REPSG
React Environmental
Professional Services Group, Inc.

April 15, 2020

Maryland Department of the Environment
Oil Control Program
1800 Washington Boulevard
Baltimore, Maryland 21230-1719
Attn: Ms. Lindley Campbell
Lindley.Campbell1@maryland.gov

**RE: Combined Quarterly Remediation and Groundwater Monitoring Report**
**First Quarter 2020**
Calvert Citgo
2815 North East Road
North East, MD
MDE OCP Case No. 1992-2616CE
Facility No. 5678
**REPSG Project Reference Numbers 5977.130.01 and 5977.130.02**

## 1.0 INTRODUCTION

### 1.1 Site Location and Description

The Site consists of an irregularly shaped parcel of land located at the street address of 2815 North East Road, in the Town of North East, Cecil County, Maryland. The Site measures approximately 1.05 acres in area; it is bounded by North East Road (MD Route 272) to the east, several single-family residences across North East Road; Quaker Lane (old MD Route 272) and agricultural land to the west, an access road and agricultural land to the south, and a mixture of residential, commercial, and agricultural land to the north. A diagram depicting Site location is provided in **Attachment 1**.

### 1.2 Site Features and Usage

The Site has operated as a retail petroleum station since the late 1950's and it continues to be operated in that capacity. Development at the Site consists of a single-story convenience store structure, located centrally at the Site, surrounded by landscaping, parking and drive areas typical of a service station. Gasoline and diesel pump islands are located east of the structure, parallel to Route 272. A kerosene pump island is located adjacent to and directly north of the structure. An on-Site septic tank is located to the southwest of the existing building. An on-Site potable well (DW-001) is located approximately 33 feet west of the existing structure at the Site. This potable well is actively used by the facility occupying the Site and has a dedicated carbon filtration treatment system.

At present, the Site contains a total of three (3) USTs: one (1) 8,000-gallon steel-constructed UST containing gasoline; one (1) 12,000-gallon steel-constructed UST containing gasoline; and one (1) 12,000-gallon, steel-constructed compartmentalized (two (2) 6,000-gallon compartments) UST containing diesel fuel and kerosene. The gasoline USTs are located in a single tank field to the north of the structure. The diesel/kerosene fuel UST is situated beneath the diesel fuel pump island. All three (3) USTs were installed at the Site in February 1997, following the removal and disposal of the previous gasoline/diesel tank system. A diagram depicting Site features is provided as **Figure 2** in **Attachment 1**.

### 1.3 Area Topography

According to USGS topographic mapping (7.5-minute series, Bay View, Maryland Quadrangle) the Site is located at an elevation of approximately 420 feet above mean sea level (MSL). Topography at the Site slopes very gently towards the east and southeast (see **Figure 1** in **Attachment 1**).

### 1.4 Physiographic Province & Regional Geology

Based on review of mapping prepared by the Maryland Geological Survey[1], the site lies within the Upland Section of the Piedmont Plateau Physiographic Province in Maryland. The Piedmont Plateau Province extends from the inner edge of the Coastal Plain westward to Catoctin Mountain, the eastern boundary of the Blue Ridge Province. The site is located in the eastern portion of the Piedmont Plateau, approximately five (5) miles to the northwest of the boundary between the Piedmont and the Coastal Plain province.

The Piedmont Plateau has considerably more topographic relief than the Coastal Plain, with gently rolling uplands having as much as 500 ft. of local relief. Landforms within this province are generally underlain by extremely deformed and folded schist, gneiss and quartzite bedrock, with an overburden of unconsolidated material known as regolith. In several places these rocks have been intruded by granitic plutons and pegmatites. Differential erosion of these contrasting rock types has produced a distinctive topography in this part of the Piedmont.

Geologic mapping[2] indicates that the Site and its vicinity are underlain by the Pelitic Gneiss rock unit (formerly mapped as a section of the Wissahickon Formation) of metasedimentary rocks. The Pelitic Gneiss is described as "*lustrous, brown, medium to coarse-grained muscovite-biotite-quartz-plagioclase*

[1] Physiographic Provinces and their Subdivisions in Maryland, MGS, 2001: http://www.mgs.md.gov/esic/brochures/mdgeology.html
[2] Geologic Map of Cecil County, Maryland Geological Survey, 1986

*gneiss with… locally abundant red garnets… Unit has a streaked appearance due to…layers, veins, and stringers*." Locally, the unit has an apparent thickness of up to 15,000 feet.

Based on Soil Survey mapping[3] for the area, soil at the Site is mapped as Glenelg loam (GeB), with 3 to 8 percent slopes. This soil type occurs on hillslopes and is described as "loamy residuum weathered from schist and phyllite." The Glenelg loam is further described as well drained, with moderately high to high permeability, and with a seasonal high-water table greater than 80 inches from the surface.

## 1.5 Site Geology

### 1.5.1 Lithology

Based on the observations reported from soil investigations at the Site, the shallow subsurface materials consist primarily of brown to yellow-brown silty to sandy clay, and brown sand and gravel from the surface to a depth of approximately 10 to 15 feet below grade (fbg). Beginning at the depth of 10 to 15 fbg, the boring logs indicate the presence of highly weathered, dense, clayey unconsolidated materials, with significant mica content, that retain the foliation and schistosity of underlying bedrock (i.e., saprolite). Saprolite was observed to approximately 40 fbg. Competent bedrock was observed at a depth of 98 fbg during construction of the on-Site deep monitoring well MW-008D, at 67 fbg in off-Site deep monitoring well MW-009D, and at 67.4 fbg in off-Site deep monitoring well MW-010D.

### 1.5.2 Other Geologic Structures

A downhole acoustic test was completed on MW-008D on October 3, 2011 by Advanced Geologic Services (AGS). The results of this test indicated that the most prominent borehole fractures observable within the deep well were at 103 fbg, 110 fbg, and 111 fbg. The fractures noted at 110 fbg and 111 fbg were indicative of the presence of a water bearing zone. In addition to these primary fractures, two secondary fractures were observed at 117 fbg and 120 fbg. These fractures did not appear to supply a significant amount of water.

A downhole geophysical survey was completed on off-Site drinking water well DW-005 (located at 2802 Northeast Road) on April 21-22, 2015 by AGS. The geophysical borehole evaluation indicated that bedrock fractures are a combination of foliation fractures, non-foliation fractures, and high angle joint fractures; with a zone between depths of 200 feet and 230 feet containing several intersecting discontinuous fractures that, combined with the continuous fractures, may contribute water to the well. The results further indicated that the largest grouping of fractures within the well

[3] Natural Resources Conservation Service, Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

is from 210 to 218 fbg. Packer testing conducted in conjunction with the downhole survey did not indicate a clear and distinct water bearing zone within the 0-250 foot depth range.

## 1.6 Hydrogeology

### 1.6.1 Surface Water

No surface water bodies are present on the Site. An unnamed drainage swale runs along the west side of North East Road, beginning just south of the intersection of North East Road and Quaker Lane. The nearest permanent body of water in the vicinity of the Site is a small pond connected to North East Creek and located approximately 1,695 feet southwest of the Site. Surface water drainage follows the general direction of the slope at the Site (southeasterly). Storm drain collection basins are located on the roads to the east and west the Site. No stormwater collection basins are present on the Site.

### 1.6.2 Hydrology

The Site is underlain by the Piedmont crystalline-rock aquifer systems; fractured igneous and metamorphic rock aquifers. This crystalline rock tends to possess low primary porosity; groundwater occurs and flows primarily through secondary porosity, i.e., rock joints and fractures. Groundwater in the fractured rock aquifers may occur in either confined or unconfined conditions. Groundwater flow patterns are dependent on multiple factors including regional topography, and various characteristics of rock fracturing, including orientation, density, and connectivity of the fractures.

There is a shallow water table (i.e., unconfined) aquifer in the overburden and weathered rock layers above the top of competent fractured rock. Subsurface investigations at the Site indicated that groundwater table was generally first observed in the fine-grained overburden materials at the Site at depths of 20.0 to 24.5 fbg. Depths to water of 7.28-15.45 fbg were measured in the shallow groundwater monitoring wells included within the groundwater monitoring program during the March 2020 groundwater monitoring event. (See **Attachment 2** for recent groundwater level information.)

Based on review of water elevations in groundwater monitoring wells at the Site, as calculated from measurements obtained quarterly groundwater events (see **Attachment 2**), shallow groundwater at the Site is estimated to flow in a southeasterly direction, while deep groundwater has historically be interpreted to flow in a more east-southeasterly direction. It is not known whether variations in groundwater flow directions may be attributable to pumping in nearby potable wells, seasonal variations, or other factors. Recent groundwater contour diagrams are included in **Attachment 1**.

## 2.0 BACKGROUND

The Site has been under investigation in some capacity since at least 1991, with an ongoing groundwater monitoring program and drinking water monitoring program in progress under REPSG's oversight at the Site, as well as an off-Site drinking water monitoring program, since 2008. A summarized chronology of site activities since 2009, including dates of field activities, report submittals, and MDE directive letters, is included below.

Field sampling activities for the first quarter 2020 were scheduled for March 2020. In the second week of March, the Office of Governor Larry Hogan, as well as the Centers for Disease Control (CDC), issued a series of public health protection measures in order to limit the spread of COVID-19 during this pandemic health crisis. In order to comply with these orders and in an abundance of caution, field collection activities/procedures were modified during the March 2020 event from previous events. Details of those modifications are included as applicable below.

**2009**

| | |
|---|---|
| 03/2009 | Quarterly Groundwater and Drinking Water Sampling Event conducted March 12, 2009 |
| 07/2009 | Quarterly Groundwater and Drinking Water Sampling Event conducted July 21, 2009 |
| 10/2009 | MDE Site Status Letter Issued |
| 12/2009 | Quarterly Groundwater and Drinking Water Sampling Event conducted December 11, 2009 |

**2010**

| | |
|---|---|
| 03/2010 | Quarterly Groundwater and Drinking Water Sampling Event Conducted March 18, 2010 |
| 04/2010 | Site Status Report and Site Investigation Workplan (SSR/SIW) submitted by REPSG |
| 05/2010 | Sentry I Open-Air volatilization system installed at both 2794 and 2802 Northeast residences |
| 05/2010 | Quarterly Groundwater and Drinking Water Sampling Event Conducted May 24, 2010 |
| 08/2010 | Revised Subsurface Investigation Workplan (SIW) submitted by REPSG |
| 09/2010 | Quarterly Groundwater and Drinking Water Sampling Event conducted September 15, 2010 |
| 09/2010 | Downhole acoustic test completed on DW-001 on September 29, 2010 |
| 10/2010 | Soil boring investigation (borings B-0013 through B-025) completed on October 5-6, 2010 |
| 11/2010 | Replacement shallow groundwater monitoring wells MW-001R, MW-003R, and MW-005R installed on November 10, 2010 |
| 11/2010 | Quarterly Groundwater and Drinking Water Sampling Event conducted November 28-29, 2010 |
| 12/2010 | Site Status Report (SSR) submitted by REPSG |

**2011**

| | |
|---|---|
| 03/2011 | Quarterly Groundwater and Drinking Water Sampling Event conducted March 23-24, 2011 |
| 05/2011 | Formal Request for Sampling Program Revision submitted by REPSG |
| 06/2011 | MDE Extension Approval Directive Letter Issued |
| 06/2011 | Quarterly Groundwater and Drinking Water Sampling Event Conducted June 19-20, 2011 |
| 08/2011 | Deep groundwater monitoring well MW-008D installed on August 8, 2011 |
| 08/2011 | Intermediate zone groundwater monitoring well MW-008 installed on August 26, 2011 |
| 08/2011 | Active Remedial Technologies Report submitted by REPSG |

| | |
|---|---|
| 09/2011 | Quarterly Groundwater and Drinking Water Sampling Event conducted September 14-16, 2011 |
| 10/20111 | Downhole acoustic test completed on MW-008D on October 3, 2011 |
| 11/2011 | Quarterly Groundwater and Drinking Water Sampling Event conducted November 26-27, 2011 |

**2012**

| | |
|---|---|
| 02/2012 | Quarterly Groundwater and Drinking Water Sampling Event conducted February 28-29, 2012 |
| 03/2012 | Formal Request for Sampling Program Revision submitted by REPSG |
| 05/2012 | MDE Site Status Directive Letter Issued |
| 05/2012 | Discrete Zone Sampling Methodology information submitted by REPSG |
| 05/2012 | Quarterly Groundwater and Drinking Water Sampling Event conducted May 7-8, 2012 |
| 07/2012 | Pilot Test Workplan (PTW) submitted by REPSG |
| 08/2012 | Quarterly Groundwater and Drinking Water Sampling Event conducted August 13-14, 2012 |
| 11/2012 | Bench Test Workplan submitted by REPSG |
| 11/2012 | Quarterly Groundwater and Drinking Water Sampling Event conducted November 15-16, 2012 |
| 12/2012 | MDE Denial of Bench Test Work Plan and Request for Additional Information Directive Letter Issued |
| 12/2012 | Response to Request for Additional Pilot Testing Information submitted by REPSG |

**2013**

| | |
|---|---|
| 03/2013 | Vapor monitoring points VMP-001, VMP-002, VMP-003, and VMP-004 installed on March 7, 2013 |
| 03/2013 | Quarterly Groundwater and Drinking Water Sampling Event conducted March 7-8, 2013 |
| 03/2013 | Full-scale Dual-Phase Extraction (DPE) Single-Well Pilot Test completed on March 13, 2013 |
| 04/2013 | Sentry I Open-Air volatilization system removed from both 2794 and 2802 Northeast residences |
| 04/2013 | Quarterly Groundwater and Drinking Water Sampling Event conducted April 1-2, 2013 |
| 05/2013 | Corrective Action Plan (CAP) submitted by REPSG |
| 07/2013 | CAP Addendum submitted by REPSG |
| 09/2013 | Quarterly Groundwater and Drinking Water Sampling Event conducted September 12-13, 2013 |
| 10/2013 | MDE CAP Approval Letter Issued |
| 10/2013 | REPSG Response to MDE CAP Approval Letter |
| 12/2013 | Quarterly Groundwater and Drinking Water Sampling Event conducted December 17-18, 2013 |

**2014**

| | |
|---|---|
| 01/2014 | Quarterly Groundwater and Drinking Water Sampling Event conducted January 13-14, 2014 |
| 02/2014 | Proposed Interim Remedial Measures (PIRM) Letter submitted by REPSG |
| 02/2014 | Remedial Measures Update Letter submitted by REPSG |
| 03/2014 | Vapor Monitoring Points (VMP-001 through VMP-004) installed March 7-8, 2014 |
| 03/2014 | Shallow and intermediate groundwater zone monitoring wells (MW-009, MW-009D, MW-010, and MW-010D) installed at off-Site residence properties March 10-12, 2014 |

| | |
|---|---|
| 04/2014 | Quarterly Groundwater and Drinking Water Sampling Event conducted on April 21-23, 2014 |
| 07/2014 | Quarterly Groundwater and Drinking Water Sampling Event conducted on July 29-31, 2014 |
| 08/2014 | MDE Letter Request for In-Person Meeting |
| 10/2014 | In-Person Meeting at MDE between MDE, REPSG, and Responsible Parties to Discuss CAP and PIRM |
| 10/2014 | Quarterly Groundwater and Drinking Water Sampling Event Conducted October 20-22, 2014 |
| 11/2014 | Revised Scope of Work/Supplemental Work Plan (SOW) submitted by REPSG |

**2015**

| | |
|---|---|
| 01/2015 | Quarterly Groundwater and Drinking Water Sampling Event Conducted January 20-22, 2015 |
| 02/2015 | MDE Partial Workplan Approval Letter Issued |
| 04/2015 | Geophysical borehole survey ("downhole acoustic") and discrete-zone ("packer testing") was conducted at DW-005 on April 21-24, 2015 |
| 05/2015 | Quarterly Groundwater and Drinking Water Sampling Event Conducted April 27-May 1, 2015 |
| 06/2015 | Supplemental Investigation Report submitted by REPSG |
| 07/2015 | Quarterly Groundwater and Drinking Water Sampling Event Conducted July 13-15, 2015 |
| 09/2015 | Response to Request for Ozone Pilot Testing and Full System Install Information submitted by REPSG |
| 10/2015 | Quarterly Groundwater and Drinking Water Sampling Event Conducted October 20-22, 2015 |

**2016**

| | |
|---|---|
| 01/2016 | Quarterly Groundwater and Drinking Water Sampling Event Conducted January 19-21, 2016 |
| 02/2016 | MDE Ozone Pilot Test Approval Letter Issued |
| 03/2016 | REPSG response to MDE Ozone Pilot Test Approval Letter |
| 04/2016 | Quarterly Groundwater and Drinking Water Sampling Event Conducted April 12-15, 2016 |
| 08/2016 | Off-Site Ozone Treatability Bench-Test Study conducted on August 23, 2016 |
| 08/2016 | Quarterly Groundwater and Drinking Water Sampling Event Conducted August 23-25, 2016 |
| 10/2016 | Off-Site Ozone Treatability Bench-Test Study submitted by REPSG |
| 10/2016 | MDE Notice of Non-Compliance of CAP Implementation Letter Issued |
| 10/2016 | REPSG Response to MDE Notice of Non-Compliance Letter Issued |
| 11/2016 | Quarterly Groundwater and Drinking Water Sampling Event Conducted November 8-10, 2016 |
| 12/2016 | Installation of Dual-Phase Extraction (DPE) System Components at Site begun on December 12, 2016 |

**2017**

| | |
|---|---|
| 03/2017 | Quarterly Groundwater and Drinking Water Sampling Event Conducted March 6-8, 2017 |
| 04/2017 | DPE System Installation Completed and System Started on April 24, 2017 |
| 05/2017 | DPE System Startup Summary submitted by REPSG |

| | |
|---|---|
| 05/2017 | Quarterly effluent water sample collected from frac tank inlet and quarterly vapor emissions sample collected from DPE system on May 12, 2017 |
| 06/2017 | Quarterly Groundwater and Drinking Water Sampling Event Conducted May 30-June 1, 2017 |
| 06/2017 | Effluent water sample collected from frac tank inlet on June 21, 2017 |
| 06/2017 | First Dual-Phase Extraction System Remedial Action Progress Report submitted by REPSG |
| 07/2017 | Quarterly effluent water sample collected from frac tank inlet and quarterly vapor emissions sample collected from DPE system on July 11, 2017 |
| 08/2017 | Quarterly Groundwater and Drinking Water Sampling Event Conducted August 14-16, 2017 |
| 11/2017 | Quarterly Groundwater and Drinking Water Sampling Event Conducted November 14-16, 2017 |
| 11/2017 | Quarterly effluent water sample collected from frac tank inlet and quarterly vapor emissions sample collected from DPE system on November 15, 2017 |
| 12/2017 | Second Dual-Phase Extraction System Remedial Action Progress Report submitted by REPSG |

**2018**

| | |
|---|---|
| 02/2018 | Damage sustained by DPE system during winter assessed on February 27-28, 2018 |
| 03/2018 | MDE Reporting Requirements Directive Letter Issued |
| 03/2018 | Quarterly Groundwater and Drinking Water Sampling Event Conducted March 6-8, 2018 |
| 03/2018 | Repairs to DPE system completed between March 8-29, 2018; system restarted on March 30, 2018 |
| 05/2018 | Off-Site Ozone/Ultraviolet Treatment Pilot Test at 2794 Northeast Road Event Conducted May 29-31, 2018 (Report will be provided under separate cover) |
| 06/2018 | Quarterly Groundwater and Drinking Water Sampling Event Conducted June 12-13, 2018 |
| 06/2018 | Quarterly effluent water sample collected from frac tank inlet at DPE system on June 15, 2018 |
| 06/2018 | Quarterly vapor emissions samples collected from DPE system on June 19, 2018 |
| 09/2018 | Quarterly Groundwater and Drinking Water Sampling Event Conducted September 18-19, 2018 |
| 09/2018 | Quarterly effluent water sample collected from frac tank inlet at DPE system on September 26, 2018 |
| 09/2018 | Quarterly vapor emissions samples collected from DPE system on September 26, 2018 |
| 11-12/2018 | DPE System Trenching and Discharge Point Installation Conducted November 26, 2018 through December 14, 2018 |
| 12/2018 | Quarterly Groundwater and Drinking Water Sampling Event Conducted December 10-12, 2018 |

**2019**

| | |
|---|---|
| 03/2019 | Quarterly Groundwater and Drinking Water Sampling Event Conducted March 4-6, 2019 |
| 04/2019 | Repairs to DPE system completed in April 2019 with the system restarted on April 16, 2019 |
| 06/2019 | Quarterly Groundwater and Drinking Water Sampling Event Conducted June 11-13, 2019 |
| 06/2019 | Quarterly effluent water sample collected from frac tank inlet at DPE system on June 13, 2019 |
| 06/2019 | Quarterly vapor emissions samples collected from DPE system on June 13, 2019 |

| | |
|---|---|
| 09/2019 | Quarterly Groundwater and Drinking Water Sampling Event Conducted September 18-20, 2019 |
| 09/2019 | Quarterly effluent water sample collected from frac tank inlet at DPE system on September 30, 2019 |
| 09/2019 | Quarterly vapor emissions samples collected from DPE system on September 30, 2019 |
| 10/2019 | Quarterly Drinking Water Sampling Event for VOCs from On-Site Conducted on October 24, 2019 |
| 11/2019 | Quarterly Drinking Water Sampling Event for chlorine from On-Site Conducted on November 25, 2019 |
| 11/2019 | Quarterly Groundwater and Drinking Water Sampling Event Conducted November 25, 2019 |
| 11/2019 | Quarterly effluent water sample collected from frac tank inlet at DPE system on November 26, 2019 |
| 11/2019 | Quarterly vapor emissions samples collected from DPE system on November 25, 2019 |

<u>2020</u>

| | |
|---|---|
| 03/2019 | Quarterly Groundwater Sampling Event Conducted March 30-31, 2020<br>Drinking water was not collected from on-site during the March 2020 mobilization as a precaution during the COVID-19 pandemic health crisis. |

In addition to the above listed items, off-Site drinking water samples have been collected on an approximately monthly basis at both 2794 and 2802 North East Road since 2009. Exceptions to this collection schedule only occur when access to a property is restricted/unavailable due to the homeowner's lack of response to requests for access, and more recently as a precaution during the COVID-19 pandemic health crisis.

## 3.0 ONGOING GROUNDWATER MONITORING

### 3.1 Groundwater Monitoring Methodology

All historical groundwater monitoring wells and measuring points at the Site are gauged and sampled via purge-method sampling as follows:

- Open well and immediately collect an air reading via a photoionization detector (PID) to analyze for volatile organic compounds (VOCs) to determine if any possible health and safety issues are present. Readings are recorded. If necessary, any appropriate health and safety measures are taken.
- Using liquid level measuring device, water level and total depth of the well is gauged and record on appropriate groundwater sampling data sheets.
- PID readings, water level and total depth of well are taken at each well included within the scope of sampling prior to conducting any purging activities.
- Following water measurement collection at each well, equipment is decontaminated before use in any other wells.
- Calculate the water volume of the well.

- Begin purging of the well, using a submersible pump, and take Water Quality Indication Parameters (WQIP). WQIP includes pH, temperature, turbidity, dissolved oxygen, and specific conductivity of the water. Readings are subsequently taken for every (3) gallons of purge water after the initial. Notes on the initial color, clarity and odor(s) of the water are taken as appropriate.
- All purged water is pumped directly into drum for future disposal by a licensed disposal facility.
- Continue purging of the well until three (3) consecutive readings of the WQIP are consistent in succession.
- Once the parameters hold constant, the pump and tubing are removed from the well to prepare for sample collection.
- Using a disposable bailer, water is collected from the well and deposited in the necessary bottleware, according to the specific regulations.
- Following the completion of sampling at each well, equipment is decontaminated before use in any other wells.
- Samples are labeled and placed in a cooler and sent to the lab for analysis under chain of custody.

During the first quarter 2020 groundwater sampling event, the sampling methodology was modified in order to comply with social distancing requirements and related health and safety protocols pertaining to the ***COVID-19 pandemic health crisis***. The handling of drums and operation of submersible pumps could not be completed while maintaining health and safety protocols, therefore purging of the wells and collection of WQIP were omitted from the sampling protocol for this quarter. Sample collection proceeded following collection of liquid level measurements and PID readings across the entire well network. Collection of groundwater samples was completed via single-use, disposable bailers in accordance with protocols indicated above.

### 3.2 Groundwater Monitoring Activities

This combined report covers the period of time that includes the first quarter 2020.

#### 3.2.3 Groundwater Gauging and Sampling Program

Prior to the second quarter 2017, REPSG collected samples from thirteen (13) on-Site monitoring wells/measuring points. Beginning in April 2017, REPSG began active remediation via dual phase extraction (DPE). As outlined in REPSG's *DPE System Start-Up Report*, dated May 19, 2017, three (3) monitoring wells (MW-001, MW-003R, and MW-005R) were converted to extraction wells and are no longer accessible for collecting groundwater samples. A figure depicting the groundwater monitoring well network, as well as on-Site and off-Site potable wells is included as **Figure 3** in **Attachment 1**.

Therefore, beginning in the third quarter of 2017, there are ten (10) monitoring wells/measuring points on-Site and four (4) off-Site monitoring wells gauged and sampled quarterly. The wells currently included in the groundwater monitoring program are listed in **Table 1**, below.

**Table 1 - Current Monitoring Well Network**

| | | | | |
|---|---|---|---|---|
| MP-001 | MW-002 | MW-006 | MW-008D | MW-010* |
| MP-002 | MW-003 | MW-007 | MW-009* | MW-010D* |
| MW-001R | MW-005 | MW-008 | MW-009D* | |

* = Off-Site well

#### **3.2.3.1** *Groundwater Gauging Results*

No liquid phase hydrocarbon (LPH) was observed in any of the wells included within the groundwater monitoring program during this period. Field collection notes are included in **Attachment 4**. Well gauging and elevation data is provided in **Attachment 2**. Groundwater contour diagrams for this groundwater sampling event are included as **Figures 5** and **6** in **Attachment 1**.

#### **3.2.3.2** *Groundwater Sampling Results*

Groundwater samples were collected on March 30-31, 2020. All groundwater samples were submitted, packed on ice and under chain of custody, to Analytical Laboratory services, Inc. (ALS) of Middletown, PA for analysis for VOCs including fuel oxygenates via EPA method 8260. ALS is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP (MD Cert No. 128).

Results of the groundwater investigation laboratory analyses were compared against the applicable MDE VCP groundwater standards. Laboratory analytical results indicated the presence of several VOCs at concentrations above the applicable MDE VCP Groundwater Standards[4]. This comparison indicated that results for this reporting period were consistent with prior sampling events, with the following exceptions and outliers**:**

- MW-002 had no exceedances for the first time since August 2017;
- MW-003 had no exceedances for the first time since at least 2009;
- MW-008 had no exceedances for the first time since installation of this well in 2011;
- MW-008D recorded a first-time exceedance (MTBE) since installation of this well in 2011;
- MW-009D had no exceedances for the first time since installation of this well in 2014; and

[4] Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (October 2018).

- MW-010D continued to exhibit no exceedances for the second consecutive quarter.

Additional groundwater sampling at these locations will be required in subsequent quarters to determine if these results are reflective of changing conditions, or a result of the change in sampling methodology utilized at the time of sample collection to address health and safety concerns related to the ***COVID-19 pandemic health crisis***.

In addition, during the fourth quarter 2019 sampling event 1,2-dichloroethane (MW-003) and MTBE in MW-009 were identified above the respective MDE standards for the first time since initiation of sampling at these locations. During the first quarter 2020, sampling at these locations did not identify the respective COCs above MDE standards suggesting the results from the fourth quarter 2019 were anomalous.

A comparison summary of groundwater analytical results is provided in **Attachment 2**. The complete analytical laboratory reports and associated chains of custody are provided in **Attachment 3.** Contaminant distribution maps for the groundwater sampling event showing compound concentrations above the applicable MDE VCP groundwater standards in groundwater at the Site is presented as **Figure 7** in **Attachment 1**.

## 4.0 ONGOING DRINKING WATER MONITORING PROGRAM

This combined report covers the period of time that includes the first quarter 2020.

### 4.1 On-Site Drinking Water Monitoring Program

Drinking water samples are collected on a quarterly basis on-Site. A Granular Carbon Filtration (GAC) system is in place at this location. These samples are historically collected as follows:

- DW-001: Pre-Carbon Filtration
- DW-001A: Mid-Carbon Filtration
- DW-001B: Post-Carbon Filtration

During this reporting period, quarterly drinking water samples were not able to be collected during the scheduled March 2020 mobilization event for the quarter due to health and safety concerns pertaining to the ***COVID-19 pandemic health crisis***.

### 4.2 Off-Site Drinking Water Monitoring Program

In addition to the on-Site drinking water sampling program, off-Site drinking water samples are collected on a monthly basis from the residences located at 2794 Northeast Road and 2802 Northeast Road. GAC systems are in place at both of these residences. These samples are collected as follows:

- Off-Site, 2794 Northeast Road (O'Brien Residence)
    - DW-004C: Pre-Carbon Filtration
    - DW-004I: Mid-Carbon Filtration 1
    - DW-004J: Mid-Carbon Filtration 2
    - DW-004K: Post-Carbon Filtration
- Off-Site, 2802 Northeast Road (Harrison Residence)
    - DW-005A: Pre-Carbon Filtration
    - DW-004I: Mid-Carbon Filtration 1
    - DW-004J: Mid-Carbon Filtration 2
    - DW-004K: Post-Carbon Filtration

During this reporting period, monthly drinking water samples were collected as follows:

- *Off-Site, 2794 Northeast Road (O'Brien Residence)*: January 17, 2020

No samples were collected at 2802 Northeast Road during the first quarter 2020 because the property owners did not provide access. The property owners at 2802 Northeast Road previously indicated in the fall of 2019 that the building would be vacant during the winter while they were residing at an out of town residence. No samples were collected at 2794 Northeast Road during the month of February 2020 as the homeowner did not provide access during that month, and no samples were collected in March 2020 due to health and safety concerns pertaining to the ***COVID-19 pandemic health crisis***.

All drinking water samples are submitted, packed on ice and under chain of custody, to ALS of VOCs including fuel oxygenates via EPA method 524.2.

The results of the drinking water analysis were compared against the drinking water standards set by the U.S. Environmental Protection Agency (USEPA)[5], which sets legal limits that certain compounds in drinking water should meet in order to be protective of human health. Not all compounds analyzed for in drinking water samples have standards set by the USEPA. MTBE for

[5] EPA National Primary Drinking Water Standards: Office of Water (June 2003) and the most conservative of EPA Drinking Water Advisory levels: Office of Water (April 2012).

which no standard is set by the EPA, is therefore compared against the MDE's recommended control level of 20 parts per billion.

Laboratory analytical results indicated the presence of several VOCs at concentrations above the applicable standards in the pre-filtration sample (DW-004C). This comparison indicated that results for this reporting period were consistent with prior sampling events, with no unanticipated exceedances or outliers. A comparison summary of groundwater analytical results is provided in **Attachment 2.**

The complete analytical laboratory reports and associated chains of custody are provided in **Attachment 3.**

## 5.0 ONGOING DPE SYSTEM OPERATION

This combined report covers the period of time that includes the first quarter 2020.

### 5.1 DPE System Set-Up

The Dual-Phase Extraction (DPE) system at the Site was initially started on April 24, 2017. The system consists of a network of monitoring wells that have been converted to extraction wells piped to a central remediation system. The DPE system utilizes extraction of vapor and groundwater for mass removal of petroleum-related regulated compounds in the unsaturated zone from the subsurface. A figure depicting the, vapor extraction wells, vapor monitoring points, and the DPE system is included in **Attachment 1**. A copy of the Soil Vacuum Extraction & Groundwater Air Stripping (SVE) System Permit (No. 015-0173-9-0226) is included in **Attachment 5**.

At this time, the DPE system is operating on well MW-005R only. System performance is monitored through readings taken from diagnostic gauges on system equipment.

### 5.2 DPE System Downtime and Maintenance

In order to avoid system damage as a result from the encroachment of extreme cold weather, the DPE system was shutdown at the end of the fourth quarter 2019. Weather throughout the months of December through February continued to be non-conducive to the running of the system.

An assessment of the system will be conducted in May 2020 following the system shutdown to determine if any damage was sustained during the winter season. Following the completion of the necessary assessment and any necessary repairs, operation of the system is anticipated to resume in the second quarter 2020.

### 5.3 DPE System Performance

As a result of the winter downtime of the system no system operational data is available for the first quarter 2020. Data collection associated with the operation of the system will resume in the second quarter 2020.

### 5.4 Future DPE System Activities

At the end of the fourth quarter 2019, the DPE system was placed into winter downtime mode to prevent damage/deterioration to both aboveground and belowground components during the winter season. The system will be assessed, repaired as appropriate, and restarted during the second quarter of 2020. The restarting of this system will be conducted in compliance with current CDC and other federal, state, and local guidelines regarding the current ***COVID-19 pandemic health crisis***.

Upon restart of the DPE system, the DPE system will be adjusted to begin withdrawal on an additional two (2) wells (MW-001 and MW-003R) at the Site under the approved NPDES permit.

If you have any additional questions regarding this request, please contact the undersigned at 215-729-3220.

Sincerely,
**React Environmental Professional Services Group, Inc**

James Manuel
Senior Project Manager

Suzanne Shourds
Senior Project Manager

**Enclosures**
Attachment 1: Figures
Attachment 2: Sampling Results Summary Tables
Attachment 3: Laboratory Reports and Chains of Custody
Attachment 4: Field Sampling Sheets
Attachment 5: Permits

# ATTACHMENT 1: FIGURES

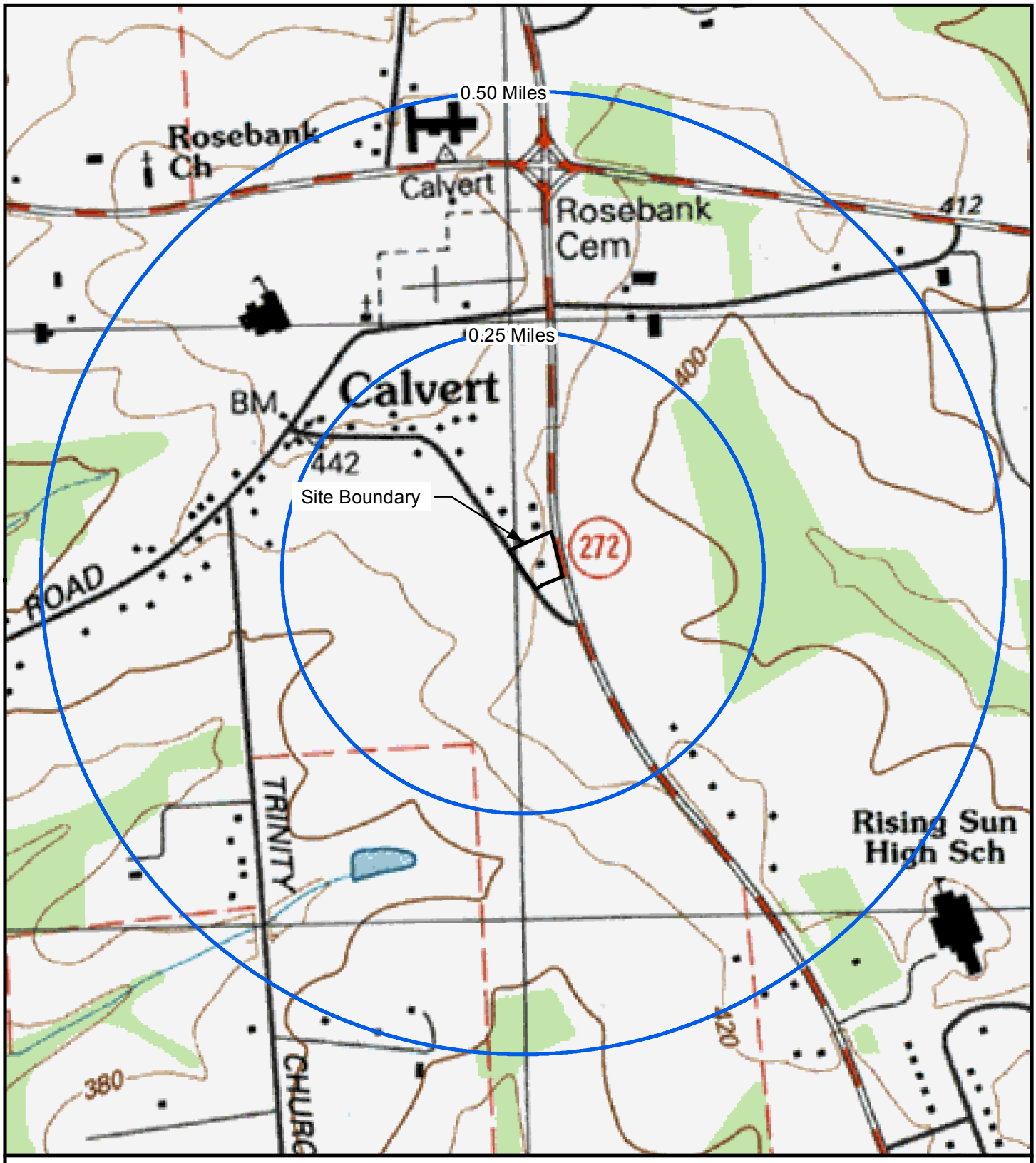



*FIGURE 1: SITE LOCATION DIAGRAM*

REPSG
React Environmental Professional Services Group, Inc.

*MAP SCALE: 1 inch = 750 feet*
0 162.5 325 650 975 1,300 Feet

*PROJECT NAME: CALVERT CITGO*
*PROJECT ADDRESS: 2815 NORTH EAST ROAD, NORTH EAST, MD*
*PROJECT NUMBER: 005977*
*DATE: MAY 2017*

N
S

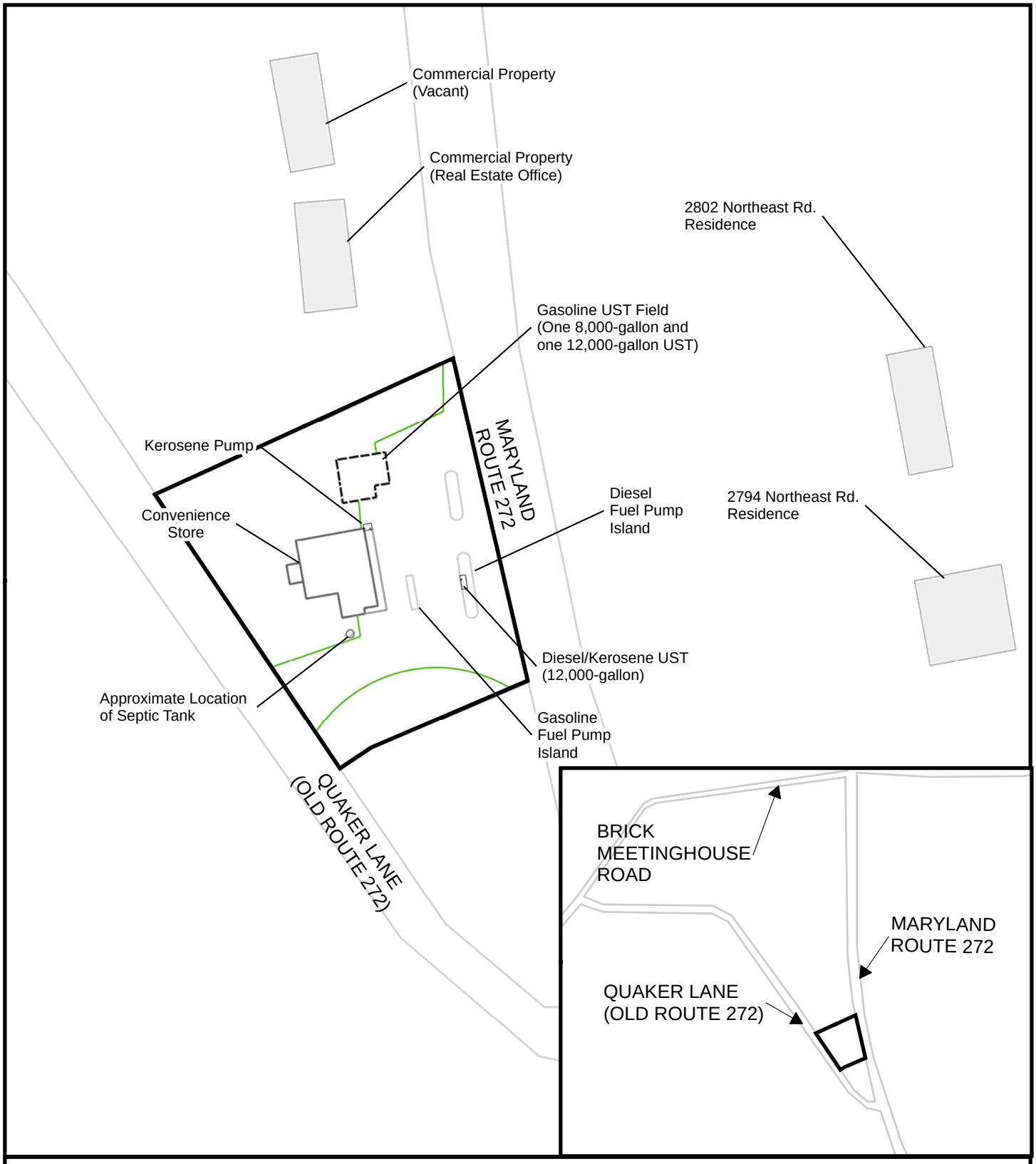



***Figure 2: Site Diagram***

Site Boundary

REPSG
React Environmental
Professional Services Group, Inc.

