>Time</b> <i>0900</i>																			
Date results are needed: Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/> E-mail Address: <a href="mailto:midatlantic@gesonline.com">midatlantic@gesonline.com</a> & <a href="mailto:ges@equisonline.com">ges@equisonline.com</a> Phone:				<b>Relinquished by:</b> <i>Denise Wandering</i> <b>Date</b> <i>8-18-22 1322</i>	<b>Date</b> <i>8-18-22 1322</i>	<b>Time</b> <i>1322</i>	<b>Received by:</b> <i>John</i>	<b>Date</b> <i>8-18-22</i>	<b>Time</b> <i>1322</i>																			
<b>Data Package Options</b> (please check if required) 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				<b>Relinquished by:</b> <i>John</i> <b>Date</b> <i>8-18-22 16:38</i>	<b>Date</b> <i>8-18-22 16:38</i>	<b>Time</b> <i>16:38</i>	<b>Received by:</b> <i>John</i>	<b>Date</b> <i>8-18-22</i>	<b>Time</b> <i>16:38</i>																			
<b>EDD Required?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: <u>GES EQEDD</u> EQEDD Name: Carroll Monrovia-lab report #.17953.EQEDD.zip				<b>Relinquished by Commercial Carrier:</b> UPS _____ FedEx _____ Other _____					Temperature upon receipt <u>1.6</u> °C																			

## Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 410-94986-1

**Login Number:** 94986

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

**List Number:** 1

**Creator:** Kanagy, Nicholas

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 is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=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.	True	
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	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	



## Environment Testing America



### ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC  
2425 New Holland Pike  
Lancaster, PA 17601  
Tel: (717)656-2300

Laboratory Job ID: 410-99916-1  
Client Project/Site: Carroll Monrovia

For:

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

Attn: Peter Reichardt

*Amek Carter*

Authorized for release by:  
10/10/2022 7:48:51 AM

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

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results through



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

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.

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Amek Carter  
Project Manager  
10/10/2022 7:48:51 AM

# Table of Contents

Cover Page .....	1
Table of Contents .....	3
Definitions/Glossary .....	4
Case Narrative .....	5
Detection Summary .....	6
Client Sample Results .....	7
Surrogate Summary .....	10
QC Sample Results .....	11
QC Association Summary .....	13
Lab Chronicle .....	14
Certification Summary .....	15
Method Summary .....	16
Sample Summary .....	17
Chain of Custody .....	18
Receipt Checklists .....	19

# Definitions/Glossary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-99916-1

## 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.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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: Carroll Monrovia

Job ID: 410-99916-1

### Job ID: 410-99916-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

#### Narrative

##### Job Narrative 410-99916-1

#### Receipt

The samples were received on 9/29/2022 6:08 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 2.7°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 524.2\_Preserved: Volatile compounds have been detected above the RL for the following sample: 3994-FARM-INF (410-99916-3). Since a field reagent blank/trip blank was not submitted, any potential contamination from the sampling/transport process cannot be assessed.

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: Carroll Monrovia

Job ID: 410-99916-1

### Client Sample ID: 3994-FARM-EFF

Lab Sample ID: 410-99916-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butyl alcohol	2.7	J	25	2.5	ug/L	1		524.2	Total/NA

### Client Sample ID: 3994-FARM-MID2

Lab Sample ID: 410-99916-2

No Detections.

### Client Sample ID: 3994-FARM-INF

Lab Sample ID: 410-99916-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	3.3	cn	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: Carroll Monrovia

Job ID: 410-99916-1

**Client Sample ID: 3994-FARM-EFF**

**Lab Sample ID: 410-99916-1**

**Matrix: Water**

Date Collected: 09/29/22 08:40

Date Received: 09/29/22 18:08

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Benzene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
t-Butyl alcohol	2.7 J		25	2.5	ug/L			10/06/22 15:38	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Chlorobenzene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			10/06/22 15:38	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Ethylbenzene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Methylene Chloride	ND		0.50	0.20	ug/L			10/06/22 15:38	1
Naphthalene	ND		0.50	0.20	ug/L			10/06/22 15:38	1
Styrene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Tetrachloroethene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Toluene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			10/06/22 15:38	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			10/06/22 15:38	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Trichloroethene	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/06/22 15:38	1
Xylenes, Total	ND		0.50	0.10	ug/L			10/06/22 15:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	102			80 - 120				10/06/22 15:38	1
1,2-Dichlorobenzene-d4 (Surr)	107			80 - 120				10/06/22 15:38	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-99916-1

**Client Sample ID: 3994-FARM-MID2**

**Lab Sample ID: 410-99916-2**

**Matrix: Water**

Date Collected: 09/29/22 08:45

Date Received: 09/29/22 18:08

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Benzene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
t-Butyl alcohol	ND		25	2.5	ug/L			10/06/22 16:02	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Chlorobenzene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			10/06/22 16:02	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Ethylbenzene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Methylene Chloride	ND		0.50	0.20	ug/L			10/06/22 16:02	1
Naphthalene	ND		0.50	0.20	ug/L			10/06/22 16:02	1
Styrene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Tetrachloroethene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Toluene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			10/06/22 16:02	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			10/06/22 16:02	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Trichloroethene	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/06/22 16:02	1
Xylenes, Total	ND		0.50	0.10	ug/L			10/06/22 16:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101			80 - 120				10/06/22 16:02	1
1,2-Dichlorobenzene-d4 (Surr)	105			80 - 120				10/06/22 16:02	1

# Client Sample Results

Client: Groundwater & Environmental Services Inc

Job ID: 410-99916-1

Project/Site: Carroll Monrovia

**Client Sample ID: 3994-FARM-INF**

**Lab Sample ID: 410-99916-3**

**Matrix: Water**

Date Collected: 09/29/22 08:50

Date Received: 09/29/22 18:08

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Benzene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
t-Butyl alcohol	ND	cn	25	2.5	ug/L			10/06/22 16:25	1
Carbon tetrachloride	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Chlorobenzene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
1,2-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
1,3-Dichlorobenzene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
1,2-Dichloroethane	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
1,1-Dichloroethene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
cis-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
trans-1,2-Dichloroethene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
1,2-Dichloropropane	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Ethyl t-butyl ether	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Ethylbenzene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
di-Isopropyl ether	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Methyl tertiary butyl ether	3.3	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Methylene Chloride	ND	cn	0.50	0.20	ug/L			10/06/22 16:25	1
Naphthalene	ND	cn	0.50	0.20	ug/L			10/06/22 16:25	1
Styrene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Tetrachloroethene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Toluene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
1,2,4-Trichlorobenzene	ND	cn	0.50	0.20	ug/L			10/06/22 16:25	1
1,1,1-Trichloroethane	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
1,1,2-Trichloroethane	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Trichloroethene	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Vinyl chloride	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
Xylenes, Total	ND	cn	0.50	0.10	ug/L			10/06/22 16:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100	cn		80 - 120				10/06/22 16:25	1
1,2-Dichlorobenzene-d4 (Surr)	107	cn		80 - 120				10/06/22 16:25	1

# Surrogate Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-99916-1

## 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	BFB (80-120)	DCZ (80-120)											
410-99916-1	3994-FARM-EFF	102	107											
410-99916-2	3994-FARM-MID2	101	105											
410-99916-3	3994-FARM-INF	100 cn	107 cn											
LCS 410-303842/5	Lab Control Sample	103	102											
MB 410-303842/7	Method Blank	100	106											

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-99916-1

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

**Lab Sample ID:** MB 410-303842/7

**Matrix:** Water

**Analysis Batch:** 303842

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Amyl methyl ether	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Benzene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
t-Butyl alcohol	ND		25	2.5	ug/L			10/06/22 14:50	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Chlorobenzene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
1,2-Dichlorobenzene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
1,3-Dichlorobenzene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
1,2-Dichloroethane	ND		0.50	0.10	ug/L			10/06/22 14:50	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
cis-1,2-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Ethyl t-butyl ether	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Ethylbenzene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
di-Isopropyl ether	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Methyl tertiary butyl ether	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Methylene Chloride	ND		0.50	0.20	ug/L			10/06/22 14:50	1
Naphthalene	ND		0.50	0.20	ug/L			10/06/22 14:50	1
Styrene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Tetrachloroethene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Toluene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			10/06/22 14:50	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			10/06/22 14:50	1
1,1,2-Trichloroethane	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Trichloroethene	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/06/22 14:50	1
Xylenes, Total	ND		0.50	0.10	ug/L			10/06/22 14:50	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		10/06/22 14:50	1
1,2-Dichlorobenzene-d4 (Surr)	106		80 - 120		10/06/22 14:50	1

**Lab Sample ID:** LCS 410-303842/5

**Matrix:** Water

**Analysis Batch:** 303842

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
t-Amyl methyl ether	5.00	5.28		ug/L		106	70 - 130
Benzene	5.00	5.09		ug/L		102	70 - 130
t-Butyl alcohol	50.0	57.5		ug/L		115	70 - 130
Carbon tetrachloride	5.00	5.64		ug/L		113	70 - 130
Chlorobenzene	5.00	5.14		ug/L		103	70 - 130
1,2-Dichlorobenzene	5.00	5.04		ug/L		101	70 - 130
1,3-Dichlorobenzene	5.00	5.01		ug/L		100	70 - 130
1,2-Dichloroethane	5.00	4.96		ug/L		99	70 - 130
1,1-Dichloroethene	5.00	5.17		ug/L		103	70 - 130
cis-1,2-Dichloroethene	5.00	5.21		ug/L		104	70 - 130
trans-1,2-Dichloroethene	5.00	5.00		ug/L		100	70 - 130

# QC Sample Results

Client: Groundwater & Environmental Services Inc  
 Project/Site: Carroll Monrovia

Job ID: 410-99916-1

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

**Lab Sample ID: LCS 410-303842/5**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 303842**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits
1,2-Dichloropropane	5.00	5.25		ug/L	105	70 - 130	
Ethyl t-butyl ether	5.00	4.99		ug/L	100	70 - 130	
Ethylbenzene	5.00	5.07		ug/L	101	70 - 130	
di-Isopropyl ether	5.00	4.97		ug/L	99	70 - 130	
Methyl tertiary butyl ether	5.00	5.11		ug/L	102	70 - 130	
Methylene Chloride	5.00	5.12		ug/L	102	70 - 130	
Naphthalene	5.00	5.21		ug/L	104	70 - 130	
Styrene	5.00	5.21		ug/L	104	70 - 130	
Tetrachloroethene	5.00	4.90		ug/L	98	70 - 130	
Toluene	5.00	4.98		ug/L	100	70 - 130	
1,2,4-Trichlorobenzene	5.00	5.19		ug/L	104	70 - 130	
1,1,1-Trichloroethane	5.00	5.41		ug/L	108	70 - 130	
1,1,2-Trichloroethane	5.00	5.18		ug/L	104	70 - 130	
Trichloroethene	5.00	4.99		ug/L	100	70 - 130	
Vinyl chloride	2.00	1.96		ug/L	98	70 - 130	
Xylenes, Total	15.0	15.3		ug/L	102	70 - 130	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		80 - 120
1,2-Dichlorobenzene-d4 (Surr)	102		80 - 120

# QC Association Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-99916-1

## GC/MS VOA

Analysis Batch: 303842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-99916-1	3994-FARM-EFF	Total/NA	Water	524.2	
410-99916-2	3994-FARM-MID2	Total/NA	Water	524.2	
410-99916-3	3994-FARM-INF	Total/NA	Water	524.2	
MB 410-303842/7	Method Blank	Total/NA	Water	524.2	
LCS 410-303842/5	Lab Control Sample	Total/NA	Water	524.2	

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## Lab Chronicle

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-99916-1

**Client Sample ID: 3994-FARM-EFF**

**Lab Sample ID: 410-99916-1**

Matrix: Water

Date Collected: 09/29/22 08:40  
Date Received: 09/29/22 18:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	303842	UJML	ELLE	10/06/22 15:38

**Client Sample ID: 3994-FARM-MID2**

**Lab Sample ID: 410-99916-2**

Matrix: Water

Date Collected: 09/29/22 08:45  
Date Received: 09/29/22 18:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	303842	UJML	ELLE	10/06/22 16:02

**Client Sample ID: 3994-FARM-INF**

**Lab Sample ID: 410-99916-3**

Matrix: Water

Date Collected: 09/29/22 08:50  
Date Received: 09/29/22 18:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	303842	UJML	ELLE	10/06/22 16:25

### 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: Carroll Monrovia

Job ID: 410-99916-1

### 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	06-30-23

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	1,3-Dichlorobenzene
524.2		Water	di-Isopropyl ether
524.2		Water	Ethyl t-butyl ether
524.2		Water	Methyl tertiary butyl ether
524.2		Water	Naphthalene
524.2		Water	t-Amyl methyl ether
524.2		Water	t-Butyl alcohol

## Method Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-99916-1

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

**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

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## Sample Summary

Client: Groundwater & Environmental Services Inc  
Project/Site: Carroll Monrovia

Job ID: 410-99916-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-99916-1	3994-FARM-EFF	Water	09/29/22 08:40	09/29/22 18:08
410-99916-2	3994-FARM-MID2	Water	09/29/22 08:45	09/29/22 18:08
410-99916-3	3994-FARM-INF	Water	09/29/22 08:50	09/29/22 18:08

# Environmental Analysis Request



Lancaster Laboratories  
Environmental

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



410-99916 Chain of Custody

Client: <b>Groundwater &amp; Env. Services, Inc.</b>				Matrix				Analyses Requested												
Project Name/#: Carroll Monrovia		Site ID #: 0403420/06/209		<input type="checkbox"/> Sediment <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Other:	Total # of Containers	Preservation Codes														
Project Manager: Peter Reichardt		P.O. #: 0403420/06/209				H Target VOCs List plus oxygenates and Naphthalene (524.2)														
Sampler: Jeff Plummer		PWSID #: _____																		
Phone #: 800-220-3606 x 3726		Quote #: _____																		
State where sample(s) were collected: 11791 Fingerboard Rd, Monrovia, MD												SF #: _____ SCR #: _____  <b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>3</sub> PO <sub>4</sub> O = Other								
<b>Sample Identification</b> 3994-FARM-EFF 3994-FARM-MID2 3994-FARM-INF				<b>Collection</b>		<input type="checkbox"/> Grab <input type="checkbox"/> Composite	Date	Time	x	x	3	x								
												<b>Remarks</b> EQEDD file name: Carroll Monrovia-lab report #.17953. EQEDD.zip Send invoice to: ges-invoices@gesonline.com & include PO #								
<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 9-29-22 1030		Received by: <i>Denise Woodring</i> Date 9-29-22 1030		Date 9-29-22 1030		Time										
				Relinquished by: <i>Denise Woodring</i> Date 9-29-22 1515		Received by: <i>Jill</i> Date 9/29/22 15:15		Date		Time										
Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/> E-mail Address: <a href="mailto:midatlantic@gesonline.com">midatlantic@gesonline.com</a> & <a href="mailto:ges@equisonline.com">ges@equisonline.com</a> Phone: _____				Relinquished by: <i>Jill</i> Date 9/29/22 1743		Received by: _____ Date _____ Time _____		Date		Time										
<b>Data Package Options</b> (please check if required) 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: _____ Date _____ Time _____		Received by: _____ Date _____ Time _____		Date		Time										
<b>EDD Required?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: <u>GES_EQEDD</u> EQEDD Name: Carroll Monrovia-lab report #.17953.EQEDD.zip				Relinquished by Commercial Carrier: _____		Temperature upon receipt <u>2.1</u> °C		Date 9/29/22		Time 18:08										

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## Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 410-99916-1

**Login Number: 99916**

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

**List Number: 1**

**Creator: Jeremiah, Cory T**

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=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.	True	
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	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

## **APPENDIX D**

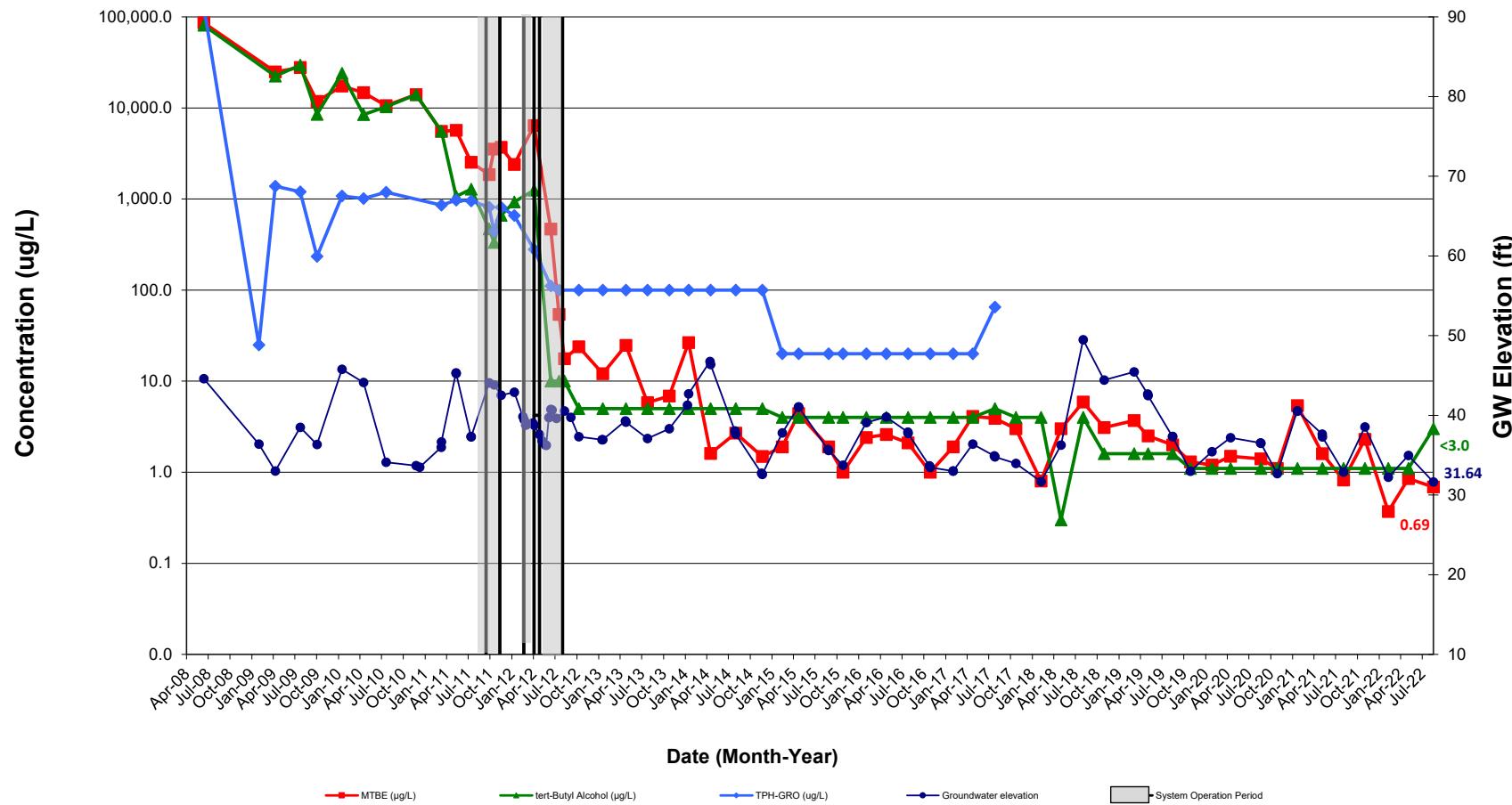
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Groundwater Monitoring Graphs

## GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

MW-7



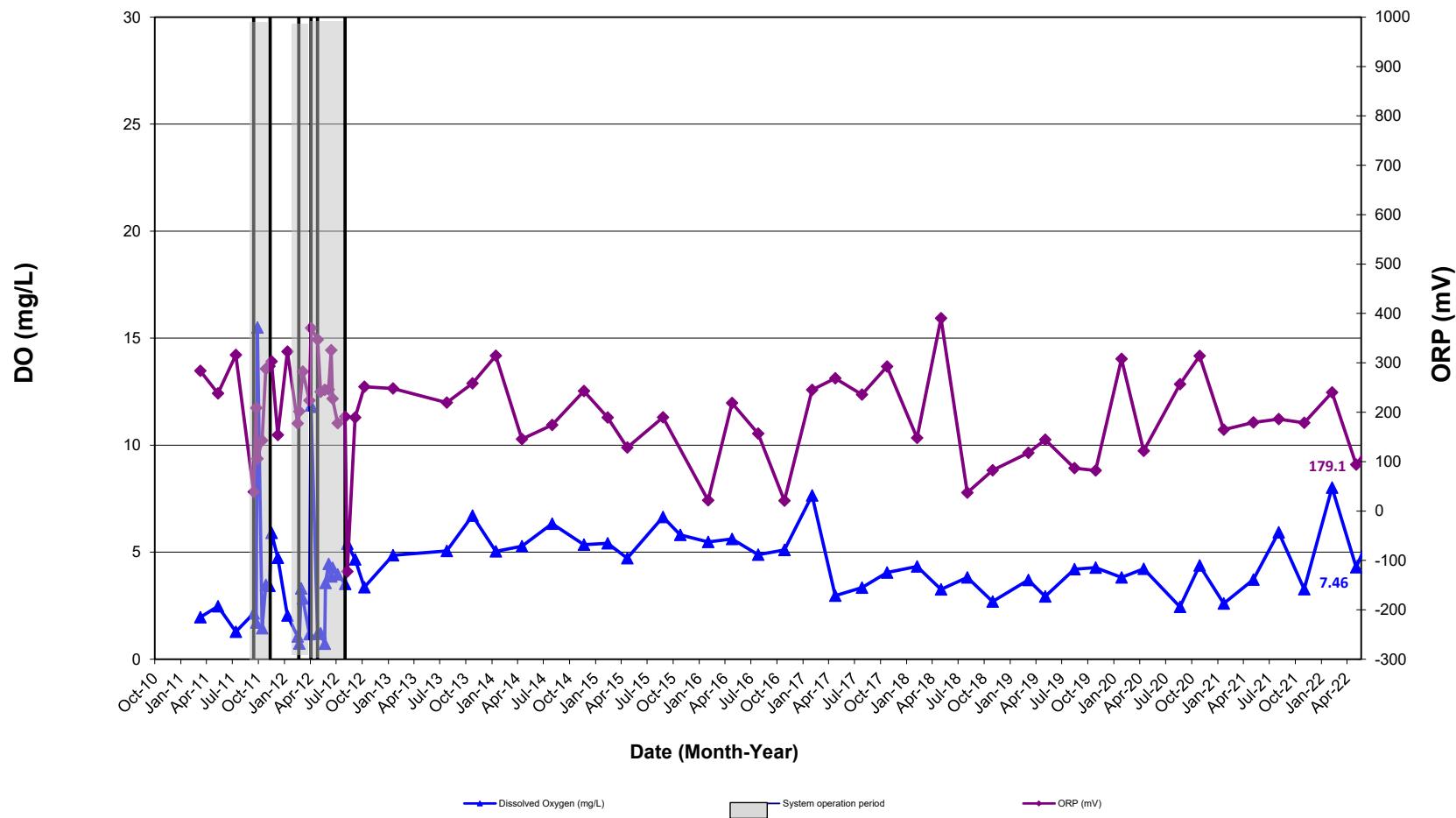
Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100 ug/L, 100 ug/L is plotted).