*MAP SCALE: 1 inch = 100 feet*

0 20 40 80 120 160 Feet

***PROJECT NAME:*** ***CALVERT CITGO***
***PROJECT ADDRESS:*** ***2815 NORTH EAST ROAD, NORTH EAST, MD***
***PROJECT NUMBER:*** ***005977***
***DATE:*** ***DECEMBER 2010***

N
S

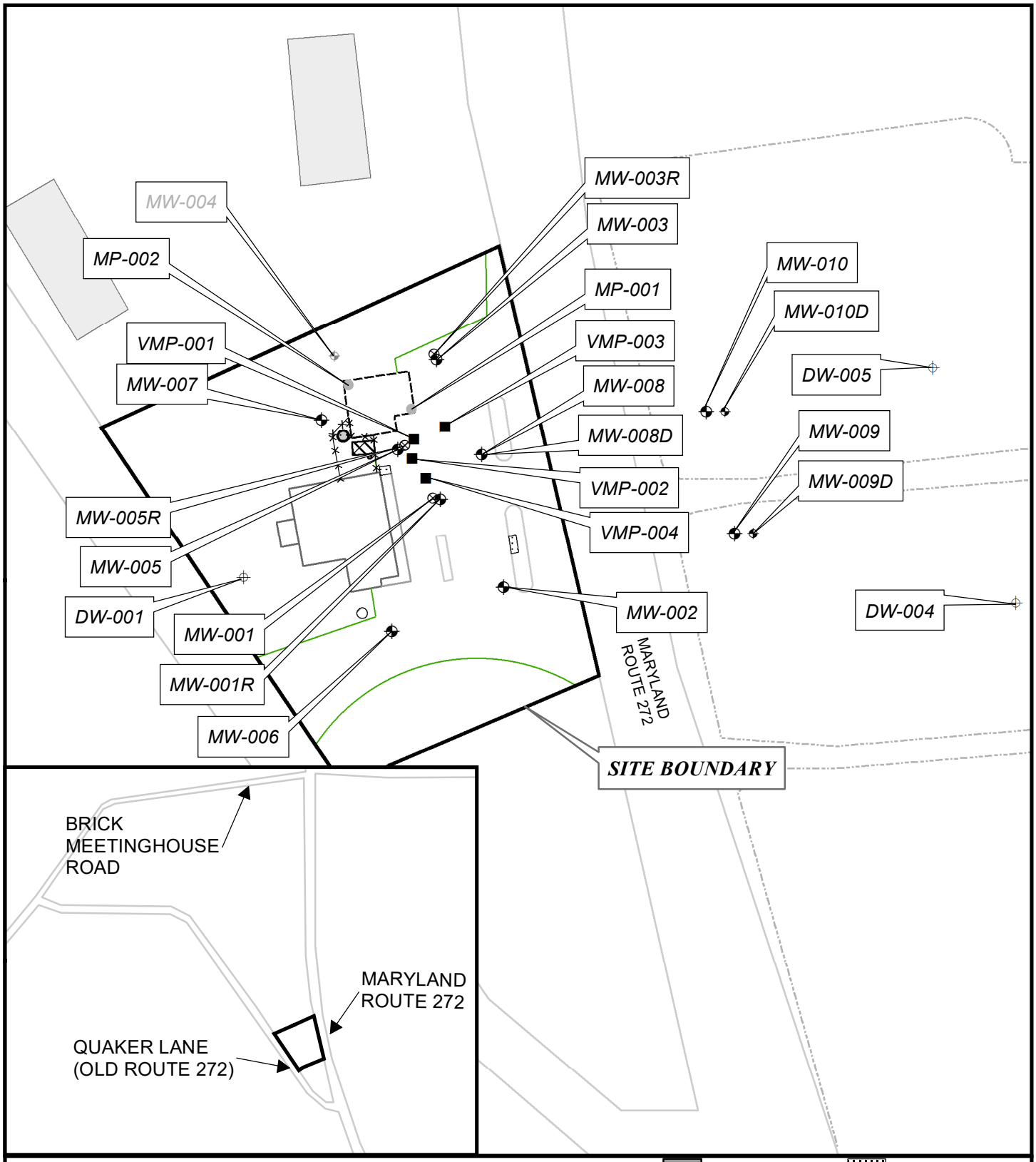



**FIGURE 3: SITE PLAN**

- Monitoring Well
- Extraction Well
- Leak Detection Well
- Lost/Abandoned Monitoring Well
- On-Site Potable Well
- Vapor Monitoring Points
- Remediation Trailer
- Catalytic Oxidizer
- Frac Tank
- Diesel Pump
- Kerosene Pump
- Off-Site Bulding
- Septic Tank
- Fencing

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 75 feet
0 15 30 60 90 120 Feet

**PROJECT NAME:** CALVERT CITGO
**PROJECT ADDRESS:** 2815 NORTH EAST ROAD, NORTH EAST, MD
**PROJECT NUMBER:** 005977
**DATE:** JUNE 2017

N
S

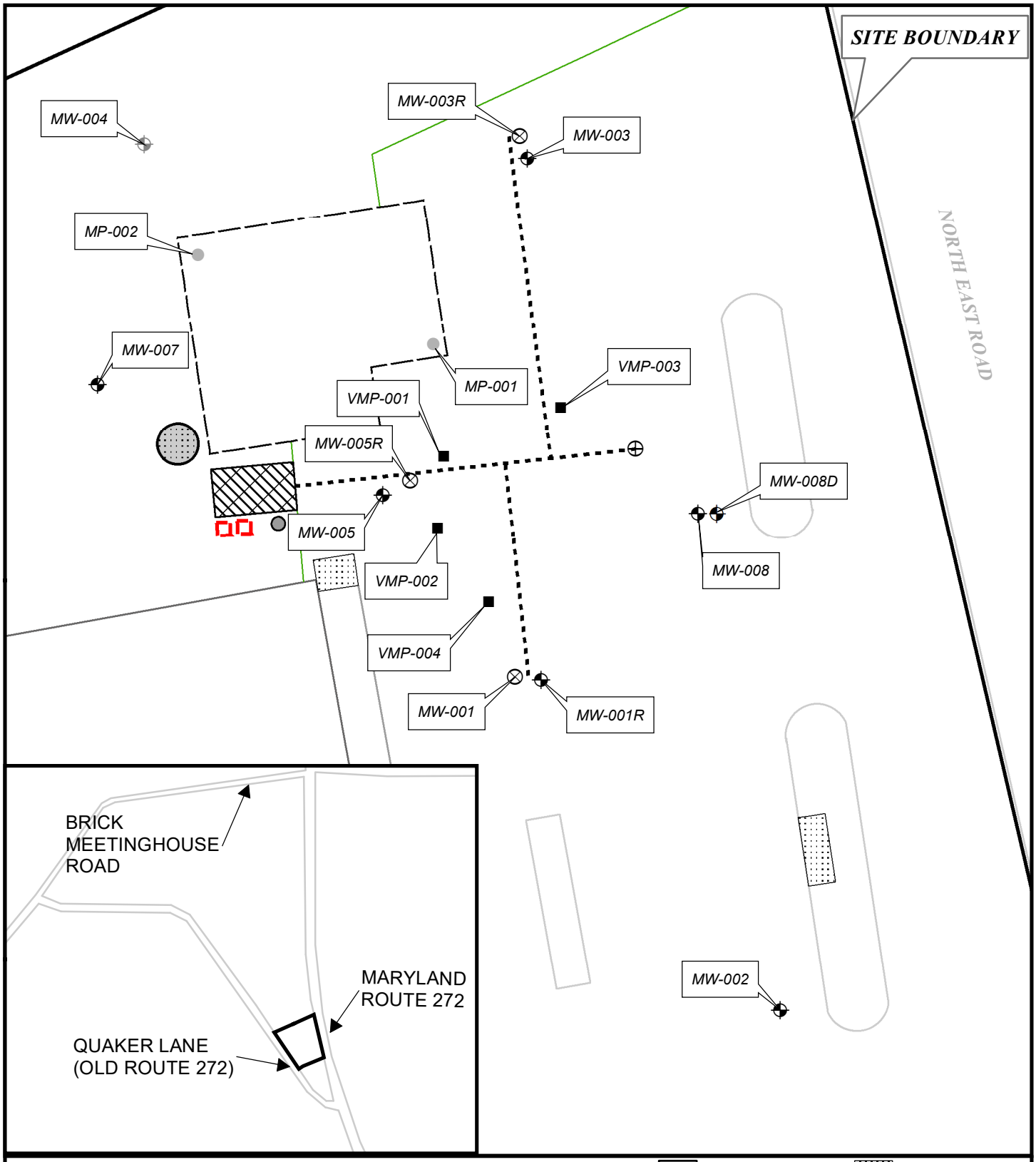



***FIGURE 4: REMEDIATION SYSTEM***

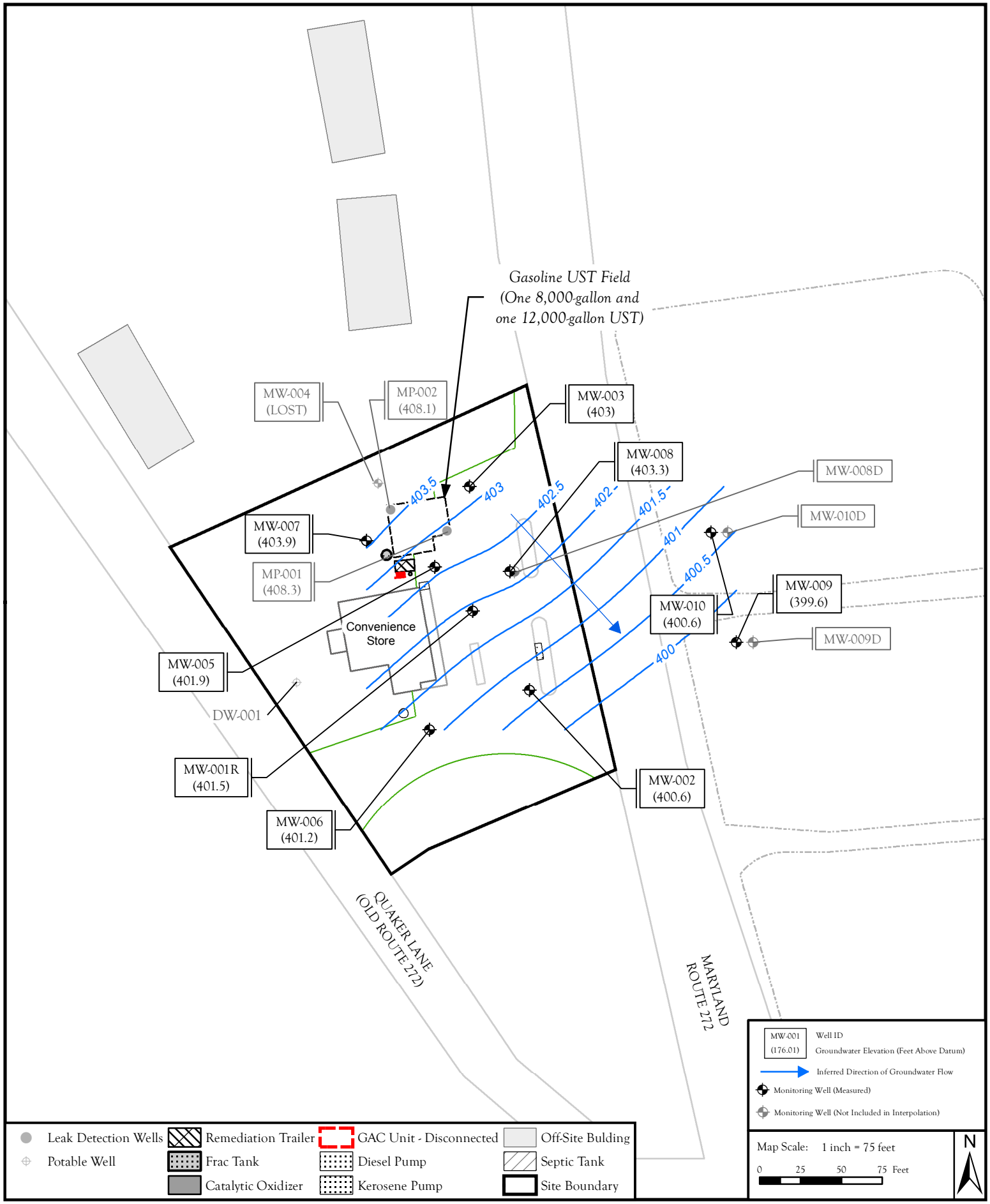
- Monitoring Well
- Lost/Abandoned Monitoring Well
- Leak Detection Well
- Vapor Monitoring Points
- Extraction Well
- Future Extraction Well
- GAC Unit -Disconnected
- Catalytic Oxidizer
- Remediation Trailer
- Frac Tank
- Tank Field
- Diesel Pump
- Kerosene Pump
- Septic Tank
- Extraction Piping

REPSG
React Environmental Professional Services Group, Inc.

*MAP SCALE: 1 inch = 20 feet*
0 4 8 16 24 32 Feet

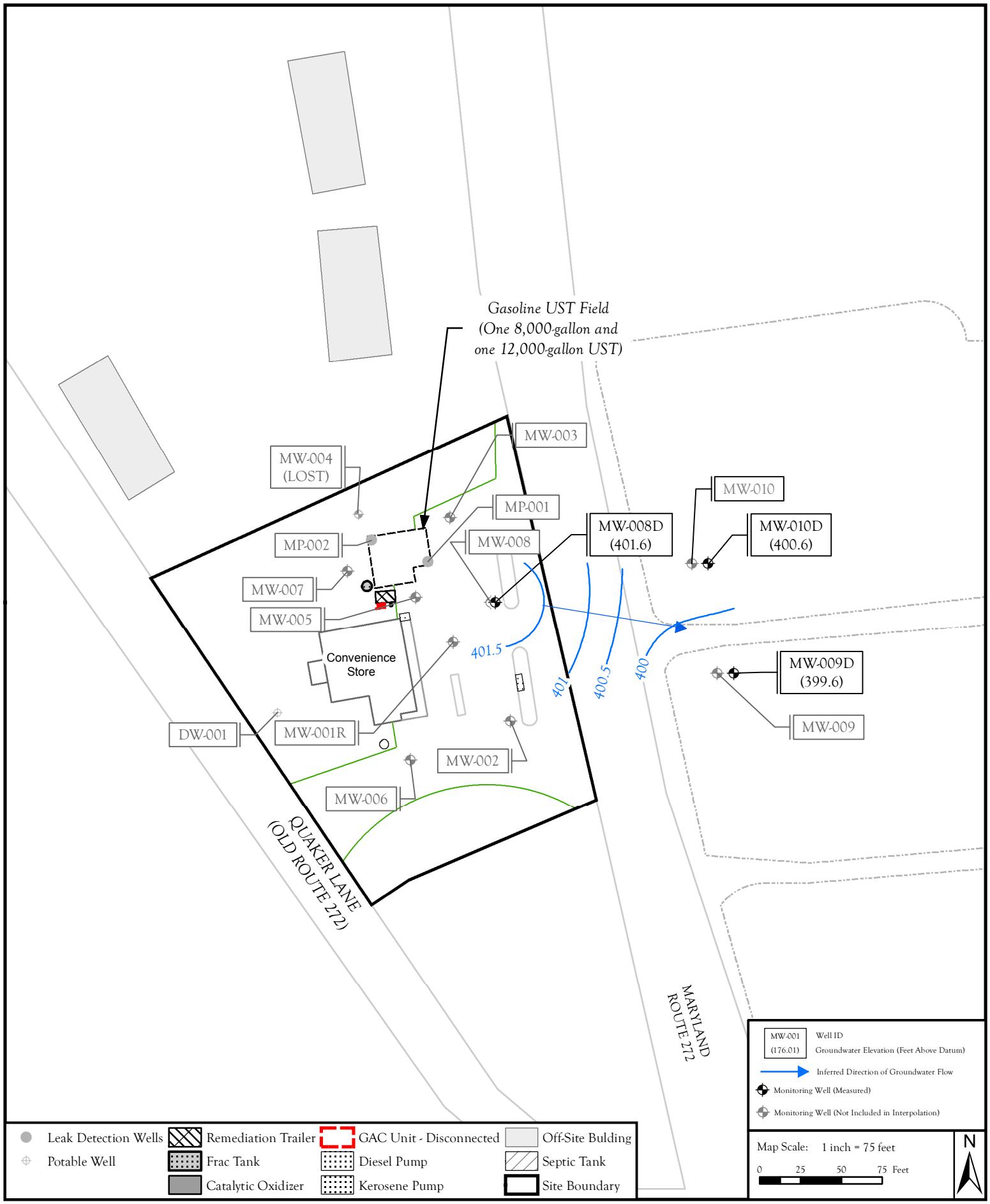
***PROJECT NAME:*** *CALVERT CITGO*
***PROJECT ADDRESS:*** *2815 NORTH EAST ROAD, NORTH EAST, MD*
***PROJECT NUMBER:*** *005977*
***DATE:*** *APRIL 2017*

N
S



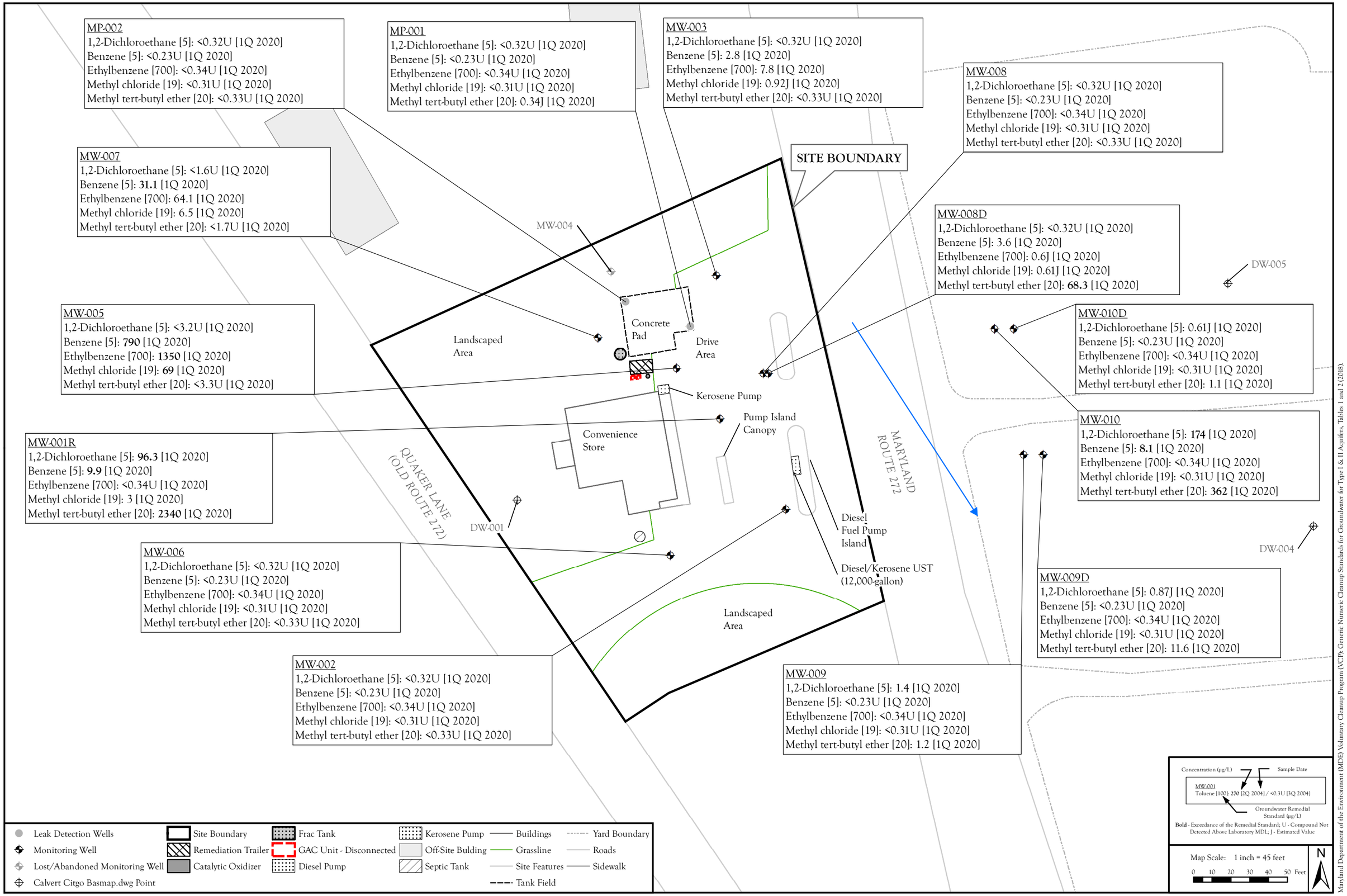

INTERPOLATION METHOD: LOCAL POLYNOMIAL (ORDER OF POLYNOMIAL:1)

| | | |
|---|---|---|
| GROUNDWATER CONTOUR MAP<br>(SHALLOW WELLS)<br>(MARCH 30-31, 2020) | PROJECT NAME: CALVERT CITGO<br>PROJECT ADDRESS: 2815 NORTH EAST ROAD, NORTH EAST, MD<br>PROJECT NUMBER: 005977<br>DATE: APRIL 2020 | REPSG React Environmental Professional Services Group, Inc. |




INTERPOLATION METHOD: INVERSE DISTANCE WEIGHTING

| | | |
|---|---|---|
| GROUNDWATER CONTOUR MAP<br>(DEEP WELLS)<br>(MARCH 30-31, 2020) | PROJECT NAME: CALVERT CITGO<br>PROJECT ADDRESS: 2815 NORTH EAST ROAD, NORTH EAST, MD<br>PROJECT NUMBER: 005977<br>DATE: APRIL 2020 | REPSG<br>React Environmental Professional Services Group, Inc. |




Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (2018).

PROJECT NAME: CALVERT CITGO
PROJECT ADDRESS: 2815 NORTH EAST ROAD, NORTH EAST, MD
PROJECT NUMBER: 005977
DATE: APRIL 2020

GROUNDWATER CONTAMINANT DISTRIBUTION MAP
MARCH 30-31, 2020)

# ATTACHMENT 2: SAMPLING RESULTS SUMMARY TABLES

# GROUNDWATER

# RESULTS SUMMARY TABLES

Groundwater Analytical Data Summary
Calvert Citgo, 2815 North East Road, North East, MD

REPSG Global Project No. 5977

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| **Well ID** | **Sample Date** | **Top of Casing Elevation*** | **Screen start depth** | **Screen end depth** | **Depth to Water (ft)** | **GW Elevation** | | | | | | | | | | | | | |
| MP-001 | 12/11/2009 | 415.6 | NA | NA | 4.42 | 411.2 | <3.3U | <31U | **372** | 2.4J | 6.4J | <2.4U | <1.6U | <1.8U | <3.2U | 248 | <2.8U | 630 | 155 |
| | 03/18/2010 | | | | 3.1 | 412.5 | <3.3U | <31U | **421** | <2.3U | <2.3U | <2.4U | <1.6U | <1.8U | <3.2U | <46U | <2.8U | 895 | 258 |
| | 05/24/2010 | | | | 8.3 | 407.3 | <0.36U | <1.8U | **1100D** | <0.49U | 12D | <0.36U | <0.56U | 9.6 | <0.76U | <21U | <0.91U | **1800D** | 410D |
| | 03/08/2013 | | | | 3.1 | 412.5 | <3.2U | <31U | **1230** | <2.1U | 57.2 | <3.9U | **438** | **39.9** | <4.5U | 1210 | <3.5U | **3180** | 948 |
| | 04/02/2013 | | | | 6.08 | 409.5 | <1.6U | 366 | **673** | <1.1U | 28.5 | <2U | <1.6U | 7.3 | <2.3U | 658 | <1.8U | **2830** | 873 |
| | 09/12/2013 | | | | 4.03 | 411.6 | <6.4U | <62U | **384** | <4.2U | 13.9J | <7.8U | 18.8J | **88.5** | <9U | 125J | <7U | 989 | 273 |
| | 12/18/2013 | | | | 4.72 | 410.9 | <3.2U | <31U | **423** | <2.1U | <3.4U | <3.9U | **63** | **83.2** | <4.5U | 225 | <3.5U | 725 | 145 |
| | 01/13/2014 | | | | 2.9 | 412.7 | <3.2U | <31U | **640** | <2.1U | <3.4U | <3.9U | **89.3** | **65.7** | <4.5U | 249 | <3.5U | **1500** | 195 |
| | 04/21/2014 | | | | 1.61 | 414 | <3.2U | 89.4J | **970** | 6.9J | 28.1 | <3.9U | <3.1U | **28.6** | <4.5U | 194 | <3.5U | **4770** | 487 |
| | 07/29/2014 | | | | 5.13 | 410.4 | <3.2U | <31U | **621** | 8J | <3.4U | <3.9U | <3.1U | **37.6** | <4.5U | 211 | <3.5U | **1860** | 427 |
| | 10/20/2014 | | | | 7.1 | 408.5 | <3.2U | <31U | **1260** | 7.1J | <3.4U | <3.9U | **73.1** | **48.6** | **6.4J** | 150 | <3.5U | **2990** | 989 |
| | 01/20/2015 | | | | 6.1 | 409.5 | <6.4U | 81.2J | **2030** | 11.7J | <6.8U | <7.8U | **367** | **105** | <9U | 74.8J | <7U | **6260** | 599 |
| | 04/27/2015 | | | | 4.91 | 410.6 | <6.4U | <62U | **1360** | <4.2U | 56 | <7.8U | <6.2U | **48.8** | <9U | 266 | <7U | **5470** | 1160 |
| | 07/13/2015 | | | | 5.35 | 410.2 | <6.4U | <62U | **463** | <4.2U | 26.1 | <7.8U | <6.2U | **37.8** | <9U | 149J | <7U | **1610** | 468 |
| | 10/21/2015 | | | | 9.99 | 405.6 | <6.4U | <62U | **878** | 4.4J | <6.8U | **9.8J** | <6.2U | **44.6** | <9U | 442 | <7U | **3130** | 1190 |
| | 01/19/2016 | | | | 7.38 | 408.2 | **33.7** | <62U | <4.6U | 11.1J | 11.2J | <7.8U | <6.2U | **1060** | <9U | 7050 | <7U | 10.1J | 65.8 |
| | 04/12/2016 | | | | 6.61 | 409 | <6.4U | <62U | **1130** | <4.2U | 37.1 | <7.8U | <6.2U | 18.6J | <9U | 337 | <7U | **6070** | 832 |
| | 08/23/2016 | | | | 10.46 | 405.1 | <6.4U | <62U | **1200** | 4.5J | <6.8U | <7.8U | **66.7** | 12.1J | <9U | 423 | <7U | **1990** | 1160 |
| | 03/06/2017 | | | | 11.15 | 404.4 | <1.6U | 20.9J | 4.6J | 2.5J | <1.7U | <2U | <1.6U | 5.4 | <2.3U | 1050 | <1.8U | 21.1 | 24.3 |
| | 06/01/2017 | | | | 7.81 | 407.8 | <1.6U | <15.5U | **24.5** | 1.7J | <1.7U | <2U | 7.8 | 1.9J | <2.3U | 233 | <1.8U | 270 | 101 |
| | 08/14/2017 | | | | 9.42 | 406.1 | <1.6U | <15.5U | **6** | <1.1U | <1.7U | <2U | <1.6U | <1.7U | <2.3U | 76.2 | <1.8U | 39.5 | 47.6 |
| | 11/14/2017 | | | | 9.48 | 406.1 | <1.6U | <15.5U | <1.2U | <1.1U | <1.7U | <2U | <1.6U | <1.7U | <2.3U | 26.9J | <1.8U | 5.3 | 4.8J |
| | 03/06/2018 | | | | 6.22 | 409.3 | <0.32U | <3.1U | 0.89J | <0.21U | 0.36J | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 8.2 | 5.7 |
| | 6/12/2018 | | | | 6.65 | 408.9 | <0.32U | 7.4J | 0.78J | <0.21U | <0.34U | <0.39U | 1.1 | <0.33U | <0.45U | <2.2U | <0.35U | 6.4 | 11.4 |
| | 09/19/2018 | | | | 3.97 | 411.6 | <0.32U | 5.1J | 0.85J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 4.7J | <0.35U | 2.9 | 10.8 |
| | 12/12/2018 | | | | 3.18 | 412.4 | **5.8** | <3.1U | 1 | 0.51J | <0.34U | <0.39U | 0.93J | 14.5 | <0.45U | 130 | <0.35U | 0.66J | 1.9J |
| | 3/6/2019 | | | | 2.39 | 413.21 | <0.32U | 13.1 | **9.3** | <0.21U | 0.42J | <0.39U | <0.31U | <0.33U | <0.45U | 5.3J | <0.35U | 21.8 | 2.8J |
| | 6/12/2019 | | | | 5.66 | 409.9 | <0.32U | <3.1U | 1.3 | <0.21U | <0.34U | **0.94J** | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 6.9 | 8.7 |
| | 9/18/2019 | | | | 11 | 404.6 | <0.28U | 5.3J | 0.46J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 2.5 | 3.8 |
| | 11/26/2019 | | | | 6.96 | 408.64 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1 | <0.45U | 49.6 | <0.35U | <0.23U | <0.66U |
| | 3/30/2020 | | | | 7.28 | 408.32 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.34J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MP-002 | 12/11/2009 | 416.0 | NA | NA | 4.93 | 411.1 | <0.33U | <3.1U | **135** | <0.23U | 1.7 | <0.24U | <0.16U | <0.18U | <0.32U | 380 | <0.28U | 172 | 44.3 |
| | 03/18/2010 | | | | 3.6 | 412.4 | <0.33U | <3.1U | **24.3** | <0.23U | <0.23U | <0.24U | <0.16U | <0.18U | <0.32U | 132 | <0.28U | 57.3 | 11.4 |
| | 05/24/2010 | | | | 8.78 | 407.2 | <0.36U | <1.8U | **540D** | <0.49U | <4UD | <0.36U | <0.56U | 4.6 | <0.76U | <21U | <0.91U | 860D | 150D |
| | 03/08/2013 | | | | 6.8 | 409.2 | <0.32U | <3.1U | **357** | <0.21U | <0.34U | <0.39U | **190** | 5.1 | <0.45U | 534 | <0.35U | **2180** | 186 |
| | 04/02/2013 | | | | 6.55 | 409.5 | <1.6U | 53.1 | **400** | <1.1U | 9.8 | <2U | <1.6U | 5.7 | <2.3U | 597 | <1.8U | **2670** | 492 |
| | 09/12/2013 | | | | 4.66 | 411.3 | <1.6U | 27.7J | **138** | <1.1U | <1.7U | <2U | 12 | **63.5** | <2.3U | 110 | <1.8U | 255 | 141 |
| | 12/18/2013 | | | | 5.11 | 410.9 | <1.6U | <15.5U | **220** | <1.1U | <1.7U | <2U | <1.6U | **32.6** | <2.3U | 159 | <1.8U | 764 | 95.7 |
| | 01/13/2014 | | | | 3.11 | 412.9 | <1.6U | <15.5U | **111** | <1.1U | <1.7U | **2J** | <1.6U | 9 | <2.3U | 125 | <1.8U | 273 | 31.3 |
| | 04/21/2014 | | | | 2.09 | 413.9 | <0.32U | <3.1U | **170** | <0.21U | <0.34U | <0.39U | <0.31U | 6 | <0.45U | 146 | <0.35U | 543 | 49.6 |
| | 07/29/2014 | | | | 5.61 | 410.4 | <1.6U | 21.7J | **166** | 3.6J | <1.7U | <2U | 18.7 | 15.7 | **12.2** | 149 | <1.8U | 334 | 142 |
| | 10/20/2014 | | | | 9.19 | 406.8 | <1.6U | <15.5U | **453** | <1.1U | <1.7U | <2U | **77.1** | **37.2** | <2.3U | 145 | <1.8U | 503 | 386 |
| | 01/20/2015 | | | | 6.51 | 409.5 | <1.6U | 157 | **1290** | <1.1U | <1.7U | <2U | **494** | **26.8** | <2.3U | 158 | <1.8U | **3950** | 536 |
| | 04/27/2015 | | | | 5.43 | 410.6 | <1.6U | 171 | **626** | <1.1U | 26.1 | <2U | <1.6U | 14.1 | <2.3U | 306 | <1.8U | **2280** | 607 |
| | 07/13/2015 | | | | 5.71 | 410.3 | <1.6U | 49.7J | **244** | <1.1U | <1.7U | <2U | <1.6U | 16.6 | <2.3U | 113 | <1.8U | 682 | 227 |
| | 10/20/2015 | | | | 10.46 | 405.5 | <0.32U | 45.2 | **236** | <0.21U | <0.34U | <0.39U | **91.1** | **48** | <0.45U | 280 | <0.35U | 369 | 420 |
| | 01/19/2016 | | | | 7.92 | 408.1 | <1.6U | <15.5U | **1290** | <1.1U | <1.7U | <2U | <1.6U | 5.4 | <2.3U | 588 | <1.8U | **5910** | 846 |
| | 04/15/2016 | | | | 6.58 | 409.4 | <1.6U | 41.4J | **926** | 2.5J | <1.7U | <2U | <1.6U | 6.7 | 2.5J | 417 | <1.8U | **4470** | 683 |
| | 08/23/2016 | | | | 10.89 | 405.1 | <1.6U | 70.9 | **289** | <1.1U | <1.7U | <2U | **30.2** | 10 | <2.3U | 565 | <1.8U | 376 | 260 |
| | 03/06/2017 | | | | 11.67 | 404.3 | <0.32U | 22.1 | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 2260 | <0.35U | <0.23U | <0.66U |
| | 05/31/2017 | | | | 8.29 | 407.7 | <0.32U | 3.4J | 0.73J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 6.5J | <0.35U | 5.7 | 5.3 |
| | 08/14/2017 | | | | 10.84 | 405.1 | <0.32U | 5.4J | 1.2 | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 11.2 | <0.35U | 0.74J | 2.6J |
| | 11/14/2017 | | | | 9.97 | 406 | <0.32U | 8.6J | 1.2 | <0.21U | 0.43J | 0.65J | <0.31U | <0.33U | <0.45U | 7J | <0.35U | 1.5 | 6.3 |
| | 03/06/2018 | | | | 6.78 | 409.2 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | <0.23U | 1.1J |
| | 6/12/2018 | | | | 7.1 | 408.9 | <0.32U | 3.3J | 0.27J | <0.21U | <0.34U | <0.39U | 0.86J | <0.33U | <0.45U | <2.2U | <0.35U | 1.2 | 2J |
| | 09/19/2018 | | | | 4.45 | 411.5 | <0.32U | 6.9J | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 28.9 | <0.35U | 0.8J | 1.3J |
| | 12/11/2018 | | | | 3.67 | 412.3 | <0.32U | <3.1U | <0.23U | 0.41J | <0.34U | <0.39U | 0.62J | <0.33U | <0.45U | <2.2U | <0.35U | 0.38J | <0.66U |
| | 3/6/2019 | | | | 2.82 | 413.18 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.37J | 2.1J |
| | 6/12/19 | | | | 6.12 | 409.87 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | 0.81J | 0.59J | <0.33U | <0.45U | <2.2U | <0.35U | 2.2 | 1.4J |
| | 9/18/2019 | | | | 11.35 | 404.65 | <0.28U | 6.8J | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 11/26/2019 | | | | 7.41 | 408.59 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 2.6 | <0.45U | 470 | <0.35U | <0.23U | <0.66U |
| | 3/31/2020 | | | | 7.85 | 408.15 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |

| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| MW-001 | 03/12/2009 | 416.3 | NA | NA | 17.2 | 399.1 | <2U | <40U | **10500** | <2U | **779** | <2U | <2U | <2U | <1U | 485 | <4U | 468 | 1800 |
| | 07/21/2009 | | | | 16.31 | 400 | **19.5** | <31U | **14400** | <2.3U | **1210** | <2.4U | <1.6U | 8J | <3.2U | 586 | <2.8U | **1440** | 3760 |
| | 12/11/2009 | | | | 16.18 | 400.1 | <3.3U | <31U | **8120** | <2.3U | **962** | <2.4U | <1.6U | 4J | <3.2U | 291 | <2.8U | 58.4 | 1930 |
| | 03/18/2010 | | | | 13.16 | 403.1 | **42.5** | 451 | **5850** | <2.3U | 606 | <2.4U | <1.6U | 3.6J | <3.2U | 343 | <2.8U | 2690 | 1860 |
| | 05/24/2010 | | | | 13.48 | 402.8 | <0.36U | 250 | **10000D** | <0.49U | **1000D** | <0.36U | <0.56U | 6.3 | <0.76U | 680 | <0.91U | **4500D** | 3200D |
| | 09/15/2010 | | | | 18.01 | 398.3 | <3.3U | <31U | **17300** | <2.3U | **2270** | <2.4U | <1.6U | 12.2 | <3.2U | 597 | <2.8U | **5850** | 4810 |
| | 11/29/2010 | | | | 19.3 | 397 | **16.2** | 92.7J | **13100** | <2.1U | **1110** | <3.9U | <3.1U | 17 | <4.5U | 707 | <3.5U | 957 | 3510 |
| | 03/24/2011 | | | | 16.42 | 399.9 | **16.1** | <31U | **9880** | 4.1J | **858** | <3.9U | <3.1U | 14.3 | <4.5U | 743 | <3.5U | 176 | 2060 |
| | 06/20/2011 | | | | 16.11 | 400.2 | **13.9** | <15.5U | **12600** | <1.1U | **1190** | <2U | <1.6U | 14 | <2.3U | 655 | <1.8U | **2210** | 3370 |
| | 10/26/2011 | | | | 16.63 | 399.7 | **33.8** | 165 | **11300** | <1.1U | **1300** | <2U | <1.6U | 13.4 | <2.3U | 700 | <1.8U | **2570** | 2630 |
| | 02/29/2012 | | | | 14.65 | 401.6 | **18.1** | 181 | **6230** | <1.1U | **797** | <2U | <1.6U | 13.2 | <2.3U | 585 | <1.8U | **2210** | 2000 |
| | 05/08/2012 | | | | 16.88 | 399.4 | **6.8** | <15.5U | **11200** | <1.1U | **991** | <2U | <1.6U | 10.5 | <2.3U | 475 | <1.8U | **1130** | 2410 |
| | 08/14/2012 | | | | 18.9 | 397.4 | **10.6** | <15.5U | **13000** | <1.1U | **1260** | <2U | <1.6U | 17.8 | <2.3U | 574 | <1.8U | **1240** | 3190 |
| | 11/15/2012 | | | | 20.04 | 396.3 | **8.5** | <3.1U | **14500** | <0.21U | **1590** | <0.39U | <0.31U | **27.8** | <0.45U | 691 | <0.35U | 522 | 2540 |
| | 03/07/2013 | | | | 19.7 | 396.6 | 3.9J | <15.5U | **9640** | <1.1U | **872** | <2U | <1.6U | **23.7** | 4.5J | 611 | <1.8U | 385 | 1530 |
| | 04/02/2013 | | | | 16.92 | 399.4 | <16U | <155U | **356** | <10.5U | **2580** | <19.5U | <15.5U | <16.5U | <22.5U | 313J | <17.5U | **20600** | **14600** |
| | 09/12/2013 | | | | 15.26 | 401 | <1.6U | <15.5U | **279** | <1.1U | 22.6 | <2U | <1.6U | <1.7U | <2.3U | <11U | <1.8U | 3.6J | 54.7 |
| | 12/17/2013 | | | | 17.99 | 398.3 | 1.1 | <3.1U | **132** | <0.21U | 4.8 | <0.39U | <0.31U | <0.33U | <0.45U | 10.4 | <0.35U | 4.6 | 14.5 |
| | 01/14/2014 | | | | 14.35 | 401.9 | <0.32U | <3.1U | **95.2** | <0.21U | **2260** | <0.39U | <0.31U | 6.8 | <0.45U | 218 | <0.35U | **18500** | **12500** |
| | 04/21/2014 | 415.6† | | | 15.28 | 400.3 | 1.5 | <3.1U | **1570** | <0.21U | 38.7 | <0.39U | <0.31U | 2.8 | 0.71J | 80.9 | <0.35U | 24.1 | 107 |
| | 07/30/2014 | | | | 15.66 | 399.9 | <16U | <155U | **8710** | <10.5U | **857** | <19.5U | <15.5U | 16.7J | **124** | <110U | <17.5U | **4810** | 3600 |
| | 10/21/2014 | | | | 17.35 | 398.2 | <0.32U | <3.1U | **2120** | <0.21U | 124 | <0.39U | <0.31U | 8 | <0.45U | 84.9 | <0.35U | 148 | 593 |
| | 01/21/2015 | | | | 15.27 | 400.3 | <0.32U | <3.1U | **97.6** | <0.21U | 4.4 | <0.39U | <0.31U | 0.47J | <0.45U | 8.7J | <0.35U | 17.6 | 18.2 |
| | 04/29/2015 | | | | 15.51 | 400 | 2 | 11.6 | **188** | <0.21U | 28.4 | 0.52J | 3.4 | 1.9 | <0.45U | 23.8 | <0.35U | 14.2 | 52.9 |
| | 07/14/2015 | | | | 15.34 | 400.2 | 1.2 | 5.4J | **112** | <0.21U | 10.1 | <0.39U | <0.31U | 0.72J | <0.45U | 15.5 | <0.35U | 42.6 | 41.6 |
| | 10/21/2015 | | | | 17.84 | 397.7 | <0.32U | 12.1 | **2390** | <0.21U | 217 | 0.41J | <0.31U | **20.1** | <0.45U | 135 | <0.35U | **1790** | 1120 |
| | 01/20/2016 | | | | 17.75 | 397.8 | 0.72J | <3.1U | **110** | <0.21U | 4.4 | <0.39U | 1.3 | 0.99J | <0.45U | 32.8 | <0.35U | 2.7 | 17.7 |
| | 04/12/2016 | | | | 14.73 | 400.8 | <0.32U | 5.6J | **11.3** | <0.21U | 2.4 | <0.39U | 0.54J | <0.33U | <0.45U | 3.6J | <0.35U | 1.3 | 3.9 |
| | 08/23/2016 | | | | 18.21 | 397.4 | 4.1 | 57.6 | **884** | <0.21U | 87.5 | <0.39U | <0.31U | 6.7 | <0.45U | 9J | <0.35U | 572 | 409 |
| | 11/08/2016 | | | | 19.72 | 395.8 | **10.1** | 4.1J | **3210** | <0.21U | 263 | <0.39U | 7.4 | **32.8** | <0.45U | 183 | <0.35U | **4000** | 1310 |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-001R | 11/29/2010 | 416.5 | 30 | 45 | 17.87 | 398.6 | 121 | 583 | 322 | <1.1U | 7.3 | <2U | <1.6U | 65.9 | <2.3U | 1020 | <1.8U | 51.1 | 43.3 |
| | 03/24/2011 | | | | 15.59 | 400.9 | 116 | <15.5U | 128 | 1.8J | 8.1 | <2U | <1.6U | 64.4 | <2.3U | 876 | <1.8U | 26.6 | 34.3 |
| | 06/20/2011 | | | | 15.98 | 400.5 | 106 | <15.5U | 133 | <1.1U | 4.7J | <2U | <1.6U | 58.8 | <2.3U | 1110 | <1.8U | 32.3 | 27.6 |
| | 10/26/2011 | | | | 15.35 | 401.1 | <1.6U | <15.5U | 65.9 | <1.1U | <1.7U | <2U | <1.6U | 73.8 | <2.3U | 1320 | <1.8U | 7.7 | 14.4J |
| | 02/29/2012 | | | | 14.71 | 401.8 | 153 | <15.5U | 63.8 | <1.1U | <1.7U | <2U | <1.6U | 121 | <2.3U | 1510 | <1.8U | 10.3 | 9.1J |
| | 05/08/2012 | | | | 16.05 | 400.5 | 124 | <3.1U | 68.5 | <0.21U | 0.43J | <0.39U | <0.31U | 109 | <0.45U | 1880 | <0.35U | 5.5 | 10.3 |
| | 08/14/2012 | | | | 18.33 | 398.2 | 136 | <3.1U | 43.5 | <0.21U | 0.93J | <0.39U | <0.31U | 53 | <0.45U | 756 | <0.35U | 1.6 | 3.1 |
| | 11/15/2012 | | | | 18.81 | 397.7 | 114 | <3.1U | 81.9 | <0.21U | 12.3 | <0.39U | <0.31U | 89 | <0.45U | 1360 | <0.35U | 59.5 | 58.8 |
| | 03/07/2013 | | | | 17.25 | 399.3 | 141 | <15.5U | 89.3 | <1.1U | <1.7U | <2U | <1.6U | 156 | 4.3J | 1640 | <1.8U | <1.2U | <3.3U |
| | 04/02/2013 | | | | 16.39 | 400.1 | <1.6U | <15.5U | 2890 | 10.5 | 1390 | <2U | <1.6U | 15.6 | <2.3U | 230 | <1.8U | 14800 | 7570 |
| | 09/12/2013 | | | | 13.97 | 402.5 | 194 | <15.5U | 141 | <1.1U | 6.2 | <2U | <1.6U | 311 | <2.3U | 2540 | <1.8U | 26.4 | 24.7 |
| | 12/17/2013 | | | | 15.46 | 401 | 118 | <15.5U | 21.7 | <1.1U | <1.7U | <2U | <1.6U | 80.4 | <2.3U | 825 | <1.8U | 2.3J | 8.9J |
| | 01/14/2014 | | | | 14.57 | 401.9 | <1.6U | 740 | 6300 | <1.1U | 1370 | <2U | <1.6U | 12.5 | <2.3U | 549 | <1.8U | 25600 | 7850 |
| | 04/21/2014 | | | | 12.84 | 402.4 | 142 | <15.5U | 141 | 4J | 2J | <2U | <1.6U | 357 | <2.3U | 2480 | <1.8U | 49.9 | 29.8 |
| | 07/30/2014 | | | | 14.97 | 400.3 | 122 | <3.1U | 37.7 | <0.21U | 2 | <0.39U | 1.1 | 187 | 3.4 | 1690 | <0.35U | 21.1 | 24.5 |
| | 10/21/2014 | | | | 16.97 | 398.3 | 114 | <3.1U | 42.3 | <0.21U | 0.55J | <0.39U | <0.31U | 93.8 | <0.45U | 1540 | <0.35U | 1.3 | 3.4 |
| | 01/21/2015 | | | | 15.27 | 400 | 129 | <15.5U | 40.8 | <1.1U | 1.9J | <2U | <1.6U | 295 | <2.3U | 2730 | <1.8U | 10.4 | 11.3J |
| | 04/29/2015 | 415.2† | | | 15.74 | 399.5 | 118 | <15.5U | 28.5 | 2.5J | <1.7U | 2.2J | <1.6U | 160 | <2.3U | 1470 | <1.8U | <1.2U | <3.3U |
| | 07/14/2015 | | | | 14.76 | 400.5 | 115 | <15.5U | 96 | <1.1U | 3J | 2.2J | <1.6U | 165 | <2.3U | 1730 | <1.8U | 39 | 29.2 |
| | 10/21/2015 | | | | 17.49 | 397.7 | 113 | <3.1U | 56.5 | <0.21U | 8.8 | 0.6J | <0.31U | 124 | <0.45U | 1200 | <0.35U | 31.6 | 39.9 |
| | 01/20/2016 | | | | 15.84 | 399.4 | 47.1 | <3.1U | 62.5 | <0.21U | 1.9 | <0.39U | 1.5 | 15.2 | <0.45U | 290 | <0.35U | 4.7 | 7.7 |
| | 04/12/2016 | | | | 14.71 | 400.5 | 50.6 | <3.1U | 62.9 | <0.21U | 2.5 | <0.39U | <0.31U | 15.9 | <0.45U | 330 | <0.35U | 29.7 | 19.6 |
| | 08/23/2016 | | | | 17.92 | 397.3 | 65.3 | <3.1U | 8.4 | <0.21U | 0.84J | <0.39U | 2.5 | 19.5 | <0.45U | 377 | <0.35U | 2 | 2J |
| | 11/09/2016 | | | | 19.36 | 395.9 | 42.4 | 10.7 | 67.7 | <0.21U | 2.3 | <0.39U | 1.6 | 28.7 | <0.45U | 480 | <0.35U | 13.9 | 8.9 |
| | 03/06/2017 | | | | 18.58 | 396.6 | 51.5 | <15.5U | 75.7 | 17700 | 4.7J | <2U | <1.6U | 29 | <2.3U | 452 | <1.8U | 13.9 | 15.8 |
| | 05/31/2017 | | | | 16.23 | 399 | 35.2 | 25.6J | 14 | <1.1U | <1.7U | <2U | <1.6U | 23.1 | <2.3U | 244 | <1.8U | <1.2U | <3.3U |
| | 08/14/2017 | | | | 16.47 | 398.8 | 23.5 | <15.5U | 4.1J | <1.1U | <1.7U | <2U | <1.6U | 11.5 | <2.3U | 178 | <1.8U | <1.2U | <3.3U |
| | 11/15/2017 | | | | 17.19 | 398 | 24.2 | <15.5U | <1.2U | 3.9J | 2.6J | <2U | <1.6U | 11 | <2.3U | 152 | <1.8U | <1.2U | <3.3U |
| | 03/06/2018 | | | | 16.2 | 399 | 18.4 | <3.1U | 0.65J | <0.21U | 0.59J | <0.39U | <0.31U | 9.4 | <0.45U | 149 | <0.35U | 1.9 | 2.3J |
| | 6/13/2018 | | | | 15 | 400.2 | 66.1 | <3.1U | 2 | <0.21U | <0.34U | <0.39U | <0.31U | 98.5 | <0.45U | 865 | <0.35U | <0.23U | <0.66U |
| | 09/19/2018 | | | | 13.91 | 401.3 | 41.6 | <3.1U | 3.8 | <0.21U | 3.3 | <0.39U | <0.31U | 61.3 | <0.45U | 362 | <0.35U | 5.9 | 15 |
| | 12/11/2018 | | | | 11.92 | 403.3 | 64.9 | <3.1U | 0.93J | 1.1 | 1.5 | <0.39U | 0.84J | 147 | <0.45U | 1160 | <0.35U | 3.9 | 7.6 |
| | 3/6/2019 | | | | 10.54 | 404.66 | 83.3 | <3.1U | 9.1 | <0.21U | <0.34U | <0.39U | <0.31U | 179 | <0.45U | 2460 | <0.35U | <0.23U | <0.66U |
| | 6/12/2019 | | | | 12.05 | 403.15 | 77.8 | <3.1U | 6.6 | <0.21U | 0.39J | 1.3J | 0.7J | 182 | <0.45U | 675 | <0.35U | 0.79J | 1.6J |
| | 9/18/2019 | | | | 15.3 | 399.9 | <0.28U | 31.8 | 22.2 | 375 | 2.2 | 0.61J | <0.31U | 143 | <0.45U | 912 | <0.35U | 0.8J | 1.8J |
| | 11/26/2019 | | | | 19.31 | 395.89 | 191 | <3.1U | 21.3 | <0.21U | <0.34U | <0.39U | <0.31U | 1610 | <0.45U | <2.2U | <0.35U | 0.49J | <0.66U |
| | 3/31/2020 | | | | 13.73 | 401.47 | 96.3 | <3.1U | 9.9 | <0.21U | <0.34U | <0.39U | 3 | 2340 | <0.45U | 6530 | <0.35U | 0.23J | <0.66U |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-002 | 03/12/2009 | 415.7 | NA | NA | 17.24 | 398.5 | <0.2U | <4U | **53.5** | <0.2U | 1.3 | <0.2U | <0.2U | 14.9 | <0.1U | 27.4 | <0.4U | 7 | 10 |
| | 07/21/2009 | | | | 15.35 | 400.4 | <0.33U | <3.1U | **68.7** | 0.31J | 1.9 | <0.24U | <0.16U | 19.2 | <0.32U | 38.7 | <0.28U | 13 | 8.2 |
| | 12/11/2009 | | | | 15.81 | 399.9 | <0.33U | <3.1U | **39.6** | <0.23U | 0.26J | <0.24U | <0.16U | 17.9 | <0.32U | 47.1 | <0.28U | <0.19U | 1.4J |
| | 03/18/2010 | | | | 12.93 | 402.8 | <0.33U | 4J | **47.4** | <0.23U | 2.1 | <0.24U | <0.16U | 16.3 | <0.32U | 33.4 | <0.28U | 6.7 | 11.6 |
| | 05/24/2010 | | | | 13.65 | 402.1 | <0.36U | <1.8U | **36** | <0.49U | 3.2 | <0.36U | <0.56U | 18 | <0.76U | <21U | <0.91U | 21 | 18 |
| | 09/15/2010 | | | | 17.78 | 397.9 | <0.33U | <3.1U | **48.5** | <0.23U | 1.8 | <0.24U | <0.16U | **20.3** | <0.32U | 27.6 | <0.28U | 10.7 | 10.8 |
| | 11/29/2010 | | | | 17.51 | 398.2 | <0.32U | <3.1U | **60.6** | <0.21U | 5.4 | <0.39U | <0.31U | **20.5** | <0.45U | 28.6 | <0.35U | 28.2 | 30.7 |
| | 03/24/2011 | | | | 16 | 399.7 | <0.32U | <3.1U | **36.8** | <0.21U | 1.5 | <0.39U | <0.31U | **20.1** | <0.45U | <2.2U | <0.35U | 5.2 | 8.7 |
| | 06/20/2011 | | | | 15.71 | 400 | <0.32U | <3.1U | **61.4** | <0.21U | 0.47J | <0.39U | <0.31U | **20.3** | <0.45U | 24.4 | <0.35U | 2.5 | 3.6 |
| | 09/16/2011 | | | | 16.03 | 399.7 | <0.32U | 4.6J | **39** | <0.21U | <0.34U | <0.39U | <0.31U | 18.7 | <0.45U | 22.1 | <0.35U | <0.23U | 1.1J |
| | 10/27/2011 | | | | 15.65 | 400.1 | <0.32U | <3.1U | **64.6** | <0.21U | 14.8 | <0.39U | <0.31U | 17.6 | <0.45U | 21.7 | <0.35U | 140 | 82.8 |
| | 02/29/2012 | | | | 14.43 | 401.3 | <0.32U | 3.2J | **45.9** | <0.21U | <0.34U | <0.39U | <0.31U | **20.7** | <0.45U | 28.8 | <0.35U | 2.3 | 3 |
| | 05/08/2012 | | | | 16.1 | 399.6 | <0.32U | <3.1U | **62.1** | <0.21U | 0.49J | <0.39U | <0.31U | 17.7 | <0.45U | 40.8 | <0.35U | 0.44J | 2.5J |
| | 08/14/2012 | | | | 18.1 | 397.6 | <0.32U | 6.3J | **50** | <0.21U | 2.7 | <0.39U | 1.2 | 18.9 | <0.45U | 22.2 | <0.35U | 2.5 | 6.2 |
| | 11/16/2012 | | | | 18.86 | 396.8 | <0.32U | <3.1U | **48.6** | <0.21U | 1.1 | <0.39U | <0.31U | 17.6 | <0.45U | 206 | <0.35U | 0.35J | 3.1 |
| | 03/07/2013 | | | | 17.2 | 398.5 | <0.32U | <3.1U | **42.4** | <0.21U | 0.47J | <0.39U | <0.31U | 18.8 | <0.45U | 24.6 | <0.35U | <0.23U | 2.3J |
| | 04/02/2013 | | | | 16.66 | 399 | <0.32U | <3.1U | **37.2** | <0.21U | 0.48J | <0.39U | 1.6 | 17.9 | <0.45U | 19 | <0.35U | 3.3 | 3.8 |
| | 09/12/2013 | | | | 14.25 | 401.5 | <0.32U | <3.1U | **22.9** | <0.21U | <0.34U | <0.39U | <0.31U | **21.4** | <0.45U | 103 | <0.35U | <0.23U | <0.66U |
| | 12/17/2013 | | | | 15.47 | 400.2 | <0.32U | <3.1U | **13.5** | <0.21U | 2.8 | <0.39U | <0.31U | 9.4 | <0.45U | 11.3 | <0.35U | 21.3 | 20.1 |
| | 01/14/2014 | | | | 14.27 | 401.4 | <0.32U | <3.1U | **21.7** | <0.21U | 4.6 | <0.39U | <0.31U | 11.4 | <0.45U | 19.8 | <0.35U | 35.8 | 35.3 |
| | 04/21/2014 | 414.6† | | | 12.85 | 401.8 | <0.32U | 6.1J | **19.3** | <0.21U | 1.2 | <0.39U | <0.31U | 10.7 | <0.45U | 15.8 | <0.35U | 9.5 | 7.9 |
| | 07/29/2014 | | | | 14.96 | 399.7 | <0.32U | <3.1U | **16.7** | 0.24J | <0.34U | <0.39U | <0.31U | 15.5 | <0.45U | 21.9 | <0.35U | <0.23U | 1.5J |
| | 10/21/2014 | | | | 17.02 | 397.6 | <0.32U | <3.1U | **35.5** | <0.21U | <0.34U | <0.39U | <0.31U | 17.7 | <0.45U | 24.5 | <0.35U | 0.36J | <0.66U |
| | 01/21/2015 | | | | 15.14 | 399.5 | <0.32U | <3.1U | **19** | <0.21U | <0.34U | <0.39U | <0.31U | 10.2 | <0.45U | 15 | <0.35U | <0.23U | <0.66U |
| | 04/27/2015 | | | | 15.42 | 399.2 | <0.32U | <3.1U | **42.7** | <0.21U | 1.1 | <0.39U | 0.57J | 11.5 | <0.45U | 11.8 | <0.35U | 4.2 | 7.1 |
| | 07/14/2015 | | | | 14.72 | 399.9 | <0.32U | <3.1U | **13.7** | <0.21U | <0.34U | 0.44J | <0.31U | 15.4 | <0.45U | 19.2 | <0.35U | 0.31J | <0.66U |
| | 10/22/2015 | | | | 17.65 | 397 | <0.32U | 3.3J | 3.6 | <0.21U | <0.34U | 0.43J | <0.31U | 4 | <0.45U | 6.3J | <0.35U | <0.23U | <0.66U |
| | 01/20/2016 | | | | 16.02 | 398.6 | <0.32U | <3.1U | **24.3** | <0.21U | <0.34U | <0.39U | <0.31U | 16.2 | <0.45U | 21.4 | <0.35U | <0.23U | 1.4J |
| | 04/12/2016 | | | | 14.59 | 400 | <0.32U | <3.1U | **11.9** | <0.21U | <0.34U | 0.43J | <0.31U | 14.4 | <0.45U | 17.3 | <0.35U | 0.67J | 1.1J |
| | 08/24/2016 | | | | 17.97 | 396.6 | <0.32U | <3.1U | **8.3** | <0.21U | <0.34U | <0.39U | 2.1 | 13.4 | <0.45U | 8J | <0.35U | <0.23U | <0.66U |
| | 11/09/2016 | | | | 19.49 | 395.1 | <0.32U | 5J | **24.4** | <0.21U | <0.34U | <0.39U | 0.32J | 13.6 | <0.45U | 16.4 | <0.35U | 0.24J | 1.1J |
| | 03/07/2017 | | | | 18.54 | 396.1 | <0.32U | <3.1U | **52.9** | <0.21U | <0.34U | 0.54J | 0.33J | 17 | <0.45U | 22 | <0.35U | 4.1 | <0.66U |
| | 06/01/2017 | | | | 16.57 | 398 | <0.32U | 3.9J | **38.7** | <0.21U | <0.34U | <0.39U | <0.31U | 12.1 | <0.45U | 19.1 | <0.35U | 0.26J | 2.1J |
| | 08/15/2017 | | | | 16.52 | 398.1 | <0.32U | 6.8J | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 9 | <0.45U | 13.8 | <0.35U | <0.23U | <0.66U |
| | 11/14/2017 | | | | 17.48 | 397.1 | <0.32U | <3.1U | **23** | <0.21U | <0.34U | 0.49J | <0.31U | 13.4 | <0.45U | 18 | <0.35U | <0.23U | <0.66U |
| | 03/08/2018 | | | | 16.31 | 398.3 | <0.32U | <3.1U | **9.3** | <0.21U | <0.34U | <0.39U | <0.31U | 11.7 | <0.45U | 12.8 | <0.35U | <0.23U | <0.66U |
| | 6/13/2018 | | | | 15.15 | 399.5 | <0.32U | <3.1U | **45.3** | <0.21U | <0.34U | <0.39U | 0.52J | 9.9 | <0.45U | 55.5 | <0.35U | <0.23U | <0.66U |
| | 09/19/2018 | | | | 13.93 | 400.7 | <0.32U | <3.1U | **9.4** | <0.21U | <0.34U | <0.39U | <0.31U | 9.1 | <0.45U | 15.9 | <0.35U | <0.23U | <0.66U |
| | 12/12/2018 | | | | 12.03 | 402.6 | <0.32U | <3.1U | **27.6** | <0.21U | 6.4 | <0.39U | <0.31U | 13.4 | <0.45U | 25.8 | <0.35U | 3.6 | 33.3 |
| | 3/6/2019 | | | | 10.9 | 403.7 | <0.32U | <3.1U | **5.6** | <0.21U | <0.34U | <0.39U | <0.31U | 12.8 | <0.45U | 17.7 | <0.35U | <0.23U | <0.66U |
| | 6/12/2019 | | | | 12.22 | 404.38 | <0.32U | 4.2J | **17.2** | <0.21U | <0.34U | **0.91J** | <0.31U | 16.1 | <0.45U | 27.3 | <0.35U | <0.23U | 1.1J |
| | 9/18/2019 | | | | 15.3 | 399.3 | <0.28U | <3.1U | **20.1** | <0.21U | <0.34U | <0.39U | <0.31U | 14.1 | <0.45U | 31.1 | <0.35U | <0.23U | <0.66U |
| | 11/26/2019 | | | | 16.91 | 397.69 | <0.32U | <3.1U | **19.8** | <0.21U | <0.34U | <0.39U | 0.69J | 12.1 | <0.45U | 108 | <0.35U | <0.23U | <0.66U |
| | 3/31/2020 | | | | 14 | 400.60 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-003 | 03/12/2009 | 416.2 | NA | NA | 17.8 | 398.4 | <1U | 123 | 3.6J | <1U | 368 | <1U | <1U | <1U | <0.5U | <15U | <2U | 1250 | 2080 |
| | 07/21/2009 | | | | 15.27 | 400.9 | <1.7U | <15.5U | 46.1 | 1.4J | 1770 | <1.2U | 1.2J | <0.9U | <1.6U | <23U | <1.4U | 7800 | 8950 |
| | 12/11/2009 | | | | 12.5 | 403.7 | <1.7U | <15.5U | 88.7 | <1.2U | 1790 | <1.2U | <0.8U | <0.9U | <1.6U | 97.6 | <1.4U | 8000 | 8670 |
| | 03/18/2010 | | | | 10.42 | 405.8 | <1.7U | <15.5U | 114 | <1.2U | 1670 | <1.2U | <0.8U | 5.5 | <1.6U | <23U | <1.4U | 9500 | 8210 |
| | 05/24/2010 | | | | 12.3 | 403.9 | <0.36U | <1.8U | 110D | <0.49U | 1600D | <0.36U | <0.56U | <0.39U | <0.76U | <21U | <0.91U | 7700D | 8100D |
| | 09/15/2010 | | | | 17.35 | 398.9 | <1.7U | <15.5U | 107 | <1.2U | 1990 | <1.2U | <0.8U | 2.8J | <1.6U | 48.7J | <1.4U | 6210 | 9440 |
| | 11/29/2010 | | | | 16.31 | 399.9 | <1.6U | <15.5U | 69.8 | <1.1U | 2420 | <2U | <1.6U | 2.3J | <2.3U | 58.6 | <1.8U | 6150 | 12400 |
| | 03/24/2011 | | | | 12.31 | 403.9 | <1.6U | <15.5U | 114 | 3.3J | 2730 | <2U | <1.6U | <1.7U | <2.3U | 163 | <1.8U | 10100 | 13300 |
| | 06/20/2011 | | | | 14.63 | 401.6 | <1.6U | <15.5U | 68.5 | <1.1U | 2040 | <2U | <1.6U | <1.7U | <2.3U | 53.6 | <1.8U | 4620 | 9410 |
| | 09/14/2011 | | | | 13.67 | 402.5 | <1.6U | <15.5U | 135 | <1.1U | 3090 | <2U | <1.6U | <1.7U | <2.3U | 253 | <1.8U | 8790 | 16000 |
| | 10/26/2011 | | | | 13.91 | 402.3 | <1.6U | <15.5U | 106 | <1.1U | 2580 | <2U | <1.6U | <1.7U | <2.3U | 94.7 | <1.8U | 9020 | 13100 |
| | 02/28/2012 | | | | 13.03 | 403.2 | <1.6U | <15.5U | 143 | <1.1U | 1780 | <2U | <1.6U | 9.3 | <2.3U | 469 | <1.8U | 5940 | 9080 |
| | 05/07/2012 | | | | 14.55 | 401.7 | <1.6U | <15.5U | 98.6 | <1.1U | 1850 | <2U | <1.6U | <1.7U | <2.3U | 437 | <1.8U | 4520 | 9410 |
| | 08/14/2012 | | | | 17.41 | 398.8 | <1.6U | <15.5U | 134 | <1.1U | 1710 | <2U | <1.6U | 16.8 | <2.3U | 928 | <1.8U | 3070 | 7990 |
| | 11/15/2012 | | | | 17.15 | 399.1 | <1.6U | 105 | 66.1 | <1.1U | 1250 | <2U | 7.3 | 7.2 | <2.3U | 322 | <1.8U | 816 | 5910 |
| | 03/08/2013 | | | | 15.72 | 400.5 | <1.6U | 126 | 12.1 | <1.1U | 322 | <2U | 2.7J | 2J | <2.3U | 117 | <1.8U | 237 | 1710 |
| | 04/01/2013 | | | | 14.95 | 401.3 | <1.6U | <15.5U | 44.2 | <1.1U | 637 | <2U | <1.6U | 5.9 | <2.3U | 381 | <1.8U | 790 | 2900 |
| | 09/12/2013 | | | | 13.11 | 403.1 | <1.6U | <15.5U | 86.3 | 4.9J | 895 | <2U | 9.1 | 10.9 | <2.3U | 525 | <1.8U | 1360 | 2710 |
| | 12/17/2013 | | | | 13.78 | 402.4 | <1.6U | 50.1 | 31.9 | <1.1U | 785 | <2U | 3.9J | 1.7J | <2.3U | 129 | <1.8U | 846 | 3810 |
| | 01/13/2014 | | | | 12.65 | 403.6 | <16U | <155U | 98.9 | <10.5U | 1140 | <19.5U | <15.5U | <16.5U | <22.5U | 328J | <17.5U | 1650 | 5670 |
| | 04/21/2014 | 415.2† | | | 11.11 | 404.1 | <16U | <155U | 159 | 34.8J | 2360 | <19.5U | <15.5U | 18.9J | 27.4J | 1340 | <17.5U | 4610 | 10800 |
| | 07/29/2014 | | | | 13.38 | 401.9 | <16U | <155U | 208 | 35.6J | 2250 | <19.5U | 17.7J | 24.9J | 116 | 1330 | <17.5U | 3090 | 9370 |
| | 10/20/2014 | | | | 15.72 | 399.5 | <16U | <155U | 150 | 27.9J | 1740 | <19.5U | <15.5U | 16.7J | 27.6J | 594 | <17.5U | 1020 | 7670 |
| | 01/20/2015 | | | | 13.52 | 401.7 | <16U | 203J | 115 | 27.5J | 986 | <19.5U | 20.9J | 19J | <22.5U | 171J | <17.5U | 320 | 4380 |
| | 04/27/2015 | | | | 13.5 | 401.7 | <6.4U | 125J | 88.3 | 19.4J | 841 | 8.4J | 12.7J | 26.5 | <9U | 228 | <7U | 1040 | 4420 |
| | 07/13/2015 | | | | 13.15 | 402.1 | <16U | <155U | 160 | 39.4J | 1020 | <19.5U | <15.5U | 40.2J | <22.5U | 246J | <17.5U | 1100 | 5700 |
| | 10/20/2015 | | | | 16.84 | 398.4 | <16U | <155U | 207 | <10.5U | 1290 | 26J | <15.5U | 27.9J | <22.5U | 264J | <17.5U | 870 | 7080 |
| | 01/19/2016 | | | | 14.52 | 400.7 | <6.4U | <62U | 1310 | 15.3J | <6.8U | <7.8U | <6.2U | 18.6J | <9U | 491 | <7U | 365 | 953 |
| | 04/12/2016 | | | | 13.22 | 402 | <6.4U | <62U | 140 | 8.2J | 584 | <7.8U | 9J | 14.1J | <9U | 111J | <7U | 311 | 2930 |
| | 08/24/2016 | | | | 16.86 | 398.4 | <6.4U | <62U | 187 | 4.3J | 379 | <7.8U | <6.2U | 25 | <9U | 362 | <7U | 97.3 | 1930 |
| | 11/09/2016 | | | | 18.55 | 396.7 | <6.4U | <62U | 156 | <4.2U | 404 | 13.2J | 7.3J | 24.7 | <9U | 193J | <7U | 62.2 | 2000 |
| | 03/06/2017 | | | | 17.39 | 397.8 | <6.4U | <62U | 272 | <4.2U | 584 | <7.8U | <6.2U | 26.9 | <9U | 199J | <7U | 179 | 3660 |
| | 05/31/2017 | | | | 15.07 | 400.2 | <6.4U | <62U | 195 | 14.5J | 809 | <7.8U | <6.2U | 23.7 | <9U | 258 | <7U | 591 | 6700 |
| | 08/14/2017 | | | | 15.33 | 399.9 | <6.4U | <62U | 120 | <4.2U | 483 | <7.8U | <6.2U | 20.6 | <9U | 286 | <7U | 308 | 3540 |
| | 11/14/2017 | | | | 16.29 | 398.9 | <6.4U | <62U | 210 | <4.2U | 1190 | <7.8U | <6.2U | 19.7J | <9U | 292 | <7U | 257 | 5940 |
| | 03/06/2018 | | | | 14.28 | 401 | <6.4U | <62U | 96.4 | 13.5J | 787 | <7.8U | 10.3J | 8.2J | <9U | 185J | <7U | 170 | 3910 |
| | 6/12/2018 | | | | 13.31 | 401.9 | <6.4U | <62U | 150 | 9.2J | 1280 | <7.8U | 10.9J | <6.6U | <9U | 190J | <7U | 825 | 6290 |
| | 09/19/2018 | | | | 11.4 | 403.8 | <6.4U | 374 | 166 | 27.7 | 1440 | <7.8U | 17.4J | 9.9J | <9U | 351 | <7U | 794 | 6700 |
| | 12/12/2018 | | | | 10.09 | 405.2 | <6.4U | <62U | 139 | 6.7J | 1400 | <7.8U | 9J | <6.6U | <9U | 278 | <7U | 510 | 5650 |
| | 3/6/2019 | | | | 8.68 | 406.52 | <6.4U | 492 | 104 | <4.2U | 732 | <7.8U | <6.2U | <6.6U | <9U | 178J | <7U | 597 | 7700 |
| | 6/12/2019 | | | | 10.58 | 404.62 | <6.4U | <62U | 67.8 | <4.2U | 860 | 17.7J | <6.2U | <6.6U | <9U | 53.2J | <7U | 264 | 3370 |
| | 9/18/2019 | | | | 14.75 | 400.45 | <5.6U | <62U | 110 | 40.4 | 824 | <7.8U | <6.2U | <6.6U | <9U | 387 | <7U | 47.6 | 1690 |
| | 11/26/2019 | | | | 16.32 | 398.88 | 14.7J | <62U | 98.9 | <4.2U | 359 | <7.8U | <6.2U | 28.5 | <9U | 667 | <7U | 28.9 | 959 |
| | 3/31/2020 | | | | 12.21 | 402.99 | <0.32U | <3.1U | 2.8 | <0.21U | 7.8 | <0.39U | 0.92J | <0.33U | <0.45U | 6.4J | <0.35U | 5.9 | 123 |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| MDE GW Clean-Up Standards | | | | | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-003R | 11/29/2010 | 416.3 | 15 | 25 | 16.49 | 399.8 | <1.6U | <15.5U | **31.2** | <1.1U | 25.5 | <2U | <1.6U | <1.7U | <2.3U | <11U | <1.8U | 54.6 | 302 |
| | 03/24/2011 | | | | 13.9 | 402.4 | <1.6U | <15.5U | **118** | 2.2J | 217 | <2U | <1.6U | <1.7U | <2.3U | 344 | <1.8U | 426 | 2490 |
| | 06/20/2011 | | | | 14.47 | 401.8 | <1.6U | <15.5U | **109** | <1.1U | 146 | <2U | <1.6U | <1.7U | <2.3U | 65.3 | <1.8U | 70.2 | 1620 |
| | 09/14/2011 | | | | 13.59 | 402.7 | <1.6U | <15.5U | **249** | 8.6 | 441 | <2U | <1.6U | <1.7U | <2.3U | 177 | <1.8U | **1490** | 2480 |
| | 10/26/2011 | | | | 13.67 | 402.6 | <1.6U | 28.5J | **105** | <1.1U | 117 | <2U | <1.6U | 5.5 | <2.3U | 216 | <1.8U | 109 | 626 |
| | 02/28/2012 | | | | 13.62 | 402.7 | <1.6U | <15.5U | **149** | <1.1U | 627 | <2U | <1.6U | <1.7U | <2.3U | 423 | <1.8U | 410 | 1900 |
| | 05/07/2012 | | | | 14.75 | 401.5 | <1.6U | <15.5U | **122** | <1.1U | 91.4 | <2U | <1.6U | 9.5 | <2.3U | 354 | <1.8U | 169 | 535 |
| | 08/14/2012 | | | | 17.3 | 399 | <1.6U | <15.5U | **204** | <1.1U | 38.5 | <2U | <1.6U | 17.9 | <2.3U | 401 | <1.8U | 129 | 267 |
| | 11/15/2012 | | | | 16.92 | 399.4 | <0.32U | <3.1U | **152** | <0.21U | 56.6 | <0.39U | <0.31U | 17 | <0.45U | 296 | <0.35U | 79.9 | 187 |
| | 03/08/2013 | | | | 15.45 | 400.8 | <0.32U | <3.1U | **70.8** | <0.21U | 10 | <0.39U | 7 | 17.7 | <0.45U | 542 | <0.35U | 9 | 71.8 |
| | 04/01/2013 | | | | 14.7 | 401.6 | <0.32U | <3.1U | **85.5** | <0.21U | 24 | <0.39U | <0.31U | 13 | <0.45U | 402 | <0.35U | 198 | 425 |
| | 09/12/2013 | | | | 12.69 | 403.6 | 0.39J | 81.2 | **84.3** | <0.21U | 339 | <0.39U | 5 | 8.4 | <0.45U | 764 | <0.35U | 167 | 2600 |
| | 12/17/2013 | | | | 13.35 | 402.9 | <0.32U | <3.1U | **23.8** | <0.21U | 28.5 | <0.39U | <0.31U | 1.1 | <0.45U | 44.9 | <0.35U | 67.8 | 176 |
| | 01/13/2014 | | | | 12.01 | 404.3 | <0.32U | <3.1U | **23.3** | <0.21U | 21.8 | <0.39U | <0.31U | 2.6 | <0.45U | 173 | <0.35U | 24.3 | 178 |
| | 04/21/2014 | 415.5† | | | 10.74 | 404.7 | <0.32U | 15.6 | **43.3** | <0.21U | 117 | <0.39U | <0.31U | 10.6 | <0.45U | 193 | <0.35U | 93.6 | 983 |
| | 07/29/2014 | | | | 13.21 | 402.2 | <1.6U | 17.6J | **172** | <1.1U | 243 | <2U | 2.3J | **29.3** | **12.8** | 378 | <1.8U | 158 | 1530 |
| | 10/20/2014 | | | | 15.45 | 400 | <0.32U | 63.7 | **119** | 2.1 | 11.6 | <0.39U | <0.31U | 13.4 | <0.45U | 355 | <0.35U | 4.9 | 33.1 |
| | 01/20/2015 | | | | 13.17 | 402.3 | <0.32U | 100 | **31.6** | <0.21U | 21.1 | <0.39U | <0.31U | 2.5 | <0.45U | 76.5 | <0.35U | 25.9 | 88 |
| | 04/27/2015 | | | | 13.25 | 402.2 | <0.32U | 107 | **43.2** | <0.21U | 19.4 | <0.39U | <0.31U | 9.6 | <0.45U | 96.2 | <0.35U | 16.2 | 191 |
| | 07/13/2015 | | | | 12.85 | 402.6 | <1.6U | 171 | **170** | <1.1U | 68 | <2U | <1.6U | **29.6** | <2.3U | 309 | <1.8U | 174 | 506 |
| | 10/20/2015 | | | | 19.39 | 396.1 | <1.6U | 19.9J | **88.7** | <1.1U | 21.3 | <2U | 8.3 | **27.1** | <2.3U | 187 | <1.8U | 10.2 | 73.2 |
| | 01/19/2016 | | | | 14.14 | 401.3 | <0.32U | <3.1U | **82.9** | <0.21U | 8.4 | <0.39U | <0.31U | **24.4** | <0.45U | 132 | <0.35U | 6.5 | 34.2 |
| | 04/12/2016 | | | | 13.02 | 402.4 | <0.32U | 16.5 | **77.6** | <0.21U | 16.2 | <0.39U | 0.51J | 18.6 | <0.45U | 203 | <0.35U | 14.3 | 144 |
| | 08/24/2016 | | | | 16.95 | 398.5 | <0.32U | <3.1U | **74.6** | <0.21U | 4.9 | <0.39U | <0.31U | 17.5 | <0.45U | 317 | <0.35U | 3.7 | 43.5 |
| | 11/08/2016 | | | | 18.4 | 397.1 | <0.32U | 6.9J | **36.2** | <0.21U | 6.2 | <0.39U | 5.6 | 9 | <0.45U | 84.9 | <0.35U | 2.7 | 32.4 |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| MDE GW Clean-Up Standards | | | | | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-005 | 03/12/2009 | 416.9 | NA | NA | 17.31 | 399.6 | <1U | <20U | 288 | <1U | 2400 | <1U | <1U | <1U | <0.5U | <15U | <2U | 31400 | 13100 |
| | 07/21/2009 | | | | 16.61 | 400.3 | <1.7U | <15.5U | 340 | <1.2U | 2540 | <1.2U | <0.8U | 10.3 | <1.6U | 46.3J | <1.4U | 33200 | 13800 |
| | 12/11/2009 | | | | 16.42 | 400.5 | <1.7U | <15.5U | 374 | <1.2U | 1960 | <1.2U | <0.8U | <0.9U | <1.6U | 1160 | <1.4U | 22700 | 10500 |
| | 03/18/2010 | | | | 12.83 | 404.1 | <1.7U | <15.5U | 787 | <1.2U | 2030 | <1.2U | <0.8U | 4.3J | <1.6U | 197 | <1.4U | 23900 | 10500 |
| | 05/24/2010 | | | | 13.8 | 403.1 | <0.36U | <1.8U | 560D | <0.49U | 2200D | <0.36U | <0.56U | <0.39U | <0.76U | <21U | <0.91U | 23000D | 11000D |
| | 09/15/2010 | | | | 18.35 | 398.5 | <1.7U | <15.5U | 323 | <1.2U | 2330 | <1.2U | <0.8U | 2.7J | <1.6U | 304 | <1.4U | 29000 | 11700 |
| | 11/29/2010 | | | | 18.21 | 398.7 | <1.6U | <15.5U | 243 | <1.1U | 2300 | <2U | <1.6U | <1.7U | <2.3U | 335 | <1.8U | 25500 | 12000 |
| | 03/24/2011 | | | | 15.73 | 401.2 | <0.32U | <3.1U | 182 | <0.21U | 2100 | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 22900 | 11000 |
| | 06/20/2011 | | | | 16.38 | 400.5 | <1.6U | 44.1J | 271 | 3.2J | 2180 | <2U | <1.6U | <1.7U | <2.3U | 87 | <1.8U | 30800 | 11700 |
| | 09/14/2011 | | | | 15.88 | 401 | <1.6U | <15.5U | 256 | <1.1U | 2210 | <2U | <1.6U | <1.7U | <2.3U | 208 | <1.8U | 21700 | 11500 |
| | 10/27/2011 | | | | 15.6 | 401.3 | <1.6U | <15.5U | 263 | <1.1U | 2340 | <2U | <1.6U | <1.7U | <2.3U | 126 | <1.8U | 29600 | 11900 |
| | 02/28/2012 | | | | 14.88 | 402 | <1.6U | <15.5U | 536 | <1.1U | 1660 | <2U | <1.6U | 3.4J | <2.3U | 192 | <1.8U | 19600 | 8570 |
| | 05/07/2012 | | | | 16.25 | 400.6 | <1.6U | 683 | 299 | 11.2 | 2350 | <2U | 88.3 | 5.6 | <2.3U | 184 | <1.8U | 25500 | 11900 |
| | 08/14/2012 | | | | 18.52 | 398.4 | <1.6U | <15.5U | 246 | <1.1U | 2310 | <2U | <1.6U | <1.7U | <2.3U | 415 | <1.8U | 30200 | 11800 |
| | 11/15/2012 | | | | 18.92 | 398 | <1.6U | 763 | 475 | <1.1U | 2940 | <2U | <1.6U | 14 | <2.3U | 433 | <1.8U | 12800 | 14300 |
| | 03/07/2013 | | | | 17.45 | 399.4 | <1.6U | <15.5U | 271 | <1.1U | 2490 | <2U | 122 | 15.8 | <2.3U | 373 | <1.8U | 25400 | 12700 |
| | 04/02/2013 | | | | 18.55 | 398.4 | <16U | <155U | 4620 | <10.5U | 285 | <19.5U | <15.5U | <16.5U | <22.5U | 991 | <17.5U | 55.5 | 731 |
| | 09/12/2013 | | | | 14.48 | 402.4 | <160U | <1550U | 352J | 175J | 2220 | <195U | <155U | <165U | <225U | <1100U | <175U | 24000 | 12200 |
| | 12/17/2013 | | | | 15.78 | 401.1 | <1.6U | 399 | 192 | <1.1U | 1860 | <2U | 65.5 | 10.7 | <2.3U | 263 | <1.8U | <1.2U | 9510 |
| | 01/13/2014 | | | | 16.24 | 400.7 | <1.6U | <15.5U | 410 | <1.1U | 28.5 | <2U | <1.6U | <1.7U | <2.3U | <11U | <1.8U | 21.6 | 47.5 |
| | 04/21/2014 | 416† | | | 13.34 | 402.7 | <1.6U | <15.5U | 313 | <1.1U | 2210 | <2U | <1.6U | 10.7 | <2.3U | 342 | <1.8U | 24200 | 12900 |
| | 07/29/2014 | | | | 15.21 | 400.8 | <80U | <775U | 363 | 154J | 2250 | <97.5U | 94.5J | <82.5U | <113U | <550U | <87.5U | 21400 | 12800 |
| | 10/20/2014 | | | | 17.22 | 398.8 | <1.6U | <15.5U | 96.8 | <1.1U | 2330 | <2U | 31.9 | 10.7 | 4.6J | 430 | <1.8U | 19100 | 13200 |
| | 01/20/2015 | | | | 14.85 | 401.2 | <3.2U | <31U | 236 | <2.1U | 1690 | <3.9U | 73.2 | 9.5J | <4.5U | 71.2J | <3.5U | 10200 | 9790 |
| | 04/27/2015 | | | | 15.34 | 400.7 | <1.6U | <15.5U | 274 | <1.1U | 1550 | <2U | 112 | 16.8 | <2.3U | 180 | <1.8U | 18400 | 9900 |
| | 07/13/2015 | | | | 14.94 | 401.1 | <32U | <310U | 242 | 85.4J | 1590 | <39U | <31U | 34.3J | <45U | <220U | <35U | 12100 | 9190 |
| | 10/21/2015 | | | | 17.9 | 398.1 | <32U | <310U | 422 | <21U | 2640 | 58.5J | <31U | 80.4J | <45U | 1800 | <35U | 17700 | 13700 |
| | 01/19/2016 | | | | 16.4 | 399.6 | <32U | <310U | 263 | 63.8J | 2310 | <39U | <31U | 48.6J | <45U | <220U | <35U | 4290 | 10700 |
| | 04/12/2016 | | | | 15.02 | 401 | <32U | 339J | 305 | <21U | 1730 | <39U | 39.7J | 39.7J | <45U | <220U | <35U | 2220 | 8450 |
| | 08/23/2016 | | | | 18.36 | 397.7 | <32U | 459J | 208 | 36.7J | 1750 | <39U | 138 | 35.3J | <45U | 634J | <35U | 5360 | 8820 |
| | 11/08/2016 | | | | 19.13 | 396.9 | <32U | <310U | 212 | <21U | 2100 | 47.4J | 38J | 36.8J | <45U | 235J | <35U | 1240 | 11700 |
| | 03/06/2017 | | | | 18.89 | 397.1 | <8U | 102J | 187 | 13.3J | 1590 | <9.8U | <7.8U | 23.4J | <11.3U | 468 | <8.8U | 751 | 9670 |
| | 06/01/2017 | | | | 14.95 | 401.1 | <8U | <77.5U | 334 | 20.4J | 713 | <9.8U | <7.8U | 45.7 | <11.3U | 330 | <8.8U | 452 | 3680 |
| | 08/14/2017 | | | | 16.86 | 399.2 | <8U | <77.5U | 235 | <5.3U | 349 | <9.8U | <7.8U | 24J | <11.3U | 284 | <8.8U | 905 | 2150 |
| | 11/14/2017 | | | | 18.42 | 397.6 | <8U | 90.4J | 334 | <5.3U | 330 | <9.8U | 88.9 | 27 | <11.3U | 433 | <8.8U | 286 | 1940 |
| | 03/06/2018 | | | | 16.45 | 399.6 | <8U | <77.5U | 240 | <5.3U | 1110 | <9.8U | <7.8U | 28.6 | <11.3U | 337 | <8.8U | 815 | 5420 |
| | 6/12/2018 | | | | 15.4 | 400.6 | <1.6U | <15.5U | 395 | <1.1U | 519 | <2U | <1.6U | 41.4 | <2.3U | 515 | <1.8U | 361 | 2290 |
| | 09/19/2018 | | | | 15.17 | 400.9 | <1.6U | <15.5U | 342 | 18.9 | 440 | <2U | 70.5 | 37.6 | <2.3U | 217 | <1.8U | 649 | 2000 |
| | 12/11/2018 | | | | 12.15 | 403.9 | <8U | <77.5U | 410 | 9.1J | 966 | <9.8U | <7.8U | 52.2 | <11.3U | 666 | <8.8U | 855 | 5260 |
| | 3/6/2019 | | | | 10.74 | 405.26 | <8U | 302 | 499 | <5.3U | 984 | <9.8U | <7.8U | 28.8 | <11.3U | 370 | <8.8U | 342 | 3800 |
| | 6/12/2019 | | | | 14.01 | 401.99 | <8U | <77.5U | 534 | <5.3U | 539 | 17J | <7.8U | 33.6 | <11.3U | 360 | <8.8U | 209 | 1730 |
| | 9/18/2019 | | | | 15.81 | 400.19 | <7U | <77.5U | 535 | <5.3U | 929 | <9.8U | <7.8U | 15.1J | <11.3U | 251 | <8.8U | 336 | 2620 |
| | 11/26/2019 | | | | 17.71 | 398.29 | <3.2U | <31U | 609 | <2.1U | 1120 | <3.9U | <3.1U | 30.2 | <4.5U | 527 | <3.5U | 330 | 2810 |
| | 3/31/2020 | | | | 14.12 | 401.88 | <3.2U | 57.6J | 790 | <2.1U | 1350 | <3.9U | 69 | <3.3U | <4.5U | <22U | <3.5U | 449 | 2940 |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| MDE GW Clean-Up Standards | | | | | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| **Well ID** | **Sample Date** | **Top of Casing Elevation*** | **Screen start depth** | **Screen end depth** | **Depth to Water (ft)** | **GW Elevation** | | | | | | | | | | | | | |
| MW-005R | 11/29/2010 | 416.9 | 15 | 25 | 18.2 | 398.7 | <1.6U | 335 | **3750** | <1.1U | **1100** | <2U | <1.6U | **396** | <2.3U | 983 | <1.8U | **14600** | 7770 |
| | 03/24/2011 | | | | 15.42 | 401.5 | 2.7J | <15.5U | **17000** | 3.7J | **1870** | <2U | <1.6U | **51.9** | <2.3U | 370 | <1.8U | **36800** | **10200** |
| | 06/20/2011 | | | | 15.96 | 400.9 | 3.1J | **976** | **16000** | <1.1U | **1830** | <2U | <1.6U | 14.6 | <2.3U | 204 | <1.8U | **38100** | 9560 |
| | 09/14/2011 | | | | 15.41 | 401.5 | <1.6U | **909** | **16300** | <1.1U | **2380** | <2U | <1.6U | **25** | <2.3U | 287 | <1.8U | **36800** | **13300** |
| | 10/27/2011 | | | | 15.68 | 401.2 | <1.6U | **1150** | **16200** | <1.1U | **2180** | <2U | <1.6U | 8.7 | <2.3U | 324 | <1.8U | **39900** | **11600** |
| | 02/28/2012 | | | | 15.17 | 401.7 | <1.6U | <15.5U | **12100** | <1.1U | **1770** | <2U | <1.6U | 8.1 | <2.3U | 596 | <1.8U | **48400** | 9490 |
| | 05/07/2012 | | | | 16.08 | 400.8 | <32U | **1260** | **15200** | <21U | **2220** | <39U | 60.7J | <33U | <45U | 522J | <35U | **38000** | **12200** |
| | 08/14/2012 | | | | 18.3 | 398.6 | <32U | <310U | **14000** | <21U | **2230** | <39U | <31U | <33U | <45U | 3090 | <35U | **36100** | **11600** |
| | 11/15/2012 | | | | 19.78 | 397.1 | <1.6U | 387 | **8660** | <1.1U | **2740** | <2U | <1.6U | 8.7 | <2.3U | 242 | <1.8U | **26200** | **15000** |
| | 03/08/2013 | | | | 18.3 | 398.6 | <1.6U | <15.5U | **6000** | <1.1U | **2150** | <2U | **39.3** | 13.4 | <2.3U | 375 | <1.8U | **28500** | **13000** |
| | 03/13/2013 | | | | 16.9 | 400 | <2.6 | 291 | **872** | <2 | 224 | <2.2 | <2.1 | 4.7J | <7 | 249J | <2.8 | **2290** | 1140 |
| | 04/02/2013 | | | | 16.55 | 400.4 | <1.6U | <15.5U | **178** | <1.1U | <1.7U | <2U | <1.6U | **146** | <2.3U | 1930 | <1.8U | 10.8 | 33 |
| | 09/12/2013 | | | | 14.05 | 402.9 | <160U | **1660J** | **9920** | **173J** | **1710** | <195U | <155U | <165U | <225U | <1100U | <175U | **36600** | **10100** |
| | 12/17/2013 | | | | 15.25 | 401.6 | <32U | **653J** | **6140** | <21U | **1240** | <39U | <31U | <33U | <45U | 502J | <35U | **20900** | 6300 |
| | 01/13/2014 | | | | 14.33 | 402.6 | 278 | <15.5U | **203** | <1.1U | <1.7U | <2U | <1.6U | **579** | 2.7J | 3490 | <1.8U | <1.2U | 4J |
| | 04/21/2014 | 415.7† | | | 12.56 | 403.2 | <16U | **800** | **7180** | 36.1J | **1630** | <19.5U | **22.4J** | 18.3J | **34J** | 583 | <17.5U | **33900** | **10400** |
| | 07/30/2014 | | | | 14.8 | 400.9 | <320U | <3100U | **8950** | <210U | **1980** | <390U | <310U | <330U | <450U | <2200U | <350U | **37900** | **11700** |
| | 10/20/2014 | | | | 18.85 | 396.9 | <16U | <155U | **7570** | 30.3J | **2190** | <19.5U | **44.6J** | 19.4J | **28.8J** | 618 | <17.5U | **35100** | **13500** |
| | 01/20/2015 | | | | 15.31 | 400.4 | <16U | 178J | **4100** | <10.5U | **1320** | <19.5U | 18J | <16.5U | <22.5U | 190J | <17.5U | **21200** | 8910 |
| | 04/27/2015 | | | | 15.12 | 400.6 | <16U | <155U | **3100** | <10.5U | **1600** | <19.5U | **33.7J** | <16.5U | <22.5U | 302J | <17.5U | **15400** | **10100** |
| | 07/13/2015 | | | | 14.55 | 401.2 | <160U | <1550U | **3620** | **325J** | **1350** | **301J** | <155U | <165U | <225U | <1100U | <175U | **22200** | 8040 |
| | 10/21/2015 | | | | 17.59 | 398.1 | <32U | <310U | **1600** | <21U | 598 | **44.2J** | <31U | <33U | <45U | 366J | <35U | **4760** | 3710 |
| | 01/19/2016 | | | | 15.78 | 399.9 | <32U | <310U | **2550** | 73J | **1400** | <39U | <31U | **38.7J** | <45U | 330J | <35U | **10900** | 7470 |
| | 04/12/2016 | | | | 14.7 | 401 | <32U | <310U | **3050** | <21U | **1050** | <39U | **49.3J** | <33U | <45U | 308J | <35U | **8370** | 6210 |
| | 08/23/2016 | | | | 18.07 | 397.6 | <6.4U | <62U | **3730** | <4.2U | **854** | <7.8U | <6.2U | **26** | <9U | 272 | <7U | 916 | 4170 |
| | 11/08/2016 | | | | 19.84 | 395.9 | <6.4U | <62U | **2210** | <4.2U | **954** | <7.8U | <6.2U | **32.7** | <9U | 263 | <7U | 303 | 4520 |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| MDE GW Clean-Up Standards | | | | | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-006 | 03/12/2009 | 416.7 | NA | NA | 17.53 | 399.2 | <0.2U | <4U | 2.3 | <0.2U | 1.6 | <0.2U | <0.2U | 4.2 | <0.1U | <3U | **9.9** | 10.6 | 8.8 |
| | 07/21/2009 | | | | 16.73 | 400 | <0.33U | <3.1U | **5.2** | <0.23U | 8.1 | <0.24U | <0.16U | 4.3 | <0.32U | <4.6U | **15.7** | 58.6 | 46.2 |