Appendix D

GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo  
11791 Fingerboard Rd  
Monrovia, MD

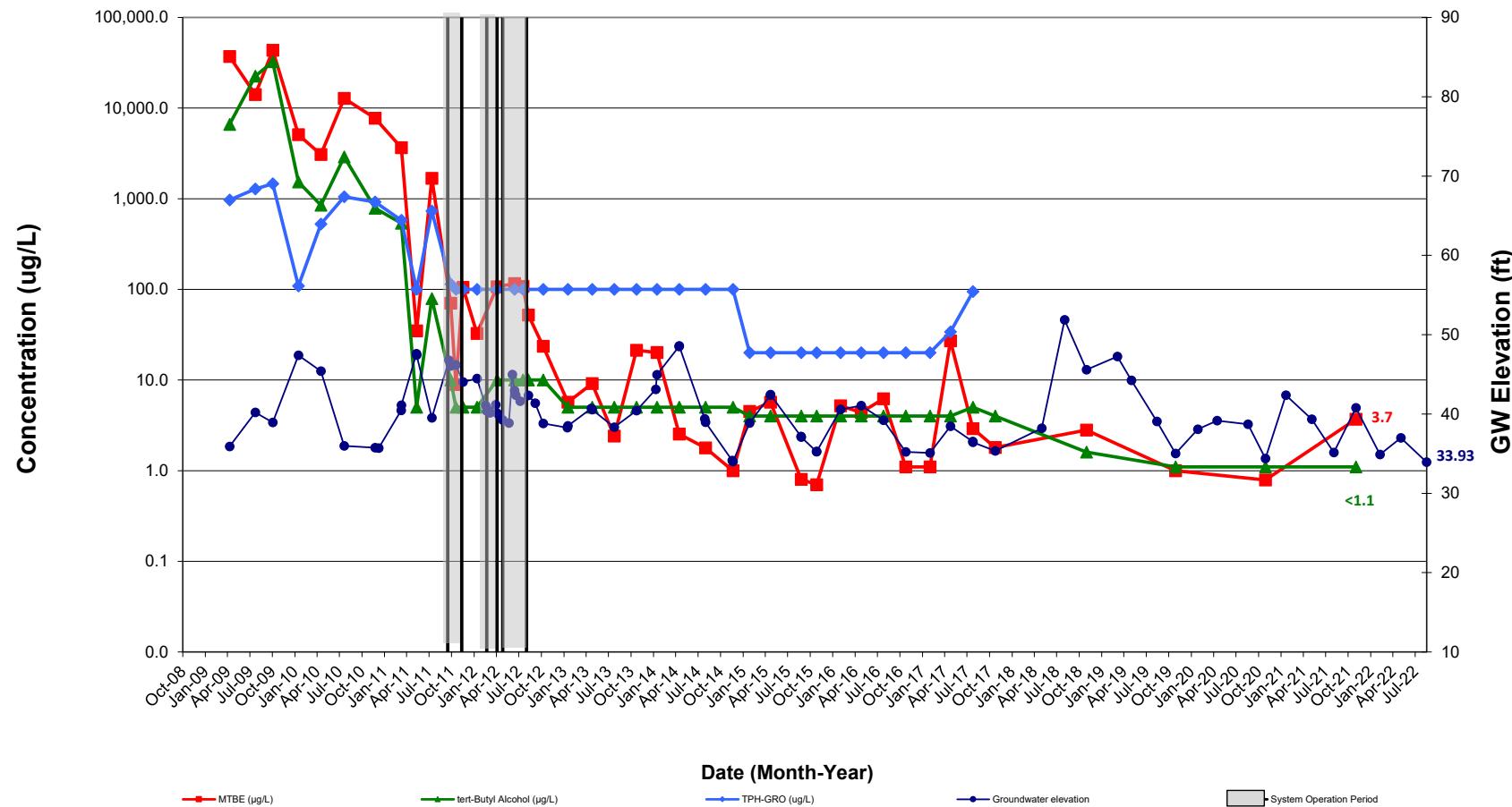
MW-7



## GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

MW-13

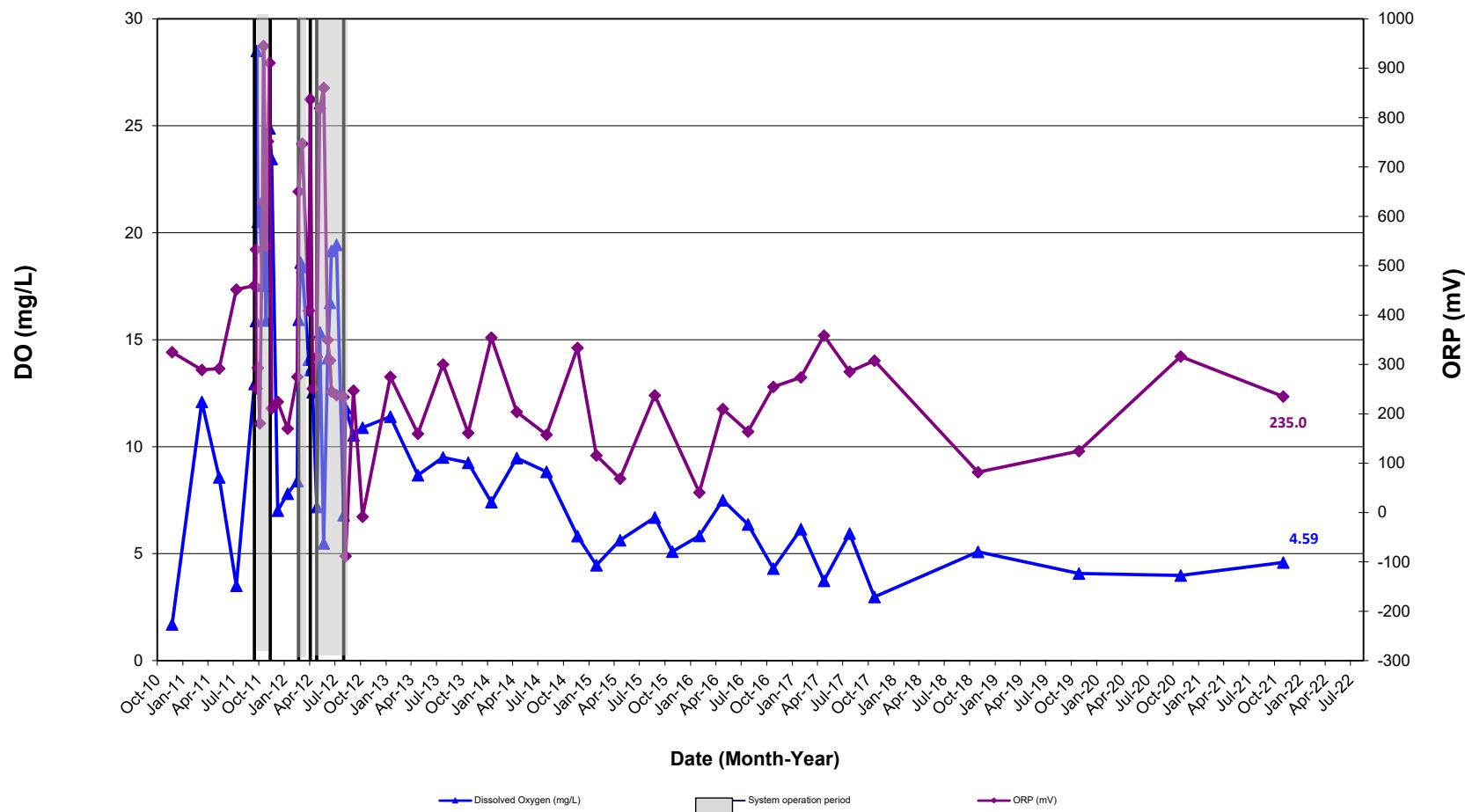


Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100  $\mu\text{g/L}$ , 100  $\mu\text{g/L}$  is plotted).

## GROUNDWATER MONITORING GRAPHS

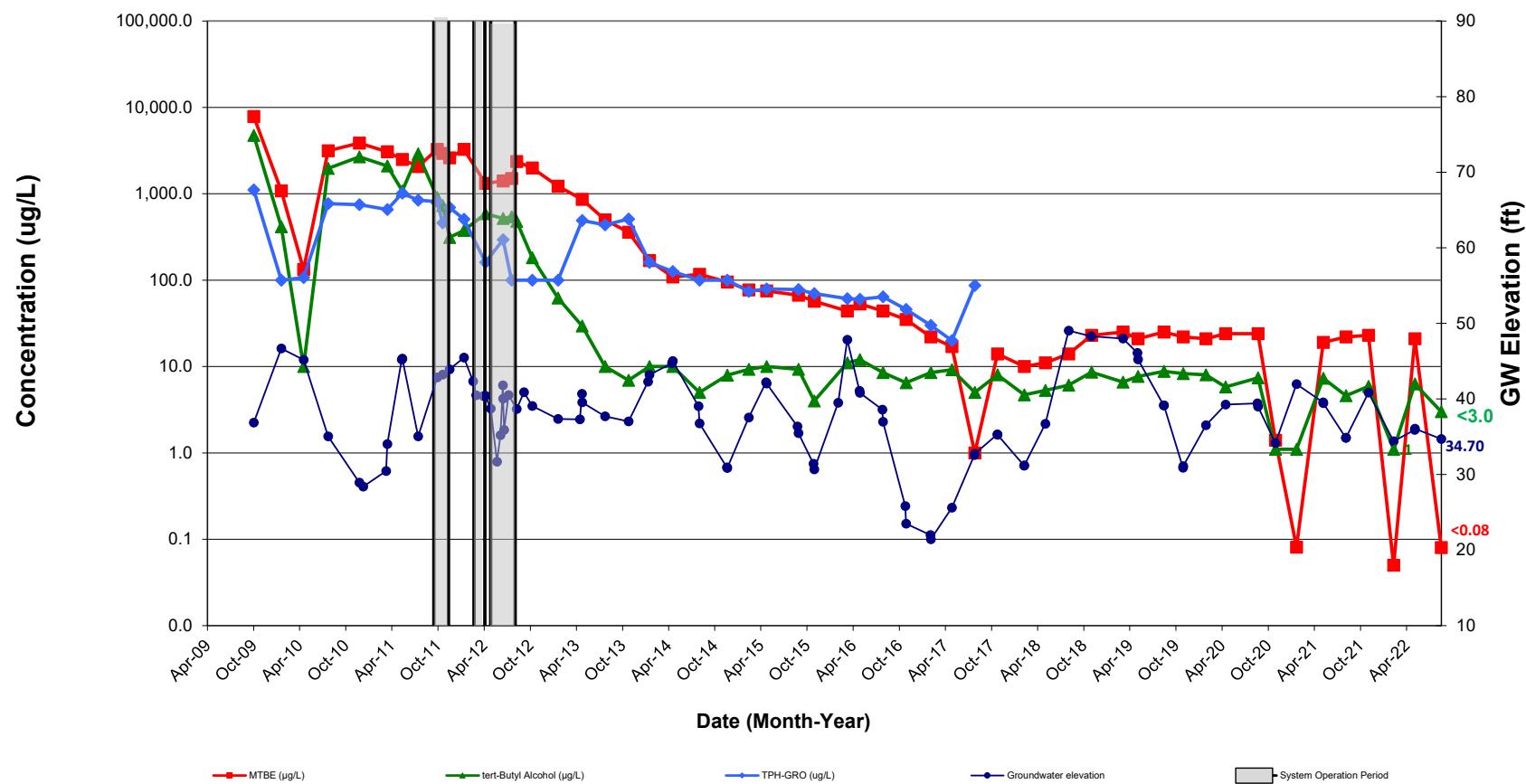
Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

MW-13



## GROUNDWATER MONITORING GRAPHS

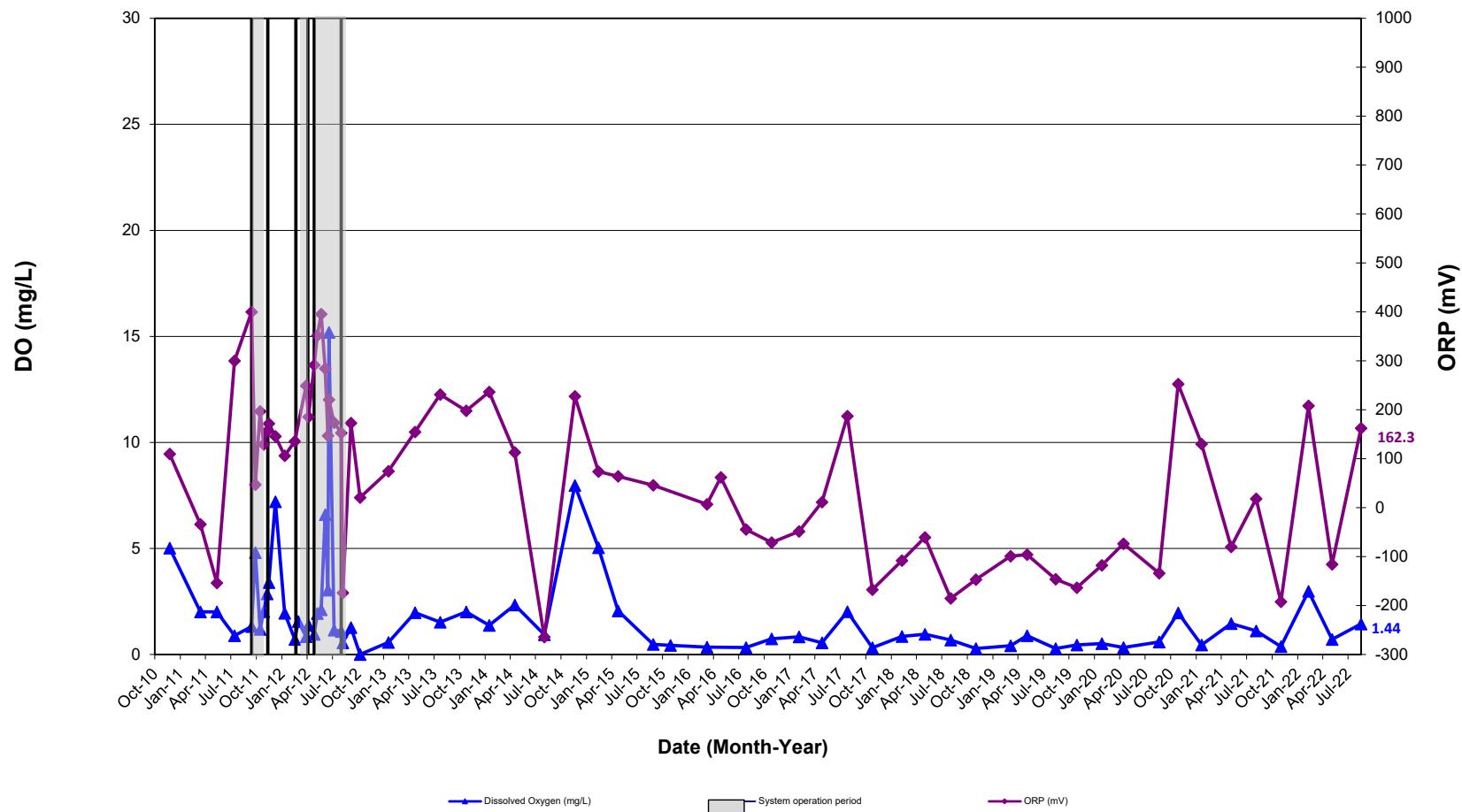
Carroll - Monrovia BP/Former Green Valley Citgo  
11791 Fingerboard Rd  
Monrovia, MD

**MW-14D**

Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100  $\mu\text{g/L}$ , 100  $\mu\text{g/L}$  is plotted).

## GROUNDWATER MONITORING GRAPHS

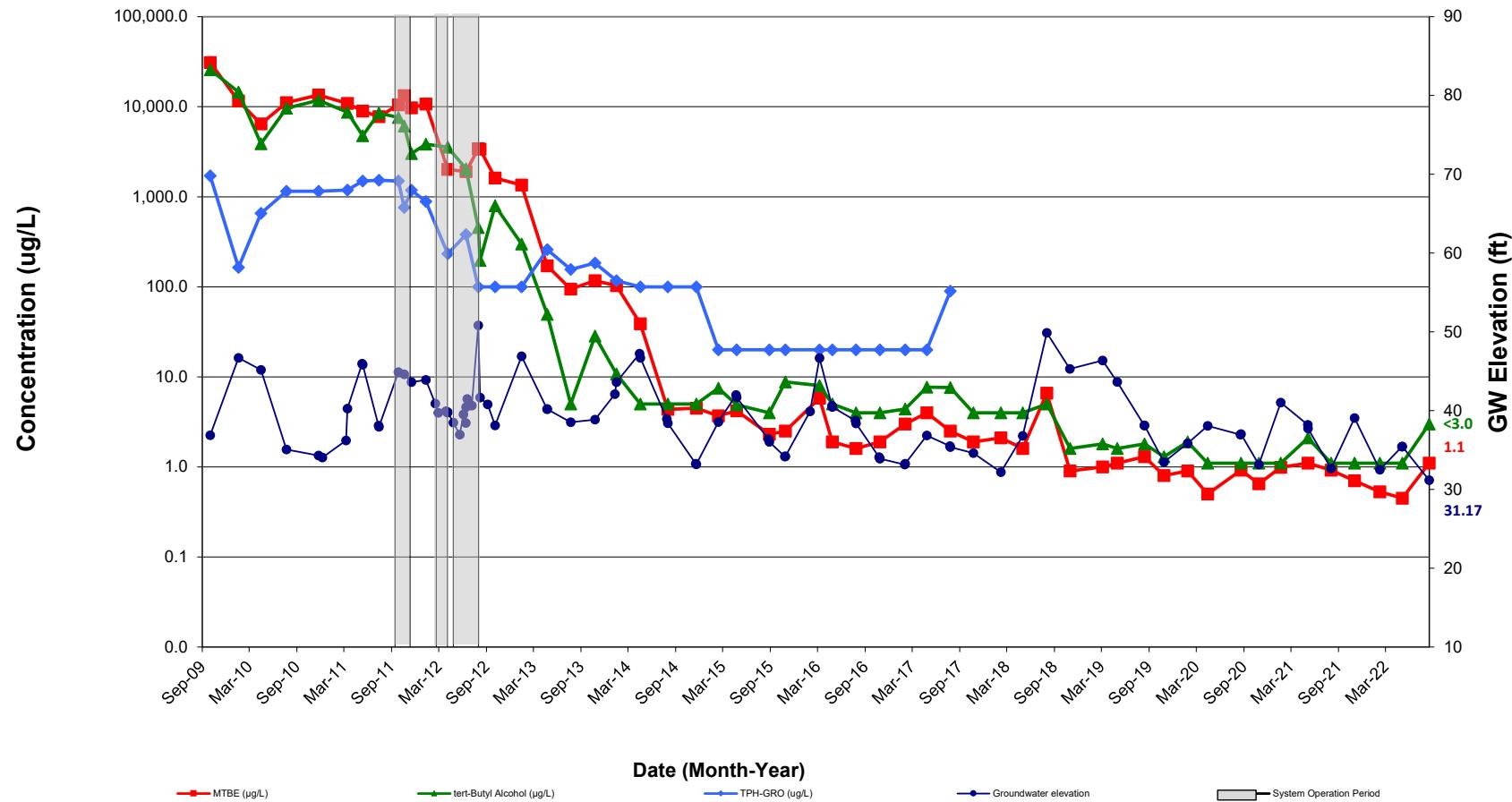
**Carroll - Monrovia BP/Former Green Valley Citgo**  
**11791 Fingerboard Rd**  
**Monrovia, MD**

**MW-14D**

## GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

MW-17

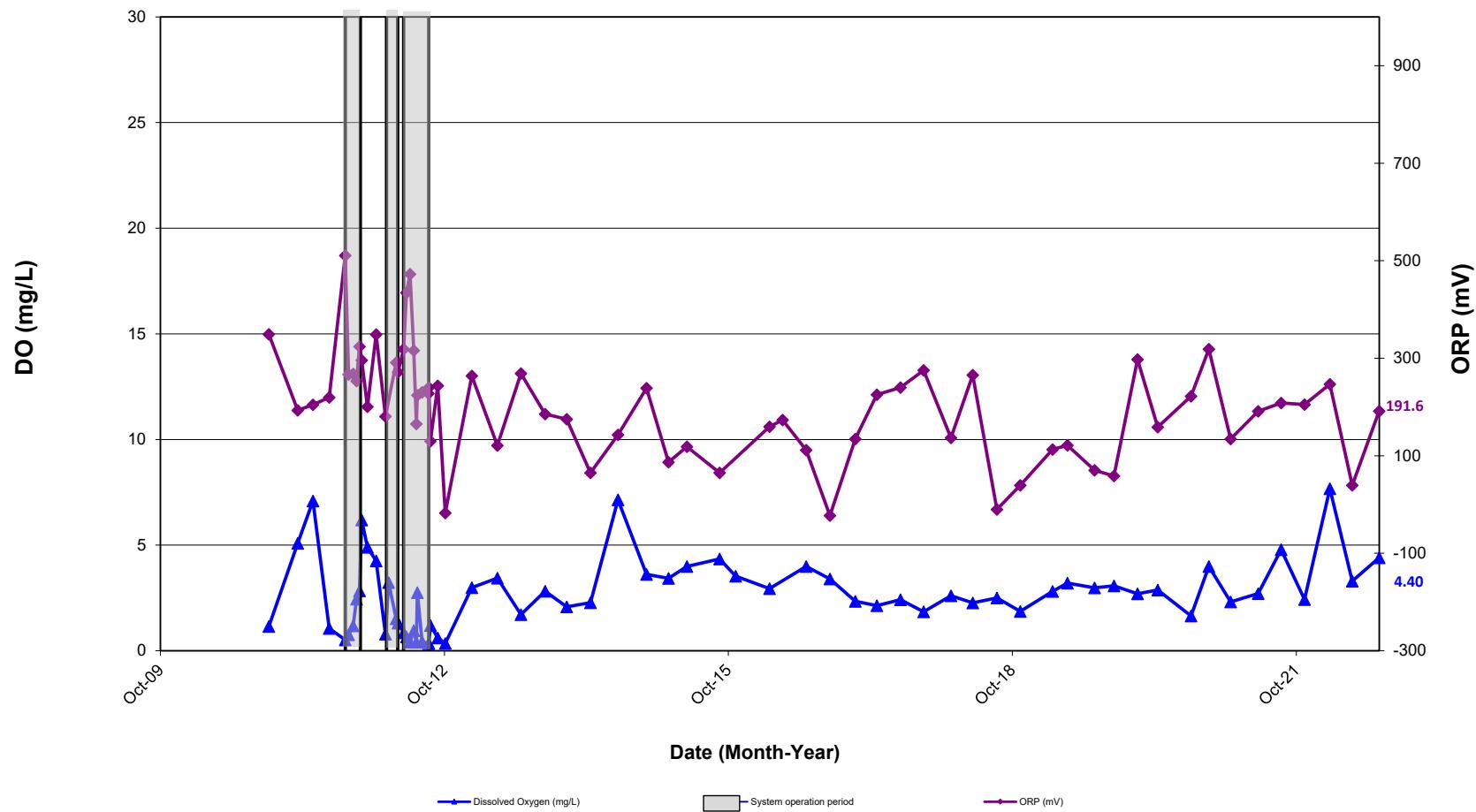


Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100  $\mu\text{g/L}$ , 100  $\mu\text{g/L}$  is plotted).