| | 12/11/2009 | | | | 15.5 | 401.2 | <0.33U | <3.1U | **11.7** | <0.23U | 32.4 | <0.24U | <0.16U | 2 | <0.32U | <4.6U | **10** | 220 | 172 |
| | 03/18/2010 | | | | 13.36 | 403.3 | <0.33U | <3.1U | 3.1 | <0.23U | 21.4 | <0.24U | <0.16U | 0.94J | <0.32U | <4.6U | **7** | 64.1 | 100 |
| | 05/24/2010 | | | | 13.96 | 402.7 | <0.36U | <1.8U | **6.4** | <0.49U | 7.4 | <0.36U | <0.56U | <0.39U | <0.76U | <21U | **6.8** | 27 | 34 |
| | 09/15/2010 | | | | 18.14 | 398.6 | <0.33U | <3.1U | **7.5** | <0.23U | 8.9 | <0.24U | <0.16U | 2 | <0.32U | <4.6U | **6.5** | 58.7 | 44.3 |
| | 11/29/2010 | | | | 15.5 | 401.2 | <0.32U | <3.1U | 2.8 | <0.21U | 1.4 | <0.39U | <0.31U | 1.9 | <0.45U | <2.2U | **6.5** | 12.5 | 8.2 |
| | 03/24/2011 | | | | 16.43 | 400.3 | <0.32U | <3.1U | **8.3** | <0.21U | 24 | <0.39U | <0.31U | 1.4 | <0.45U | <2.2U | 1.7 | 121 | 146 |
| | 06/20/2011 | | | | 15.68 | 401 | <0.32U | <3.1U | 4.6 | <0.21U | 3.6 | <0.39U | <0.31U | 2.9 | <0.45U | <2.2U | 2 | 32 | 20.4 |
| | 09/16/2011 | | | | 16.65 | 400.1 | <0.32U | <3.1U | 0.37J | <0.21U | <0.34U | <0.39U | <0.31U | 4.4 | <0.45U | <2.2U | 1.9 | 1.6 | 1.7J |
| | 10/27/2011 | | | | 16.06 | 400.6 | <0.32U | <3.1U | **37.8** | <0.21U | 34 | <0.39U | <0.31U | 3 | <0.45U | <2.2U | 1.7 | 292 | 194 |
| | 02/28/2012 | | | | 15.09 | 401.6 | <0.32U | <3.1U | **5.6** | <0.21U | 6.3 | <0.39U | <0.31U | 1.6 | <0.45U | <2.2U | 1.2 | 54.2 | 35.4 |
| | 05/08/2012 | | | | 16.55 | 400.2 | <0.32U | <3.1U | **9.8** | <0.21U | 3.3 | <0.39U | <0.31U | 1.6 | <0.45U | <2.2U | 1.2 | 2.9 | 9.3 |
| | 08/14/2012 | | | | 18.58 | 398.1 | <0.32U | <3.1U | 0.46J | <0.21U | <0.34U | <0.39U | <0.31U | 1.5 | <0.45U | <2.2U | 1.5 | 2.7 | 1.8J |
| | 11/15/2012 | | | | 19.36 | 397.3 | <0.32U | <3.1U | 0.77J | <0.21U | 14.1 | <0.39U | <0.31U | 2 | <0.45U | 21.2 | 0.83J | 6.9 | 76.4 |
| | 03/07/2013 | | | | 17.88 | 398.8 | <0.32U | <3.1U | **23.9** | <0.21U | 6.6 | <0.39U | <0.31U | 1.5 | <0.45U | 14 | 0.56J | 3 | 16 |
| | 04/01/2013 | | | | 17.2 | 399.5 | <0.32U | <3.1U | 3.8 | <0.21U | 21.7 | <0.39U | <0.31U | 1.1 | <0.45U | <2.2U | 0.48J | 143 | 176 |
| | 09/12/2013 | | | | 14.61 | 402.1 | <0.32U | <3.1U | 0.3J | <0.21U | <0.34U | <0.39U | <0.31U | 1.2 | <0.45U | <2.2U | 0.41J | 0.86J | <0.66U |
| | 12/17/2013 | | | | 15.98 | 400.7 | <0.32U | <3.1U | 3.2 | <0.21U | 10.5 | <0.39U | <0.31U | 0.58J | <0.45U | <2.2U | <0.35U | 76.1 | 66 |
| | 01/13/2014 | | | | 14.92 | 401.8 | <0.32U | <3.1U | 0.76J | <0.21U | 0.59J | <0.39U | <0.31U | 1 | <0.45U | <2.2U | <0.35U | 1.3 | 2.5J |
| | 04/21/2014 | 415.7† | | | 13.3 | 402.4 | <0.32U | <3.1U | 0.3J | <0.21U | 2.2 | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 3.7 | 10.1 |
| | 07/29/2014 | | | | 15.23 | 400.4 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1.1 | 0.76J | <2.2U | <0.35U | <0.23U | <0.66U |
| | 10/21/2014 | | | | 17.38 | 398.3 | <0.32U | <3.1U | 0.86J | <0.21U | <0.34U | <0.39U | 0.32J | 1.2 | <0.45U | 2.9J | <0.35U | 2.3 | 2J |
| | 01/20/2015 | | | | 15.54 | 400.1 | <0.32U | <3.1U | 1.3 | <0.21U | 2.1 | <0.39U | <0.31U | 0.74J | <0.45U | <2.2U | <0.35U | 22.8 | 10.1 |
| | 04/27/2015 | | | | 15.82 | 399.8 | <0.32U | <3.1U | 0.77J | <0.21U | 4.4 | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 13.9 | 25.2 |
| | 07/13/2015 | | | | 15.26 | 400.4 | <0.32U | 4.1J | 4.6 | <0.21U | 7.9 | <0.39U | 0.7J | 0.52J | <0.45U | <2.2U | <0.35U | 81 | 50.3 |
| | 10/21/2015 | | | | 18.01 | 397.6 | <0.32U | <3.1U | **10.2** | <0.21U | 7 | 0.46J | <0.31U | 0.78J | <0.45U | <2.2U | <0.35U | 43.2 | 43.4 |
| | 01/19/2016 | | | | 16.43 | 399.2 | <0.32U | <3.1U | 0.3J | <0.21U | 2.1 | <0.39U | <0.31U | 0.95J | 0.57J | <2.2U | <0.35U | 0.62J | 12.9 |
| | 04/12/2016 | | | | 15.31 | 400.4 | <0.32U | 3.1J | 0.23J | <0.21U | <0.34U | <0.39U | 0.49J | 0.55J | <0.45U | <2.2U | <0.35U | 0.98J | <0.66U |
| | 08/24/2016 | | | | 18.45 | 397.2 | <0.32U | 5.5J | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.34J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 11/08/2016 | | | | 19.93 | 395.7 | <0.32U | <3.1U | 0.97J | <0.21U | 0.62J | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 2.8 | 3.4 |
| | 03/07/2017 | | | | 19.12 | 396.5 | <0.32U | 4.8J | 0.37J | <0.21U | <0.34U | <0.39U | <0.31U | 2.1 | <0.45U | <2.2U | <0.35U | 1.9 | 0.76J |
| | 05/31/2017 | | | | 17.19 | 398.5 | <0.32U | <3.1U | 0.37J | <0.21U | <0.34U | <0.39U | <0.31U | 1.2 | <0.45U | <2.2U | <0.35U | 1 | 1.9J |
| | 08/15/2017 | | | | 17.04 | 398.6 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.33J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 11/14/2017 | | | | 17.99 | 397.7 | <0.32U | <3.1U | 0.59J | <0.21U | 11 | <0.39U | <0.31U | 0.86J | <0.45U | <2.2U | <0.35U | 2 | 64.9 |
| | 03/08/2018 | | | | 16.93 | 398.7 | <0.32U | <3.1U | <0.23U | <0.21U | 0.82J | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.78J | 5.5 |
| | 6/13/2018 | | | | 15.75 | 399.9 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.47J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 09/19/2018 | | | | 14.5 | 401.2 | <0.32U | 3.5J | <0.23U | <0.21U | 0.55J | <0.39U | <0.31U | 0.61J | <0.45U | <2.2U | <0.35U | 0.24J | 2.6J |
| | 12/11/2018 | | | | 12.46 | 403.2 | <0.32U | <3.1U | <0.23U | <0.21U | 1.1 | <0.39U | 0.48J | <0.33U | <0.45U | <2.2U | <0.35U | 0.58J | 6.4 |
| | 3/6/2019 | | | | 11.05 | 404.65 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 6/12/2019 | | | | 12.39 | 403.31 | <0.32U | 3.2J | <0.23U | <0.21U | 0.53J | 1.4J | 0.64J | <0.33U | <0.45U | 2.2J | <0.35U | <0.23U | 1.6J |
| | 9/18/2019 | | | | 15.9 | 399.8 | <0.28U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.38J | <0.45U | <2.2U | <0.35U | 0.47J | <0.66U |
| | 11/26/2019 | | | | 17.31 | 398.39 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.77J | <0.45U | 14.2 | <0.35U | <0.23U | <0.66U |
| | 3/31/2020 | | | | 14.48 | 401.22 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 2.5J | <0.35U | <0.23U | <0.66U |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-007 | 03/12/2009 | 417.6 | NA | NA | 17.09 | 400.5 | <2U | <40U | 732 | <2U | 977 | <2U | <2U | <2U | <1U | <30U | <4U | 29800 | 8250 |
| | 07/21/2009 | | | | 16.51 | 401.1 | <3.3U | <31U | 760 | 3.9J | 964 | <2.4U | <1.6U | 19.6 | <3.2U | <46U | <2.8U | 22400 | 5120 |
| | 12/11/2009 | | | | 13.67 | 403.9 | <3.3U | <31U | 1060 | <2.3U | 827 | <2.4U | <1.6U | 2.3J | <3.2U | <46U | <2.8U | 10200 | 4460 |
| | 03/18/2010 | | | | 10.81 | 406.8 | <3.3U | <31U | 1310 | <2.3U | 749 | <2.4U | <1.6U | <1.8U | <3.2U | <46U | <2.8U | 9430 | 3620 |
| | 05/24/2010 | | | | 13.51 | 404.1 | <0.36U | <1.8U | 2200D | <0.49U | 850D | <0.36U | <0.56U | <0.39U | <0.76U | <21U | <0.91U | 13000D | 4600D |
| | 09/15/2010 | | | | 18.6 | 399 | <3.3U | <31U | 1260 | <2.3U | 1240 | <2.4U | <1.6U | <1.8U | <3.2U | 91.2J | <2.8U | 17300 | 4710 |
| | 11/29/2010 | | | | 17.96 | 399.6 | <3.2U | <31U | 1080 | <2.1U | 906 | <3.9U | <3.1U | <3.3U | <4.5U | 127 | <3.5U | 18200 | 4420 |
| | 03/24/2011 | | | | 13.86 | 403.7 | <0.32U | <3.1U | 1220 | <0.21U | 1520 | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 24300 | 7500 |
| | 06/20/2011 | | | | 15.93 | 401.7 | <1.6U | <15.5U | 1150 | 1.7J | 1230 | <2U | <1.6U | <1.7U | <2.3U | <11U | <1.8U | 19100 | 5740 |
| | 09/14/2011 | | | | 13.64 | 404 | <0.32U | 56.4 | 169 | <0.21U | 227 | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 519 | 1270 |
| | 10/26/2011 | | | | 14.8 | 402.8 | <0.32U | <3.1U | 184 | <0.21U | 325 | <0.39U | <0.31U | 1.1 | <0.45U | 17.4 | <0.35U | 1600 | 1210 |
| | 02/28/2012 | | | | 15.08 | 402.5 | <1.6U | <15.5U | 917 | <1.1U | 563 | <2U | <1.6U | 2.6J | <2.3U | 236 | <1.8U | 5130 | 2350 |
| | 05/07/2012 | | | | 16.55 | 401.1 | <3.2U | <31U | 593 | <2.1U | 648 | <3.9U | 33.9 | 5.4J | <4.5U | 241 | <3.5U | 7450 | 2160 |
| | 08/13/2012 | | | | 18.88 | 398.7 | <3.2U | <31U | 404 | <2.1U | 808 | <3.9U | <3.1U | <3.3U | <4.5U | 420 | <3.5U | 8980 | 2690 |
| | 11/15/2012 | | | | 18.68 | 398.9 | <16U | <155U | 430 | <10.5U | 421 | <19.5U | <15.5U | <16.5U | <22.5U | <110U | <17.5U | 3190 | 1730 |
| | 03/07/2013 | | | | 16.88 | 400.7 | <1.6U | <15.5U | 64.9 | <1.1U | 211 | <2U | <1.6U | <1.7U | 3.8J | <11U | <1.8U | 423 | 1080 |
| | 04/02/2013 | | | | 16.21 | 401.4 | <0.32U | <3.1U | 3.2 | <0.21U | 17.7 | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 97.3 | 212 |
| | 09/12/2013 | | | | 13.39 | 404.2 | <1.6U | <15.5U | 163 | 2.3J | 146 | <2U | 6.9 | <1.7U | <2.3U | 59.9 | <1.8U | 1040 | 490 |
| | 12/17/2013 | | | | 14.98 | 402.6 | <1.6U | <15.5U | 431 | <1.1U | 177 | <2U | 8.4 | <1.7U | <2.3U | <11U | <1.8U | 2780 | 877 |
| | 01/13/2014 | | | | 14.09 | 403.5 | <16U | <155U | 408 | <10.5U | 382 | <19.5U | <15.5U | <16.5U | <22.5U | 11500 | <17.5U | 3340 | 1610 |
| | 04/22/2014 | 416.9† | | | 12.22 | 404.7 | <16U | <155U | 646 | 28.5J | 345 | <19.5U | <15.5U | <16.5U | 40.1J | 185J | <17.5U | 5530 | 1230 |
| | 07/30/2014 | | | | 14.66 | 402.2 | <16U | <155U | 1250 | <10.5U | 434 | <19.5U | <15.5U | <16.5U | 123 | <110U | <17.5U | 8920 | 1740 |
| | 10/20/2014 | | | | 16.98 | 399.9 | <1.6U | 29.6J | 124 | 3.2J | 26.3 | <2U | <1.6U | <1.7U | 4.9J | <11U | <1.8U | 368 | 353 |
| | 01/20/2015 | | | | 15.24 | 401.6 | <1.6U | <15.5U | 509 | 1.8J | 293 | <2U | 30.1 | 6.8 | <2.3U | 16.4J | <1.8U | 5380 | 1240 |
| | 04/27/2015 | | | | 15.94 | 400.9 | <1.6U | <15.5U | 630 | <1.1U | 558 | <2U | 18.3 | 14 | <2.3U | 111 | <1.8U | 8250 | 2190 |
| | 07/13/2015 | | | | 14.45 | 402.4 | <1.6U | 24.5J | 45.5 | <1.1U | 84.9 | <2U | <1.6U | <1.7U | <2.3U | <11U | <1.8U | 687 | 452 |
| | 10/20/2015 | | | | 18.15 | 398.7 | <1.6U | 29.4J | 192 | <1.1U | 218 | 3.8J | 12.5 | 4.4J | <2.3U | 30.5J | <1.8U | 1120 | 863 |
| | 01/19/2016 | | | | 16.03 | 400.9 | <32U | <310U | 180 | 56.2J | 336 | <39U | <31U | <33U | 65.8J | <220U | <35U | 4510 | 1110 |
| | 04/12/2016 | | | | 14.92 | 402 | <1.6U | 34.9J | 335 | 1.6J | 407 | <2U | <1.6U | 8.4 | <2.3U | 111 | <1.8U | 6840 | 1550 |
| | 08/23/2016 | | | | 18.08 | 398.8 | <16U | <155U | 189 | 11.7J | 480 | <19.5U | <15.5U | 17.9J | <22.5U | 261J | <17.5U | 3700 | 1430 |
| | 11/08/2016 | | | | 19.7 | 397.2 | <16U | <155U | 340 | <10.5U | 772 | <19.5U | <15.5U | 25.2J | <22.5U | 334J | <17.5U | 6070 | 3270 |
| | 03/06/2017 | | | | 18.54 | 398.3 | <16U | <155U | 490 | <52.5U | 987 | <19.5U | 54.5 | 25.4J | <22.5U | 348J | <17.5U | 9200 | 3610 |
| | 05/31/2017 | | | | 16.81 | 400.1 | <16U | <155U | 233 | 19.7J | 394 | <19.5U | <15.5U | <16.5U | <22.5U | <110U | <17.5U | 5360 | 1580 |
| | 08/15/2017 | | | | 16.45 | 400.4 | <16U | <155U | 253 | <10.5U | 521 | <19.5U | <15.5U | <16.5U | <22.5U | <110U | <17.5U | 8250 | 2210 |
| | 11/15/2017 | | | | 17.92 | 399 | <16U | <155U | 292 | <10.5U | 710 | <19.5U | 28.1J | <16.5U | <22.5U | 308J | <17.5U | 9820 | 2770 |
| | 03/06/2018 | | | | 16.32 | 400.6 | <16U | <155U | 675 | 36.7J | 933 | <19.5U | 46.6J | <16.5U | <22.5U | 280J | <17.5U | 12600 | 4090 |
| | 6/12/2018 | | | | 15.34 | 401.5 | <16U | <155U | 643 | <10.5U | 759 | <19.5U | <15.5U | <16.5U | <22.5U | 230J | <17.5U | 8960 | 3530 |
| | 09/18/2018 | | | | 13.42 | 403.5 | <16U | <155U | 184 | 34.6J | 290 | <19.5U | <15.5U | <16.5U | <22.5U | 864 | <17.5U | 2820 | 1600 |
| | 12/11/2018 | | | | 12.11 | 404.8 | <16U | <155U | 988 | <10.5U | 647 | <19.5U | <15.5U | <16.5U | <22.5U | <110U | <17.5U | 7040 | 3160 |
| | 3/6/2019 | | | | 10.89 | 406.01 | <16U | <155U | 973 | <10.5U | 736 | <19.5U | <15.5U | <16.5U | <22.5U | <110U | <17.5U | 7070 | 3490 |
| | 6/12/2019 | | | | 11.7 | 405.2 | <16U | <155U | 1190 | <10.5U | 963 | <19.5U | <15.5U | <16.5U | <22.5U | 140J | <17.5U | 6940 | 4350 |
| | 9/18/2019 | | | | 16.65 | 400.25 | <14U | <155U | 678 | <10.5U | 888 | <19.5U | <15.5U | <16.5U | <22.5U | <110U | <17.5U | 3870 | 3810 |
| | 11/26/2019 | | | | 16.59 | 400.31 | <1.6U | 43.9J | 17.7 | <1.1U | 17.2 | 4.1J | <1.6U | <1.7U | <2.3U | 218 | <1.8U | 76.8 | 581 |
| | 3/31/2020 | | | | 13 | 403.90 | <1.6U | <15.5U | 31.1 | <1.1U | 64.1 | <2U | 6.5 | <1.7U | <2.3U | 13.4J | <1.8U | 140 | 416 |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-008 | 09/15/2011 | 416.4 | 55 | 75 | 15.82 | 400.6 | 3 | <3.1U | 279 | <0.21U | 68.2 | <0.39U | <0.31U | 723 | <0.45U | 230 | <0.35U | 254 | 181 |
| | 10/27/2011 | | | | 16.65 | 399.8 | 13.1 | <3.1U | 569 | <0.21U | 275 | <0.39U | <0.31U | 737 | <0.45U | 583 | <0.35U | 249 | 350 |
| | 02/29/2012 | | | | 27.4 | 389 | 11.3 | <3.1U | 275 | <0.21U | 157 | <0.39U | <0.31U | 742 | <0.45U | 749 | <0.35U | 15.8 | 13.7 |
| | 05/07/2012 | | | | 16.31 | 400.1 | 3.2J | 370 | 343 | <1.1U | 223 | <2U | 23.8 | 667 | <2.3U | 609 | <1.8U | 61.5 | 69.5 |
| | 08/14/2012 | | | | 18.15 | 398.3 | 9.2 | <15.5U | 417 | <1.1U | 221 | <2U | <1.6U | 599 | <2.3U | 699 | <1.8U | 43 | 49.9 |
| | 11/16/2012 | | | | 19.36 | 397 | <3.2U | <31U | 449 | <2.1U | 197 | <3.9U | <3.1U | 664 | <4.5U | 737 | <3.5U | 20.5 | 41.1 |
| | 03/08/2013 | | | | 18.51 | 397.9 | 6.5 | <15.5U | 418 | <1.1U | 139 | <2U | <1.6U | 550 | 4.3J | 347 | <1.8U | 11.9 | 30.9 |
| | 04/02/2013 | | | | 16.56 | 399.9 | <0.32U | <3.1U | 51 | <0.21U | 6.2 | <0.39U | <0.31U | 485 | <0.45U | <2.2U | 1.7 | 5.1 | 9.1 |
| | 09/12/2013 | | | | 14.19 | 402.2 | <1.6U | 34.8J | 32.9 | 2.5J | 4.8J | <2U | <1.6U | 326 | <2.3U | 111 | <1.8U | 5J | <3.3U |
| | 12/17/2013 | | | | 16.5 | 399.9 | 16.3 | <31U | 359 | <2.1U | 63.3 | <3.9U | <3.1U | 532 | <4.5U | 459 | <3.5U | 16.9 | 28.9J |
| | 01/13/2014 | | | | 15.04 | 401.4 | 7.6J | <62U | 323 | 24.5 | 65.8 | <7.8U | 29.6 | 516 | <9U | <44U | <7U | 13.8J | 158 |
| | 04/22/2014 | 415.6† | | | 12.75 | 402.8 | 4J | 258 | 248 | 8.9 | 36.8 | 3.9J | <1.6U | 478 | <2.3U | 428 | 1.8J | 6.8 | 14.2J |
| | 07/29/2014 | | | | 14.6 | 401 | 7.8 | <15.5U | 380 | <1.1U | 73.2 | <2U | 32.9 | 668 | 13 | 618 | <1.8U | 27.1 | 32.1 |
| | 10/21/2014 | | | | 18.07 | 397.5 | 8.6 | <15.5U | 441 | <1.1U | 60.7 | <2U | <1.6U | 870 | <2.3U | 906 | <1.8U | 24.2 | 30.6 |
| | 01/22/2015 | | | | 14.97 | 400.6 | 6.1 | <15.5U | 366 | 8 | 40.6 | <2U | <1.6U | 545 | <2.3U | 532 | <1.8U | 10.2 | 17 |
| | 05/01/2015 | | | | 16.01 | 399.5 | 4.8J | 686 | 383 | <1.1U | 60.1 | <2U | <1.6U | 516 | <2.3U | 588 | <1.8U | 10.9 | 37.1 |
| | 07/14/2015 | | | | 15.8 | 399.8 | 4.2J | <15.5U | 350 | <1.1U | 55.9 | <2U | <1.6U | 539 | 10.4 | 506 | <1.8U | 16 | 24.8 |
| | 10/22/2015 | | | | 17.64 | 397.9 | 1.8 | <3.1U | 160 | <0.21U | 23.2 | 0.63J | <0.31U | 575 | <0.45U | 768 | <0.35U | 12.1 | 12.7 |
| | 01/19/2016 | | | | 16.1 | 399.5 | <1.6U | <15.5U | 61.3 | 4.9J | 8 | <2U | 9.1 | 222 | <2.3U | 122 | <1.8U | 5.7 | 14J |
| | 04/13/2016 | | | | 15.57 | 400 | <1.6U | 17.5J | 35.9 | 1.5J | 2.8J | <2U | 2J | 173 | <2.3U | 111 | <1.8U | 3.9J | 7.4J |
| | 08/24/2016 | | | | 18.14 | 397.4 | <1.6U | <15.5U | 59.2 | <1.1U | 7.3 | <2U | <1.6U | 211 | <2.3U | 173 | <1.8U | 5J | 22.6 |
| | 11/09/2016 | | | | 19.55 | 396 | <1.6U | <15.5U | 32.9 | <1.1U | 3.2J | <2U | 1.6J | 189 | <2.3U | 183 | <1.8U | 5.7 | 10.7J |
| | 03/07/2017 | | | | 18.5 | 397.1 | <1.6U | <15.5U | 29.1 | <1.1U | <1.7U | <2U | <1.6U | 142 | <2.3U | 93.9 | <1.8U | 1.6J | <3.3U |
| | 06/01/2017 | | | | 16.76 | 398.8 | <1.6U | 28.2J | 3.3J | 1.1J | 2.2J | <2U | <1.6U | 110 | <2.3U | 123 | <1.8U | 1.4J | 16.6 |
| | 08/15/2017 | | | | 16.64 | 398.9 | <1.6U | <15.5U | 5.1 | <1.1U | <1.7U | <2U | <1.6U | 111 | <2.3U | 78.1 | <1.8U | <1.2U | <3.3U |
| | 11/16/2017 | | | | 17.44 | 398.1 | <1.6U | <15.5U | 4.7J | <1.1U | <1.7U | <2U | <1.6U | 98.9 | <2.3U | 54.6 | <1.8U | 1.5J | <3.3U |
| | 03/08/2018 | | | | 16.17 | 399.4 | <0.32U | <3.1U | 11.3 | <0.21U | 0.78J | <0.39U | <0.31U | 46.6 | <0.45U | 65.9 | <0.35U | 0.6J | 0.72J |
| | 6/13/2018 | | | | 15.12 | 400.4 | <0.32U | <3.1U | 6.6 | <0.21U | 0.5J | <0.39U | 0.87J | 76.8 | <0.45U | 16.9 | <0.35U | 0.31J | <0.66U |
| | 09/19/2018 | | | | 14.13 | 401.4 | <0.32U | <3.1U | 3.5 | <0.21U | 0.42J | <0.39U | <0.31U | 79.8 | <0.45U | 53.1 | <0.35U | 0.25J | <0.66U |
| | 12/12/2018 | | | | 11.98 | 403.6 | <0.32U | 14.3 | 13.1 | <0.21U | 1.4 | <0.39U | <0.31U | 73.7 | <0.45U | 36.2 | <0.35U | 1.4 | 2.4J |
| | 3/06/2019 | | | | 10.58 | 405.02 | <0.32U | 19.4 | 10.2 | <0.21U | 1.1 | <0.39U | <0.31U | 43.9 | <0.45U | 25.1 | <0.35U | 1.1 | 1.6J |
| | 6/12/2019 | | | | 12.14 | 403.46 | <0.32U | <3.1U | 12.2 | <0.21U | 2.4 | <0.39U | <0.31U | 58 | <0.45U | 35.2 | <0.35U | 0.74J | 12.2 |
| | 9/18/2019 | | | | 15.2 | 400.4 | <0.28U | <3.1U | 24.5 | <0.21U | 2.7 | <0.39U | <0.31U | 82.2 | <0.45U | 127 | <0.35U | 1.9 | 10.9 |
| | 11/26/2019 | | | | 17.84 | 397.76 | <0.32U | <3.1U | 18.8 | <0.21U | 1.7 | <0.39U | <0.31U | 69.2 | <0.45U | 100 | <0.35U | 1.8 | 7.6 |
| | 3/30/2020 | | | | 12.23 | 403.33 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 18.7 | <0.35U | <0.23U | <0.66U |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| MDE GW Clean-Up Standards | | | | | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-008D | 09/15/2011 | 416.5 | 99.5 | 125 | 13.85 | 402.6 | <0.32U | 4J | 0.46J | <0.21U | <0.34U | <0.39U | <0.31U | 1.8 | <0.45U | <2.2U | <0.35U | 1.1 | <0.66U |
| | 10/26/2011 | | | | 13.95 | 402.5 | <0.32U | 5.3J | 0.29J | <0.21U | <0.34U | <0.39U | <0.31U | 1.4 | <0.45U | <2.2U | <0.35U | 0.93J | <0.66U |
| | 02/28/2012 | | | | 13.26 | 403.2 | <0.32U | <3.1U | 0.33J | <0.21U | <0.34U | <0.39U | <0.31U | 1.2 | <0.45U | 9.6J | <0.35U | 0.49J | <0.66U |
| | 05/08/2012 | | | | 14.18 | 402.3 | <0.32U | 3.5J | 0.23J | <0.21U | <0.34U | <0.39U | <0.31U | 0.99J | <0.45U | <2.2U | <0.35U | 0.23J | <0.66U |
| | 08/13/2012 | | | | 17.3 | 399.2 | <0.32U | <3.1U | 0.27J | <0.21U | <0.34U | <0.39U | <0.31U | 0.69J | <0.45U | <2.2U | <0.35U | 1.3 | <0.66U |
| | 11/16/2012 | | | | 17.25 | 399.3 | <0.32U | <3.1U | 0.43J | <0.21U | <0.34U | <0.39U | <0.31U | 0.75J | <0.45U | <2.2U | <0.35U | 0.87J | <0.66U |
| | 03/07/2013 | | | | 15.55 | 401 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.55J | <0.45U | <2.2U | <0.35U | 0.38J | <0.66U |
| | 04/01/2013 | | | | 14.93 | 401.6 | <0.32U | 4.3J | 0.37J | <0.21U | <0.34U | <0.39U | <0.31U | 0.49J | <0.45U | 2.3J | <0.35U | 0.8J | <0.66U |
| | 09/12/2013 | | | | 12.83 | 403.7 | <0.32U | 6.6J | 1.1 | <0.21U | <0.34U | <0.39U | <0.31U | 1J | <0.45U | 9.5J | <0.35U | 0.64J | <0.66U |
| | 12/18/2013 | | | | 13.59 | 402.9 | <0.32U | <3.1U | 0.97J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 1.4 | 2J |
| | 01/14/2014 | | | | 12.07 | 404.4 | <0.32U | <3.1U | 0.42J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.93J | <0.66U |
| | 04/22/2014 | 415.4† | | | 10.9 | 404.5 | <0.32U | <3.1U | 0.23J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.44J | <0.66U |
| | 07/30/2014 | | | | 13.61 | 401.8 | <0.32U | <3.1U | 0.38J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.43J | <0.66U |
| | 10/21/2014 | | | | 15.51 | 399.9 | <0.32U | <3.1U | 0.64J | <0.21U | <0.34U | <0.39U | 0.5J | <0.33U | <0.45U | 3.1J | <0.35U | 0.79J | <0.66U |
| | 01/22/2015 | | | | 13.29 | 402.1 | <0.32U | <3.1U | 0.58J | <0.21U | <0.34U | <0.39U | 0.32J | <0.33U | <0.45U | <2.2U | <0.35U | 0.6J | <0.66U |
| | 04/28/2015 | | | | 13.46 | 402 | <0.32U | 5.9J | 0.24J | <0.21U | <0.34U | 0.49J | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.54J | 2.7J |
| | 07/15/2015 | | | | 13.11 | 402.3 | <0.32U | 4.2J | 0.28J | <0.21U | <0.34U | 0.45J | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.38J | <0.66U |
| | 10/22/2015 | | | | 16.45 | 399 | <0.32U | 7.8J | 0.48J | <0.21U | <0.34U | 0.58J | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.63J | <0.66U |
| | 01/19/2016 | | | | 14.04 | 401.4 | <0.32U | 6.4J | 0.4J | <0.21U | <0.34U | <0.39U | 0.48J | <0.33U | <0.45U | <2.2U | <0.35U | 0.55J | <0.66U |
| | 04/12/2016 | | | | 13.31 | 402.1 | <0.32U | 4.5J | 0.32J | <0.21U | <0.34U | <0.39U | 0.71J | <0.33U | <0.45U | <2.2U | <0.35U | 0.77J | <0.66U |
| | 08/23/2016 | | | | 16.93 | 398.5 | <0.32U | 5.8J | 0.3J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.49J | <0.66U |
| | 11/08/2016 | | | | 18.4 | 397 | <0.32U | 6.8J | 0.39J | <0.21U | <0.34U | <0.39U | 0.46J | <0.33U | <0.45U | 3.5J | <0.35U | 0.76J | <0.66U |
| | 03/06/2017 | | | | 17.13 | 398.3 | <0.32U | 4.6J | 0.24J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.37J | <0.66U |
| | 06/01/2017 | | | | 15 | 400.4 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 08/14/2017 | | | | 15.26 | 400.1 | <0.32U | 5.9J | 0.31J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.42J | <0.66U |
| | 11/15/2017 | | | | 16.21 | 399.2 | <0.32U | 6.6J | 0.59J | <0.21U | <0.34U | 0.62J | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.9J | <0.66U |
| | 03/06/2018 | | | | 14.44 | 401 | <0.32U | 8.2J | 0.39J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.63J | <0.66U |
| | 6/12/2018 | | | | 13.57 | 401.8 | <0.32U | 14 | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.29J | <0.66U |
| | 09/18/2018 | | | | 12.18 | 403.2 | <0.32U | 9.2J | 0.38J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 31.3 | <0.35U | 0.73J | <0.66U |
| | 12/12/2018 | | | | 10.5 | 404.9 | <0.32U | 8.6J | 0.84J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 3.9J | <0.35U | 1.6 | <0.66U |
| | 3/6/2019 | | | | 8.94 | 406.46 | <0.32U | 13.6 | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 6/13/2019 | | | | 10.83 | 404.57 | <0.32U | 10.3 | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.31J | <0.66U |
| | 9/18/2019 | | | | 14.8 | 400.6 | <0.28U | 9.5J | 0.6J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | <2.2U | <0.35U | 0.86J | <0.66U |
| | 11/26/2019 | | | | 15.26 | 400.14 | <0.32U | 7.5J | 0.32J | <0.21U | <0.34U | <0.39U | <0.31U | <0.33U | <0.45U | 13.5 | <0.35U | 0.66J | 0.69J |
| | 3/30/2020 | | | | 13.83 | 401.57 | <0.32U | <3.1U | 3.6 | <0.21U | 0.6J | <0.39U | 0.61J | **68.3** | <0.45U | 107 | <0.35U | 1.5 | 6.8 |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| **Well ID** | **Sample Date** | **Top of Casing Elevation*** | **Screen start depth** | **Screen end depth** | **Depth to Water (ft)** | **GW Elevation** | | | | | | | | | | | | | |
| MW-009 | 04/22/2014 | 415.0 | 20 | 30 | 14.59 | 400.4 | 2.8 | 5.3J | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.74J | <0.45U | <2.2U | <0.35U | 0.5J | <0.66U |
| | 07/31/2014 | | | | 16.43 | 398.6 | 3.9 | 6J | 0.26J | <0.21U | <0.34U | <0.39U | 0.36J | 0.64J | 0.57J | 5.5J | <0.35U | 1.4 | <0.66U |
| | 10/22/2014 | | | | 18.28 | 396.7 | 3.2 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | 0.44J | 0.42J | <0.45U | <2.2U | <0.35U | 0.27J | 0.99J |
| | 01/21/2015 | | | | 16.5 | 398.5 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.34J | <0.45U | <2.2U | <0.35U | 0.85J | <0.66U |
| | 04/29/2015 | | | | 16.82 | 398.2 | 2.8 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.43J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 07/14/2015 | | | | 16.8 | 398.2 | 2.9 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.6J | <0.45U | <2.2U | <0.35U | 0.3J | <0.66U |
| | 10/20/2015 | | | | 18.8 | 396.2 | 3.1 | <3.1U | <0.23U | <0.21U | <0.34U | 0.69J | <0.31U | 0.81J | <0.45U | <2.2U | <0.35U | 0.48J | 0.69J |
| | 01/20/2016 | | | | 17.19 | 397.8 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.75J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 04/12/2016 | | | | 16.5 | 398.5 | 2.7 | <3.1U | 0.26J | <0.21U | <0.34U | <0.39U | 0.64J | 1.1 | <0.45U | <2.2U | <0.35U | 0.46J | <0.66U |
| | 08/24/2016 | | | | 19.28 | 395.7 | 2.5 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1.1 | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 11/09/2016 | | | | 20.7 | 394.3 | 2.4 | <3.1U | <0.23U | <0.21U | <0.34U | 0.46J | 0.32J | 0.71J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 03/07/2017 | | | | 19.75 | 395.3 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1.5 | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 06/01/2017 | | | | 17.91 | 397.1 | 2.8 | <3.1U | <0.23U | <0.21U | 0.38J | <0.39U | <0.31U | 1.3 | <0.45U | <2.2U | <0.35U | 6.2 | 1.8J |
| | 08/15/2017 | | | | 18.37 | 396.6 | 2.1 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.54J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 11/15/2017 | | | | 18.67 | 396.3 | 2.7 | <3.1U | <0.23U | <0.21U | 0.45J | <0.39U | <0.31U | 1.7 | <0.45U | <2.2U | <0.35U | 4.2 | 1.4J |
| | 03/08/2018 | | | | 17.6 | 397.4 | <0.32U | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1.3 | <0.45U | <2.2U | <0.35U | <0.23U | 1.4J |
| | 6/13/2018 | | | | 16.63 | 398.4 | 2.3 | 3.7J | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1.2 | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 09/18/2018 | | | | 16 | 399 | <0.32U | 3.9J | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 2.3 | <0.45U | <2.2U | <0.35U | 2.4 | 1.5J |
| | 12/10/2018 | | | | 13.9 | 401.1 | 1.8 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 2.2 | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 03/06/2019 | | | | 12.45 | 402.55 | 1.5 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 0.54J | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 6/12/2019 | | | | 14.18 | 400.82 | 1.7 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 2.4 | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 9/18/2019 | | | | 17 | 398 | <0.28U | <3.1U | <0.23U | <0.21U | <0.34U | 0.42J | <0.31U | 2.5 | <0.45U | 5.1J | <0.35U | <0.23U | <0.66U |
| | 11/26/2019 | | | | 18.57 | 396.43 | **8.7** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | 1.9 | **190** | <0.45U | 988 | <0.35U | <0.23U | <0.66U |
| | 3/30/2020 | | | | 15.45 | 399.55 | 1.4 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1.2 | <0.45U | 8.4J | <0.35U | <0.23U | <0.66U |
| MW-009D | 07/31/2014 | 415.0 | NA | NA | 16.56 | 398.4 | **20.2** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | 0.42J | **590** | 0.47J | 4790 | <0.35U | <0.23U | <0.66U |
| | 10/22/2014 | | | | 19.01 | 395.9 | **26.8** | <15.5U | <1.2U | 2.9J | <1.7U | <2U | 2.4J | **912** | <2.3U | 7330 | <1.8U | <1.2U | <3.3U |
| | 01/21/2015 | | | | 17.62 | 397.3 | **26.6** | <31U | <2.3U | <2.1U | <3.4U | <3.9U | <3.1U | **840** | <4.5U | 6180 | <3.5U | 4.6J | <6.6U |
| | 05/01/2015 | | | | 16.79 | 398.2 | **20.8** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **666** | <0.45U | 4860 | <0.35U | <0.23U | <0.66U |
| | 07/15/2015 | | | | 16.8 | 398.2 | **24.9** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | 0.43J | **669** | <0.45U | 737 | <0.35U | <0.23U | <0.66U |
| | 10/20/2015 | | | | 19.3 | 395.7 | **28.3** | <3.1U | <0.23U | <0.21U | <0.34U | 0.83J | <0.31U | **874** | <0.45U | 5280 | <0.35U | 0.45J | <0.66U |
| | 01/20/2016 | | | | 18.26 | 396.7 | <6.4U | <62U | **127** | 15.4J | **1050** | <7.8U | <6.2U | 11.2J | <9U | 57.4J | <7U | 391 | 5580 |
| | 04/12/2016 | | | | 17.64 | 397.3 | **27.8** | <15.5U | <1.2U | <1.1U | <1.7U | <2U | 2.3J | **904** | <2.3U | 4340 | <1.8U | 1.8J | <3.3U |
| | 08/24/2016 | | | | 19.05 | 395.9 | **26.3** | <15.5U | <1.2U | 2.3J | <1.7U | <2U | <1.6U | **912** | <2.3U | 3310 | <1.8U | <1.2U | <3.3U |
| | 11/09/2016 | | | | 20.34 | 394.6 | **24.7** | <15.5U | <1.2U | <1.1U | <1.7U | <2U | 1.6J | **787** | <2.3U | 5260 | <1.8U | <1.2U | <3.3U |
| | 03/07/2017 | | | | 20.5 | 394.5 | **28.1** | <15.5U | <1.2U | <1.1U | <1.7U | <2U | <1.6U | **932** | <2.3U | 4500 | <1.8U | <1.2U | <3.3U |
| | 06/01/2017 | | | | 17.95 | 397 | **26.8** | <15.5U | <1.2U | <1.1U | <1.7U | <2U | <1.6U | **986** | <2.3U | 751 | <1.8U | <1.2U | <3.3U |
| | 08/15/2017 | | | | 17.91 | 397 | **31.4** | <15.5U | <1.2U | <1.1U | <1.7U | <2U | <1.6U | **856** | <2.3U | 3920 | <1.8U | <1.2U | <3.3U |
| | 11/15/2017 | | | | 18.28 | 396.7 | **36.8** | <77.5U | <5.8U | <5.3U | <8.5U | <9.8U | <7.8U | **1010** | <11.3U | 4580 | <8.8U | <5.8U | <16.5U |
| | 03/08/2018 | | | | 18.28 | 396.7 | **29.8** | <15.5U | <1.2U | <1.1U | <1.7U | <2U | <1.6U | **439** | <2.3U | 2270 | <1.8U | <1.2U | <3.3U |
| | 6/13/2018 | | | | 16.38 | 398.6 | 4.9 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | 0.37J | **86.3** | <0.45U | 347 | <0.35U | <0.23U | <0.66U |
| | 09/18/2018 | | | | 15.35 | 399.6 | 3.2 | <3.1U | 0.3J | <0.21U | 1.6 | <0.39U | <0.31U | **107** | <0.45U | 382 | <0.35U | 10.4 | 8.2 |
| | 12/10/2018 | | | | 13.58 | 401.4 | 2.3 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **42.3** | <0.45U | 188 | <0.35U | <0.23U | <0.66U |
| | 03/06/2019 | | | | 13.58 | 401.42 | 2.1 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **58.7** | <0.45U | 363 | <0.35U | <0.23U | <0.66U |
| | 6/12/2019 | | | | 13.9 | 401.91 | 4.3 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **93** | <0.45U | 701 | <0.35U | <0.23U | <0.66U |
| | 9/18/2019 | | | | 17.1 | 397.9 | <0.28U | <3.1U | <0.23U | <0.21U | <0.34U | 0.52J | <0.31U | **443** | <0.45U | 1630 | <0.35U | <0.23U | <0.66U |
| | 11/26/2019 | | | | 18.76 | 396.24 | **143** | <3.1U | **7.1** | <0.21U | <0.34U | <0.39U | <0.31U | **440** | <0.45U | <2.2U | <0.35U | 0.44J | <0.66U |
| | 3/31/2020 | | | | 15.38 | 399.62 | 0.87J | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 11.6 | <0.45U | 19.2 | <0.35U | <0.23U | <0.66U |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | | | MDE GW Clean-Up Standards | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |
| MW-010 | 04/22/2014 | 415.1 | 20 | 30 | 13.61 | 401.5 | **118** | <3.1U | **12.5** | <0.21U | <0.34U | 0.4J | 3.7 | **82.8** | 0.65J | 813 | <0.35U | 1.2 | <0.66U |
| | 07/31/2014 | | | | 15.79 | 399.4 | **132** | <3.1U | **26.7** | <0.21U | <0.34U | <0.39U | <0.31U | **121** | <0.45U | 1120 | <0.35U | 2.3 | 0.89J |
| | 10/22/2014 | | | | 17.55 | 397.6 | **147** | <31U | **35** | 7.8J | <3.4U | <3.9U | 7.2J | **184** | <4.5U | 1320 | <3.5U | 2.6J | <6.6U |
| | 01/21/2015 | | | | 15.97 | 399.2 | **197** | <31U | **33.6** | <2.1U | <3.4U | <3.9U | <3.1U | **196** | <4.5U | 1640 | <3.5U | 2.9J | <6.6U |
| | 04/29/2015 | | | | 15.94 | 399.2 | **167** | <15.5U | **19** | <1.1U | <1.7U | **3.3J** | <1.6U | **155** | <2.3U | 1230 | <1.8U | 2.1J | <3.3U |
| | 07/15/2015 | | | | 15.79 | 399.4 | **162** | <31U | **14.8** | <2.1U | <3.4U | <3.9U | 6.1J | **160** | <4.5U | 1410 | <3.5U | <2.3U | <6.6U |
| | 10/20/2015 | | | | 12.24 | 402.9 | **194** | <15.5U | **23.4** | <1.1U | <1.7U | **3J** | <1.6U | **250** | <2.3U | 1450 | <1.8U | 3.8J | 3.3J |
| | 01/21/2016 | | | | 16.47 | 398.7 | **248** | <15.5U | **26.8** | <1.1U | <1.7U | <2U | <1.6U | **254** | <2.3U | 1440 | <1.8U | 18.2 | 10J |
| | 04/13/2016 | | | | 15.93 | 399.2 | **162** | 19.7J | **11.9** | 1.1J | <1.7U | **2J** | 2.1J | **142** | <2.3U | 967 | <1.8U | 2.6J | <3.3U |
| | 08/24/2016 | | | | 18.55 | 396.6 | **115** | <3.1U | **10.4** | <0.21U | <0.34U | <0.39U | 5.6 | **170** | <0.45U | 682 | <0.35U | 1.2 | <0.66U |
| | 11/09/2016 | | | | 19.98 | 395.2 | **164** | <3.1U | **35** | <0.21U | <0.34U | <0.39U | 4.9 | **501** | <0.45U | 2590 | <0.35U | 2.2 | 0.93J |
| | 03/07/2017 | | | | 19.1 | 396 | **237** | <15.5U | **40** | <1.1U | <1.7U | <2U | <1.6U | **714** | <2.3U | 2910 | <1.8U | 2.8J | <3.3U |
| | 06/01/2017 | | | | 17.18 | 398 | **240** | <15.5U | **24.3** | <1.1U | <1.7U | <2U | <1.6U | **540** | <2.3U | 2340 | <1.8U | 7.9 | 4.2J |
| | 08/15/2017 | | | | 17.14 | 398 | **203** | <15.5U | **17.7** | **159000** | <1.7U | <2U | <1.6U | **494** | <2.3U | 2230 | <1.8U | 2.3J | <3.3U |
| | 11/15/2017 | | | | 18 | 397.1 | **164** | <15.5U | **13.7** | 1.4J | <1.7U | <2U | <1.6U | **455** | <2.3U | 1700 | <1.8U | 2.4J | <3.3U |
| | 03/08/2018 | | | | 16.67 | 398.5 | **164** | <15.5U | **9.8** | 3.5J | <1.7U | <2U | 2J | **395** | <2.3U | 1130 | <1.8U | 1.6J | <3.3U |
| | 6/13/2018 | | | | 15.64 | 399.5 | **181** | <15.5U | **9.7** | <1.1U | <1.7U | <2U | 4.3J | **350** | <2.3U | 1900 | <1.8U | <1.2U | <3.3U |
| | 09/19/2018 | | | | 14.35 | 400.8 | **200** | <15.5U | **10.2** | 3.9J | <1.7U | <2U | <1.6U | **381** | <2.3U | 1050 | <1.8U | 2.4J | 4.7J |
| | 12/11/2018 | | | | 12.71 | 402.4 | **28.1** | <15.5U | <1.2U | <1.1U | <1.7U | <2U | <1.6U | **91** | <2.3U | 583 | <1.8U | <1.2U | <3.3U |
| | 03/06/2019 | | | | 11.65 | 403.45 | **34.9** | <15.5U | 1.5J | <1.1U | <1.7U | <2U | <1.6U | **31.9** | <2.3U | 356 | <1.8U | <1.2U | <3.3U |
| | 6/12/2019 | | | | 13 | 402.1 | **103** | <3.1U | 3.9 | <0.21U | <0.34U | <0.39U | <0.31U | **164** | <0.45U | 902 | <0.35U | 0.54J | <0.66U |
| | 9/18/2019 | | | | 16.2 | 398.9 | <0.28U | <3.1U | 1.8 | 1.2 | <0.34U | <0.39U | <0.31U | **151** | <0.45U | 458 | <0.35U | 0.24J | <0.66U |
| | 11/26/2019 | | | | 17.56 | 397.54 | **13.3** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **293** | <0.45U | 719 | <0.35U | <0.23U | <0.66U |
| | 3/31/2020 | | | | 14.51 | 400.59 | **174** | <3.1U | **8.1** | <0.21U | <0.34U | <0.39U | <0.31U | **362** | <0.45U | 1280 | <0.35U | <0.23U | <0.66U |
| MW-010D | 04/23/2014 | 415.1 | 50 | 70 | 15.05 | 400.1 | **12.4** | 11.3 | **42.8** | <0.21U | <0.34U | 0.77J | <0.31U | **35.8** | <0.45U | 68.8 | 0.71J | 0.55J | <0.66U |
| | 07/31/2014 | | | | 15.61 | 399.5 | **15** | 8.3J | **39.9** | <0.21U | <0.34U | <0.39U | <0.31U | **64** | 0.5J | 96 | <0.35U | <0.23U | <0.66U |
| | 10/22/2014 | | | | 17.6 | 397.5 | **13.5** | <3.1U | **33.3** | <0.21U | <0.34U | <0.39U | 0.52J | **97.2** | <0.45U | 77.3 | <0.35U | <0.23U | <0.66U |
| | 01/21/2015 | | | | 15.89 | 399.2 | **12.6** | <3.1U | 2.1 | <0.21U | 0.5J | <0.39U | <0.31U | **85.6** | <0.45U | 50.6 | <0.35U | 4.6 | 3.1 |
| | 05/01/2015 | | | | 15.72 | 399.4 | **7.8** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **77.9** | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |
| | 07/15/2015 | | | | 15.56 | 399.5 | **9.6** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **108** | <0.45U | 57.3 | <0.35U | <0.23U | <0.66U |
| | 01/21/2016 | | | | 16.52 | 398.6 | **14** | <3.1U | 0.44J | <0.21U | <0.34U | 0.59J | <0.31U | **144** | <0.45U | 117 | <0.35U | 1.7 | 1.8J |
| | 04/13/2016 | | | | 16.29 | 398.8 | **7.3** | 5J | 0.38J | <0.21U | <0.34U | <0.39U | 0.5J | 11.5 | <0.45U | 8.4J | <0.35U | 0.25J | <0.66U |
| | 08/24/2016 | | | | 18.85 | 396.3 | **12.5** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **160** | <0.45U | 89.1 | <0.35U | <0.23U | <0.66U |
| | 11/09/2016 | | | | 19.8 | 395.3 | **11.5** | <3.1U | 0.63J | <0.21U | 0.35J | <0.39U | 0.32J | **156** | <0.45U | 140 | <0.35U | <0.23U | 1.2J |
| | 03/07/2017 | | | | 18.95 | 396.2 | **13.5** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **190** | <0.45U | 10.6 | <0.35U | <0.23U | <0.66U |
| | 06/01/2017 | | | | 17.1 | 398 | 4 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | 0.56J | **110** | <0.45U | 46.8 | <0.35U | <0.23U | <0.66U |
| | 08/15/2017 | | | | 17.14 | 398 | **9.6** | <3.1U | 0.5J | <0.21U | <0.34U | <0.39U | <0.31U | **141** | <0.45U | 123 | <0.35U | <0.23U | <0.66U |
| | 11/15/2017 | | | | 17.52 | 397.6 | **12.4** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **190** | <0.45U | 117 | <0.35U | <0.23U | <0.66U |
| | 03/08/2018 | | | | 16.59 | 398.5 | **10.8** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **181** | <0.45U | 14.9 | <0.35U | <0.23U | <0.66U |
| | 6/13/2018 | | | | 15.59 | 399.5 | 3.4 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 11.7 | <0.45U | 5.3J | <0.35U | <0.23U | <0.66U |
| | 09/19/2018 | | | | 14.68 | 400.4 | **8.3** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **162** | <0.45U | 76.5 | <0.35U | <0.23U | <0.66U |
| | 12/11/2018 | | | | 12.86 | 402.3 | **8.8** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | 0.32J | **176** | <0.45U | 148 | <0.35U | <0.23U | <0.66U |
| | 03/06/2019 | | | | 12.02 | 403.08 | **8.3** | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | **200** | <0.45U | 47.7 | <0.35U | <0.23U | <0.66U |
| | 6/12/2019 | | | | 12.92 | 402.18 | **10.6** | <3.1U | <0.23U | 0.22J | <0.34U | 0.78J | <0.31U | **313** | <0.45U | 142 | <0.35U | <0.23U | <0.66U |
| | 9/19/2019 | | | | 12.9 | 402.2 | <0.28U | <3.1U | <0.23U | 0.36J | <0.34U | <0.39U | <0.31U | **148** | <0.45U | 85 | <0.35U | <0.23U | <0.66U |
| | 11/26/2019 | | | | 17.46 | 397.64 | 1.9 | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1.7 | <0.45U | 130 | <0.35U | <0.23U | <0.66U |
| | 3/31/2020 | | | | 14.51 | 400.59 | 0.61J | <3.1U | <0.23U | <0.21U | <0.34U | <0.39U | <0.31U | 1.1 | <0.45U | <2.2U | <0.35U | <0.23U | <0.66U |