## GROUNDWATER MONITORING GRAPHS

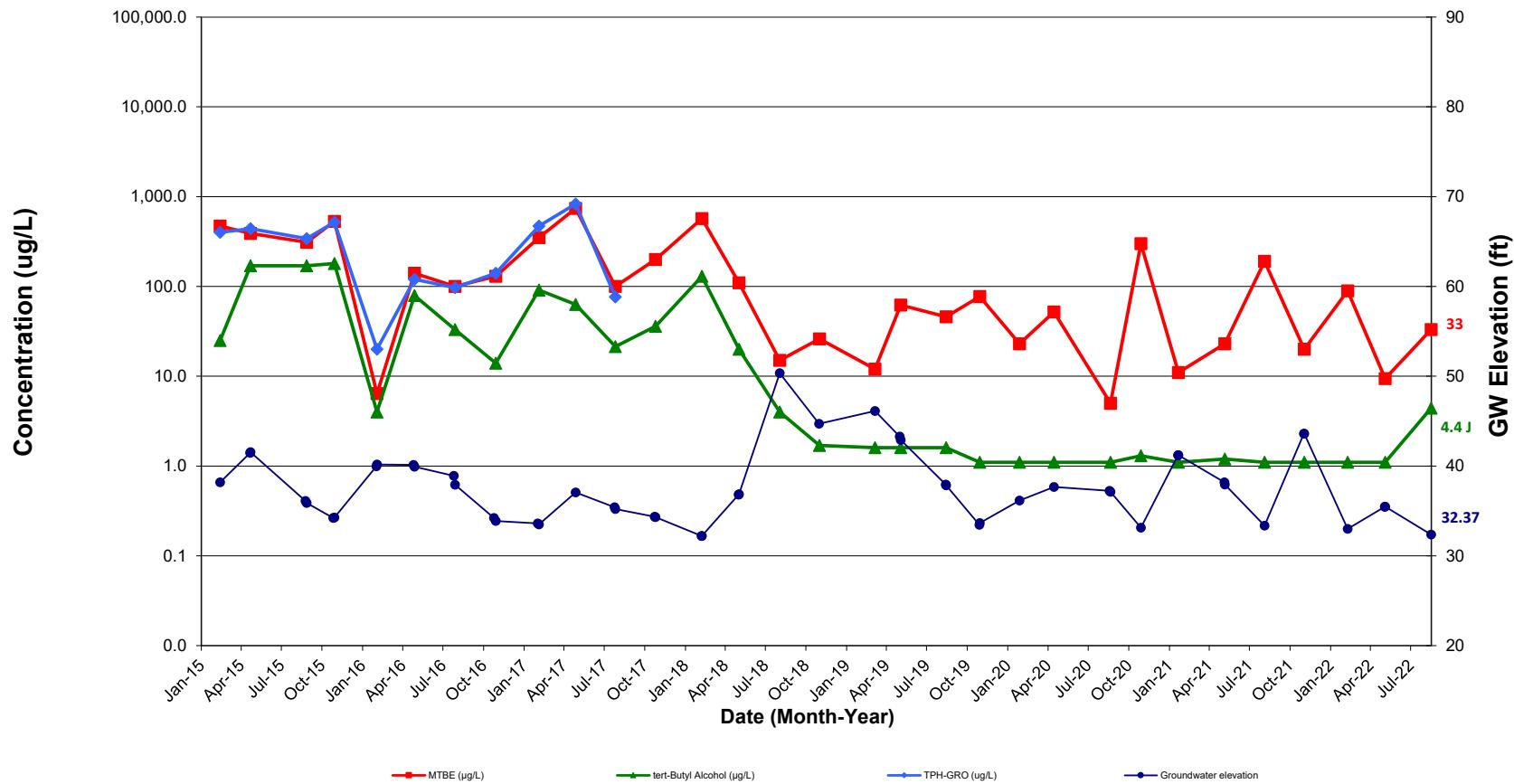
Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

MW-17



## GROUNDWATER MONITORING GRAPHS

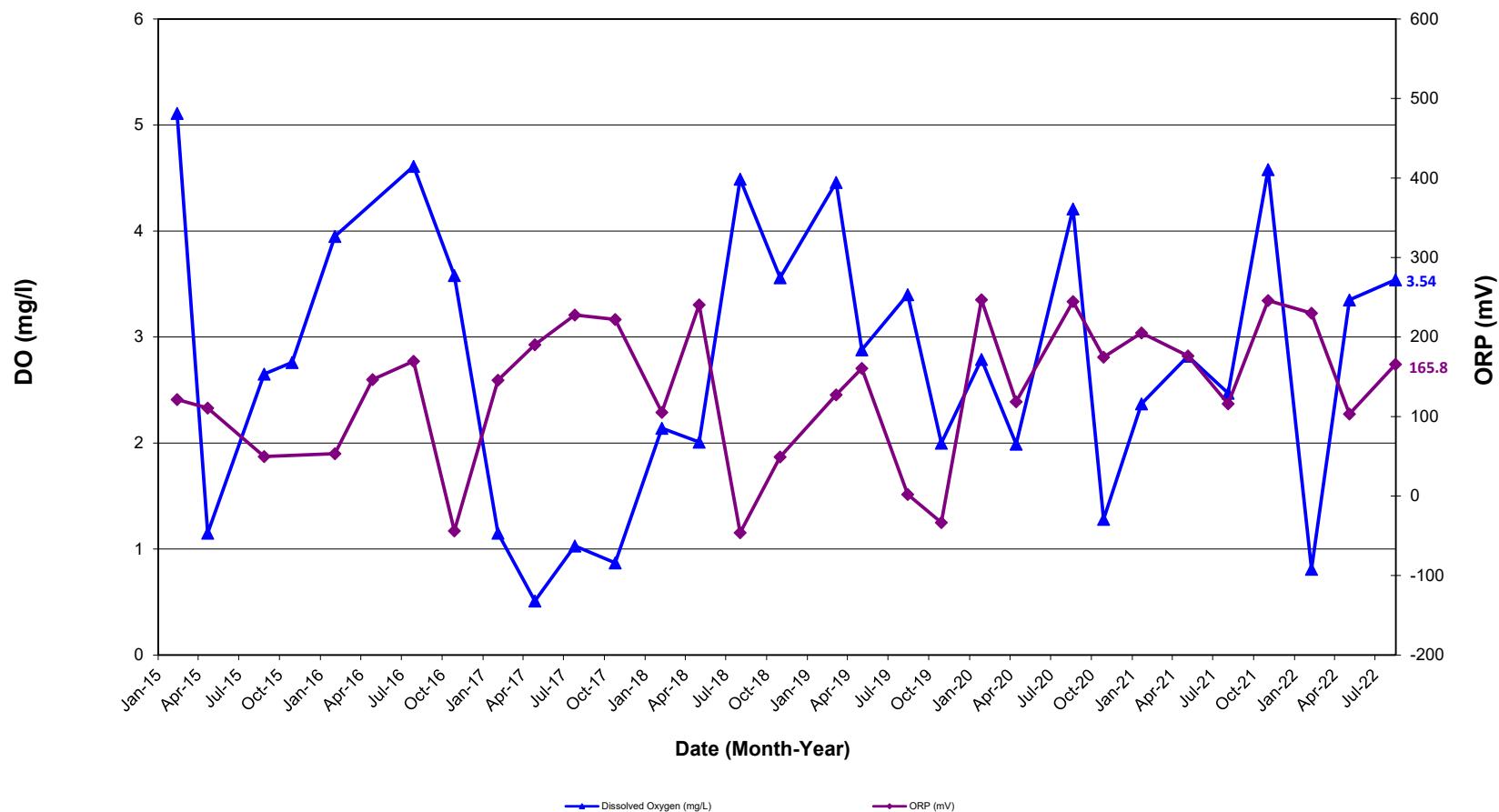
Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

**MW-18S-R**

Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100  $\mu\text{g/L}$ , 100  $\mu\text{g/L}$  is plotted).

## GROUNDWATER MONITORING GRAPHS

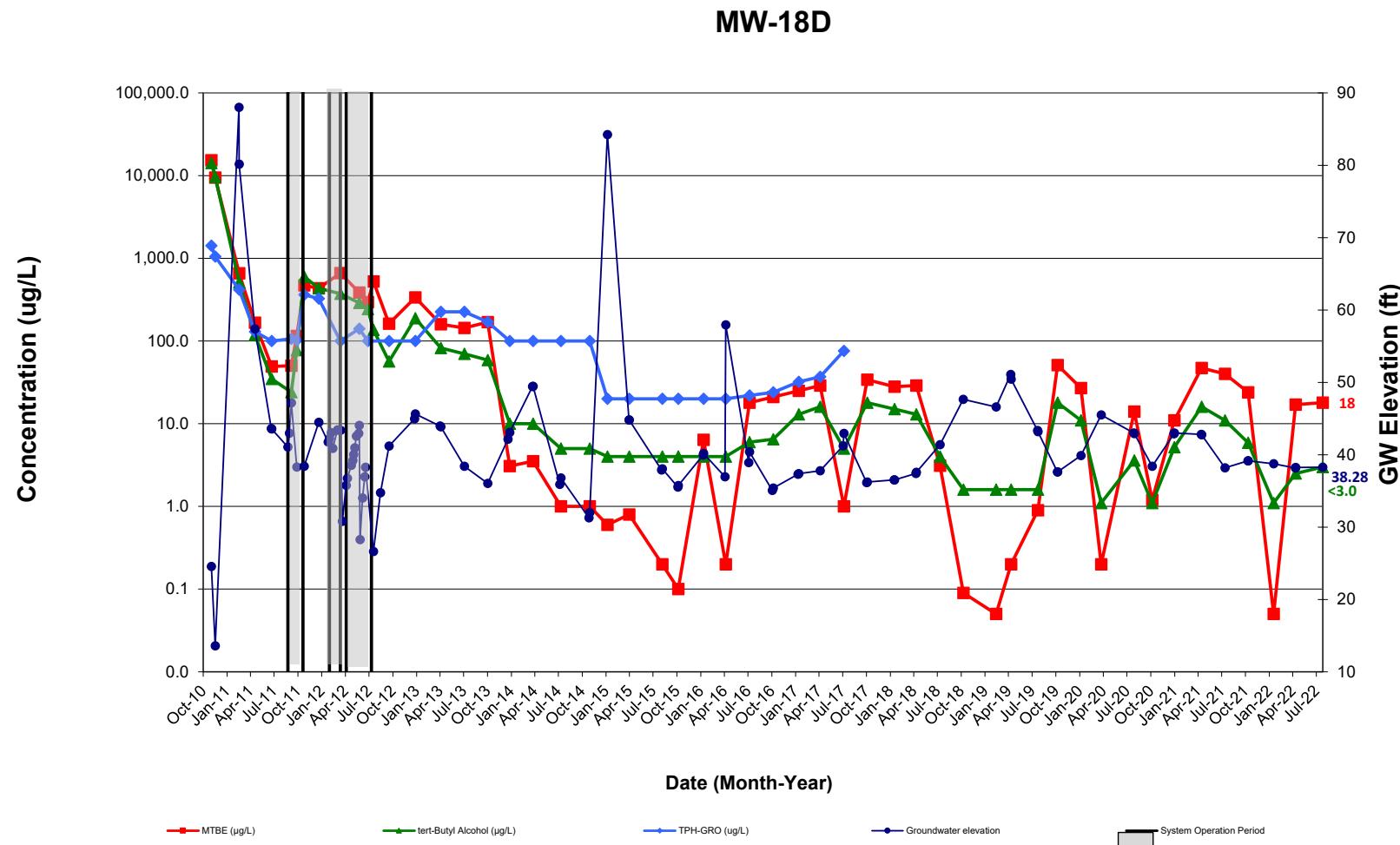
Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

**MW-18S-R**

Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100 µg/L, 100 µg/L is plotted).

## GROUNDWATER MONITORING GRAPHS

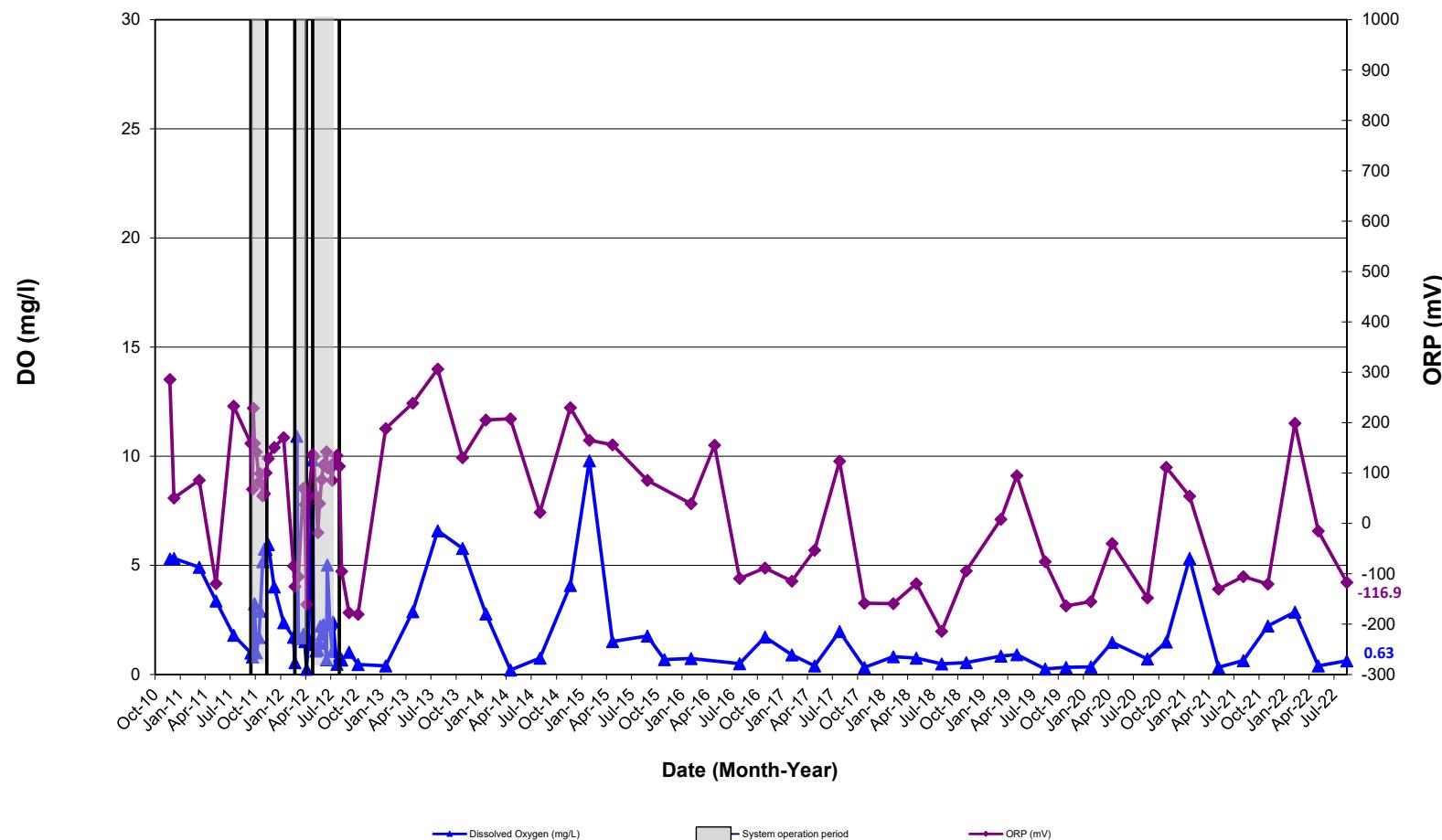
Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD



Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100  $\mu\text{g/L}$ , 100  $\mu\text{g/L}$  is plotted).

## GROUNDWATER MONITORING GRAPHS

**Carroll - Monrovia BP/Former Green Valley Citgo**  
 11791 Fingerboard Rd  
 Monrovia, MD

**MW-18D**

## **APPENDIX E**

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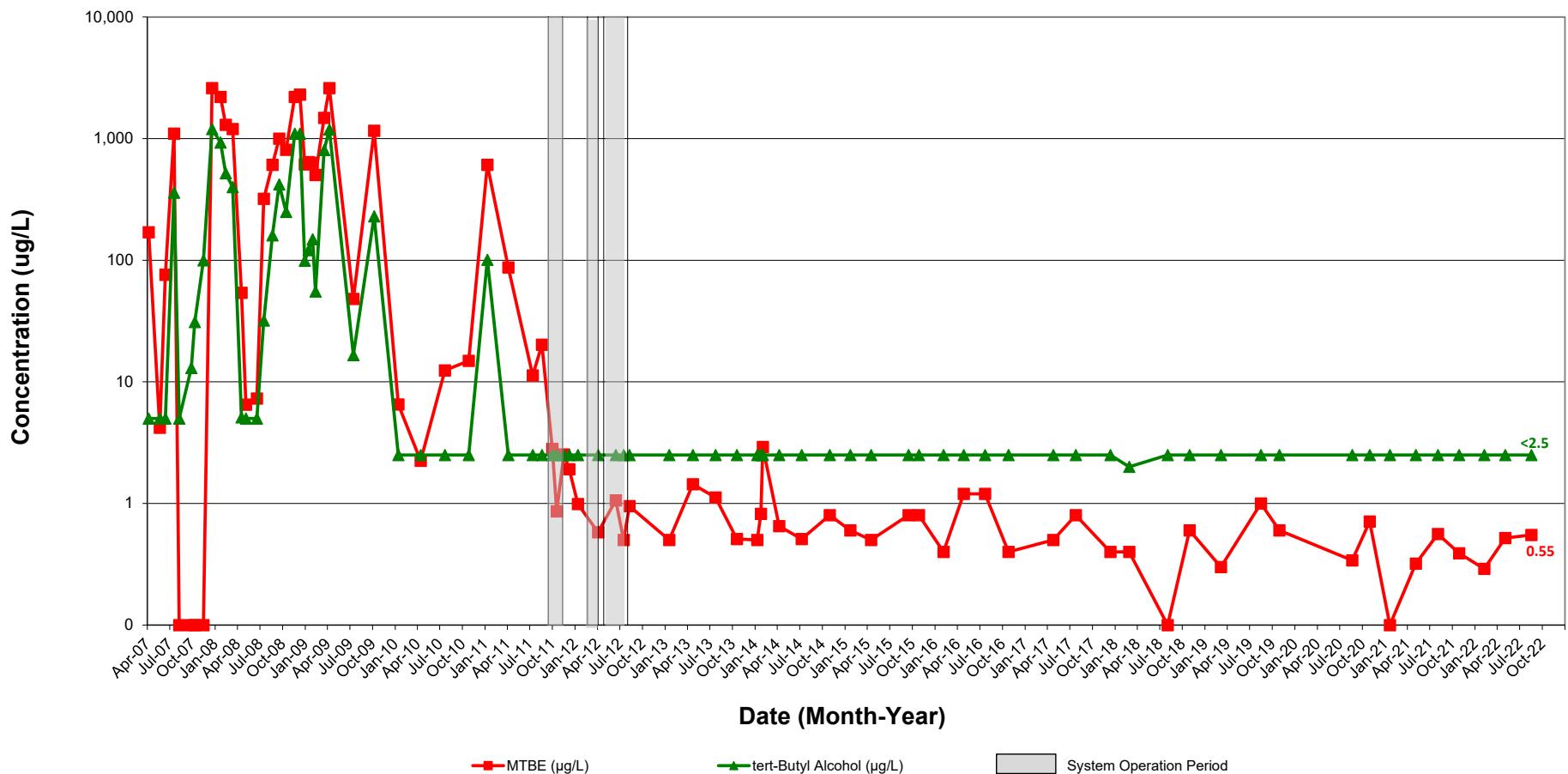
Supply Well Monitoring Graphs

Appendix E

RESIDENTIAL SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo  
11791 Fingerboard Rd  
Monrovia, MD