| | | | | | | Compound | 1,2-Dichloroethane | Acetone | Benzene | Chloroform | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl tert-butyl ether | Methylene chloride | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| MDE GW Clean-Up Standards | | | | | | | 5 | 550 | 5 | 80 | 700 | 0.85 | 19 | 20 | 5 | ** | 5 | 1000 | 10000 |
| Well ID | Sample Date | Top of Casing Elevation* | Screen start depth | Screen end depth | Depth to Water (ft) | GW Elevation | | | | | | | | | | | | | |

**Notes**

**U = Not detected, method detection limit reported**
**J = Estimated Value**
**D = Compound identified at a secondary diluation factor**
**B = Analyte reported in associated field or trip blank**
**(µg/l) = Micrograms per liter**
**NA = Not analyzed/Not available**
**Bold values (highlighted in yellow) indicate exceedence of MDE Groundwater Clean-Up Standards for Type I & II Aquifers (2018)**
*** Well casing survey completed based on vertical datum: NAVD 1988.**
**† Well casings were re-surveyed in 2014, the updated casing elevations were used to determine GW elevations in April 2014 and subsequent measurements**

# ON-SITE DRINKING WATER

# RESULTS SUMMARY TABLES

On-Site Drinking Water Analytical Data Summary
Calvert Citgo, 2815 North East Road, North East, MD

| Stage | Location | Compound: | Acetone | Benzene | Ethylbenzene | Isopro panol | Isopropyl Ether | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | ** | 20 | 5 | ** | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| | | Sample Date | | | | | | | | | | | | | | | |
| Pre-Carbon Filtration | DW-001 | 03/12/2009 | <2.3U | <0.1U | <0.1U | <11U | 1.6 | <0.1U | <1U | 12.2 | <0.3U | <0.2U | <2U | <0.2U | <1.7U | <0.1U | <0.3U |
| | | 07/21/2009 | <2.3U | <0.1U | <0.1U | <11U | 2.1 | <0.1U | 2.5 | 18.8 | <0.3U | <0.2U | <2U | <0.2U | <1.7U | 0.14J | <0.3U |
| | | 12/11/2009 | <2.3U | <0.1U | <0.1U | <11U | 0.91 | <0.1U | <1U | 2.7 | <0.3U | <0.2U | <2U | <0.2U | <1.7U | 0.11J | <0.3U |
| | | 03/18/2010 | <2.3U | <0.1U | <0.1U | <11U | 0.33J | <0.1U | <1U | 0.91 | <0.3U | <0.2U | <2U | <0.2U | <1.7U | <0.1U | <0.3U |
| | | 05/24/2010 | NA | <0.18U | <0.12U | NA | NA | NA | NA | 5.1 | <0.36U | <0.43U | NA | NA | <1.6U | <0.23U | <0.27U |
| | | 06/07/2010 | <2.3U | <0.1U | <0.1U | <11U | 1.8 | <0.1U | <1U | 4.8 | <0.3U | <0.2U | <2U | <0.2U | 5.4 | <0.1U | <0.3U |
| | | 09/15/2010 | <2.3U | <0.1U | <0.1U | <11U | <0.1U | <0.1U | <1U | 19.3 | <0.3U | <0.2U | <2U | <0.2U | 6.1 | 0.22J | <0.3U |
| | | 11/29/2010 | <2.3U | <0.1U | <0.1U | <11U | 3.2 | <0.1U | <1U | **23.9** | <0.3U | <0.2U | <2U | <0.2U | 4.5 | <0.1U | <0.3U |
| | | 01/20/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 3.2 | <0.22U | <1.3U | 17 | <0.32U | <0.15U | <1.6U | <0.15U | 2.4J | <0.12U | <0.27U |
| | | 04/29/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 2.5 | <0.22U | <1.3U | 12.5 | <0.32U | <0.15U | <1.6U | <0.15U | 2.6J | <0.12U | <0.27U |
| | | 07/25/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 1.5 | <0.22U | <1.3U | 7.6 | <0.32U | <0.15U | <1.6U | <0.15U | 2.1J | <0.12U | <0.27U |
| | | 10/14/2011 | <2.2U | 0.085J | <0.18U | <3.9U | 5.3 | <0.22U | <1.3U | **102** | <0.32U | <0.15U | <1.6U | 0.95 | 28.4 | <0.12U | <0.27U |
| | | 01/13/2012 | 2.8J | <0.07U | <0.18U | <3.9U | 2.4 | <0.22U | 1.6J | **21** | <0.32U | <0.15U | <1.6U | <0.15U | 6.6 | <0.12U | <0.27U |
| | | 04/20/2012 | <2.2U | <0.07U | <0.18U | <3.9U | 2 | <0.22U | 2J | 18.7 | <0.32U | <0.15U | <1.6U | <0.15U | 4.2J | <0.12U | <0.27U |
| | | 07/27/2012 | <2.2U | <0.07U | <0.18U | <3.9U | 2.2 | <0.22U | <1.3U | 15.7 | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 10/19/2012 | <2.2U | <0.07U | <0.18U | <3.9U | 2.2 | <0.22U | 2.9 | **29.5** | <0.32U | <0.15U | 2.8J | 0.32J | 13.7J | <0.12U | <0.27U |
| | | 01/30/2013 | 2.4J | <0.07U | <0.18U | <3.9U | 1.5 | <0.22U | 8.4 | 15.2 | <0.32U | <0.15U | <1.6U | <0.15U | 9 | <0.12U | <0.27U |
| | | 04/25/2013 | 5.6 | <0.07U | <0.18U | <3.9U | 1.7 | <0.22U | 9.8 | 16.9 | <0.32U | <0.15U | <1.6U | 0.17J | 12 | <0.12U | <0.27U |
| | | 07/26/2013 | <2.2U | <0.07U | <0.18U | <3.9U | 1.4 | <0.22U | <1.3U | 19.1 | <0.32U | <0.15U | <1.6U | <0.15U | 2.3J | <0.12U | <0.27U |
| | | 10/16/2013 | <2.2U | <0.07U | <0.18U | <3.9U | 1.2 | <0.22U | <1.3U | 18.2 | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 01/14/2014 | 4.8J | <0.07U | <0.18U | <3.9U | 0.84 | <0.22U | <1.3U | 18.6 | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 04/23/2014 | 8.5 | <0.07U | <0.18U | <3.9U | 1.2 | <0.22U | 12.1 | **24.8** | <0.32U | <0.15U | <1.6U | 0.23J | 9 | <0.12U | <0.27U |
| | | 07/29/2014 | <2.2U | <0.07U | <0.18U | <3.9U | 2.2 | <0.22U | 4.5 | **110** | <0.32U | <0.15U | <1.6U | <0.15U | 17.5 | 0.12J | <0.27U |
| Pre-Carbon Filtration | DW-001 | 10/21/2014 | <2.2U | <0.07U | <0.18U | <3.9U | 1 | <0.22U | <1.3U | **32.5** | <0.32U | <0.15U | <1.6U | 0.27J | 9.6 | <0.12U | <0.27U |
| | | 01/20/2015 | <2.2U | <0.07U | <0.18U | <3.9U | 0.41J | 0.28J | 7.9 | 14.8 | <0.32U | <0.15U | <1.6U | <0.15U | 6.9 | <0.12U | <0.27U |
| | | 04/28/2015 | 9.1 | <0.07U | <0.18U | <3.9U | 0.9 | <0.22U | 8.8 | **22.6** | <0.32U | <0.15U | <1.6U | 0.22J | 12.8 | <0.12U | <0.27U |
| | | 07/15/2015 | <2.2U | <0.07U | <0.18U | <3.9U | 0.86 | <0.22U | <1.3U | **36.5** | <0.32U | <0.15U | <1.6U | <0.15U | 7.7 | <0.12U | <0.27U |
| | | 10/21/2015 | 7.7 | <0.07U | <0.18U | <3.9U | 1.4 | <0.22U | <1.3U | **114** | <0.32U | <0.15U | <1.6U | <0.15U | 14.2 | <0.12U | <0.27U |
| | | 01/21/2016 | 3.2J | <0.07U | <0.18U | <3.9U | 0.59 | <0.22U | <1.3U | 19 | <0.32U | <0.15U | <1.6U | 0.27J | 11 | <0.12U | <0.27U |
| | | 04/14/2016 | 15.7 | <0.07U | <0.18U | <3.9U | 0.39J | <0.22U | 12.7 | 18.1 | <0.32U | <0.15U | <1.6U | 0.27J | 12.7 | <0.12U | <0.27U |
| | | 08/18/2016 | 8.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 3.5 | 15 | <0.32U | <0.15U | <1.6U | <0.15U | 5.1 | <0.12U | <0.27U |
| | | 09/16/2016 | 5.2 | <0.07U | <0.18U | <3.9U | 0.74 | <0.22U | <1.3U | **22** | <0.32U | <0.15U | 1.7J | 0.37J | 8.8 | <0.12U | <0.27U |
| | | 12/21/2016 | 3.6J | <0.07U | <0.18U | <3.9U | 0.51 | <0.22U | <1.3U | **40.8** | <0.32U | <0.15U | <1.6U | 0.59 | <1.4U | <0.12U | <0.27U |
| | | 03/08/2017 | 8.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | **25.2** | <0.32U | <0.15U | <1.6U | <0.15U | 7.3 | <0.12U | <0.27U |
| | | 05/31/2017 | 4.9J | <0.07U | <0.18U | <3.9U | 0.38J | <0.22U | <1.3U | **27.5** | <0.32U | <0.15U | <1.6U | 0.43J | 11.9 | <0.12U | <0.27U |
| | | 08/15/2017 | 11.4 | <0.07U | <0.18U | <3.9U | 0.45J | 0.49J | <1.3U | **29.4** | <0.32U | <0.15U | <1.6U | <0.15U | 10 | <0.12U | <0.27U |
| | | 12/13/2017 | <2.2U | <0.07U | <0.18U | <3.9U | 0.4J | <0.22U | <1.3U | **23.4** | <0.32U | <0.15U | <1.6U | <0.15U | 13.5 | <0.12U | <0.27U |
| | | 01/25/2018 | 2.9J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.6 | <0.12U | <0.27U |
| | | 03/16/2018 | <2.2U | <0.07U | <0.18U | <3.9U | 0.27J | <0.22U | <1.3U | 19.5 | <0.32U | <0.15U | <1.6U | 0.25J | 9.5 | <0.12U | <0.27U |
| | | 6/13/2018 | 5.5 | <0.07U | <0.18U | <3.9U | 0.34J | <0.22U | <6.5U | **65.1** | <0.32U | <0.15U | <1.6U | 0.9 | <7U | <0.12U | <0.27U |
| | | 09/11/2018 | 7.6 | <0.07U | <0.18U | <3.9U | 0.22J | <0.22U | <1.3U | 15.3 | <0.32U | <0.15U | <1.6U | 0.21J | 13.5 | <0.12U | <0.27U |
| | | 12/11/2018 | 4.9J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | **20.9** | <0.32U | <0.15U | <1.6U | 0.29J | 6.2 | <0.12U | <0.27U |
| | | 3/6/2019 | | <0.07U | <0.18U | | 0.22J | | <1.3U | **23.2** | | <0.15U | <1.6U | 0.29J | 5.7 | <0.12U | <0.27U |
| | | 6/11/2019 | | <0.07U | <0.18U | | 0.23J | | <1.3U | 14.1 | | <0.15U | <1.6U | <0.12U | <1.4U | <0.12U | <0.27U |
| | | 09/19/2019 | <0.07U | <0.07U | <0.18U | | 0.21J | | <1.3U | 16 | | <0.15U | <1.6U | 0.16J | 7.5 | <0.12U | <0.27U |
| | | 10/24/2019 | <2.2U | <0.07U | <0.18U | <3.9U | 0.26J | <0.22U | <1.3U | 13 | <0.32U | <0.15U | <0.11U | <0.15U | 4.4J | <0.12U | <0.27U |
| | | 09/15/2010 | <2.3U | <0.1U | <0.1U | <11U | <0.1U | <0.1U | <1U | 13.6 | <0.3U | <0.2U | <2U | <0.2U | 7.8 | <0.1U | <0.3U |
| | | 11/29/2010 | <2.3U | <0.1U | <0.1U | <11U | <0.1U | <0.1U | <1U | 11.1 | <0.3U | <0.2U | <2U | <0.2U | <1.7U | <0.1U | <0.3U |
| | | 01/20/2011 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | 10.8 | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 04/29/2011 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | 12 | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 07/25/2011 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | 13.1 | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 10/14/2011 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | 11.2 | <0.32U | <0.15U | <1.6U | <0.15U | 2.9J | <0.12U | <0.27U |

| | | Compound: | Acetone | Benzene | Ethylbenzene | Isopro panol | Isopropyl Ether | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | ** | 20 | 5 | ** | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| Stage | Location | Sample Date | | | | | | | | | | | | | | | |
| Mid-Carbon Filtration | DW-001A | 01/13/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 2J | 10.1 | <0.32U | <0.15U | <1.6U | <0.15U | 2.7J | <0.12U | <0.27U |
| | | 04/20/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 3.4 | 10.6 | <0.32U | <0.15U | <1.6U | <0.15U | 2.4J | <0.12U | <0.27U |
| | | 07/27/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | 9.5 | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 10/19/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 2.9 | 7.6 | <0.32U | <0.15U | <1.6U | <0.15U | 7.8 | <0.12U | <0.27U |
| | | 01/30/2013 | 3.2J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 8.4 | 6.5 | <0.32U | <0.15U | <1.6U | <0.15U | 8.7 | <0.12U | <0.27U |
| | | 04/25/2013 | 6.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 10.1 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 11 | <0.12U | <0.27U |
| | | 07/26/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 10/16/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 01/14/2014 | 4.6J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 6.2 | 0.12J | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 04/23/2014 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | 1.8 | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 07/29/2014 | 5.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 3.1 | 0.21J | <0.32U | <0.15U | <1.6U | <0.15U | 4.7J | <0.12U | <0.27U |
| | | 10/21/2014 | 2.9J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.8 | <0.12U | <0.27U |
| | | 01/20/2015 | 4.7J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 8.2 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 04/28/2015 | 10.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 7.4 | <0.09U | <0.32U | 0.16J | <1.6U | <0.15U | 10.3 | <0.12U | <0.27U |
| | | 07/15/2015 | 5.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 6.3 | <0.12U | <0.27U |
| | | 10/21/2015 | 11.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 5.9 | <0.12U | <0.27U |
| Mid-Carbon Filtration | DW-001A | 01/21/2016 | 2.3J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 5.7 | <0.12U | <0.27U |
| | | 04/14/2016 | 18 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 8 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 6.6 | <0.12U | <0.27U |
| | | 08/18/2016 | 12.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 6.4 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.8 | <0.12U | <0.27U |
| | | 09/16/2016 | 5.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 4.9 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 5.6 | <0.12U | <0.27U |
| | | 12/21/2016 | 3.5J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 03/08/2017 | 2.6J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.5 | <0.12U | <0.27U |
| | | 05/31/2017 | 4.3J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 10.2 | <0.12U | <0.27U |
| | | 08/15/2017 | 12 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | 3 | <0.15U | <1.6U | <0.15U | 7.7 | <0.12U | <0.27U |
| | | 12/13/2017 | 4.3J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 9.3 | <0.12U | <0.27U |
| | | 01/25/2018 | <2.2U | <0.07U | <0.18U | <3.9U | 0.34J | <0.22U | <1.3U | **26** | <0.32U | <0.15U | 2.8J | 0.45J | 9.9 | <0.12U | <0.27U |
| | | 03/16/2018 | 2.4J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 6/13/2018 | 8.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 8.8 | <0.12U | <0.27U |
| | | 09/11/2018 | 6.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 6.6 | <0.12U | <0.27U |
| | | 12/11/2018 | 15 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 5.6 | <0.12U | <0.27U |
| | | 3/6/2019 | | <0.07U | <0.18U | | <0.21U | | <1.3U | <0.09U | | <0.15U | <1.6U | <0.15U | 4J | <0.12U | <0.27U |
| | | 6/11/2019 | | <0.07U | <0.18U | | <0.21U | | <1.3U | <0.09U | | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 9/19/2019 | | <0.07U | <0.18U | | <0.21U | | <1.3U | <0.09U | | <0.15U | <1.6U | <0.15U | 4.6J | <0.12U | <0.27U |
| | | 10/24/2019 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <0.15U | <1.4U | <0.12U | <0.27U |
| Post-Carbon Filtration | DW-001B | 09/15/2010 | <2.3U | <0.1U | <0.1U | <11U | <0.1U | <0.1U | <1U | <0.2U | <0.3U | <0.2U | <2U | <0.2U | 8.6 | <0.1U | <0.3U |
| | | 11/29/2010 | <2.3U | <0.1U | <0.1U | <11U | <0.1U | <0.1U | <1U | <0.2U | <0.3U | <0.2U | <2U | <0.2U | <1.7U | <0.1U | <0.3U |
| | | 01/20/2011 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 2.3J | <0.12U | <0.27U |
| | | 04/29/2011 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 07/25/2011 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 2.1J | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | 0.21J | <0.27U |
| | | 10/14/2011 | 4.3J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 01/13/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 2J | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 3.4J | <0.12U | <0.27U |
| | | 04/20/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 2.3J | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 2J | <0.12U | <0.27U |
| | | 07/27/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 10/19/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 2.3J | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 4.8J | <0.12U | <0.27U |
| | | 01/30/2013 | 4J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 9 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.3 | <0.12U | <0.27U |
| | | 04/25/2013 | 5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 9.2 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 9.5 | <0.12U | <0.27U |
| | | 07/26/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 10/16/2013 | 5.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 2.8 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 1.7J | <0.12U | <0.27U |
| | | 01/14/2014 | 5.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 5.5 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 04/23/2014 | 4.3J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 9.8 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 6.4 | <0.12U | <0.27U |
| | | 07/29/2014 | 5.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 3 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 10/21/2014 | 2.5J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 6.5 | <0.12U | <0.27U |
| | | 01/20/2015 | 6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 7 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.6 | <0.12U | <0.27U |

| | | Compound: | Acetone | Benzene | Ethylbenzene | Isopro panol | Isopropyl Ether | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **MDE DW Standards** | ****** | **5** | **700** | ****** | ****** | ****** | ****** | **20** | **5** | ****** | ****** | ****** | ****** | **1000** | **10000** |
| | | **Unit** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | |
| Post-Carbon Filtration | DW-001B | 04/28/2015 | 10.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 8.6 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 12 | <0.12U | <0.27U |
| | | 07/15/2015 | 3.9J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 9.9 | <0.12U | <0.27U |
| | | 10/21/2015 | 15.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 01/21/2016 | 3.4J | <0.07U | <0.18U | 11.2J | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.1 | <0.12U | <0.27U |
| | | 04/14/2016 | 19.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 10.6 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7 | <0.12U | <0.27U |
| | | 08/18/2016 | 11.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 5.3 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 11.5 | <0.12U | <0.27U |
| | | 09/16/2016 | 4.1J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 4.4 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 4.5J | <0.12U | <0.27U |
| | | 12/21/2016 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 4.3J | <0.12U | <0.27U |
| | | 05/31/2017 | <2.2U | <0.07U | <0.18U | 12J | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 8.8 | <0.12U | <0.27U |
| | | 08/15/2017 | 2.4J | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.1 | <0.12U | <0.27U |
| | | 12/13/2017 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 9.4 | <0.12U | <0.27U |
| | | 01/25/2018 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 7.5 | <0.12U | <0.27U |
| | | 03/16/2018 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 4.8J | <0.12U | <0.27U |
| | | 6/13/2018 | 5.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | 8.2 | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 8.1 | <0.12U | <0.27U |
| | | 09/11/2018 | 5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 6.1 | <0.12U | <0.27U |
| | | 12/11/2018 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <1.6U | <0.15U | 6.2 | <0.12U | <0.27U |
| | | 3/6/2019 | | <0.07U | <0.18U | | <0.21U | | <1.3U | <0.09U | | <0.15U | <1.6U | <0.15U | 4.3J | <0.12U | <0.27U |
| | | 6/11/2019 | | <0.07U | <0.18U | | <0.21U | | <1.3U | <0.09U | | <0.15U | <1.6U | <0.12U | 8 | <0.12U | <0.27U |
| | | 9/19/2019 | | <0.07U | <0.18U | | <0.21U | | <1.3U | <0.09U | | <0.15U | <1.6U | <0.12U | 4.3J | <0.12U | <0.27U |
| | | 10/24/2019 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <0.15U | <1.4U | <0.12U | <0.27U |

**Notes**
**U = Not detected, method detection limit reported**
**J = Estimated Value**
**(µg/l) = Micrograms per liter**
**NA = Not analyzed/Not available**
**Bold values (highlighted in yellow) indicate exceedence of MDE Drinking Water Standards (2008)**