**3923-ROSE-INF**

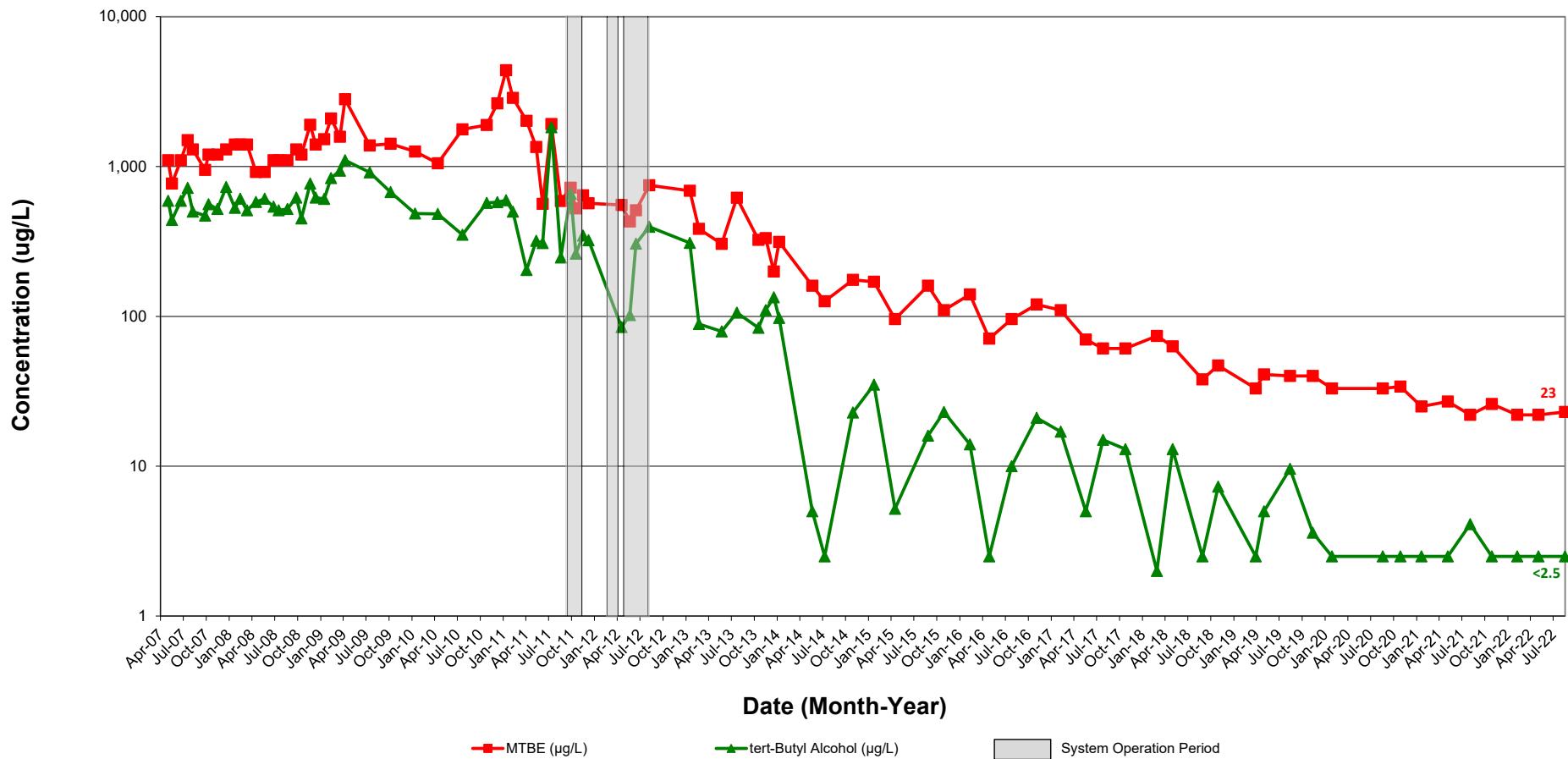


Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100 µg/L, 100 µg/L is plotted).

## RESIDENTIAL SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

## 3990-FARM-INF

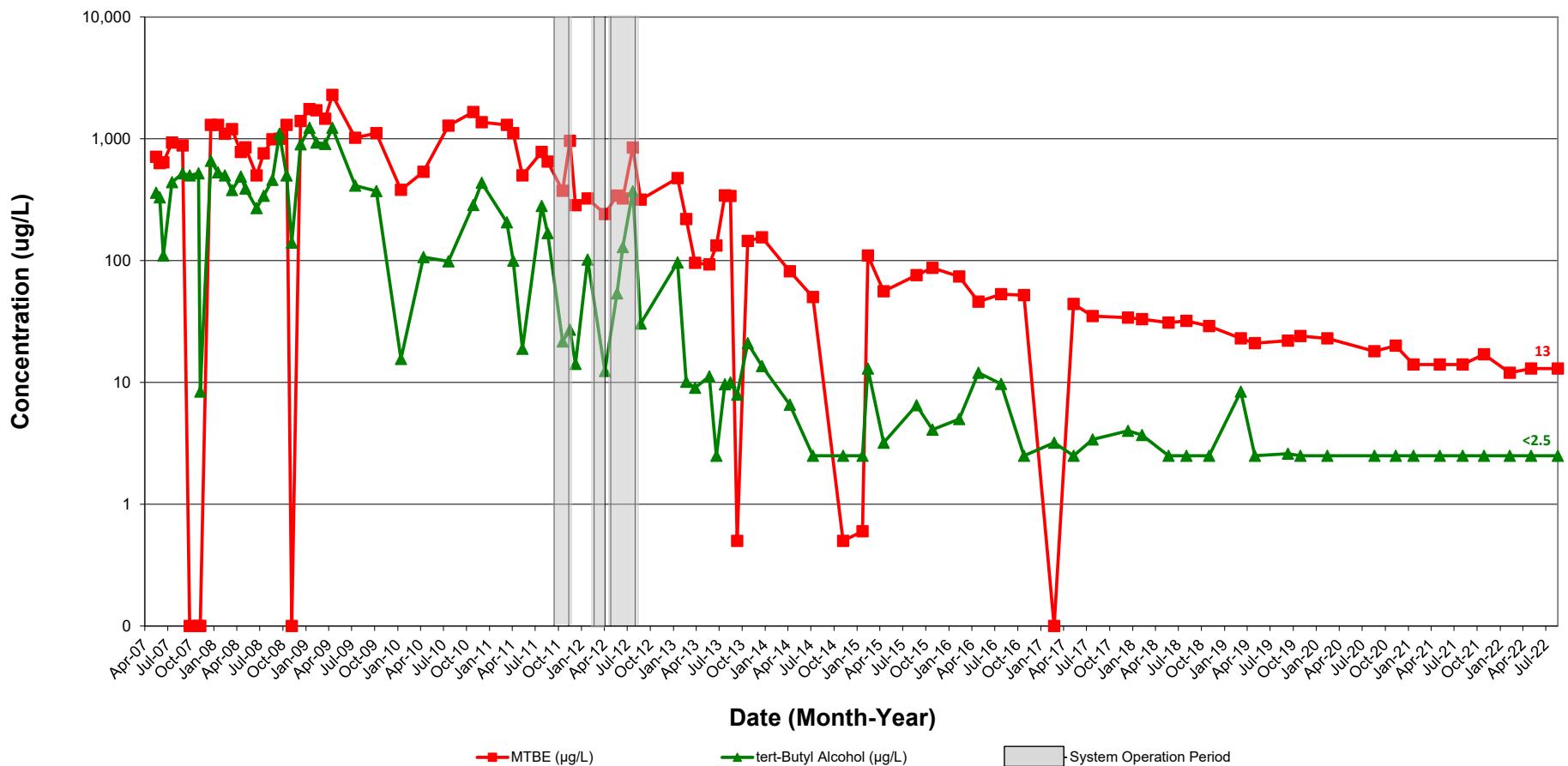


Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100 µg/L, 100 µg/L is plotted).

## RESIDENTIAL SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

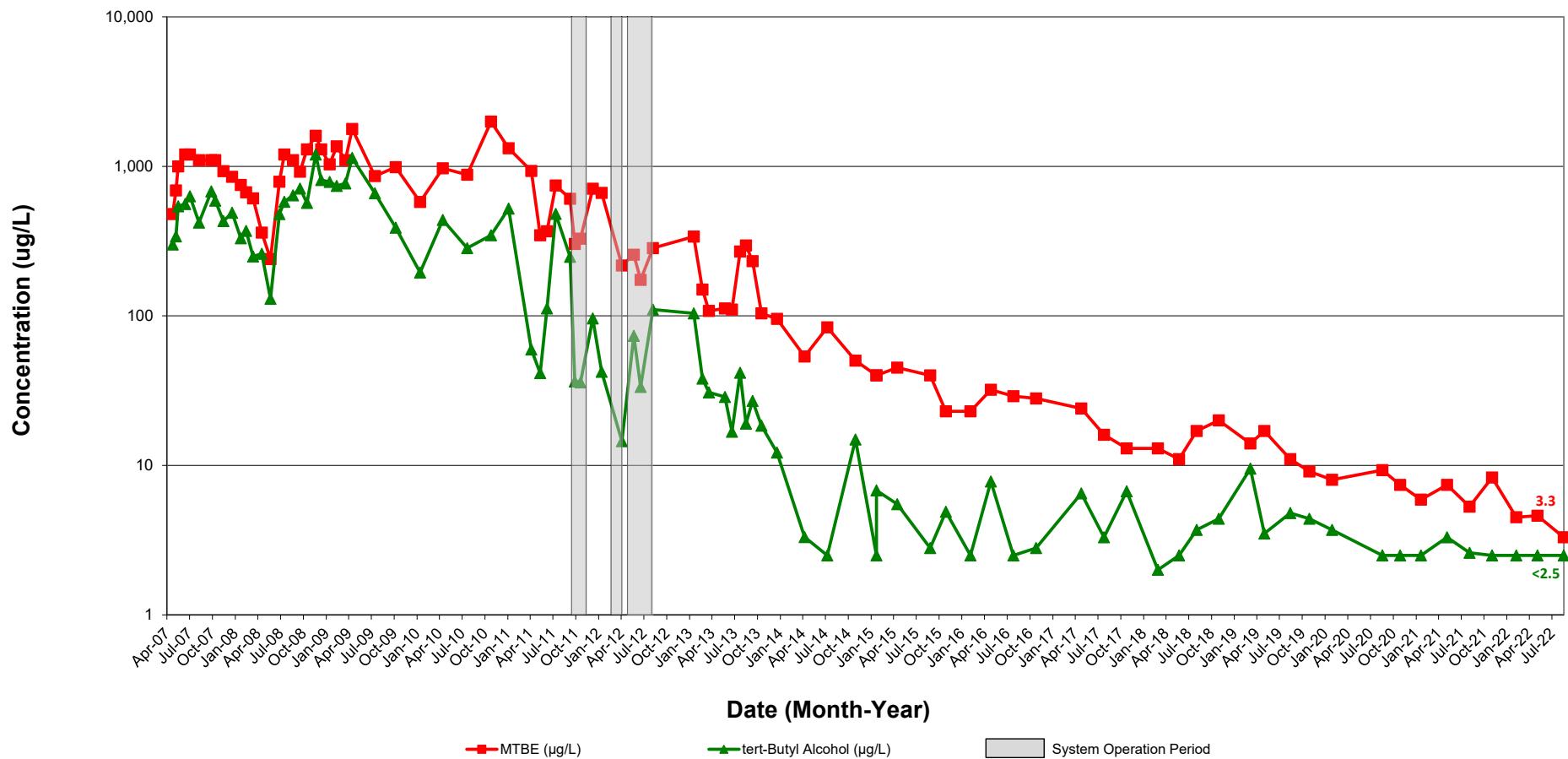
## 3992-FARM-INF



Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100  $\mu\text{g/L}$ , 100  $\mu\text{g/L}$  is plotted).

## RESIDENTIAL SUPPLY WELL GROUNDWATER MONITORING GRAPHS

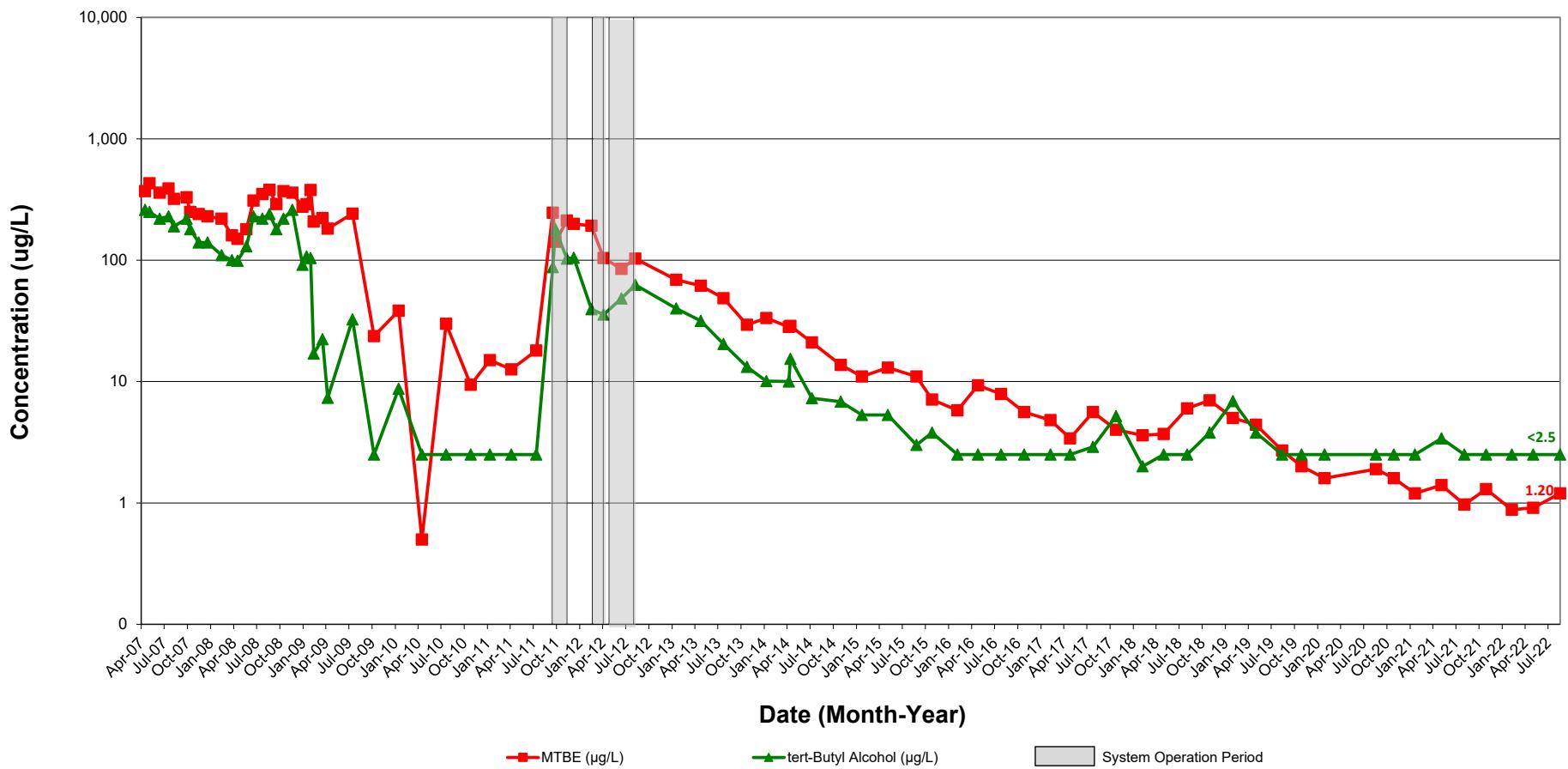
Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

**3994-FARM-INF**

Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100 ug/L, 100 ug/L is plotted).

## RESIDENTIAL SUPPLY WELL GROUNDWATER MONITORING GRAPHS

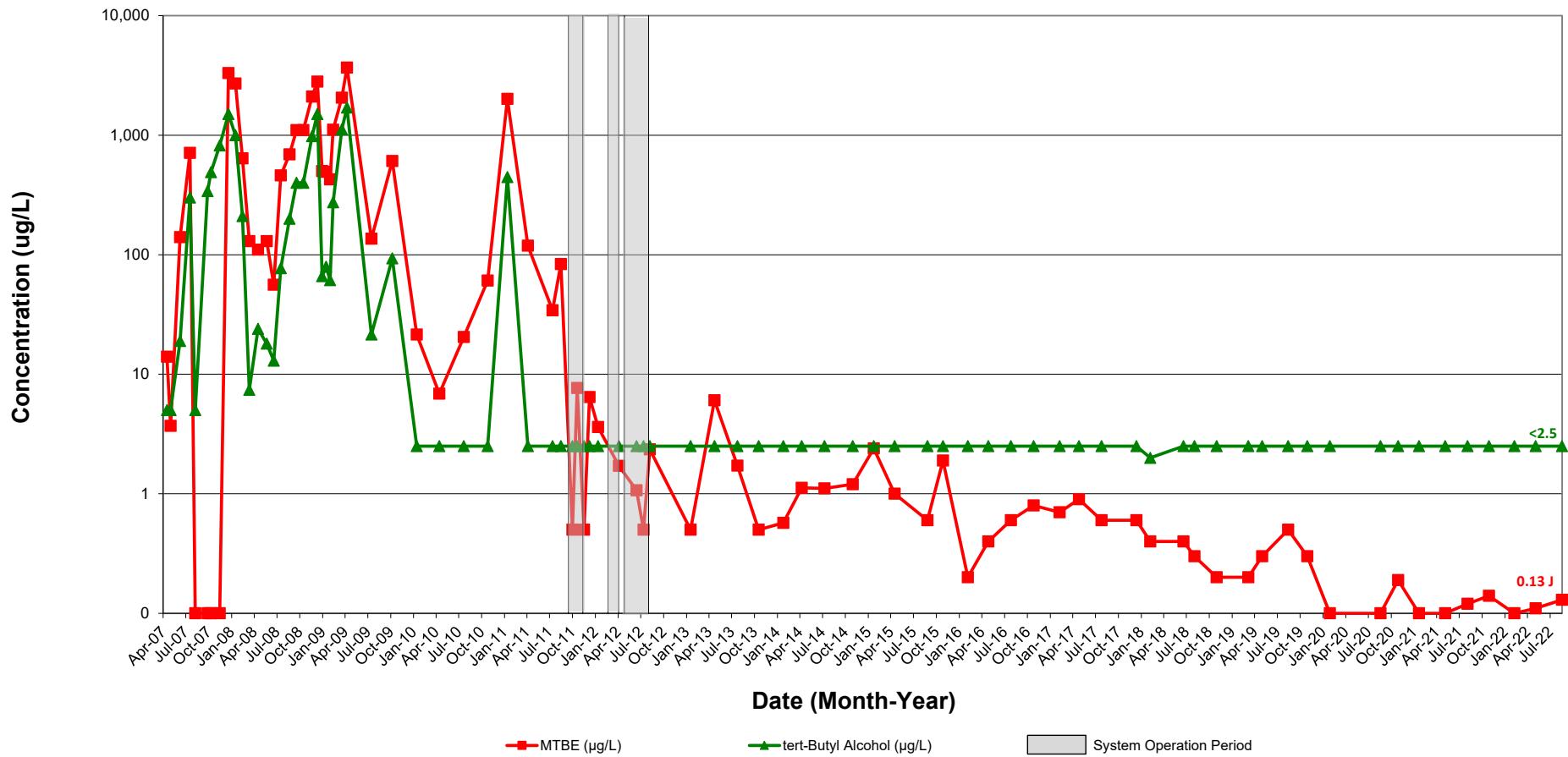
Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

**3996-FARM-INF**

Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100  $\mu\text{g/L}$ , 100  $\mu\text{g/L}$  is plotted).

## RESIDENTIAL SUPPLY WELL GROUNDWATER MONITORING GRAPHS

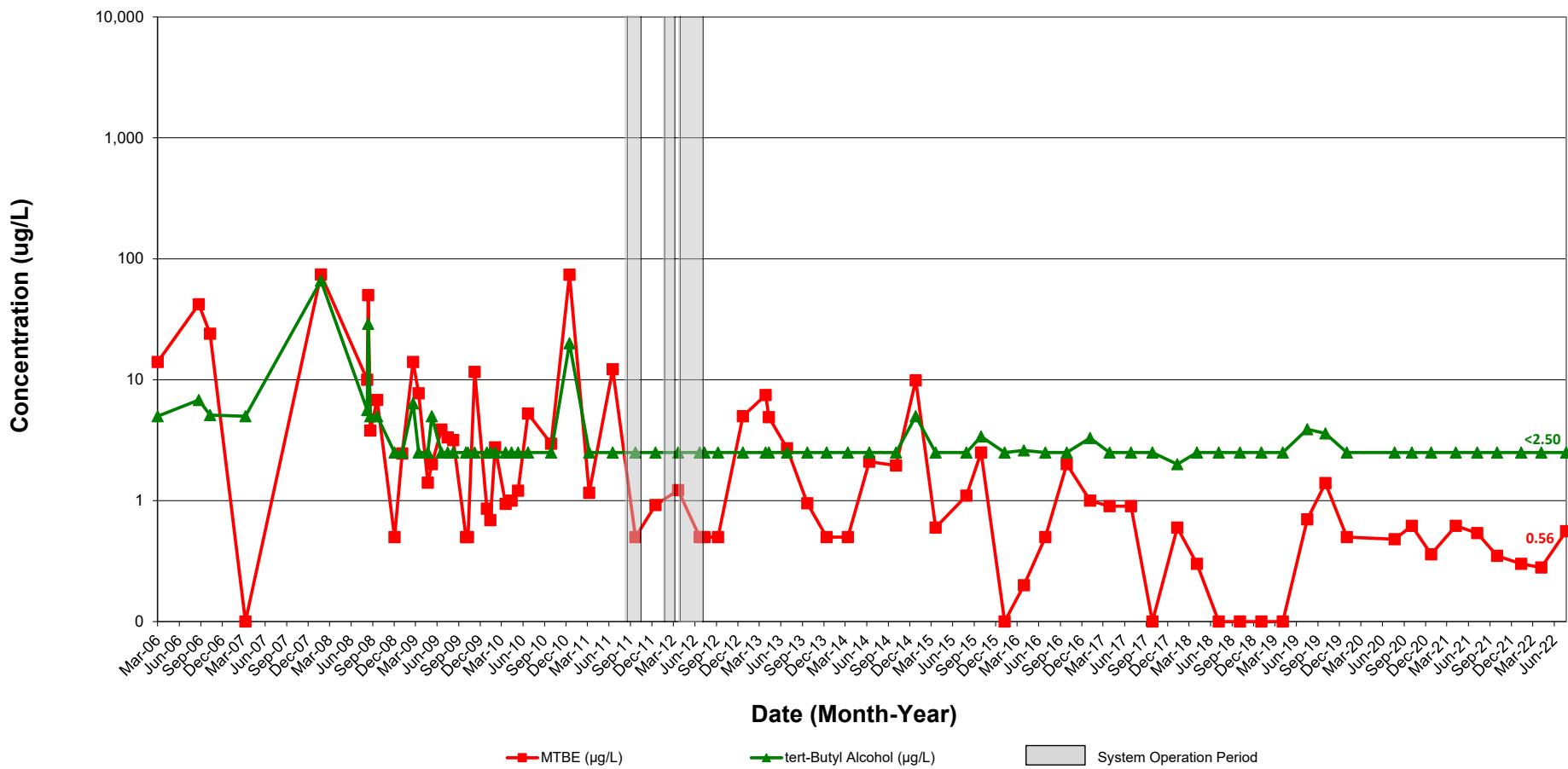
Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

**3997-FARM-INF**

Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND<100 ug/L, 100 ug/L is plotted).

## RESIDENTIAL SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo  
 11791 Fingerboard Rd  
 Monrovia, MD

**GVP-INF**

Note: 1. Non-detect results are plotted at the method detection/reporting limit (i.e., for TPH-GRO = ND100 ug/L, 100 ug/L is plotted).