# 2794 NORTHEAST ROAD DRINKING WATER

# RESULTS SUMMARY TABLES

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropanol | Isopropyl Ether | Methyl bromide | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | ** | ** | 20 | 5 | ** | 75 | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| Stage | Location | Sample Date | | | | | | | | | | | | | | | | | |
| Pre-Carbon Filtration | DW-004C | 01/26/2009 | <2.3U | <0.1U | <0.1U | <11U | 3.9 | <0.3U | <0.1U | <1U | **234** | <0.3U | <0.2U | <0.2U | 83.1 | 0.9 | 2230 | <0.1U | <0.3U |
| | | 03/04/2009 | <11.5U | <0.5U | <0.5U | <55U | 3.9 | <1.5U | <0.5U | <5U | **232** | **6.1** | <1U | <1U | <10U | <1U | 1800 | <0.5U | <1.5U |
| | | 06/29/2009 | <2.3U | <0.1U | <0.1U | <11U | 4.6 | <0.3U | <0.1U | 2.4J | **214** | <0.3U | <0.2U | <0.2U | 82.9 | 1.2 | 1960 | <0.1U | <0.3U |
| | | 03/18/2010 | <2.3U | <0.1U | <0.1U | <11U | <0.1U | <0.3U | <0.1U | 5 | **271** | <0.3U | <0.2U | <0.2U | <2U | <0.2U | 2040 | <0.1U | <0.3U |
| | | 06/07/2010 | <2.3U | <0.1U | <0.1U | <11U | 2.9 | <0.3U | 0.19J | 20.2 | **232** | <0.3U | <0.2U | <0.2U | <2U | <0.2U | 2380 | <0.1U | <0.3U |
| | | 08/25/2010 | 48.5 | <0.1U | <0.1U | <11U | 1.3 | <0.3U | <0.1U | 16.1 | **121** | <0.3U | <0.2U | <0.2U | 42 | 0.5J | 1940 | <0.1U | <0.3U |
| | | 11/29/2010 | <2.3U | <0.1U | <0.1U | <11U | 4.5 | <0.3U | <0.1U | <1U | **269** | <0.3U | <0.2U | <0.2U | 90.1 | 1.6 | 2310 | <0.1U | <0.3U |
| | | 01/20/2011 | <11U | <0.35U | <0.9U | <19.5U | 5 | <0.65U | <1.1U | <6.5U | **277** | <1.6U | <0.75U | <0.55U | 127 | 1.7J | 2770 | <0.6U | <1.4U |
| | | 03/24/2011 | <3.1U | <0.23U | <0.34U | NA | 5.4 | <0.39U | <0.31U | <1.8U | **341** | <0.45U | NA | NA | <6.6U | <0.2U | 3860 | 0.25J | <0.66U |
| | | 04/29/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 5.6 | <0.13U | <0.22U | <1.3U | **330** | <0.32U | <0.15U | 0.14J | <1.6U | 1.9 | 3040 | <0.12U | <0.27U |
| | | 05/27/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 4.9 | <0.13U | <0.22U | <1.3U | **304** | <0.32U | <0.15U | 0.14J | <1.6U | 1.4 | 4350 | <0.12U | <0.27U |
| | | 06/20/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 5.5 | <0.13U | <0.22U | <1.3U | **269** | <0.32U | <0.15U | <0.11U | <1.6U | 1.7 | 3990 | <0.12U | <0.27U |
| | | 07/25/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 3.4 | <0.13U | <0.22U | <1.3U | **309** | <0.32U | <0.15U | 0.15J | <80U | 1.4 | 3150 | <0.12U | <0.27U |
| | | 08/11/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 3.7 | <0.13U | <0.22U | <1.3U | **234** | <0.32U | <0.15U | 0.12J | <1.6U | <0.15U | 2970 | 0.13J | <0.27U |
| | | 09/20/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 4.2 | <0.13U | <0.22U | <1.3U | **363** | <0.32U | <0.15U | 0.12J | 115 | <0.15U | 3950 | <0.12U | <0.27U |
| | | 10/14/2011 | <2.2U | <0.07U | <0.18U | <3.9U | 4.9 | <0.13U | <0.22U | <1.3U | **407** | <0.32U | <0.15U | 0.29J | <80U | 2.2 | 4250 | <0.12U | <0.27U |
| | | 11/18/2011 | <11U | <0.35U | <0.9U | <19.5U | 5.4 | <0.65U | <1.1U | <6.5U | **335** | <1.6U | <0.75U | <0.55U | <8U | 2.3J | 3350 | <0.6U | <1.4U |
| | | 12/08/2011 | 20.5J | <0.35U | <0.9U | <19.5U | 4.4 | <0.65U | <1.1U | <6.5U | **292** | <1.6U | <0.75U | <0.55U | <8U | <0.75U | 2720 | <0.6U | <1.4U |
| | | 01/13/2012 | <11U | <0.35U | <0.9U | <19.5U | 5.1 | <0.65U | <1.1U | <6.5U | **390** | <1.6U | <0.75U | <0.55U | <8U | 1.9J | 3770 | <0.6U | <1.4U |
| | | 02/22/2012 | <11U | <0.35U | <0.9U | <19.5U | 3.8 | <0.65U | <1.1U | <6.5U | **334** | <1.6U | <0.75U | <0.55U | <8U | <0.75U | 3500 | <0.6U | <1.4U |
| | | 03/16/2012 | <11U | <0.35U | <0.9U | <19.5U | <1.1U | <0.65U | 1.5J | <6.5U | **339** | <1.6U | <0.75U | <0.55U | <8U | <0.75U | 2570 | <0.6U | <1.4U |
| | | 04/20/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 2.3J | **367** | <0.32U | <0.15U | <0.11U | 155 | 2.2 | 4300 | <0.12U | <0.27U |
| | | 05/24/2012 | 4.7J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 3.3 | **403** | <0.32U | <0.15U | 0.13J | 136J | 2.4 | 5020 | <0.12U | <0.27U |
| | | 06/20/2012 | <11U | <0.35U | <0.9U | <19.5U | 7.1 | <0.65U | <1.1U | 10.6J | **390** | <1.6U | <0.75U | <0.55U | <8U | <0.75U | 3410 | <0.6U | <1.4U |
| | | 07/27/2012 | <11U | <0.35U | <0.9U | <19.5U | 5.5 | <0.65U | <1.1U | <6.5U | **345** | <1.6U | <0.75U | <0.55U | 118 | 2.3J | 4060 | <0.6U | <1.4U |
| | | 08/14/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **330** | <0.32U | <0.15U | <0.11U | 115 | <0.15U | 3550 | <0.12U | <0.27U |
| | | 09/14/2012 | 7.7 | <0.07U | <0.18U | <3.9U | 5 | <0.13U | <0.22U | <1.3U | **478** | <0.32U | <0.15U | 0.33J | 119 | 2.6 | 4110 | <0.12U | <0.27U |
| | | 10/19/2012 | <2.2U | <0.07U | <0.18U | <3.9U | 4.6 | <0.13U | <0.22U | 3 | **345** | <0.32U | <0.15U | 0.15J | 109 | 2 | 3610 | <0.12U | <0.27U |
| | | 11/16/2012 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **339** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3650 | <0.12U | <0.27U |
| | | 12/11/2012 | <2.2U | <0.07U | <0.18U | <3.9U | 4.4 | <0.13U | <0.22U | 7.3 | **476** | <0.32U | <0.15U | 0.15J | 132 | 2.5 | 4830 | <0.12U | <0.27U |
| | | 01/30/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.3 | **350** | <0.32U | <0.15U | 0.12J | <1.6U | 2.9 | 3830 | <0.12U | <0.27U |
| | | 02/21/2013 | 5.6 | <0.07U | <0.18U | <3.9U | 5.8 | <0.13U | <0.22U | 8.4 | **421** | <0.32U | <0.15U | <0.11U | <1.6U | 2.4 | 5790 | 0.15J | <0.27U |
| | | 03/08/2013 | <11U | <0.35U | <0.9U | <19.5U | 6.2 | <0.65U | <1.1U | <6.5U | **458** | <1.6U | <0.75U | <0.55U | <8U | 2.8 | 5100 | <0.6U | <1.4U |
| | | 04/25/2013 | 9.9 | <0.07U | <0.18U | <3.9U | 6.1 | <0.13U | <0.22U | 125 | **519** | <0.32U | <0.15U | <0.11U | 165 | 2.8 | 5620 | <0.12U | <0.27U |
| | | 05/21/2013 | 7.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.7 | **497** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4700 | <0.12U | <0.27U |
| | | 06/27/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **526** | <0.32U | <0.15U | 0.14J | <80U | 2.5 | 4960 | <0.12U | <0.27U |
| | | 07/26/2013 | 11.6 | <0.07U | <0.18U | <3.9U | 5.8 | <0.13U | <0.22U | <1.3U | **423** | <0.32U | <0.15U | 0.18J | <1.6U | 3.3 | 4090 | <0.12U | <0.27U |
| | | 08/23/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 1.9J | **491** | <0.32U | <0.15U | <0.11U | <1.6U | 2.6 | 5020 | <0.12U | <0.27U |
| | | 09/13/2013 | <2.2U | <0.07U | <0.18U | <3.9U | 5.2 | <0.13U | <0.22U | <1.3U | **427** | <0.32U | <0.15U | <0.11U | 145 | 2.9 | 4350 | <0.12U | <0.27U |
| | | 10/16/2013 | <2.2U | <0.07U | <0.18U | <3.9U | 6.3 | <0.13U | <0.22U | <1.3U | **444** | <0.32U | <0.15U | <0.11U | <160U | 3.8 | 4410 | <0.12U | <0.27U |
| | | 11/19/2013 | 12.1 | <0.07U | <0.18U | <3.9U | 7.2 | <0.13U | <0.22U | 9.2 | **519** | <0.32U | <0.15U | 0.12J | <160U | 3.9 | 5180 | <0.12U | <0.27U |
| | | 12/18/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **433** | <0.32U | <0.15U | <0.11U | 186 | 3.4 | 4470 | <0.12U | <0.27U |
| Pre-Carbon Filtration | DW-004C | 01/13/2014 | <2.2U | <0.07U | <0.18U | <3.9U | 5.7 | <0.13U | <0.22U | <1.3U | **529** | <0.32U | <0.15U | <0.11U | <160U | 3.7 | 4240 | <0.12U | <0.27U |
| | | 02/10/2014 | 20.5 | <0.07U | <0.18U | <3.9U | 6.8 | <0.13U | <0.22U | 12.1 | **577** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 6420 | <0.12U | <0.27U |
| | | 03/31/2014 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **553** | <0.32U | <0.15U | <0.11U | 266 | <0.15U | 5850 | <0.12U | <0.27U |
| | | 04/23/2014 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 10 | **417** | <0.32U | <0.15U | <0.11U | 181 | 3.2 | 3160 | <0.12U | <0.27U |
| | | 05/20/2014 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6.6 | **469** | <0.32U | <0.15U | <0.11U | <160U | 3.5 | 3960 | <0.12U | <0.27U |
| | | 06/17/2014 | 43.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | 0.5 | <1.3U | **432** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5560 | <0.12U | <0.27U |
| | | 07/29/2014 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.9 | **512** | <0.32U | <0.15U | 0.15J | 137 | <0.15U | 5010 | <0.12U | <0.27U |
| | | 08/29/2014 | 27.1 | 0.082J | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.6 | **436** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 4010 | 0.21J | <0.27U |
| | | 09/15/2014 | 11.5 | <0.07U | <0.18U | <3.9U | 5.2 | <0.13U | <0.22U | 8.8 | **421** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 4620 | 0.13J | <0.27U |
| | | 10/20/2014 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.8 | **527** | <0.32U | <0.15U | 0.13J | 180 | 3.4 | 6290 | 0.16J | <0.27U |
| | | 11/20/2014 | <220U | <7U | <18U | <390U | <21U | <13U | <22U | <130U | **555** | <32U | <15U | <11U | <160U | <15U | 6820 | <12U | <27U |
| | | 12/15/2014 | <2.2U | <0.07U | <0.18U | <3.9U | 4.8 | <0.13U | <0.22U | 6.7 | **527** | <0.32U | <0.15U | 0.13J | 144 | <0.15U | 5260 | <0.12U | <0.27U |
| | | 01/20/2015 | <2.2U | <0.07U | <0.18U | <3.9U | 4.6 | <0.13U | <0.22U | 6.8 | **420** | <0.32U | <0.15U | 0.12J | <160U | <0.15U | 5510 | <0.12U | <0.27U |
| | | 02/13/2015 | <2.2U | <0.07U | <0.18U | <3.9U | 5.6 | <0.13U | <0.22U | 5 | **472** | <0.32U | <0.15U | <0.11U | <80U | <0.15U | 4520 | <0.12U | <0.27U |
| | | 03/18/2015 | <2.2U | 0.082J | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.7 | **780** | <0.32U | <0.15U | 0.13J | 202 | <0.15U | 7880 | 0.15J | <0.27U |
| | | 04/28/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.2 | **549** | <0.32U | <0.15U | 0.14J | <160U | 3.9 | 5380 | <0.12U | <0.27U |
| | | 05/21/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 4.1 | **596** | <0.32U | <0.15U | <0.11U | <160U | 3 | 4510 | <0.12U | <0.27U |
| | | 06/23/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **548** | <0.32U | <0.15U | <0.11U | 166 | 3.2 | 5530 | <0.12U | <0.27U |
| | | 07/15/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **521** | <0.32U | <0.15U | <0.11U | 143 | <0.15U | 5270 | <0.12U | <0.27U |
| | DW-004C_Post* | 09/02/2015 | <2.2U | <0.07U | <0.18U | <3.9U | 3.8 | <0.13U | <0.22U | <1.3U | **343** | <0.32U | <0.15U | <0.11U | <1.6U | 2.2 | 3180 | 0.13J | <0.27U |
| | DW-004C_Pre* | 09/02/2015 | <2.2U | <0.07U | <0.18U | <3.9U | 4 | <0.13U | <0.22U | 4.4 | **401** | <0.32U | <0.15U | <0.11U | <1.6U | 2.6 | 4450 | 0.12J | <0.27U |
| | DW-004C | 10/22/2015 | 21.6 | <0.07U | <0.18U | <3.9U | 5.7 | <0.13U | <0.22U | 1.8J | **490** | <0.32U | <0.15U | <0.11U | <160U | 3.2 | 5030 | <0.12U | <0.27U |
| | | 11/18/2015 | <2.2U | <0.07U | <0.18U | <3.9U | 7 | <0.13U | 1.1 | <1.3U | **430** | <0.32U | <0.15U | <0.11U | <80U | 3 | 4470 | <0.12U | <0.27U |
| | | 12/16/2015 | <2.2U | <0.07U | <0.18U | <3.9U | 5.8 | <0.13U | <0.22U | <1.3U | **462** | <0.32U | <0.15U | <0.11U | <160U | 3.7 | 4230 | <0.12U | <0.27U |
| | | 01/21/2016 | 14.6 | <0.07U | <0.18U | <3.9U | 6.2 | <0.13U | <0.22U | 11.7 | **431** | <0.32U | <0.15U | <0.11U | <1.6U | 3.5 | 3520 | <0.12U | <0.27U |
| | | 02/29/2016 | 21.5 | <0.07U | <0.18U | <390U | 5.8 | <0.13U | <0.22U | 3.4 | **451** | <0.32U | <0.15U | <0.11U | 152E | 3 | 4450 | <0.12U | <0.27U |
| | | 03/24/2016 | 13 | <0.07U | <0.18U | <3.9U | 5.1 | <0.13U | <0.22U | 6.2 | **368** | <0.32U | <0.15U | <0.11U | <160U | 3.3 | 3560 | <0.12U | <0.27U |
| | | 04/14/2016 | 15.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 2.8 | **486** | <0.32U | <0.15U | <0.11U | 141E | 3 | 4190 | <0.12U | <0.27U |
| | | 05/20/2016 | 21.8 | 0.11J | <0.18U | <3.9U | <0.21U | <0.13U | 0.24J | 10.6 | **479** | <0.32U | <0.15U | <0.11U | 151E | 3.5 | 4480 | <0.12U | <0.27U |
| | | 06/17/2016 | 8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6 | **458** | <0.32U | <0.15U | <0.11U | <80U | 3.5 | 4780 | <0.12U | <0.27U |
| | | 07/20/2016 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 11 | **369** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 3400 | <0.12U | <0.27U |

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropanol | Isopropyl Ether | Methyl bromide | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **MDE DW Standards** | ****** | **5** | **700** | ****** | ****** | ****** | ****** | ****** | **20** | **5** | ****** | **75** | ****** | ****** | ****** | **1000** | **10000** |
| | | **Unit** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | | | |
| | | 08/18/2016 | 37.1 | <0.07U | <0.18U | <3.9U | 5.7 | <0.13U | <0.22U | 6.8 | **480** | <0.32U | <0.15U | <0.11U | <160U | 2.6 | 5430 | <0.12U | <0.27U |
| | | 09/16/2016 | 26.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7 | **424** | <0.32U | <0.15U | <0.11U | 223J | 3.5 | 4410 | <0.12U | <0.27U |
| | | 10/21/2016 | 20.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.9 | **455** | <0.32U | <0.15U | <0.11U | <160U | 4 | 4440 | <0.12U | <0.27U |
| | | 11/10/2016 | 32.4 | 0.1J | <0.18U | <3.9U | 7 | 0.18J | <0.22U | 5.4 | **481** | <0.32U | <0.15U | 0.13J | <160U | 4 | 4550 | <0.12U | <0.27U |
| | | 12/01/2016 | 12.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6.9 | **433** | <0.32U | <0.15U | <0.11U | 197J | 3.8 | 4140 | <0.12U | <0.27U |
| Pre-Carbon Filtration | DW-004C | 01/12/2017 | 28.4 | <0.07U | <0.18U | <3.9U | 6.2 | <0.13U | <0.22U | 7.9 | **461** | <0.32U | <0.15U | <0.11U | 205 | 3.9 | 5590 | <0.12U | <0.27U |
| | | 02/16/2017 | 13 | 0.084J | <0.18U | <3.9U | 7.6 | <0.13U | <0.22U | 6 | **515** | <0.32U | <0.15U | <0.11U | 9 | 4.7 | 5940 | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | 0.073J | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **511** | <0.32U | <0.15U | <0.11U | <1.6U | 4.1 | 5330 | <0.12U | <0.27U |
| | | 04/24/2017 | 6.4 | <0.07U | <0.18U | <3.9U | 7.5 | <0.13U | <0.22U | <1.3U | **521** | <0.32U | <0.15U | <0.11U | <1.6U | 4.8 | 6670 | <0.12U | <0.27U |
| | | 05/16/2017 | <3.1U | <0.23U | <0.34U | <7.1U | <0.25U | <0.39U | <0.31U | <1.8U | **419** | <0.45U | <0.34U | <0.27U | 150 | 4.6 | 3880 | <0.23U | <0.66U |
| | | 06/27/2017 | 29.6 | <0.07U | <0.18U | <3.9U | 7.9 | <0.13U | <0.22U | <1.3U | **609** | <0.32U | <0.15U | <0.11U | 281J | 4.7 | 6210 | <0.12U | <0.27U |
| | | 07/11/2017 | <2.2U | <0.07U | <0.18U | <3.9U | 6 | <0.13U | <0.22U | <1.3U | **414** | <0.32U | <0.15U | <0.11U | <160U | 3.7 | 1940 | <0.12U | <0.27U |
| | | 08/08/2017 | 32.3 | <0.07U | <0.18U | <3.9U | 6.9 | <0.13U | <0.22U | <1.3U | **548** | <0.32U | <0.15U | <0.11U | <1.6U | 3.7 | 4920 | <0.12U | <0.27U |
| | | 09/29/2017 | 38.3 | <0.07U | <0.18U | <3.9U | 6 | <0.13U | <0.22U | <1.3U | **441** | <0.32U | <0.15U | <0.11U | 11 | 3.9 | 4550 | <0.12U | <0.27U |
| | | 10/17/2017 | 23.3 | <0.07U | <0.18U | <3.9U | 5.7 | <0.13U | <0.22U | <1.3U | **458** | <0.32U | <0.15U | <0.11U | 8.8 | 3.6 | 5300 | <0.12U | <0.27U |
| | | 11/15/2017 | 68.4 | <0.07U | <0.18U | 89.3 | 6.8 | <0.13U | <0.22U | <1.3U | **471** | <0.32U | <0.15U | <0.11U | <1.6U | 4.3 | 9100 | <0.12U | <0.27U |
| | | 12/13/2017 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **471** | <0.32U | <0.15U | <0.11U | 11.8 | 3.6 | 4240 | <0.12U | <0.27U |
| | | 01/26/2018 | 11.4 | <0.07U | <0.18U | <3.9U | 6.9 | <0.13U | <0.22U | <1.3U | **505** | <0.32U | <0.15U | <0.11U | 281J | 4 | 3930 | <0.12U | <0.27U |
| | | 02/15/2018 | 12.3 | <0.07U | <0.18U | <3.9U | 7.4 | <0.13U | <0.22U | <1.3U | **481** | <0.32U | <0.15U | <0.11U | <160U | 4.6 | 5220 | <0.12U | <0.27U |
| | | 03/16/2018 | 15.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **515** | <0.32U | <0.15U | <0.11U | 183J | 4 | 4630 | <0.12U | <0.27U |
| | | 04/26/2018 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **387** | <0.32U | <0.15U | <0.11U | 91.5 | 3.9 | 2800 | <0.12U | <0.27U |
| | | 05/23/2018 | 41.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | 0.8 | 1.7J | **477** | <0.32U | <0.15U | <0.11U | <160U | 4.7 | 4130 | <0.12U | <0.27U |
| | | 06/13/2018 | 57.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5720 | **503** | <0.32U | <0.15U | <0.11U | 181J | 3.9 | 4540 | <0.12U | <0.27U |
| | | 07/20/2018 | 55.8 | <0.07U | <0.18U | 10J | <0.21U | <0.13U | <0.22U | 2.5J | **435** | <0.32U | <0.15U | <0.11U | 192J | 3.8 | 4030 | <0.12U | <0.27U |
| | | 09/11/2018 | 37.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **470** | <0.32U | <0.15U | <0.11U | 194J | 4.2 | 4260 | <0.12U | <0.27U |
| | | 10/23/2018 | 50.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **468** | <0.32U | <0.15U | <0.11U | 179 | 3.4 | 4910 | <0.12U | <0.27U |
| | | 11/28/2018 | 45.5 | <0.07U | <0.18U | <3.9U | 6.7 | <0.13U | <0.22U | <1.3U | **487** | <0.32U | <0.15U | <0.11U | <160U | 4.3 | 4560 | <0.12U | <0.27U |
| | | 12/12/2018 | 125 | <0.07U | <0.18U | <3.9U | 5.2 | <0.13U | <0.22U | <1.3U | **424** | <0.32U | <0.15U | <0.11U | 186J | <0.15U | 3740 | <0.12U | <0.27U |
| | | 2/1/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **421** | | <0.15U | | <160U | 3.6 | 3730 | <0.12U | <0.27U |
| | | 3/1/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **404** | | <0.15U | | <160U | 3.7 | 3650 | <0.12U | <0.27U |
| | | 4/12/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **389** | | <0.15U | | <1.60U | <0.12U | 3570 | <0.12U | <0.27U |
| | | 5/02/2019 | | <0.07U | <0.18U | | 4.9 | | | <1.3U | **428** | | <0.15U | | <160U | 3.3 | 3960 | <0.12U | <0.27U |
| | | 6/11/2019 | | <0.07U | <0.18U | | 5 | | | <1.3U | **358** | | <0.15U | | <160U | <0.12U | 3280 | <0.12U | <0.27U |
| | | 9/18/2019 | | <0.07U | <0.18U | | 4.9 | | | 2J | **395** | | <0.15U | | <160U | 2.6 | 4030 | <0.12U | <0.27U |
| | | 10/24/2019 | 22.3 | <0.07U | <0.18U | <3.9U | 6.2 | <0.13U | <0.22U | <1.3U | **439** | <0.32U | <0.15U | <0.11U | 104 | 2 | 3650 | <0.12U | <0.27U |
| Mid-Carbon Filtration 1 | DW-004I | 04/25/2013 | 8.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 184 | 0.5J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 177 | <0.12U | <0.27U |
| | | 05/21/2013 | 11.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 10.4 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4230 | <0.12U | <0.27U |
| | | 06/27/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.58 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5520 | <0.12U | <0.27U |
| | | 07/26/2013 | 6.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.9 | 1.4 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4350 | <0.12U | <0.27U |
| | | 08/23/2013 | 8.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 9.5 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5510 | <0.12U | <0.27U |
| | | 09/13/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.38J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4380 | <0.12U | <0.27U |
| | | 10/16/2013 | 2.4J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4280 | <0.12U | <0.27U |
| | | 11/19/2013 | 10.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5160 | <0.12U | <0.27U |
| | | 12/18/2013 | <220U | <7U | <18U | <390U | <21U | <13U | <22U | <130U | <9U | <32U | <15U | <11U | <160U | <15U | 9350 | <12U | <27U |
| | | 01/13/2014 | 8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 17.7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2560 | <0.12U | <0.27U |
| | | 02/10/2014 | 19.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 10.5 | 0.58 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5420 | <0.12U | <0.27U |
| | | 03/31/2014 | 4.4J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 6100 | <0.12U | <0.27U |
| | | 04/23/2014 | 7.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 12.2 | 0.29J | <0.32U | <0.15U | <0.11U | 10.3 | <0.15U | 3330 | <0.12U | <0.27U |
| | | 05/20/2014 | 20.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 4.8 | 3 | <0.32U | <0.15U | <0.11U | 35.3 | <0.15U | 4980 | <0.12U | <0.27U |
| | | 06/17/2014 | 39.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 16.8 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4250 | <0.12U | <0.27U |
| | | 07/29/2014 | 4.7J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 3.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4800 | 0.15J | <0.27U |
| | | 08/29/2014 | 15.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5260 | 0.2J | <0.27U |
| | | 09/15/2014 | 13.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.3 | 0.44J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3570 | <0.12U | <0.27U |
| | | 10/20/2014 | 5.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.1 | 4.1 | <0.32U | <0.15U | <0.11U | 10.1 | <0.15U | 6350 | 0.17J | <0.27U |
| | | 11/20/2014 | <220U | <7U | <18U | <390U | <21U | <13U | <22U | <130U | **26.4J** | <32U | <15U | <11U | <160U | <15U | 6170 | <12U | <27U |
| | | 12/15/2014 | 4.2J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.8 | **39.6** | <0.32U | <0.15U | <0.11U | 32.9 | <0.15U | 4010 | <0.12U | <0.27U |
| | | 01/20/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.7 | **67.6** | <0.32U | <0.15U | <0.11U | 107 | <0.15U | 4310 | <0.12U | <0.27U |
| | | 02/13/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | 0.17J | <0.22U | 6 | **118** | <0.32U | <0.15U | <0.11U | 114 | <0.15U | 4380 | <0.12U | <0.27U |
| | | 03/18/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.6 | **302** | <0.32U | <0.15U | <0.11U | 121 | 0.17J | 7930 | 0.13J | <0.27U |
| | | 04/28/2015 | 10.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.1 | **282** | <0.32U | <0.15U | <0.11U | 199J | <0.15U | 5590 | <0.12U | <0.27U |
| | | 05/21/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 4.9 | **410** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 6380 | <0.12U | <0.27U |
| | | 06/23/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **366** | <0.32U | <0.15U | <0.11U | 165 | <0.15U | 5590 | <0.12U | <0.27U |
| | | 07/15/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **381** | <0.32U | <0.15U | <0.11U | 131 | <0.15U | 5790 | <0.12U | <0.27U |
| | DW-004I_Post* | 09/02/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **67.1** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4130 | <0.12U | <0.27U |
| | DW-004I_Pre* | 09/02/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 3.4 | **367** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4590 | <0.12U | <0.27U |
| | | 10/22/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **137** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 4740 | <0.12U | <0.27U |
| | | 11/18/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **211** | <0.32U | <0.15U | <0.11U | <80U | <0.15U | 4270 | <0.12U | <0.27U |
| | | 12/16/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **226** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 4460 | <0.12U | <0.27U |
| | | 01/21/2016 | 11.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 12.9 | **253** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3520 | <0.12U | <0.27U |
| | | 02/29/2016 | 6.2 | <0.07U | <0.18U | 16.7J | <0.21U | <0.13U | <0.22U | <1.3U | **333** | <0.32U | <0.15U | <0.11U | 146E | <0.15U | 4050 | <0.12U | <0.27U |
| | | 03/24/2016 | 12.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.5 | **302** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 3830 | <0.12U | <0.27U |
| | | 04/14/2016 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **440** | <0.32U | <0.15U | <0.11U | <80U | <0.15U | 4480 | <0.12U | <0.27U |

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropanol | Isopropyl Ether | Methyl bromide | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | ** | ** | 20 | 5 | ** | 75 | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| Stage | Location | Sample Date | | | | | | | | | | | | | | | | | |
| Mid-Carbon Filtration 1 | DW-004I | 05/20/2016 | 20.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 11.8 | **511** | <0.32U | <0.15U | <0.11U | 189E | <0.15U | 4960 | <0.12U | <0.27U |
| | | 06/17/2016 | 7.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.7 | **477** | <0.32U | <0.15U | <0.11U | 156J | <0.15U | 4660 | <0.12U | <0.27U |
| | | 07/20/2016 | 16.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.5 | **374** | <0.32U | <0.15U | <0.11U | <160U | 0.27J | 1860 | <0.12U | <0.27U |
| | | 08/18/2016 | 11.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.7 | **608** | <0.32U | <0.15U | <0.11U | 187J | <0.15U | 5570 | <0.12U | <0.27U |
| | | 09/16/2016 | 8.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.1 | 0.61 | <0.32U | <0.15U | <0.11U | 36.6 | <0.15U | 4620 | <0.12U | <0.27U |
| | | 10/21/2016 | 12.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.2 | 0.67 | <0.32U | <0.15U | <0.11U | 52.6 | <0.15U | 4300 | <0.12U | <0.27U |
| | | 11/10/2016 | 40.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.2 | 1.6 | <0.32U | <0.15U | <0.11U | 68 | <0.15U | 5640 | <0.12U | <0.27U |
| | | 12/01/2016 | 16.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.2 | 2.1 | <0.32U | <0.15U | <0.11U | 75.6 | <0.15U | 4130 | <0.12U | <0.27U |
| | | 01/12/2017 | 23 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.6 | 8.8 | <0.32U | <0.15U | <0.11U | 138 | <0.15U | 5550 | <0.12U | <0.27U |
| | | 02/16/2017 | 16.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6.5 | **21.5** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 6500 | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **39.7** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5400 | <0.12U | <0.27U |
| | | 04/24/2017 | 6.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **90.5** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5850 | <0.12U | <0.27U |
| | | 05/16/2017 | 14.9 | <0.23U | <0.34U | <7.1U | <0.25U | <0.39U | <0.31U | <1.8U | **127** | <0.45U | <0.34U | <0.27U | 83.4 | <0.2U | 4010 | <0.23U | <0.66U |
| | | 06/27/2017 | 19.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **237** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 5880 | <0.12U | <0.27U |
| | | 07/11/2017 | 17.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **172** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 1960 | <0.12U | <0.27U |
| | | 08/08/2017 | 37.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **276** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5240 | <0.12U | <0.27U |
| | | 09/29/2017 | 34.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **320** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4470 | <0.12U | <0.27U |
| | | 10/17/2017 | 32.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **376** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4420 | <0.12U | <0.27U |
| | | 11/15/2017 | 78.7 | <0.07U | <0.18U | 28500 | <0.21U | 0.43J | <0.22U | <1.3U | **414** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 6660 | <0.12U | <0.27U |
| | | 12/13/2017 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **449** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4100 | <0.12U | <0.27U |
| | | 01/26/2018 | 6.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **458** | <0.32U | <0.15U | <0.11U | 248J | <0.15U | 3420 | <0.12U | <0.27U |
| | | 02/15/2018 | 13 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **414** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 5590 | <0.12U | <0.27U |
| | | 03/16/2018 | 25.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **449** | <0.32U | <0.15U | <0.11U | 179J | <0.15U | 3490 | <0.12U | <0.27U |
| | | 04/26/2018 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **445** | <0.32U | <0.15U | <0.11U | 113 | <0.15U | 3260 | <0.12U | <0.27U |
| | | 05/23/2018 | 30.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **510** | <0.32U | <0.15U | <0.11U | 198J | <0.15U | 4660 | <0.12U | <0.27U |
| | | 06/13/2018 | 37.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 3.6 | **523** | <0.32U | <0.15U | <0.11U | 286J | <0.15U | 4800 | <0.12U | <0.27U |
| | | 07/20/2018 | 61.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 2.5J | **550** | <0.32U | <0.15U | <0.11U | 272J | <0.15U | 3940 | <0.12U | <0.27U |
| | | 09/11/2018 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **568** | <0.32U | <0.15U | <0.11U | 207J | <0.15U | 4180 | <0.12U | <0.27U |
| | | 10/23/2018 | 28 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **548** | <0.32U | <0.15U | <0.11U | 206 | <0.15U | 5050 | <0.12U | <0.27U |
| | | 11/28/2018 | 18.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **505** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 4100 | <0.12U | <0.27U |
| | | 12/12/2018 | 104 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **441** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 3820 | <0.12U | <0.27U |
| | | 2/1/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **457** | | <0.15U | | <160U | <0.15U | 3540 | <0.12U | <0.27U |
| | | 3/1/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **443** | | <0.15U | | 169J | <0.15U | 3870 | <0.12U | <0.27U |
| | | 4/12/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 7 | | <0.15U | | 3.8J | <0.15U | 72.9 | <0.12U | <0.27U |
| | | 05/02/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 9.7 | | <0.15U | | 3.7J | <0.15U | 834 | <0.12U | <0.27U |
| | | 6/11/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 6.5 | | <0.15U | | <1.6U | <0.15U | 3770 | <0.12U | <0.27U |
| | | 9/18/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 5 | | <0.15U | | 4.8J | <0.15U | 4100 | <0.12U | <0.27U |
| | | 10/24/2019 | 9.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 5.5 | <0.32U | <0.15U | <0.11U | 12.1 | <0.15U | 3280 | <0.12U | <0.27U |
| Mid-Carbon Filtration 2 | DW-004J | 04/25/2013 | 5.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 174 | 0.15J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 16.2 | <0.12U | <0.27U |
| | | 05/21/2013 | 5.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 23.3 | <0.12U | <0.27U |
| | | 06/27/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.11J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4820 | <0.12U | <0.27U |
| | | 07/26/2013 | 5.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5020 | <0.12U | <0.27U |
| | | 08/23/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.16J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5430 | <0.12U | <0.27U |
| | | 09/13/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4920 | <0.12U | <0.27U |
| | | 10/16/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4400 | <0.12U | <0.27U |
| | | 11/19/2013 | 12.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 10 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4440 | <0.12U | <0.27U |
| | | 12/18/2013 | <220U | <7U | <18U | <390U | <21U | <13U | <22U | <130U | <9U | <32U | <15U | <11U | <160U | <15U | 2400 | <12U | <27U |
| | | 01/13/2014 | 3.3J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 12.2 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2860 | <0.12U | <0.27U |
| | | 02/10/2014 | 25.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 13.3 | 0.12J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5700 | <0.12U | <0.27U |
| | | 03/31/2014 | 4.4J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5980 | <0.12U | <0.27U |
| | | 04/23/2014 | 9.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 13.1 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4250 | <0.12U | <0.27U |
| | | 05/20/2014 | 7.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5150 | <0.12U | <0.27U |
| | | 06/17/2014 | 15.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5950 | <0.12U | <0.27U |
| | | 07/29/2014 | 5.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.21J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3470 | <0.12U | <0.27U |
| | | 08/29/2014 | 6.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 4.4 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4540 | 0.15J | <0.27U |
| | | 09/15/2014 | 11.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.1 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4700 | <0.12U | <0.27U |
| | | 10/20/2014 | 10 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.5 | <0.09U | <0.32U | <0.15U | <0.11U | 7.5 | <0.15U | 6190 | 0.15J | <0.27U |
| | | 11/20/2014 | <220U | <7U | <18U | <390U | <21U | <13U | <22U | <130U | 16.7J | <32U | <15U | <11U | <160U | <15U | 5450 | <12U | <27U |
| | | 12/15/2014 | 3.9J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6.2 | <0.09U | <0.32U | <0.15U | <0.11U | 7.6 | <0.15U | 4270 | <0.12U | <0.27U |
| | | 01/20/2015 | 6.3 | <0.07U | <0.18U | <3.9U | <0.21U | 0.22J | <0.22U | 8 | 0.38J | <0.32U | <0.15U | <0.11U | 56.5 | <0.15U | 3470 | <0.12U | <0.27U |
| | | 02/13/2015 | 7.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.8 | 0.2J | <0.32U | <0.15U | <0.11U | 13.2 | <0.15U | 4660 | <0.12U | <0.27U |
| | | 03/18/2015 | 17.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.8 | 0.68 | <0.32U | <0.15U | <0.11U | 18.2 | <0.15U | 7410 | 0.22J | <0.27U |
| | | 04/28/2015 | 12.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.4 | 2.1 | <0.32U | <0.15U | <0.11U | 24.8 | <0.15U | 5770 | <0.12U | <0.27U |
| | | 05/21/2015 | 7.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 4.9 | 5.9 | <0.32U | <0.15U | <0.11U | 34.6 | <0.15U | 6630 | <0.12U | <0.27U |
| | | 06/23/2015 | 4.6J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 11.8 | <0.32U | <0.15U | <0.11U | 71 | <0.15U | 4920 | <0.12U | <0.27U |
| | | 07/15/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **28.4** | <0.32U | <0.15U | <0.11U | 85.5 | <0.15U | 5820 | <0.12U | <0.27U |
| | DW-004J_Post* | 09/02/2015 | 7.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 20 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1530 | <0.12U | <0.27U |
| | DW-004J_Pre* | 09/02/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 4.4 | **74.1** | <0.32U | <0.15U | <0.11U | 95.3 | <0.15U | 4200 | <0.12U | <0.27U |
| | | 10/22/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.62 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5220 | <0.12U | <0.27U |
| | | 11/18/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.33J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4300 | <0.12U | <0.27U |
| | | 12/16/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <9U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4180 | <0.12U | <0.27U |
| | | 01/21/2016 | 10.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 12 | 0.54 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3560 | <0.12U | <0.27U |
| | | 02/29/2016 | 5.3 | <0.07U | <0.18U | 11J | <0.21U | <0.13U | <0.22U | <1.3U | 1.4 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4380 | <0.12U | <0.27U |
| | | 03/24/2016 | 8.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.2 | 2.2 | <0.32U | <0.15U | <0.11U | 42.9 | <0.15U | 3680 | <0.12U | <0.27U |

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropanol | Isopropyl Ether | Methyl bromide | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **MDE DW Standards** | ****** | **5** | **700** | ****** | ****** | ****** | ****** | ****** | **20** | **5** | ****** | **75** | ****** | ****** | ****** | **1000** | **10000** |
| | | **Unit** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | | | |
| Mid-Carbon Filtration 2 | DW-004J | 04/14/2016 | 4.4J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 12.9 | <0.32U | <0.15U | <0.11U | 101 | <0.15U | 4470 | <0.12U | <0.27U |
| | | 05/20/2016 | 14 | <0.07U | <0.18U | 4.2J | <0.21U | <0.13U | <0.22U | 11 | **63.5** | <0.32U | <0.15U | <0.11U | 160E | <0.15U | 5300 | <0.12U | <0.27U |
| | | 06/17/2016 | 7.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6.8 | **108** | <0.32U | <0.15U | <0.11U | 191J | <0.15U | 4790 | <0.12U | <0.27U |
| | | 07/20/2016 | 32.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.4 | **182** | <0.32U | <0.15U | <0.11U | 198J | <0.15U | 3480 | <0.12U | <0.27U |
| | | 08/18/2016 | 42.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.3 | **300** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 5050 | <0.12U | <0.27U |
| | | 09/16/2016 | 12.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.6 | **375** | <0.32U | <0.15U | <0.11U | 280J | <0.15U | 4370 | <0.12U | <0.27U |
| | | 10/21/2016 | 21.7 | <0.07U | <0.18U | <3.9U | <0.21U | 0.19J | <0.22U | 7.4 | **387** | <0.32U | <0.15U | <0.11U | 210 | <0.15U | 3930 | <0.12U | <0.27U |
| | | 11/10/2016 | 21.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6.1 | **406** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 4880 | <0.12U | <0.27U |
| | | 12/01/2016 | 12.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.2 | **332** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 3860 | <0.12U | <0.27U |
| | | 01/12/2017 | 26.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **278** | <0.32U | <0.15U | <0.11U | 127 | <0.15U | 5330 | <0.12U | <0.27U |
| | | 02/16/2017 | 28.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | 0.52 | 6.5 | **254** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 6630 | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **247** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5240 | <0.12U | <0.27U |
| | | 04/24/2017 | 3.6J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **202** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 7000 | <0.12U | <0.27U |
| | | 05/16/2017 | 11.3 | <0.23U | <0.34U | <7.1U | <0.25U | <0.39U | <0.31U | <1.8U | <0.33U | <0.45U | <0.34U | <0.27U | <6.6U | <0.2U | 49.8 | <0.23U | <0.66U |
| | | 06/27/2017 | 35 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.62 | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 6150 | <0.12U | <0.27U |
| | | 07/11/2017 | 25.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.74 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1920 | <0.12U | <0.27U |
| | | 08/08/2017 | 33.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 1.3 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5510 | <0.12U | <0.27U |
| | | 09/29/2017 | 22.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 1.6 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3710 | <0.12U | <0.27U |
| | | 10/17/2017 | 28.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 1.9 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5070 | <0.12U | <0.27U |
| | | 11/15/2017 | 54.1 | <0.07U | <0.18U | 2500 | <0.21U | <0.13U | <0.22U | <1.3U | 2.9 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 6410 | <0.12U | <0.27U |
| | | 12/13/2017 | 14.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 8.6 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4160 | <0.12U | <0.27U |
| | | 01/26/2018 | 10.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **42.3** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4780 | <0.12U | <0.27U |
| | | 02/15/2018 | 17.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **55** | <0.32U | <0.15U | <0.11U | <80U | <0.15U | 4710 | <0.12U | <0.27U |
| | | 03/16/2018 | 9.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **116** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 4120 | <0.12U | <0.27U |
| | | 04/26/2018 | 7.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **193** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 3400 | <0.12U | <0.27U |
| | | 05/23/2018 | 16.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **275** | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 3970 | <0.12U | <0.27U |
| | | 06/13/2018 | 19.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 4.2 | <0.32U | <0.15U | <0.11U | 80.6 | <0.15U | 4840 | <0.12U | <0.27U |
| | | 07/20/2018 | 64.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 10.9 | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 4450 | <0.12U | <0.27U |
| | | 09/11/2018 | 8.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **46.8** | <0.32U | <0.15U | <0.11U | 200 | <0.15U | 4010 | <0.12U | <0.27U |
| | | 10/23/2018 | 23.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **140** | <0.32U | <0.15U | <0.11U | 244J | <0.15U | 4720 | <0.12U | <0.27U |
| | | 11/28/2018 | 16.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **241** | <0.32U | <0.15U | <0.11U | 166J | <0.15U | 4220 | <0.12U | <0.27U |
| | | 12/12/2018 | 77.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **226** | <0.32U | <0.15U | <0.11U | 260J | <0.15U | 3810 | <0.12U | <0.27U |
| | | 2/1/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **314** | | <0.15U | | 254J | <0.15U | 3670 | <0.12U | <0.27U |
| | | 3/1/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **325** | | <0.15U | | 207J | <0.15U | 4010 | <0.12U | <0.27U |
| | | 4/12/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 1.3 | | <0.15U | | <1.6U | <0.15U | 40.4 | <0.12U | <0.27U |
| | | 5/02/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | <0.09U | | <0.15U | | <1.6U | <0.15U | 21.8 | <0.12U | <0.27U |
| | | 6/11/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 0.56 | | <0.15U | | <1.6U | <0.15U | 3230 | <0.12U | <0.27U |
| | | 9/18/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 0.24J | | <0.15U | | <1.6U | <0.15U | 3790 | <0.12U | <0.27U |
| | | 10/24/2019 | 9.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3290 | <0.12U | <0.27U |
| Post-Carbon Filtration | DW-004K | 04/25/2013 | 13.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 309 | 0.11J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 12.6 | <0.12U | <0.27U |
| | | 05/21/2013 | 4.5J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 10.2 | <0.12U | <0.27U |
| | | 06/27/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3000 | <0.12U | <0.27U |
| | | 07/26/2013 | 5J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4280 | <0.12U | <0.27U |
| | | 08/23/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5770 | <0.12U | <0.27U |
| | | 09/13/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 2J | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 10/16/2013 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3220 | <0.12U | <0.27U |
| | | 11/19/2013 | 6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 11.2 | 0.32J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4300 | <0.12U | <0.27U |
| | | 12/18/2013 | <220U | <7U | <18U | <390U | <21U | <13U | <22U | <130U | <9U | <32U | <15U | <11U | <160U | <15U | 4010 | <12U | <27U |
| | | 01/13/2014 | 7.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2840 | <0.12U | <0.27U |
| | | 02/10/2014 | 23 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 14.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5150 | <0.12U | <0.27U |
| | | 03/31/2014 | 4.3J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5800 | <0.12U | <0.27U |
| | | 04/23/2014 | 6.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.8 | 0.53 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3390 | <0.12U | <0.27U |
| | | 05/20/2014 | 13.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.5 | 0.37J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5430 | <0.12U | <0.27U |
| | | 06/17/2014 | 58.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.6 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5490 | <0.12U | <0.27U |
| | | 07/29/2014 | 5J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.3 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 80.6 | <0.12U | <0.27U |
| | | 08/29/2014 | 11.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6.7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2200 | 0.14J | <0.27U |
| | | 09/15/2014 | 9.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.1 | 0.26J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4240 | <0.12U | <0.27U |
| | | 10/20/2014 | 7.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.9 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5190 | <0.12U | <0.27U |
| | | 11/20/2014 | <220U | <7U | <18U | <390U | <21U | <13U | <22U | <130U | <9U | **99.2** | <15U | <11U | <160U | <15U | 5700 | <12U | <27U |
| | | 12/15/2014 | 4J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4220 | <0.12U | <0.27U |
| | | 01/20/2015 | 5.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.9 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3610 | <0.12U | <0.27U |
| | | 02/13/2015 | 4.9J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4130 | <0.12U | <0.27U |
| | | 03/18/2015 | 20.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 8.9 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 7030 | 0.16J | <0.27U |
| | | 04/28/2015 | 7.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5080 | <0.12U | <0.27U |
| | | 05/21/2015 | 5.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5910 | <0.12U | <0.27U |
| | | 06/23/2015 | 3.1J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5570 | <0.12U | <0.27U |
| | | 07/15/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5170 | <0.12U | <0.27U |
| | DW-004K_Post* | 09/02/2015 | 9.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.12J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5220 | <0.12U | <0.27U |
| | DW-004K_Pre* | 09/02/2015 | 6.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 4.6 | 0.35J* | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4830 | <0.12U | <0.27U |
| | | 10/20/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.3J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4400 | <0.12U | <0.27U |
| | | 11/18/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5080 | <0.12U | <0.27U |
| | | 12/16/2015 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.65 | <0.32U | <0.15U | <0.11U | 9.2 | <0.15U | 4480 | <0.12U | <0.27U |
| | | 01/21/2016 | 10.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 11.6 | 0.18J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3240 | <0.12U | <0.27U |
| | | 02/29/2016 | 3.1J | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | 11.1 | <0.15U | 4490 | <0.12U | <0.27U |
| | | 03/24/2016 | 7.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.8 | 0.14J | <0.32U | <0.15U | <0.11U | 12.6 | <0.15U | 4180 | <0.12U | <0.27U |

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropanol | Isopropyl Ether | Methyl bromide | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **MDE DW Standards** | ****** | **5** | **700** | ****** | ****** | ****** | ****** | ****** | **20** | **5** | ****** | **75** | ****** | ****** | ****** | **1000** | **10000** |
| | | **Unit** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | | | |
| Post-Carbon Filtration | DW-004K | 04/14/2016 | 6.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.2J | <0.32U | <0.15U | <0.11U | 17.2 | <0.15U | 5330 | <0.12U | <0.27U |
| | | 05/20/2016 | 12.6 | <0.07U | <0.18U | 5.7J | <0.21U | 0.13J | <0.22U | 11.9 | 0.81 | <0.32U | <0.15U | <0.11U | 20.3 | <0.15U | 5180 | <0.12U | <0.27U |
| | | 06/17/2016 | 10.2 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.6 | 0.35J | <0.32U | <0.15U | <0.11U | 25.4 | <0.15U | 5400 | <0.12U | <0.27U |
| | | 07/20/2016 | 19.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 9.8 | 0.74 | <0.32U | <0.15U | <0.11U | 9.7 | <0.15U | 3780 | <0.12U | <0.27U |
| | | 08/18/2016 | 14.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7 | 0.99 | <0.32U | <0.15U | <0.11U | 26.6 | <0.15U | 5420 | <0.12U | <0.27U |
| | | 09/16/2016 | 7.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 10.9 | <0.12U | <0.27U |
| | | 10/21/2016 | 5.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.65 | <0.32U | <0.15U | <0.11U | 6.6 | <0.15U | 4320 | <0.12U | <0.27U |
| | | 11/10/2016 | 13 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 4.7 | 0.5J | <0.32U | <0.15U | <0.11U | 7.7 | <0.15U | 5610 | <0.12U | <0.27U |
| | | 12/01/2016 | 9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 6.6 | 0.12J | <0.32U | <0.15U | <0.11U | 4.6J | <0.15U | 3820 | <0.12U | <0.27U |
| | | 01/12/2017 | 13.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 1.2 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4770 | <0.12U | <0.27U |
| | | 02/16/2017 | 7.7 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 5.8 | 10 | <0.32U | 1.1J | <0.11U | <1.6U | <0.15U | 6990 | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | **21.8** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5490 | <0.12U | <0.27U |
| | | 04/24/2017 | 15.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | 7.9 | **71.9** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4590 | <0.12U | <0.27U |
| | | 05/16/2017 | 12.4 | <0.23U | <0.34U | <7.1U | <0.25U | <0.39U | <0.31U | <1.8U | <0.33U | <0.45U | <0.34U | <0.27U | <6.6U | <0.2U | 13.5 | <0.23U | <0.66U |
| | | 06/27/2017 | 32.6 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 5490 | <0.12U | <0.27U |
| | | 07/11/2017 | 25 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1850 | <0.12U | <0.27U |
| | | 08/08/2017 | 8.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4550 | <0.12U | <0.27U |
| | | 09/29/2017 | 27.3 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.096J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3240 | <0.12U | <0.27U |
| | | 10/17/2017 | 11.1 | <0.07U | <0.18U | 6.3J | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2990 | <0.12U | <0.27U |
| | | 11/15/2017 | 47 | <0.07U | <0.18U | 9590 | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 6360 | <0.12U | <0.27U |
| | | 12/13/2017 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.17J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4740 | <0.12U | <0.27U |
| | | 01/26/2018 | 9.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2970 | <0.12U | <0.27U |
| | | 02/15/2018 | 12.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4780 | <0.12U | <0.27U |
| | | 03/16/2018 | 8.1 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | 3.7J | <0.15U | 3650 | <0.12U | <0.27U |
| | | 04/26/2018 | 7.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.31J | <0.32U | <0.15U | <0.11U | 27.8 | <0.15U | 2820 | 0.13J | <0.27U |
| | | 05/23/2018 | 21.5 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.26J | <0.32U | <0.15U | <0.11U | 23.3 | <0.15U | 3590 | <0.12U | <0.27U |
| | | 06/13/2018 | <2.2U | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 257 | <0.12U | <0.27U |
| | | 07/20/2018 | 59 | <0.07U | <0.18U | 8.7J | <0.21U | <0.13U | <0.22U | <1.3U | 0.13J | <0.32U | <0.15U | <0.11U | 4.6J | <0.15U | 4030 | <0.12U | <0.27U |
| | | 09/11/2018 | 15.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 0.37J | <0.32U | <0.15U | <0.11U | 25.8 | <0.15U | 4020 | <0.12U | <0.27U |
| | | 10/23/2018 | 15.9 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 1.6 | <0.32U | <0.15U | <0.11U | 68 | <0.15U | 4870 | <0.12U | <0.27U |
| | | 11/28/2018 | 14.8 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 10.8 | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 3840 | <0.12U | <0.27U |
| | | 12/12/2018 | 44.4 | <0.07U | <0.18U | <3.9U | <0.21U | <0.13U | <0.22U | <1.3U | 10.9 | <0.32U | <0.15U | <0.11U | <160U | <0.15U | 3880 | <0.12U | <0.27U |
| | | 2/1/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **33.4** | | <0.15U | | 180 | <0.15U | 3950 | <0.12U | <0.27U |
| | | 3/1/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | **39.7** | | <0.15U | | 197 | <0.15U | 4230 | <0.12U | <0.27U |
| | | 4/12/19 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 1.2 | | <0.15U | | 2.5J | <0.15U | 19 | <0.12U | <0.27U |
| | | 05/02/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 0.73 | | <0.15U | | <1.6U | <0.15U | <1.4U | <0.12U | <0.27U |
| | | 6/11/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 0.39J | | <0.15U | | <1.6U | <0.12U | 281 | <0.12U | <0.27U |
| | | 9/18/2019 | | <0.07U | <0.18U | | <0.21U | | | <1.3U | 0.14J | | <0.15U | | <1.6U | <0.15U | 3890 | <0.12U | <0.27U |
| | | 10/24/2019 | 3.8J | <0.07U | <0.18U | <3.9U | <0.21U | 0.26J | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3350 | <0.12U | <0.27U |

**Notes**
**U = Not detected, method detection limit reported**
**J = Estimated Value**
**(µg/l) = Micrograms per liter**
**NA = Not analyzed/Not available**

Off-Site Drinking Water Analytical Data Summary
2794 Northeast Road
Calvert Citgo, 2815 North East Road, North East, MD

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropanol | Isopropyl Ether | Methyl bromide | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **MDE DW Standards** | ****** | **5** | **700** | ****** | ****** | ****** | ****** | ****** | **20** | **5** | ****** | **75** | ****** | ****** | ****** | **1000** | **10000** |
| | | **Unit** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | | | |

**Bold values (highlighted in yellow) indicate exceedence of MDE Drinking Water Standards (2008)**

*** Two samples were collected per location on September 20, 2015: samples labeled "pre" were collected prior to carbon filter change-out; samples labeled "post" were collected after carbon filters were changed out.**

# 2802 NORTHEAST ROAD DRINKING WATER

# RESULTS SUMMARY TABLES

Off-Site Drinking Water Analytical Data Summary
2802 Northeast Road
Calvert Citgo, 2815 North East Road, North East, MD

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropyl Ether | Methyl bromide | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | 20 | 5 | ** | 75 | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | |
| Pre-Carbon Filtration | DW-005A | 01/26/2009 | <2.3U | <0.1U | <0.1U | 2.7 | <0.3U | <1U | **220** | <0.3U | <0.2U | <0.2U | 27.5 | 1.8 | 326 | <0.1U | <0.3U |
| | | 03/04/2009 | <11.5U | <0.5U | <0.5U | 3.2 | <1.5U | <5U | **300** | 3.3 | <1U | <1U | <10U | 2.6 | 575 | <0.5U | <1.5U |
| | | 06/29/2009 | <2.3U | <0.1U | <0.1U | 6.4 | <0.3U | 2.9 | **514** | <0.3U | <0.2U | <0.2U | 102 | 3.8 | 1310 | <0.1U | <0.3U |
| | | 03/18/2010 | <2.3U | <0.1U | <0.1U | <0.1U | <0.3U | <1U | **139** | <0.3U | <0.2U | <0.2U | <2U | <0.2U | 164 | <0.1U | <0.3U |
| | | 06/07/2010 | <2.3U | <0.1U | <0.1U | 2.9 | <0.3U | 6.6 | **349** | <0.3U | <0.2U | <0.2U | <2U | <0.2U | 1250 | <0.1U | <0.3U |
| | | 08/25/2010 | 15.5 | <0.1U | <0.1U | 6.2 | <0.3U | 359 | **457** | <0.3U | <0.2U | <0.2U | 93.7 | 3.1 | 2590 | <0.1U | <0.3U |
| | | 11/10/2010 | <2.3U | <0.1U | <0.1U | 4 | <0.3U | <1U | **237** | <0.3U | <0.2U | <0.2U | <2U | 2.2 | 732 | <0.1U | <0.3U |
| | | 02/04/2011 | <2.2U | <0.07U | <0.18U | 2.6 | <0.13U | <1.3U | **222** | <0.32U | <0.15U | 0.25J | <1.6U | <0.15U | 322 | <0.12U | <0.27U |
| | | 03/24/2011 | <3.1U | <0.23U | <0.34U | 1.7 | <0.39U | <1.8U | **173** | <0.45U | NA | NA | 19.9 | <0.2U | <2.2U | <0.23U | <0.66U |
| | | 04/29/2011 | <2.2U | <0.07U | <0.18U | 3 | <0.13U | <1.3U | **254** | <0.32U | <0.15U | 0.24J | <1.6U | 2.5 | 382 | <0.12U | <0.27U |
| | | 05/27/2011 | <2.2U | <0.07U | <0.18U | 4.3 | <0.13U | <1.3U | **478** | <0.32U | <0.15U | 0.26J | <1.6U | 3.5 | 1160 | <0.12U | <0.27U |
| | | 06/20/2011 | <2.2U | <0.07U | <0.18U | 5.7 | <0.13U | <1.3U | **474** | <0.32U | <0.15U | <0.11U | <80U | 4.2 | 1600 | <0.12U | <0.27U |
| | | 07/25/2011 | <2.2U | <0.07U | <0.18U | 5.3 | <0.13U | <1.3U | **440** | <0.32U | <0.15U | 0.24J | 107 | 4.7 | 1580 | <0.12U | <0.27U |
| | | 08/11/2011 | <2.2U | <0.07U | <0.18U | 4.2 | <0.13U | <1.3U | **358** | <0.32U | <0.15U | 0.16J | 99.2 | <0.15U | 1820 | <0.12U | <0.27U |
| | | 09/20/2011 | <2.2U | <0.07U | <0.18U | 2.5 | <0.13U | <1.3U | **284** | <0.32U | <0.15U | 0.24J | 45.1 | <0.15U | 680 | <0.12U | <0.27U |
| | | 10/14/2011 | <2.2U | <0.07U | <0.18U | 1.8 | <0.13U | <1.3U | **200** | <0.32U | <0.15U | 0.32J | <1.6U | <0.15U | 225 | <0.12U | <0.27U |
| | | 11/18/2011 | 26.4 | <0.35U | <0.9U | 2.4J | <0.65U | <6.5U | **212** | 1.6J | <0.75U | <0.55U | <8U | 2.4J | 531 | <0.6U | <1.4U |
| | | 12/08/2011 | <11U | <0.35U | <0.9U | 1.4J | <0.65U | <6.5U | **123** | <1.6U | <0.75U | <0.55U | <8U | <0.75U | 210 | <0.6U | <1.4U |
| | | 01/13/2012 | <11U | <0.35U | <0.9U | 2.4J | <0.65U | <6.5U | **269** | <1.6U | <0.75U | <0.55U | <8U | <0.75U | 392 | <0.6U | <1.4U |
| | | 02/22/2012 | <11U | <0.35U | <0.9U | 2.3J | <0.65U | <6.5U | **315** | <1.6U | <0.75U | <0.55U | <8U | <0.75U | 818 | <0.6U | <1.4U |
| | | 03/16/2012 | 77.9 | <0.35U | <0.9U | <1.1U | <0.65U | <6.5U | **311** | <1.6U | <0.75U | <0.55U | <8U | <0.75U | 595 | <0.6U | <1.4U |
| | | 04/26/2012 | <2.2U | <0.07U | <0.18U | 3.2 | <0.13U | 2.3J | **425** | <0.32U | <0.15U | 0.22J | <1.6U | <0.15U | 1230 | <0.12U | <0.27U |
| | | 05/24/2012 | 13.2 | <0.07U | <0.18U | 4 | <0.13U | 3.3 | **337** | <0.32U | <0.15U | 0.21J | 61.9 | <0.15U | 1100 | <0.12U | <0.27U |
| | | 06/20/2012 | 94.5 | <0.35U | <0.9U | 3.6 | <0.65U | 13.1 | **505** | <1.6U | <0.75U | <0.55U | 81.9 | 4.2 | 1530 | <0.6U | <1.4U |
| | | 08/14/2012 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **455** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2650 | <0.12U | 0.49J |
| | | 09/14/2012 | 20.1 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **538** | <0.32U | <0.15U | <0.11U | 111 | <0.15U | 3030 | <0.12U | <0.27U |
| | | 10/19/2012 | <2.2U | <0.07U | <0.18U | 3.5 | <0.13U | 2.3J | **401** | <0.32U | <0.15U | 0.14J | 79.2 | 4.1 | 1890 | <0.12U | <0.27U |
| | | 11/20/2012 | <2.2U | <0.07U | <0.18U | 3 | <0.13U | 3.1 | **281** | <0.32U | <0.15U | 0.22J | 49.3 | 3.2 | 802 | <0.12U | <0.27U |
| | | 12/11/2012 | <2.2U | <0.07U | <0.18U | 2.5 | <0.13U | 8.9 | **351** | <0.32U | <0.15U | 0.18J | 56.9 | 3.4 | 878 | <0.12U | <0.27U |
| | | 01/30/2013 | 5.5 | <0.07U | <0.18U | 2 | <0.13U | 9.5 | **174** | <0.32U | <0.15U | 0.14J | <1.6U | 2.1 | 327 | <0.12U | <0.27U |
| | | 02/21/2013 | 7.9 | <0.07U | <0.18U | 1.6 | <0.13U | 15.3 | **169** | <0.32U | <0.15U | <0.11U | <1.6U | 1.5 | 290 | 0.21J | <0.27U |
| | | 03/08/2013 | <2.2U | <0.07U | <0.18U | 1.4 | <0.13U | 1.4J | **157** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 205 | 0.26J | <0.27U |
| | | 04/25/2013 | 3.7J | <0.07U | <0.18U | 2 | <0.13U | 31.3 | **244** | <0.32U | <0.15U | 0.15J | <1.6U | 2.1 | 273 | <0.12U | <0.27U |
| | | 05/21/2013 | 5.3 | <0.07U | <0.18U | <0.21U | <0.13U | 8.6 | **199** | <0.32U | <0.15U | 0.19J | <1.6U | 1.7 | 253 | <0.12U | <0.27U |
| | | 06/27/2013 | <2.2U | <0.07U | <0.18U | 0.6 | <0.13U | <1.3U | **87.2** | <0.32U | <0.15U | <0.11U | <1.6U | 0.74 | 60.6 | <0.12U | <0.27U |
| | | 07/26/2013 | <2.2U | <0.07U | <0.18U | 1.8 | <0.13U | <1.3U | **221** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 286 | <0.12U | <0.27U |
| | | 08/23/2013 | <2.2U | <0.07U | <0.18U | 2.1 | <0.13U | <1.3U | **331** | <0.32U | <0.15U | <0.11U | <1.6U | 2.8 | 705 | <0.12U | <0.27U |
| | | 09/13/2013 | 10.9 | <0.07U | <0.18U | 3.1 | <0.13U | 8.2 | **407** | <0.32U | <0.15U | 0.13J | 82.2 | 4.5 | 1220 | <0.12U | <0.27U |
| | | 10/16/2013 | 9.3 | <0.07U | <0.18U | 3.3 | <0.13U | <1.3U | **366** | <0.32U | <0.15U | 0.15J | 59.3 | 4.3 | 1380 | <0.12U | <0.27U |
| | | 11/19/2013 | 18.4 | 0.17J | <0.18U | 4.9 | <0.13U | 9.5 | **450** | <0.32U | <0.15U | 0.17J | <80U | 6.4 | 1700 | <0.12U | <0.27U |
| | | 12/18/2013 | <2.2U | 0.17J | <0.18U | <0.21U | <0.13U | 2.4J | **243** | <0.32U | <0.15U | <0.11U | 46.3 | <0.15U | 622 | <0.12U | <0.27U |
| | | 01/13/2014 | <2.2U | <0.07U | <0.18U | 1.2 | <0.13U | 4.9 | **185** | <0.32U | <0.15U | <0.11U | <1.6U | 2.2 | 276 | <0.12U | <0.27U |
| | | 02/10/2014 | 18.3 | <0.07U | <0.18U | 2.3 | <0.13U | 8.6 | **249** | <0.32U | <0.15U | 0.14J | <1.6U | <0.15U | 534 | <0.12U | <0.27U |
| | | 03/31/2014 | <2.2U | <0.07U | <0.18U | 2.5 | <0.13U | 7.1 | **45.2** | <0.32U | <0.15U | <0.11U | 66.5 | <0.15U | 808 | <0.12U | <0.27U |
| | | 04/23/2014 | <2.2U | 0.24J | <0.18U | 2.7 | <0.13U | 11.3 | **317** | <0.32U | <0.15U | <0.11U | 83.6 | 3.8 | 762 | <0.12U | <0.27U |
| | | 05/20/2014 | 14.2 | 0.098J | <0.18U | <0.21U | <0.13U | 5.4 | **294** | <0.32U | <0.15U | 0.13J | 71.4 | 3.7 | 948 | <0.12U | <0.27U |
| | | 06/17/2014 | 30.6 | <0.07U | <0.18U | 2.6 | <0.13U | <1.3U | **294** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 958 | <0.12U | <0.27U |
| | | 07/30/2014 | 16.8 | <0.07U | <0.18U | <0.21U | <0.13U | 27.3 | **116** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 442 | <0.12U | <0.27U |
| | | 08/25/2014 | 14.4 | <0.07U | <0.18U | <0.21U | <0.13U | 8.8 | **212** | <0.32U | <0.15U | <0.11U | 14.6 | <0.15U | 510 | 0.13J | <0.27U |
| | | 09/15/2014 | 10.8 | <0.07U | <0.18U | 1 | <0.13U | 9.3 | **74.7** | <0.32U | <0.15U | <0.11U | 6.1 | <0.15U | 219 | 0.14J | <0.27U |
| | | 10/20/2014 | 7.8 | <0.07U | <0.18U | 1.2 | 0.31J | 7.4 | **116** | <0.32U | <0.15U | 0.14J | <1.6U | <0.15U | 119 | <0.12U | <0.27U |
| | | 11/20/2014 | <22U | <0.7U | <1.8U | <2.1U | <1.3U | <13U | **54** | <3.2U | <1.5U | <1.1U | <16U | <1.5U | 88.7 | <1.2U | <2.7U |
| | | 12/15/2014 | 3.7J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **31** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 144 | <0.12U | <0.27U |
| | | 02/13/2015 | 4.4J | <0.07U | <0.18U | 0.49J | 0.2J | 4.7 | 17.7 | <0.32U | 0.2J | 0.12J | <1.6U | <0.15U | 5.9 | <0.12U | <0.27U |
| | | 03/18/2015 | 16.1 | <0.07U | <0.18U | 1.7 | <0.13U | 7.8 | **132** | <0.32U | <0.15U | 0.11J | 12.1 | 1.4 | 245 | <0.12U | <0.27U |
| | | 04/28/2015 | 15.7 | <0.07U | <0.18U | 2.1 | <0.13U | 10.4 | **189** | <0.32U | <0.15U | 0.2J | 24 | 2 | 313 | 0.74 | <0.27U |
| | | 05/21/2015 | 8.4 | <0.07U | <0.18U | 0.64 | <0.13U | 5.9 | **52.9** | <0.32U | <0.15U | <0.11U | 5.6 | <0.15U | 59.2 | <0.12U | <0.27U |
| | | 06/23/2015 | 15.3 | <0.07U | <0.18U | 0.45J | 0.13J | <1.3U | **48.9** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 20.9 | 0.23J | <0.27U |
| | | 07/15/2015 | 61.5J | <1.4U | <3.6U | <4.2U | <2.6U | <26U | **48.3** | <6.4U | <3U | <2.2U | <32U | <3U | <28U | <2.4U | <5.4U |
| | DW-005A_Post | 09/02/2015 | <2.2U | <0.07U | <0.18U | 1.1 | <0.13U | 2J | **136** | <0.32U | <0.15U | <0.11U | <1.6U | 1.7 | 857 | <0.12U | <0.27U |
| | DW-005A_Pre | 09/02/2015 | 21.2 | <0.07U | <0.18U | 0.36J | 0.14J | <1.3U | **27.1** | <0.32U | <0.15U | 0.15J | <1.6U | <0.15U | 17.9 | <0.12U | <0.27U |
| | | 10/20/2015 | 58.1 | <0.07U | <0.18U | 2.3 | 0.16J | <1.3U | **324** | <0.32U | <0.15U | 0.15J | 56 | 3.6 | 1320 | <0.12U | <0.27U |
| | | 11/18/2015 | 21.8 | <0.07U | <0.18U | 2.6 | <0.13U | <1.3U | **239** | <0.32U | <0.15U | <0.11U | 53.8 | 2.7 | 814 | <0.12U | <0.27U |
| | | 12/16/2015 | <2.2U | <0.07U | <0.18U | 1.9 | <0.13U | <1.3U | **234** | <0.32U | <0.15U | 0.13J | 64.7 | 3 | 656 | <0.12U | <0.27U |
| | | 01/21/2016 | 17.3 | <0.07U | <0.18U | 1.8 | <0.13U | 3.8 | **170** | <0.32U | <0.15U | <0.11U | <1.6U | 2.2 | 260 | <0.12U | <0.27U |
| | | 02/29/2016 | 6 | <0.07U | <0.18U | 0.64 | <0.13U | <1.3U | **66.3** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 65.8 | <0.12U | <0.27U |
| | | 03/24/2016 | 12.7 | <0.07U | <0.18U | <0.21U | <0.13U | 5.6 | **111** | <0.32U | <0.15U | 0.16J | 24.3 | 1.6 | 174 | <0.12U | <0.27U |

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropyl Ether | Methyl bromide | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | 20 | 5 | ** | 75 | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | |
| Pre-Carbon Filtration | DW-005A | 04/15/2016 | 42.1 | <0.07U | <0.18U | 1.5 | <0.13U | <1.3U | **200** | <0.32U | <0.15U | <0.11U | 41.8 | 2.5 | 491 | <0.12U | <0.27U |
| | | 05/20/2016 | 19.6 | <0.07U | <0.18U | 2.1 | 0.17J | 1.6J | **247** | <0.32U | <0.15U | <0.11U | 49.6 | 3 | 688 | <0.12U | <0.27U |
| | | 06/17/2016 | 15.1 | <0.07U | <0.18U | 2.5 | <0.13U | 6.3 | **339** | <0.32U | <0.15U | <0.11U | 77.6 | 4.1 | 988 | <0.12U | <0.27U |
| | | 07/20/2016 | 39.6 | <0.07U | <0.18U | 3 | <0.13U | 7.1 | **311** | <0.32U | <0.15U | <0.11U | 107 | <0.15U | 1400 | <0.12U | <0.27U |
| | | 08/18/2016 | 60.2 | <0.07U | <0.18U | <0.21U | <0.13U | 9.3 | 8.1 | <0.32U | <0.15U | <0.11U | 76.9 | 3.6 | 41.9 | <0.12U | <0.27U |
| | | 09/28/2016 | 27.8 | <0.07U | <0.18U | 3.4 | <0.13U | 6 | **353** | <0.32U | <0.15U | <0.11U | 105 | 4.5 | 1830 | <0.12U | <0.27U |
| | | 10/21/2016 | 22.6 | <0.07U | <0.18U | 0.85 | 0.14J | 7.5 | **297** | <0.32U | <0.15U | 0.12J | 88.7 | 3.6 | 1580 | <0.12U | <0.27U |
| | | 11/10/2016 | 13.2 | <0.07U | <0.18U | 2.7 | <0.13U | <1.3U | **288** | <0.32U | <0.15U | 0.14J | 83.4 | 3.7 | 1760 | <0.12U | <0.27U |
| | | 12/01/2016 | 43.5 | <0.07U | <0.18U | 1.6 | <0.13U | 5.7 | **136** | <0.32U | <0.15U | <0.11U | 43.1 | 2.1 | 624 | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | <0.07U | <0.18U | <0.21U | 0.14J | <1.3U | **225** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 586 | <0.12U | <0.27U |
| | | 04/24/2017 | 6.9 | <0.07U | <0.18U | 1.2 | <0.13U | <1.3U | **109** | <0.32U | <0.15U | <0.11U | <1.6U | 1.5 | 167 | <0.12U | <0.27U |
| | | 05/31/2017 | 35.7 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **171** | <0.32U | <0.15U | <0.11U | <1.6U | 2.3 | 429 | <0.12U | <0.27U |
| | | 10/17/2017 | 87.6 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 15.8 | <0.32U | <0.15U | <0.11U | <1.6U | 0.21J | 333 | <0.12U | <0.27U |
| | | 12/13/2017 | 47.7 | <0.07U | <0.18U | 1.5 | <0.13U | <1.3U | **153** | <0.32U | <0.15U | <0.11U | 3.5J | 2.4 | 738 | <0.12U | <0.27U |
| | | 04/26/2018 | 8.8 | <0.07U | <0.18U | 0.89 | <0.13U | <1.3U | **87.7** | <0.32U | <0.15U | <0.11U | 11.6 | 1.1 | 1340 | <0.12U | <0.27U |
| | | 05/23/2018 | 41.7 | <0.07U | <0.18U | 0.71 | <0.13U | <1.3U | **66** | <0.32U | <0.15U | <0.11U | 14.2 | <0.15U | 129 | <0.12U | <0.27U |
| | | 06/15/2018 | 41.2 | <0.07U | <0.18U | 0.89 | <0.13U | <1.3U | **92.4** | <0.32U | <0.15U | <0.11U | 21.4 | 1.3 | 167 | <0.12U | <0.27U |
| | | 07/20/2018 | 66.2 | <0.07U | <0.18U | 1.8 | <0.13U | <1.3U | **174** | <0.32U | <0.15U | <0.11U | 67.3 | 2.5 | 672 | <0.12U | <0.27U |
| | | 09/11/2018 | 32.9 | <0.07U | <0.18U | 1.3 | <0.13U | <1.3U | **181** | <0.32U | <0.15U | <0.11U | 46.2 | 2.2 | 468 | <0.12U | <0.27U |
| | | 10/23/2018 | 68.4 | <0.07U | <0.18U | 1.4 | <0.13U | <1.3U | **157** | <0.32U | <0.15U | <0.11U | 43.6 | 2.1 | 797 | <0.12U | <0.27U |
| | | 11/28/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3860 | <0.12U | <0.27U |
| | | 12/10/2018 | 61.9 | <0.07U | <0.18U | 1.2 | <0.13U | <1.3U | **146** | <0.32U | <0.15U | <0.11U | 37.8 | 1.9 | 600 | <0.12U | <0.27U |
| | | 04/12/2019 | 31.7 | <0.07U | <0.18U | 1.7 | <0.13U | <1.3U | **148** | <0.32U | <0.15U | <0.11U | 44.1 | <0.15U | 1030 | <0.12U | <0.27U |
| | | 6/12/2019 | 55.3 | <0.07U | <0.18U | 2.9 | <0.13U | <1.3U | **195** | <0.22U | <0.15U | <0.11U | 62.8 | <0.12U | 1450 | <0.12U | <0.27U |
| | | 09/18/2019 | 40.6 | <0.07U | <0.18U | 2.7 | <0.13U | <1.3U | **211** | <0.32U | <0.15U | <0.11U | 57.7 | 1.8 | 1720 | <0.12U | <0.27U |
| Mid-Carbon Filtration 1 | DW-005I | 04/25/2013 | 8.6 | <0.07U | <0.18U | <0.21U | <0.13U | 42.3 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 65.4 | <0.12U | <0.27U |
| | | 05/21/2013 | 6.7 | <0.07U | <0.18U | <0.21U | <0.13U | 13 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 280 | <0.12U | <0.27U |
| | | 06/27/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.099J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 358 | <0.12U | <0.27U |
| | | 07/26/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 2.2J | 2.2 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 311 | <0.12U | <0.27U |
| | | 08/23/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 7 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 650 | <0.12U | <0.27U |
| | | 09/13/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 3.3 | 0.44J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 716 | <0.12U | <0.27U |
| | | 10/16/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1630 | <0.12U | <0.27U |
| | | 11/19/2013 | 7.9 | <0.07U | <0.18U | <0.21U | <0.13U | 11.2 | 0.24J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1710 | <0.12U | <0.27U |
| | | 12/18/2013 | 7.6 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 1.9 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1430 | <0.12U | <0.27U |
| | | 01/13/2014 | 9.5 | <0.07U | <0.18U | <0.21U | <0.13U | 7.2 | 1.8 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 590 | <0.12U | <0.27U |
| | | 02/10/2014 | 11.8 | <0.07U | <0.18U | <0.21U | <0.13U | 8.7 | 9.9 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 882 | <0.12U | <0.27U |
| | | 03/31/2014 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **260** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 642 | <0.12U | <0.27U |
| | | 04/23/2014 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 8.2 | **65.3** | <0.32U | <0.15U | <0.11U | 34.7 | <0.15U | 456 | <0.12U | <0.27U |
| | | 05/20/2014 | 9.4 | <0.07U | <0.18U | <0.21U | <0.13U | 5.5 | **95.3** | <0.32U | <0.15U | <0.11U | 49.1 | <0.15U | 910 | <0.12U | <0.27U |
| | | 06/17/2014 | 12.3 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **136** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1390 | <0.12U | <0.27U |
| | | 07/30/2014 | 13.2 | <0.07U | <0.18U | <0.21U | <0.13U | 8.9 | **160** | <0.32U | <0.15U | <0.11U | 52.4 | <0.15U | 905 | <0.12U | <0.27U |
| | | 08/25/2014 | 9.9 | <0.07U | <0.18U | <0.21U | <0.13U | 7.2 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1330 | 0.2J | <0.27U |
| | | 09/15/2014 | 12.2 | <0.07U | <0.18U | <0.21U | <0.13U | 9.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1240 | 0.14J | <0.27U |
| | | 10/20/2014 | 6 | <0.07U | <0.18U | <0.21U | <0.13U | 6.2 | 0.094J | <0.32U | 0.35J | <0.11U | <1.6U | <0.15U | 1360 | 0.13J | <0.27U |
| | | 11/20/2014 | <44U | <1.4U | <3.6U | <4.2U | <2.6U | <26U | 2.2J | <6.4U | <3U | <2.2U | <32U | <3U | 1070 | <2.4U | <5.4U |
| | | 12/15/2014 | 2.7J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.72 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1610 | <0.12U | <0.27U |
| | | 01/20/2015 | 4.3J | <0.07U | <0.18U | <0.21U | <0.13U | 7.5 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 527 | <0.12U | <0.27U |
| | | 02/13/2015 | 4.4J | <0.07U | <0.18U | <0.21U | 0.24J | 5.7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 681 | <0.12U | <0.27U |
| | | 03/18/2015 | 17.6 | <0.07U | <0.18U | <0.21U | <0.13U | 7.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1050 | <0.12U | <0.27U |
| | | 04/28/2015 | 10.1 | <0.07U | <0.18U | <0.21U | <0.13U | 6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 998 | <0.12U | <0.27U |
| | | 05/21/2015 | 5.1 | <0.07U | <0.18U | <0.21U | <0.13U | 4.7 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1270 | <0.12U | <0.27U |
| | | 06/23/2015 | 3J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.18J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1200 | <0.12U | <0.27U |
| | | 07/15/2015 | <44U | <1.4U | <3.6U | <4.2U | <2.6U | <26U | <1.8U | <6.4U | <3U | <2.2U | <32U | <3U | 1330 | <2.4U | <5.4U |
| | DW-005I_Post | 09/02/2015 | 8.5 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.14J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 49.9 | <0.12U | <0.27U |
| | DW-005I_Pre | 09/02/2015 | 4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.11J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 954 | <0.12U | <0.27U |
| | | 10/20/2015 | 16.1 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.2J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1330 | <0.12U | <0.27U |
| | | 11/18/2015 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.23J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1080 | <0.12U | <0.27U |
| | | 12/16/2015 | <2.2U | <0.07U | <0.18U | <0.21U | 0.16J | <1.3U | 0.88 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 987 | <0.12U | <0.27U |
| | | 01/21/2016 | 4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 1.8 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 327 | <0.12U | <0.27U |
| | | 02/29/2016 | 3.8J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 3.7 | <0.32U | <0.15U | <0.11U | 5.4 | <0.15U | 269 | <0.12U | <0.27U |
| | | 03/24/2016 | 8.1 | <0.07U | <0.18U | <0.21U | <0.13U | 6.2 | 4.7 | <0.32U | <0.15U | <0.11U | 7.4 | <0.15U | 186 | <0.12U | <0.27U |
| | | 04/15/2016 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 10.5 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 373 | <0.12U | <0.27U |
| | | 05/20/2016 | 5.1 | <0.07U | <0.18U | <0.21U | 0.16J | <1.3U | **49.2** | <0.32U | <0.15U | <0.11U | 27 | <0.15U | 774 | <0.12U | <0.27U |
| | | 06/17/2016 | 10 | <0.07U | <0.18U | <0.21U | <0.13U | 6.5 | **72.3E** | <0.32U | <0.15U | <0.11U | 33.8 | <0.15U | 660 | <0.12U | <0.27U |
| | | 07/20/2016 | 8.5 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **76.4** | <0.32U | <0.15U | <0.11U | 55.5 | <0.15U | 881 | <0.12U | <0.27U |
| | | 08/18/2016 | 19.7 | <0.07U | <0.18U | 4.4 | <0.13U | 8.1 | **497** | <0.32U | <0.15U | <0.11U | 87.3 | 4.1 | 2410 | <0.12U | <0.27U |

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropyl Ether | Methyl bromide | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | 20 | 5 | ** | 75 | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | |
| Mid-Carbon Filtration 1 | DW-005I | 09/28/2016 | 22 | <0.07U | <0.18U | <0.21U | <0.13U | 5.9 | **120** | <0.32U | <0.15U | <0.11U | 65.6 | <0.15U | 1710 | <0.12U | <0.27U |
| | | 10/21/2016 | 16.2 | <0.07U | <0.18U | <0.21U | 0.21J | 7.9 | **164** | <0.32U | <0.15U | <0.11U | 73.2 | <0.15U | 1650 | <0.12U | <0.27U |
| | | 11/10/2016 | 15.9 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **182** | <0.32U | <0.15U | <0.11U | 70.3 | 0.22J | 1820 | <0.12U | <0.27U |
| | | 12/01/2016 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 4.7 | **172** | <0.32U | <0.15U | <0.11U | 64.9 | 0.17J | 1420 | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **214** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 662 | <0.12U | <0.27U |
| | | 04/24/2017 | 2.4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **178** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 382 | <0.12U | <0.27U |
| | | 05/31/2017 | 2.6J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **195** | <0.32U | <0.15U | <0.11U | <1.6U | 0.32J | 471 | <0.12U | <0.27U |
| | | 10/17/2017 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **196** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 749 | <0.12U | <0.27U |
| | | 12/13/2017 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **160** | <0.32U | <0.15U | <0.11U | <1.6U | 0.28J | 679 | <0.12U | <0.27U |
| | | 04/26/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **135** | <0.32U | <0.15U | <0.11U | 25.5 | 0.3J | 477 | 0.14J | <0.27U |
| | | 05/23/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **132** | <0.32U | <0.15U | <0.11U | 37.9 | <0.15U | 236 | <0.12U | <0.27U |
| | | 06/15/2018 | 6.5 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.57 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 6.2 | <0.12U | <0.27U |
| | | 07/20/2018 | 13.2 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 4J | <0.12U | <0.27U |
| | | 09/11/2018 | 5.6 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.26J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 453 | <0.12U | <0.27U |
| | | 10/23/2018 | 4.3J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 473 | <0.12U | <0.27U |
| | | 11/28/2018 | 21.7 | <0.07U | <0.18U | 1.3 | <0.13U | <1.3U | **116** | <0.32U | <0.15U | <0.11U | 34.1 | 1.8 | 541 | <0.12U | <0.27U |
| | | 12/10/2018 | 4.1J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **0.16J** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 585 | <0.12U | <0.27U |
| | | 04/12/2019 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 744 | <0.12U | <0.27U |
| | | 6/12/2019 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.78 | <0.22U | <0.15U | <0.11U | 4.7J | <0.12U | 1080 | <0.12U | <0.27U |
| | | 09/18/2019 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 24.6J | <0.32U | <0.15U | <0.11U | 29.7 | <0.15U | 1960 | <0.12U | <0.27U |
| Mid-Carbon Filtration 2 | DW-005J | 04/25/2013 | 9.8 | <0.07U | <0.18U | <0.21U | <0.13U | 97.3 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 11.6 | <0.12U | <0.27U |
| | | 05/21/2013 | 6.8 | <0.07U | <0.18U | <0.21U | <0.13U | 11.2 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 33.1 | <0.12U | <0.27U |
| | | 06/27/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 274 | <0.12U | <0.27U |
| | | 07/26/2013 | 3.2J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 238 | <0.12U | <0.27U |
| | | 08/23/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 484 | <0.12U | <0.27U |
| | | 09/13/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.095J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 442 | <0.12U | <0.27U |
| | | 10/16/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 872 | <0.12U | <0.27U |
| | | 11/19/2013 | 16.1 | <0.07U | <0.18U | <0.21U | <0.13U | 8.2 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1480 | <0.12U | <0.27U |
| | | 12/18/2013 | 6.3 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1360 | <0.12U | <0.27U |
| | | 01/13/2014 | 7.3 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1180 | <0.12U | <0.27U |
| | | 02/10/2014 | 13.9 | <0.07U | <0.18U | <0.21U | <0.13U | 12.1 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1020 | <0.12U | <0.27U |
| | | 03/31/2014 | 2.5J | <0.07U | <0.18U | <0.21U | <0.13U | 6.5 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 661 | <0.12U | <0.27U |
| | | 04/23/2014 | 4J | <0.07U | <0.18U | <0.21U | <0.13U | 10 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 420 | <0.12U | <0.27U |
| | | 05/20/2014 | 12.3 | <0.07U | <0.18U | <0.21U | <0.13U | 9.1 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 927 | <0.12U | <0.27U |
| | | 06/17/2014 | 41.3 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.35J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 720 | <0.12U | <0.27U |
| | | 07/30/2014 | 8.8 | <0.07U | <0.18U | <0.21U | <0.13U | 9.3 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1190 | 0.14J | <0.27U |
| | | 08/25/2014 | 8.4 | <0.07U | <0.18U | <0.21U | <0.13U | 7.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1560 | 0.16J | <0.27U |
| | | 09/15/2014 | 12.1 | <0.07U | <0.18U | <0.21U | <0.13U | 11.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1180 | <0.12U | <0.27U |
| | | 10/20/2014 | 7 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1800 | 0.19J | <0.27U |
| | | 11/20/2014 | <44U | <1.4U | <3.6U | <4.2U | <2.6U | <26U | 1.9J | <6.4U | <3U | <2.2U | <32U | <3U | 1120 | <2.4U | <5.4U |
| | | 12/15/2014 | 6.5 | <0.07U | <0.18U | <0.21U | 0.23J | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 904 | <0.12U | <0.27U |
| | | 01/20/2015 | 6.9 | <0.07U | <0.18U | <0.21U | <0.13U | 12.3 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 791 | <0.12U | <0.27U |
| | | 02/13/2015 | 6.7 | <0.07U | <0.18U | <0.21U | <0.13U | 5.5 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 686 | <0.12U | <0.27U |
| | | 03/18/2015 | 11 | <0.07U | <0.18U | <0.21U | <0.13U | 9.4 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1020 | 0.14J | <0.27U |
| | | 04/28/2015 | 10 | <0.07U | <0.18U | <0.21U | <0.13U | 7.5 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1100 | <0.12U | <0.27U |
| | | 05/21/2015 | 3.8J | <0.07U | <0.18U | <0.21U | <0.13U | 5 | 0.13J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1000 | <0.12U | <0.27U |
| | | 06/23/2015 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 2.5J | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1340 | <0.12U | <0.27U |
| | | 07/15/2015 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1230 | <0.12U | <0.27U |
| | DW-005J_Post | 09/02/2015 | 7.6 | <0.07U | <0.18U | <0.21U | <0.13U | 3.2 | 0.12J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 739 | <0.12U | <0.27U |
| | DW-005J_Pre | 09/02/2015 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1050 | <0.12U | <0.27U |
| Mid-Carbon Filtration 2 | DW-005J | 10/20/2015 | 20.3 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.19J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 646 | <0.12U | <0.27U |
| | | 11/18/2015 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.23J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 908 | <0.12U | <0.27U |
| | | 12/16/2015 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.63 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1060 | <0.12U | <0.27U |
| | | 01/21/2016 | 5.7 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.64 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 496 | <0.12U | <0.27U |
| | | 02/29/2016 | 7.4 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.7 | <0.32U | <0.15U | <0.11U | 5.4 | <0.15U | 359 | <0.12U | <0.27U |
| | | 03/24/2016 | 8.3 | <0.07U | <0.18U | <0.21U | <0.13U | 5.3 | 0.67 | <0.32U | <0.15U | <0.11U | 6.1 | <0.15U | 261 | <0.12U | <0.27U |
| | | 04/15/2016 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 1.1 | <0.32U | <0.15U | <0.11U | 6.2 | <0.15U | 349 | <0.12U | <0.27U |
| | | 05/20/2016 | 7.3 | <0.07U | <0.18U | <0.21U | 0.18J | 2.4J | 3 | <0.32U | <0.15U | <0.11U | 9.8 | <0.15U | 775 | <0.12U | <0.27U |
| | | 06/17/2016 | 10.5 | <0.07U | <0.18U | <0.21U | <0.13U | 7.2 | 4 | <0.32U | <0.15U | <0.11U | 10.7 | <0.15U | 668 | <0.12U | <0.27U |
| | | 07/20/2016 | 14.7 | <0.07U | <0.18U | <0.21U | <0.13U | 6.3 | 4.9 | <0.32U | <0.15U | <0.11U | 12.5 | <0.15U | 688 | <0.12U | <0.27U |
| | | 08/18/2016 | 22.3 | <0.07U | <0.18U | <0.21U | <0.13U | 7.2 | 12.8 | <0.32U | <0.15U | <0.11U | 15.5 | <0.15U | 2160 | <0.12U | <0.27U |
| | | 09/28/2016 | 24.9 | <0.07U | <0.18U | <0.21U | <0.13U | 5.8 | 15.6 | <0.32U | <0.15U | <0.11U | 27.6 | <0.15U | 1800 | <0.12U | <0.27U |
| | | 10/21/2016 | 13.5 | <0.07U | <0.18U | <0.21U | 0.22J | 6.9 | **25** | <0.32U | <0.15U | <0.11U | 37.6 | <0.15U | 1910 | <0.12U | <0.27U |
| | | 11/10/2016 | 6.2 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **38.7** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1750 | <0.12U | <0.27U |
| | | 12/01/2016 | 8.6 | <0.07U | <0.18U | <0.21U | <0.13U | 5.4 | **33.3** | <0.32U | <0.15U | <0.11U | 40.9 | <0.15U | 1170 | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **125** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 774 | <0.12U | <0.27U |
| | | 04/24/2017 | 3J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **123** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 538 | <0.12U | <0.27U |

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropyl Ether | Methyl bromide | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | 20 | 5 | ** | 75 | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| **Stage** | **Location** | **Sample Date** | | | | | | | | | | | | | | | |
| | | 05/31/2017 | 4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **133** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 653 | <0.12U | <0.27U |
| | | 10/17/2017 | 5.5 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **121** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 528 | <0.12U | <0.27U |
| | | 12/13/2017 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **128** | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 555 | <0.12U | <0.27U |
| | | 04/26/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **138** | <0.32U | <0.15U | <0.11U | 30.4 | <0.15U | 344 | <0.12U | <0.27U |
| | | 05/23/2018 | 8.1 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **130** | <0.32U | <0.15U | <0.11U | 56.5 | <0.15U | 229 | <0.12U | <0.27U |
| | | 06/15/2018 | 6.4 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3.9J | <0.12U | <0.27U |
| | | 07/20/2018 | 21.6 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.21J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 53.3 | <0.12U | <0.27U |
| | | 09/11/2018 | 5.2 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 164 | <0.12U | <0.27U |
| | | 10/23/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 457 | <0.12U | <0.27U |
| | | 11/28/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 487 | <0.12U | <0.27U |
| | | 12/10/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 515 | <0.12U | <0.27U |
| | | 04/12/2019 | 6.8 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 563 | <0.12U | <0.27U |
| | | 6/12/2019 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.22U | <0.15U | <0.11U | <1.6U | <0.12U | 869 | <0.12U | <0.27U |
| | | 09/18/2019 | 5.4 | <0.07U | <0.18U | <0.21U | 0.44J | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1770 | <0.12U | <0.27U |
| | | 10/24/2019 | 3.8J | <0.07U | <0.18U | <0.21U | 0.33J | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <0.15U | 1880 | <0.12U | <0.27U |
| Post-Carbon Filtration | DW-005K | 04/25/2013 | 10.8 | <0.07U | <0.18U | <0.21U | <0.13U | 84.3 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 10 | <0.12U | <0.27U |
| | | 05/21/2013 | 6.5 | <0.07U | <0.18U | <0.21U | <0.13U | 8.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 9.2 | <0.12U | <0.27U |
| | | 06/27/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 50.1 | <0.12U | <0.27U |
| | | 07/26/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 205 | <0.12U | <0.27U |
| | | 08/23/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 1.4J | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 317 | <0.12U | <0.27U |
| | | 09/13/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 11.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2.7J | <0.12U | <0.27U |
| | | 10/16/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 182 | <0.12U | <0.27U |
| | | 11/19/2013 | 7.7 | <0.07U | <0.18U | <0.21U | <0.13U | 9 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1010 | <0.12U | <0.27U |
| | | 12/18/2013 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 2.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1300 | <0.12U | <0.27U |
| | | 01/13/2014 | 5.2 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <1.8U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 838 | <0.12U | <0.27U |
| | | 02/10/2014 | 10.1 | <0.07U | <0.18U | <0.21U | <0.13U | 7.3 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1390 | <0.12U | <0.27U |
| | | 03/31/2014 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | 5 | 0.46J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 815 | <0.12U | <0.27U |
| | | 04/23/2014 | 6.1 | <0.07U | <0.18U | <0.21U | <0.13U | 9.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 548 | <0.12U | <0.27U |
| | | 05/20/2014 | 7 | <0.07U | <0.18U | <0.21U | <0.13U | 5.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 586 | <0.12U | <0.27U |
| | | 06/17/2014 | 28.1 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1060 | <0.12U | <0.27U |
| | | 07/30/2014 | 10.5 | <0.07U | <0.18U | <0.21U | <0.13U | 12 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1040 | <0.12U | <0.27U |
| | | 08/25/2014 | 8.6 | <0.07U | <0.18U | <0.21U | <0.13U | 6.1 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1520 | <0.12U | <0.27U |
| | | 09/15/2014 | 10.3 | <0.07U | <0.18U | <0.21U | <0.13U | 11.8 | 0.48J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 10.9 | <0.12U | <0.27U |
| | | 10/20/2014 | 10.5 | <0.07U | <0.18U | <0.21U | 0.23J | <1.3U | 3.9 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1330 | 0.13J | <0.27U |
| | | 11/20/2014 | 91.1J | <1.4U | <3.6U | <4.2U | <2.6U | <26U | 2.5J | <6.4U | <3U | <2.2U | <32U | <3U | 137 | <2.4U | <5.4U |
| | | 12/15/2014 | 4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 4.6 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 7.8 | 0.14J | <0.27U |
| | | 01/20/2015 | 7.9 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.89 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 47.6J | 0.83 | <0.27U |
| | | 02/13/2015 | 6.2 | <0.07U | <0.18U | <0.21U | <0.13U | 4.3 | 0.62 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 18.6 | <0.12U | <0.27U |
| | | 03/18/2015 | 17.4 | <0.07U | <0.18U | <0.21U | <0.13U | 7.9 | 0.36J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 33.4 | 0.13J | <0.27U |
| | | 04/28/2015 | 8.1 | <0.07U | <0.18U | <0.21U | <0.13U | 5.7 | 0.71 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 8.4 | <0.12U | <0.27U |
| | | 05/21/2015 | 4.6J | <0.07U | <0.18U | <0.21U | <0.13U | 5.3 | 0.15J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 9.9 | <0.12U | <0.27U |
| | | 06/23/2015 | 3.9J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 1.2 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 16.7 | <0.12U | <0.27U |
| | | 07/15/2015 | 6.2 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 2.6 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 9.1 | <0.12U | <0.27U |
| | DW-005K_Post | 09/02/2015 | 7.6 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 10.8 | <0.12U | <0.27U |
| | DW-005K_Pre | 09/02/2015 | 6.8 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 2 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 43.6 | <0.12U | <0.27U |
| Post-Carbon Filtration | DW-005K | 10/20/2015 | 9.7 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 469 | <0.12U | <0.27U |
| | | 11/18/2015 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 764 | <0.12U | <0.27U |
| | | 12/16/2015 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1200 | <0.12U | <0.27U |
| | | 01/21/2016 | 4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 706 | <0.12U | <0.27U |
| | | 02/29/2016 | 4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 480 | <0.12U | <0.27U |
| | | 03/24/2016 | 7.9 | <0.07U | <0.18U | <0.21U | <0.13U | 5.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 379 | <0.12U | <0.27U |
| | | 04/15/2016 | 4.3J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 357 | <0.12U | <0.27U |
| | | 05/20/2016 | 8.7 | <0.07U | <0.18U | <0.21U | <0.13U | 1.9J | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 764 | <0.12U | <0.27U |
| | | 06/17/2016 | 10.2 | <0.07U | <0.18U | <0.21U | <0.13U | 7.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 615 | <0.12U | <0.27U |
| | | 07/20/2016 | 15.3 | <0.07U | <0.18U | <0.21U | <0.13U | 8.6 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 810 | <0.12U | <0.27U |
| | | 08/18/2016 | 18.1 | <0.07U | <0.18U | <0.21U | <0.13U | 10.2 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 2020 | <0.12U | <0.27U |
| | | 09/28/2016 | 22.5 | <0.07U | <0.18U | <0.21U | <0.13U | 5.8 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 707 | <0.12U | <0.27U |
| | | 10/21/2016 | 16.2 | <0.07U | <0.18U | <0.21U | 0.24J | 7.4 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1900 | <0.12U | <0.27U |
| | | 11/10/2016 | 6.3 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1710 | <0.12U | <0.27U |
| | | 12/01/2016 | 6.1 | <0.07U | <0.18U | <0.21U | <0.13U | 5.4 | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1630 | <0.12U | <0.27U |
| | | 03/08/2017 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 683 | <0.12U | <0.27U |
| | | 04/24/2017 | 5J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 0.42J | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 422 | <0.12U | <0.27U |
| | | 05/31/2017 | 2.5J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 1.9 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 372 | <0.12U | <0.27U |
| | | 10/17/2017 | 6.8 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 4.1 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5390 | <0.12U | <0.27U |
| | | 12/13/2017 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | 11.6 | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 521 | <0.12U | <0.27U |
| | | 04/26/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **25.6** | <0.32U | <0.15U | <0.11U | 33.2 | <0.15U | 212 | 0.14J | <0.27U |
| | | 05/23/2018 | 3J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | **38** | <0.32U | <0.15U | <0.11U | 71.1 | <0.15U | 152 | <0.12U | <0.27U |
| | | 06/15/2018 | 5.9 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 5.6 | <0.12U | <0.27U |
| | | 07/20/2018 | 16.8 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 3.2J | <0.12U | <0.27U |

Off-Site Drinking Water Analytical Data Summary
2802 Northeast Road
Calvert Citgo, 2815 North East Road, North East, MD

| | | Compound | Acetone | Benzene | Ethylbenzene | Isopropyl Ether | Methyl bromide | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | p-Dichlorobenzene | Tert-Amyl alcohol | Tert-Amyl Methyl Ether | tert-Butylalcohol | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MDE DW Standards | ** | 5 | 700 | ** | ** | ** | 20 | 5 | ** | 75 | ** | ** | ** | 1000 | 10000 |
| | | Unit | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) | (µg/l) |
| Stage | Location | Sample Date | | | | | | | | | | | | | | | |
| | | 09/11/2018 | 4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 7.6 | <0.12U | <0.27U |
| | | 10/23/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 203 | <0.12U | <0.27U |
| | | 11/28/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 407 | <0.12U | <0.27U |
| | | 12/10/2018 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 395 | <0.12U | <0.27U |
| | | 04/12/2019 | 4.4J | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 483 | <0.12U | <0.27U |
| | | 6/12/2019 | <2.2U | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.22U | <0.15U | <0.11U | <1.6U | <0.12U | 659 | <0.12U | <0.27U |
| | | 09/18/2019 | 5.3 | <0.07U | <0.18U | <0.21U | <0.13U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <1.6U | <0.15U | 1900 | <0.12U | <0.27U |
| | | 10/24/2019 | 4.1J | <0.07U | <0.18U | <0.21U | 0.24J | <0.22U | <1.3U | <0.09U | <0.32U | <0.15U | <0.11U | <0.15U | 2050 | <0.12U | <0.27U |

**Notes**
**U = Not detected, method detection limit reported**
**J = Estimated Value**
**(µg/l) = Micrograms per liter**
**NA = Not analyzed/Not available**
**Bold values (highlighted in yellow) indicate exceedence of MDE Drinking Water Standards (2008)**
*** Two samples were collected per location on September 20, 2015: samples labeled "pre" were collected prior to carbon filter change-out; samples labeled "post" were collected after carbon filters were changed out.**

# DPE EFFLUENT WATER

# RESULTS SUMMARY TABLES

DEP Effluent (Outfall) Water Analytical Data Summary
Calvert Citgo, 2815 North East Road, North East, MD

| | Compound | 1,2-Dibromoethane | 2-Hexanone | Acetone | Benzene | Ethylbenzene | Isopropyl Ether | Methyl bromide | Methyl chloride | Methyl ethyl ketone | Methyl tert-butyl ether | Methylene chloride | Tert-Amyl alcohol | tert-Butylalcohol | Tetrachloroethylene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **MDE GW Cleanup Standards** | **0.05** | ****** | **550** | **5** | **700** | ****** | **0.85** | **19** | **700** | **20** | **5** | ****** | ****** | **5** | **1000** | **10000** |
| | **Unit** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** | **(µg/l)** |
| **Location** | **Sample Date** | | | | | | | | | | | | | | | | |
| OUTFALL 001 | 04/26/2017 | <0.28U | 36.7 | 170 | **1300** | 261 | <0.25U | <0.39U | 3 | 257 | 7.8 | <0.45U | 770 | 344 | <0.35U | **2870** | 1550 |
| | 05/12/2017 | <2.8U | <13U | 164 | **867** | 142 | 2.5J | <3.9U | <3.1U | 65.9J | 5.5J | **56.8** | 587 | 340 | <3.5U | **1710** | 950 |
| | 06/21/2017 | **7J** | 14.2J | 103 | **665** | 97.1 | <2.5U | <3.9U | <3.1U | 43.5J | **21.1** | **5.7J** | 713 | 239 | <3.5U | **1660** | 823 |
| | 07/11/2017 | **9** | <1.3U | 101 | **521** | 48.9 | 2.9 | 0.5J | <0.31U | 41.8 | **23.9** | <0.45U | 892 | 422 | <0.35U | **1180** | 706 |
| | 11/15/2017 | <2.8U | <13U | 119 | **248** | 63.9 | <2.5U | <3.9U | <3.1U | 36.3J | 17.7 | <4.5U | 852 | 336 | <3.5U | 843 | 499 |
| EFFLUENT-001 | 06/15/2018 | **1.7** | 15.5 | 117 | **58.1** | 8.9 | <0.25U | <0.39U | <0.31U | 41.3 | 8.5 | <0.45U | 691 | 283 | <0.35U | 139 | 123 |
| | 09/26/2018 | **2** | 13.9 | 138 | **38.2** | 14 | <0.25U | <0.39U | <0.31U | 63.2 | 4.8 | <0.45U | 1030 | 446 | <0.35U | 154 | 108 |
| | 6/13/2019 | **0.97J** | 13.6 | 80.8 | **10.7** | 2.7 | <0.25U | <0.39U | <0.31U | 43.6 | 2.9 | <0.45U | 764 | 322 | <0.35U | 33.3 | 31.6 |
| | 09/30/2019 | <0.28U | 46.3 | 112 | **303** | 36 | 1 | <0.39U | <0.31U | 210 | **53.9** | <0.45U | 648 | 199 | <0.35U | 315 | 262 |
| | 11/26/2019 | **2.2** | 66 | 548 | **96.2** | 30.4 | <0.25U | <0.39U | <0.31U | 488 | **125** | <0.45U | <6.6U | <2.2U | <0.35U | 253 | 205 |

**Notes**
**U = Not detected, method detection limit reported**
**J = Estimated Value**
**(µg/l) = Micrograms per liter**
**Bold values (highlighted in yellow) indicate exceedence of MDE Groundwater Clean-Up Standards for Type I & II Aquifers (2018)**

# DPE INFLUENT AND EFFLUENT VAPOR

# RESULTS SUMMARY TABLES

| | Compound | Acetone | Benzene | Ethylbenzene | Methyl bromide | Methyl chloride | Methyl ethyl ketone | Methyl isobutylketone (MIBK) | Methyl tert-butyl ether | Naphthalene | Toluene | Xylene (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **USEPA RSL - Carcinogenic Risk** | | ****** | **1.6** | **4.9** | ****** | ****** | ****** | ****** | **47** | **0.36** | ****** | ****** |
| **USEPA RSL - Noncarcinogenic Risk** | | **14000** | **13** | **440** | **2.2** | **39** | **2200** | **1300** | **1300** | **1.3** | **2200** | **44** |
| | **Unit** | **ug/m3** | **ug/m3** | **ug/m3** | **ug/m3** | **ug/m3** | **ug/m3** | **ug/m3** | **ug/m3** | **ug/m3** | **ug/m3** | **ug/m3** |
| **Location** | **Sample Date** | | | | | | | | | | | |
| POST-VES | 05/12/2017 | <28U | **119** | <10.6U | <11.8U | <8.67U | <6.75U | <10.9U | <7.14U | <9.91U | <10.4U | <0U |
| | 07/11/2017 | 6.77 | *3.67* | *5.99* | 2.1 | 0.45 | 2.16 | 2.09 | <0.163U | <0.227U | 21 | 27.48 |
| | 11/16/2017 | <0.392U | **17.5** | 3.99 | **18.3** | 8.3 | 4.28 | <0.249U | <0.163U | <0.223U | 25.2 | 21.65 |
| | 6/19/2018 | <0.489U | *11.9* | 4.09 | **24.1** | 14 | NA | <0.311U | <0.204U | 1.43 | 32.2 | 20.65 |
| | 09/26/2018 | <54.4U | **83.1** | <8.25U | **61.7** | 41.5 | <6.25U | <8.85U | <8.98U | <14.6U | 81.4 | <0U |
| | 6/14/2019 | <1.96U | *1.7* | <0.308U | **11** | <0.368U | 5.9 | <0.288U | <0.321U | <0.781U# | 4.11 | <0.336U |
| | 9/30/2019 | <12.9U | ***22*** | <2.03U | **8.81** | 23.5 | <1.4U | <1.9U | <2.06U | <5.16U | 13.7 | <2.22U |
| | 11/26/2019 | <54.6U | **438** | <6.25U | **26.2** | **86.9** | <4.75U | <5.74U | <6.31U | <15.5U | 49.4 | <6.56U |
| PRE-VES | 05/12/2017 | <347U | **34800** | **5520** | <147U | <108U | <83.8U | <135U | <88.7U | <123U | **67100** | **23000** |
| | 07/11/2017 | <152U | **36100** | **5910** | <64.5U | <47.1U | <36.6U | <59U | <38.9U | <54U | **68600** | **23870** |
| | 11/16/2017 | <50.4U | **13300** | **5040** | <34.6U | <25.4U | <19.7U | <31.9U | <20.9U | <28.6U | **41100** | **24450** |
| | 6/19/2018 | <264U | **22900** | **6340** | <183U | <134U | NA | <168U | <110U | <150U | **67100** | **31760** |
| | 09/26/2018 | <929U | **16800** | **7080** | <103U | <59.5U | <107U | <151U | <153U | <249U | **60700** | **34320** |
| | 6/14/2019 | <115U | **73800** | **1480** | <24.6U | <21.6U | 183 | <16.9U | <18.3U | <45.9U# | **15300** | **8170** |
| | 9/30/2019 | <103U | **12800** | **2090** | <22.1U | <12.1U | <11.2U | <15.2U | <16.4U | <41.2U | **16000** | **11300** |
| | 11/26/2019 | <285U | **10700** | **2400** | <52U | <24.8U | 330 | <30U | 772 | <80.7U | **20700** | **11700** |

**Notes**

**U = Not detected, method detection limit reported**
**(µg/m3) = Micrograms per cubic meter**

**Bold values (highlighted in yellow) indicate exceedence of USEPA Regional Screening Levels (RSLs) for Worker Ambient Air, Carcinogenic and Noncarcinogenic Risk - Based on a Carcinogenic Target Risk of 1E-06 and Noncarcinogenic Hazard Index of 0.1 (May 2018)**

**Italic values (highlighted in yellow) indicate exceedence of USEPA Regional Screening Levels (RSLs) for Worker Ambient Air, Carcinogenic Risk - Based on a Carcinogenic Target Risk of 1E-06 (May 2018)**

# ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS AND CHAINS OF CUSTODY

# GROUNDWATER

# LABORATORY REPORTS AND CHAINS OF CUSTODY

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

April 8, 2020

Mr. John Filoon
REPSG
6901 Kingsessing Avenue
Suite 201
Philadelphia, PA 19142

# Certificate of Analysis

| | | | |
|---|---|---|---|
| Project Name: | **CALVERT CITGO/5977** | Workorder: | **3095011** |
| Purchase Order: | **19328** | Workorder ID: | **CALVERT CITGO/5977** |

Dear Mr. Filoon:

Enclosed are the analytical results for samples received by the laboratory on Wednesday, April 1, 2020.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Natalie Griffith , Ms. S Shourds , Ms. Brenda MacPhail Kellogg

*This page is included as part of the Analytical Report and must be retained as a permanent record thereof.*

Susan J. Scherer

Ms. Susan J Scherer
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

## SAMPLE SUMMARY

Workorder: 3095011 CALVERT CITGO/5977

| Lab ID | Sample ID | Matrix | Date Collected | Date Received | Collected By |
|---|---|---|---|---|---|
| 3095011001 | MP-001 | Ground Water | 3/30/2020 14:53 | 4/1/2020 20:00 | Collected by Client |
| 3095011002 | MP-002 | Ground Water | 3/31/2020 12:45 | 4/1/2020 20:00 | Collected by Client |
| 3095011003 | MW-001R | Ground Water | 3/31/2020 14:35 | 4/1/2020 20:00 | Collected by Client |
| 3095011004 | MW-002 | Ground Water | 3/31/2020 13:20 | 4/1/2020 20:00 | Collected by Client |
| 3095011005 | MW-003 | Ground Water | 3/31/2020 14:18 | 4/1/2020 20:00 | Collected by Client |
| 3095011006 | MW-005 | Ground Water | 3/31/2020 14:26 | 4/1/2020 20:00 | Collected by Client |
| 3095011007 | MW-006 | Ground Water | 3/31/2020 13:08 | 4/1/2020 20:00 | Collected by Client |
| 3095011008 | MW-007 | Ground Water | 3/31/2020 14:50 | 4/1/2020 20:00 | Collected by Client |
| 3095011009 | MW-008 | Ground Water | 3/30/2020 15:20 | 4/1/2020 20:00 | Collected by Client |
| 3095011010 | MW-008D | Ground Water | 3/30/2020 15:02 | 4/1/2020 20:00 | Collected by Client |
| 3095011011 | MW-009 | Ground Water | 3/30/2020 14:16 | 4/1/2020 20:00 | Collected by Client |
| 3095011012 | MW-009D | Ground Water | 3/31/2020 13:58 | 4/1/2020 20:00 | Collected by Client |
| 3095011013 | MW-010 | Ground Water | 3/31/2020 13:50 | 4/1/2020 20:00 | Collected by Client |
| 3095011014 | MW-010D | Ground Water | 3/31/2020 13:37 | 4/1/2020 20:00 | Collected by Client |
| 3095011015 | DUP-001 | Ground Water | 3/31/2020 00:00 | 4/1/2020 20:00 | Collected by Client |
| 3095011016 | TB-001 | Ground Water | 3/31/2020 00:00 | 4/1/2020 20:00 | Collected by Client |
| 3095011017 | FB-001 | Ground Water | 3/31/2020 00:00 | 4/1/2020 20:00 | Collected by Client |
| 3095011018 | FB-002 | Ground Water | 3/31/2020 00:00 | 4/1/2020 20:00 | Collected by Client |

## SAMPLE SUMMARY

Workorder: 3095011 CALVERT CITGO/5977

**Notes**

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
-- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

**Standard Acronyms/Flags**

| | |
|---|---|
| J | Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte |
| U | Indicates that the analyte was Not Detected (ND) |
| N | Indicates presumptive evidence of the presence of a compound |
| MDL | Method Detection Limit |
| PQL | Practical Quantitation Limit |
| RDL | Reporting Detection Limit |
| ND | Not Detected - indicates that the analyte was Not Detected at the RDL |
| Cntr | Analysis was performed using this container |
| RegLmt | Regulatory Limit |
| LCS | Laboratory Control Sample |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| DUP | Sample Duplicate |
| %Rec | Percent Recovery |
| RPD | Relative Percent Difference |
| LOD | DoD Limit of Detection |
| LOQ | DoD Limit of Quantitation |
| DL | DoD Detection Limit |
| I | Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL) |
| (S) | Surrogate Compound |
| NC | Not Calculated |
| * | Result outside of QC limits |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011001** Date Collected: 3/30/2020 14:53 Matrix: Ground Water

Sample ID: **MP-001** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| tert-Butyl Alcohol | ND | | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Carbon Disulfide | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| Methyl t-Butyl Ether | 0.34J | J | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:03 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/3/20 17:03 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011001** Date Collected: 3/30/2020 14:53 Matrix: Ground Water

Sample ID: **MP-001** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 98.8 | | % | 62 - 133 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| 4-Bromofluorobenzene (S) | 108 | | % | 79 - 114 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| Dibromofluoromethane (S) | 89.3 | | % | 78 - 116 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |
| Toluene-d8 (S) | 94.2 | | % | 76 - 127 | SW846 8260C | | | 4/3/20 17:03 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011002** Date Collected: 3/31/2020 12:45 Matrix: Ground Water

Sample ID: **MP-002** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| tert-Butyl Alcohol | ND | | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Carbon Disulfide | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:26 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/3/20 17:26 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011002** Date Collected: 3/31/2020 12:45 Matrix: Ground Water

Sample ID: **MP-002** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 100 | | % | 62 - 133 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| 4-Bromofluorobenzene (S) | 108 | | % | 79 - 114 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| Dibromofluoromethane (S) | 89.6 | | % | 78 - 116 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |
| Toluene-d8 (S) | 93.6 | | % | 76 - 127 | SW846 8260C | | | 4/3/20 17:26 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011003** Date Collected: 3/31/2020 14:35 Matrix: Ground Water

Sample ID: **MW-001R** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| tert-Amyl Alcohol | 1940 | | ug/L | 200 | 132 | SW846 8260C | | 4/6/20 19:29 | DPC | B |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Benzene | 9.9 | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| 2-Butanone | 1.9J | J | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| tert-Butyl Alcohol | 6530 | | ug/L | 200 | 44.0 | SW846 8260C | | 4/6/20 19:29 | DPC | B |
| Carbon Disulfide | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Chloromethane | 3.0 | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| 1,2-Dichloroethane | 96.3 | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Diisopropyl ether | 263 | | ug/L | 20.0 | 5.0 | SW846 8260C | | 4/6/20 19:29 | DPC | B |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/3/20 19:42 | DPC | A |
| Methyl t-Butyl Ether | 2340 | | ug/L | 20.0 | 6.6 | SW846 8260C | | 4/6/20 19:29 | DPC | B |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/3/20 19:42 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011003** Date Collected: 3/31/2020 14:35 Matrix: Ground Water

Sample ID: **MW-001R** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Toluene | 0.23J | J | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 97.5 | | % | 62 - 133 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| 1,2-Dichloroethane-d4 (S) | 98.4 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 19:29 | DPC | B |
| 4-Bromofluorobenzene (S) | 109 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 19:29 | DPC | B |
| 4-Bromofluorobenzene (S) | 108 | | % | 79 - 114 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Dibromofluoromethane (S) | 94.9 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 19:29 | DPC | B |
| Dibromofluoromethane (S) | 88.4 | | % | 78 - 116 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Toluene-d8 (S) | 93.5 | | % | 76 - 127 | SW846 8260C | | | 4/3/20 19:42 | DPC | A |
| Toluene-d8 (S) | 96 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 19:29 | DPC | B |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011004** Date Collected: 3/31/2020 13:20 Matrix: Ground Water

Sample ID: **MW-002** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| tert-Butyl Alcohol | ND | | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Carbon Disulfide | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 17:49 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/3/20 17:49 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011004** Date Collected: 3/31/2020 13:20 Matrix: Ground Water

Sample ID: **MW-002** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 99 | | % | 62 - 133 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| 4-Bromofluorobenzene (S) | 108 | | % | 79 - 114 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| Dibromofluoromethane (S) | 89.5 | | % | 78 - 116 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |
| Toluene-d8 (S) | 93.9 | | % | 76 - 127 | SW846 8260C | | | 4/3/20 17:49 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011005** Date Collected: 3/31/2020 14:18 Matrix: Ground Water

Sample ID: **MW-003** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Benzene | 2.8 | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 2-Butanone | 5.3J | J | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| tert-Butyl Alcohol | 6.4J | J | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Carbon Disulfide | ND | 4 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Chloromethane | 0.92J | J | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 1,1-Dichloroethene | ND | 2 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| trans-1,2-Dichloroethene | ND | 5 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Ethylbenzene | 7.8 | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 2-Hexanone | 3.4J | J | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| Methyl t-Butyl Ether | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 16:33 | DPC | B |
| 4-Methyl-2-Pentanone(MIBK) | 5.4 | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 16:33 | DPC | B |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011005** Date Collected: 3/31/2020 14:18 Matrix: Ground Water

Sample ID: **MW-003** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 3 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| Toluene | 5.9 | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| Total Xylenes | 123 | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| o-Xylene | 31.8 | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| mp-Xylene | 90.8 | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 110 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| 4-Bromofluorobenzene (S) | 109 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| Dibromofluoromethane (S) | 95.8 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |
| Toluene-d8 (S) | 102 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 16:33 | DPC | B |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011006** Date Collected: 3/31/2020 14:26 Matrix: Ground Water

Sample ID: **MW-005** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | 57.6J | J | ug/L | 100 | 31.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 10.0 | 2.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| tert-Amyl Alcohol | 225 | | ug/L | 100 | 66.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 10.0 | 2.9 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Benzene | 790 | | ug/L | 10.0 | 2.3 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Bromochloromethane | ND | | ug/L | 10.0 | 3.2 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 10.0 | 2.7 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Bromoform | ND | | ug/L | 10.0 | 4.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Bromomethane | ND | | ug/L | 10.0 | 3.9 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 2-Butanone | ND | | ug/L | 100 | 18.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| tert-Butyl Alcohol | ND | | ug/L | 100 | 22.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Carbon Disulfide | ND | | ug/L | 10.0 | 2.3 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Chlorobenzene | ND | | ug/L | 10.0 | 1.9 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 10.0 | 4.5 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Chloroethane | ND | | ug/L | 10.0 | 3.3 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Chloroform | ND | | ug/L | 10.0 | 2.1 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Chloromethane | 69.0 | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 70.0 | 15.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 10.0 | 2.8 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 10.0 | 3.3 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 10.0 | 2.8 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 10.0 | 3.2 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 10.0 | 2.9 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 10.0 | 3.2 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 10.0 | 2.6 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 10.0 | 3.7 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 10.0 | 2.4 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 10.0 | 2.9 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 10.0 | 2.5 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 10.0 | 1.9 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Ethylbenzene | 1350 | | ug/L | 10.0 | 3.4 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 2-Hexanone | ND | | ug/L | 50.0 | 13.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 10.0 | 3.3 | SW846 8260C | | 4/3/20 18:57 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 50.0 | 15.0 | SW846 8260C | | 4/3/20 18:57 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011006** Date Collected: 3/31/2020 14:26 Matrix: Ground Water

Sample ID: **MW-005** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | | ug/L | 10.0 | 4.5 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| Styrene | ND | | ug/L | 10.0 | 2.4 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 10.0 | 3.4 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 10.0 | 3.5 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| Toluene | 449 | | ug/L | 10.0 | 2.3 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| Total Xylenes | 2940 | | ug/L | 30.0 | 6.6 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 10.0 | 2.2 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 10.0 | 3.3 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| Trichloroethene | ND | | ug/L | 10.0 | 3.3 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 10.0 | 3.0 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| o-Xylene | 226 | | ug/L | 10.0 | 3.3 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| mp-Xylene | 2710 | | ug/L | 20.0 | 5.2 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 96.9 | | % | 62 - 133 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| 4-Bromofluorobenzene (S) | 106 | | % | 79 - 114 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| Dibromofluoromethane (S) | 88 | | % | 78 - 116 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |
| Toluene-d8 (S) | 91.9 | | % | 76 - 127 | SW846 8260C | | | 4/3/20 18:57 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011007** Date Collected: 3/31/2020 13:08 Matrix: Ground Water

Sample ID: **MW-006** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| tert-Butyl Alcohol | 2.5J | J | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Carbon Disulfide | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/3/20 18:11 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/3/20 18:11 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011007** Date Collected: 3/31/2020 13:08 Matrix: Ground Water

Sample ID: **MW-006** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
| 1,2-Dichloroethane-d4 (S) | 99.1 | | % | 62 - 133 | | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| 4-Bromofluorobenzene (S) | 106 | | % | 79 - 114 | | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| Dibromofluoromethane (S) | 88.6 | | % | 78 - 116 | | SW846 8260C | | | 4/3/20 18:11 | DPC | A |
| Toluene-d8 (S) | 93.7 | | % | 76 - 127 | | SW846 8260C | | | 4/3/20 18:11 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011008** Date Collected: 3/31/2020 14:50 Matrix: Ground Water

Sample ID: **MW-007** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 50.0 | 15.5 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 5.0 | 1.0 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| tert-Amyl Alcohol | 35.6J | J | ug/L | 50.0 | 33.0 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Benzene | 31.1 | | ug/L | 5.0 | 1.2 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Bromochloromethane | ND | | ug/L | 5.0 | 1.6 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 5.0 | 1.4 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Bromoform | ND | | ug/L | 5.0 | 2.0 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Bromomethane | ND | | ug/L | 5.0 | 2.0 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 2-Butanone | ND | | ug/L | 50.0 | 9.0 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| tert-Butyl Alcohol | 13.4J | J | ug/L | 50.0 | 11.0 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Carbon Disulfide | ND | | ug/L | 5.0 | 1.2 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 5.0 | 1.6 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Chlorobenzene | ND | | ug/L | 5.0 | 0.95 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 5.0 | 2.3 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Chloroethane | ND | | ug/L | 5.0 | 1.7 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Chloroform | ND | | ug/L | 5.0 | 1.1 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Chloromethane | 6.5 | | ug/L | 5.0 | 1.6 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 35.0 | 7.5 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 5.0 | 1.4 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 5.0 | 1.7 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 5.0 | 1.4 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 5.0 | 1.6 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 5.0 | 1.6 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 5.0 | 1.9 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 5.0 | 1.2 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 5.0 | 1.6 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 5.0 | 0.95 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Ethylbenzene | 64.1 | | ug/L | 5.0 | 1.7 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 2-Hexanone | ND | | ug/L | 25.0 | 6.5 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 5.0 | 1.7 | SW846 8260C | | 4/3/20 19:19 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 25.0 | 7.5 | SW846 8260C | | 4/3/20 19:19 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011008** Date Collected: 3/31/2020 14:50 Matrix: Ground Water

Sample ID: **MW-007** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | | ug/L | 5.0 | 2.3 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| Styrene | ND | | ug/L | 5.0 | 1.2 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 5.0 | 1.7 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 5.0 | 1.8 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| Toluene | 140 | | ug/L | 5.0 | 1.2 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| Total Xylenes | 416 | | ug/L | 15.0 | 3.3 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 5.0 | 1.1 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 5.0 | 1.7 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| Trichloroethene | ND | | ug/L | 5.0 | 1.7 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| o-Xylene | 246 | | ug/L | 5.0 | 1.7 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| mp-Xylene | 170 | | ug/L | 10.0 | 2.6 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 100 | | % | 62 - 133 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| 4-Bromofluorobenzene (S) | 106 | | % | 79 - 114 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| Dibromofluoromethane (S) | 88.7 | | % | 78 - 116 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |
| Toluene-d8 (S) | 93.3 | | % | 76 - 127 | SW846 8260C | | | 4/3/20 19:19 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011009** Date Collected: 3/30/2020 15:20 Matrix: Ground Water

Sample ID: **MW-008** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| tert-Butyl Alcohol | 18.7 | | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Carbon Disulfide | ND | 3 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| trans-1,2-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:52 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 19:52 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011009** Date Collected: 3/30/2020 15:20 Matrix: Ground Water

Sample ID: **MW-008** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 2 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 96.8 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| 4-Bromofluorobenzene (S) | 110 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| Dibromofluoromethane (S) | 95.7 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |
| Toluene-d8 (S) | 96.4 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 19:52 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011010** Date Collected: 3/30/2020 15:02 Matrix: Ground Water

Sample ID: **MW-008D** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| tert-Amyl methyl ether | 1.0 | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| tert-Amyl Alcohol | 182 | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Benzene | 3.6 | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| tert-Butyl Alcohol | 107 | | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Carbon Disulfide | ND | 3 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Chloromethane | 0.61J | J | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| trans-1,2-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Diisopropyl ether | 7.2 | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Ethyl tert-butyl ether | 1.1 | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Ethylbenzene | 0.60J | J | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| Methyl t-Butyl Ether | 68.3 | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 20:14 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | 1.9J | J | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 20:14 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011010** Date Collected: 3/30/2020 15:02 Matrix: Ground Water

Sample ID: **MW-008D** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 2 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| Toluene | 1.5 | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| Total Xylenes | 6.8 | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| o-Xylene | 3.2 | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| mp-Xylene | 3.6 | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 95.8 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| 4-Bromofluorobenzene (S) | 106 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| Dibromofluoromethane (S) | 93.5 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |
| Toluene-d8 (S) | 97.6 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 20:14 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011011** Date Collected: 3/30/2020 14:16 Matrix: Ground Water

Sample ID: **MW-009** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| tert-Amyl Alcohol | 7.6J | J | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| tert-Butyl Alcohol | 8.4J | J | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Carbon Disulfide | ND | 3 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 1,2-Dichloroethane | 1.4 | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| trans-1,2-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| Methyl t-Butyl Ether | 1.2 | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 20:37 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 20:37 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011011** Date Collected: 3/30/2020 14:16 Matrix: Ground Water

Sample ID: **MW-009** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 2 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 96.8 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| 4-Bromofluorobenzene (S) | 109 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| Dibromofluoromethane (S) | 94.6 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |
| Toluene-d8 (S) | 96.3 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 20:37 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011012** Date Collected: 3/31/2020 13:58 Matrix: Ground Water

Sample ID: **MW-009D** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| tert-Butyl Alcohol | 19.2 | | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Carbon Disulfide | ND | 2 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 1,2-Dichloroethane | 0.87J | J | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 1,1-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| trans-1,2-Dichloroethene | ND | 3 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| Methyl t-Butyl Ether | 11.6 | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:34 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 19:34 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011012** Date Collected: 3/31/2020 13:58 Matrix: Ground Water

Sample ID: **MW-009D** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 1 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 112 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| 4-Bromofluorobenzene (S) | 111 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| Dibromofluoromethane (S) | 98.8 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |
| Toluene-d8 (S) | 105 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 19:34 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011013** Date Collected: 3/31/2020 13:50 Matrix: Ground Water

Sample ID: **MW-010** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| tert-Amyl Alcohol | 4590 | | ug/L | 200 | 132 | SW846 8260C | | 4/7/20 16:23 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Benzene | 8.1 | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| tert-Butyl Alcohol | 1280 | | ug/L | 200 | 44.0 | SW846 8260C | | 4/7/20 16:23 | DPC | A |
| Carbon Disulfide | ND | 3 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| 1,2-Dichloroethane | 174 | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| trans-1,2-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Diisopropyl ether | 31.9 | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 19:57 | DPC | A |
| Methyl t-Butyl Ether | 362 | | ug/L | 20.0 | 6.6 | SW846 8260C | | 4/7/20 16:23 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 19:57 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011013** Date Collected: 3/31/2020 13:50 Matrix: Ground Water

Sample ID: **MW-010** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 2 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| 1,1,2-Trichloroethane | 0.81J | J | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 115 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| 1,2-Dichloroethane-d4 (S) | 102 | | % | 62 - 133 | SW846 8260C | | | 4/7/20 16:23 | DPC | A |
| 4-Bromofluorobenzene (S) | 110 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| 4-Bromofluorobenzene (S) | 104 | | % | 79 - 114 | SW846 8260C | | | 4/7/20 16:23 | DPC | A |
| Dibromofluoromethane (S) | 90.7 | | % | 78 - 116 | SW846 8260C | | | 4/7/20 16:23 | DPC | A |
| Dibromofluoromethane (S) | 98.4 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |
| Toluene-d8 (S) | 90.4 | | % | 76 - 127 | SW846 8260C | | | 4/7/20 16:23 | DPC | A |
| Toluene-d8 (S) | 102 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 19:57 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011014** Date Collected: 3/31/2020 13:37 Matrix: Ground Water

Sample ID: **MW-010D** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| tert-Butyl Alcohol | ND | | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Carbon Disulfide | ND | 3 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 1,2-Dichloroethane | 0.61J | J | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| trans-1,2-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| Methyl t-Butyl Ether | 1.1 | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 16:55 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 16:55 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011014** Date Collected: 3/31/2020 13:37 Matrix: Ground Water

Sample ID: **MW-010D** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 2 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 109 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| 4-Bromofluorobenzene (S) | 111 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| Dibromofluoromethane (S) | 97.3 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |
| Toluene-d8 (S) | 104 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 16:55 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011015** Date Collected: 3/31/2020 00:00 Matrix: Ground Water

Sample ID: **DUP-001** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| tert-Amyl methyl ether | 20.3 | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| tert-Amyl Alcohol | 1430 | | ug/L | 100 | 66.0 | SW846 8260C | | 4/7/20 16:46 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Benzene | 10.5 | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| tert-Butyl Alcohol | 4780 | | ug/L | 100 | 22.0 | SW846 8260C | | 4/7/20 16:46 | DPC | A |
| Carbon Disulfide | ND | 3 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Chloromethane | 3.5 | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| 1,2-Dichloroethane | 105 | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| trans-1,2-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Diisopropyl ether | 205 | | ug/L | 10.0 | 2.5 | SW846 8260C | | 4/7/20 16:46 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 20:19 | DPC | A |
| Methyl t-Butyl Ether | 1970 | | ug/L | 20.0 | 6.6 | SW846 8260C | | 4/8/20 12:56 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 20:19 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011015** Date Collected: 3/31/2020 00:00 Matrix: Ground Water

Sample ID: **DUP-001** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 2 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 90.3 | | % | 62 - 133 | SW846 8260C | | | 4/8/20 12:56 | DPC | A |
| 1,2-Dichloroethane-d4 (S) | 104 | | % | 62 - 133 | SW846 8260C | | | 4/7/20 16:46 | DPC | A |
| 1,2-Dichloroethane-d4 (S) | 109 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| 4-Bromofluorobenzene (S) | 112 | | % | 79 - 114 | SW846 8260C | | | 4/8/20 12:56 | DPC | A |
| 4-Bromofluorobenzene (S) | 104 | | % | 79 - 114 | SW846 8260C | | | 4/7/20 16:46 | DPC | A |
| 4-Bromofluorobenzene (S) | 111 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Dibromofluoromethane (S) | 87.5 | | % | 78 - 116 | SW846 8260C | | | 4/8/20 12:56 | DPC | A |
| Dibromofluoromethane (S) | 88.9 | | % | 78 - 116 | SW846 8260C | | | 4/7/20 16:46 | DPC | A |
| Dibromofluoromethane (S) | 99.3 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Toluene-d8 (S) | 105 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 20:19 | DPC | A |
| Toluene-d8 (S) | 80.1 | | % | 76 - 127 | SW846 8260C | | | 4/8/20 12:56 | DPC | A |
| Toluene-d8 (S) | 89.2 | | % | 76 - 127 | SW846 8260C | | | 4/7/20 16:46 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011016** Date Collected: 3/31/2020 00:00 Matrix: Ground Water

Sample ID: **TB-001** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| tert-Butyl Alcohol | 5.4J | J | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Carbon Disulfide | ND | 1 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 1,1-Dichloroethene | ND | 3 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| trans-1,2-Dichloroethene | ND | 2 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 18:21 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 18:21 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011016** Date Collected: 3/31/2020 00:00 Matrix: Ground Water

Sample ID: **TB-001** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 4 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 97.1 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| 4-Bromofluorobenzene (S) | 108 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| Dibromofluoromethane (S) | 95.2 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |
| Toluene-d8 (S) | 95.7 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 18:21 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011017** Date Collected: 3/31/2020 00:00 Matrix: Ground Water

Sample ID: **FB-001** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| tert-Butyl Alcohol | 2.9J | J | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Carbon Disulfide | ND | 3 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| trans-1,2-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 18:44 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 18:44 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011017** Date Collected: 3/31/2020 00:00 Matrix: Ground Water

Sample ID: **FB-001** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 2 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 96.8 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| 4-Bromofluorobenzene (S) | 109 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| Dibromofluoromethane (S) | 93.8 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |
| Toluene-d8 (S) | 95.5 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 18:44 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011018** Date Collected: 3/31/2020 00:00 Matrix: Ground Water

Sample ID: **FB-002** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | ND | | ug/L | 10.0 | 3.1 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| tert-Amyl methyl ether | ND | | ug/L | 1.0 | 0.20 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| tert-Amyl Alcohol | ND | | ug/L | 10.0 | 6.6 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| tert-Amyl Ethylether | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Benzene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Bromochloromethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Bromodichloromethane | ND | | ug/L | 1.0 | 0.27 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Bromoform | ND | | ug/L | 1.0 | 0.40 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Bromomethane | ND | | ug/L | 1.0 | 0.39 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 2-Butanone | ND | | ug/L | 10.0 | 1.8 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| tert-Butyl Alcohol | 4.9J | J | ug/L | 10.0 | 2.2 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Carbon Disulfide | ND | 3 | ug/L | 1.0 | 0.23 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Carbon Tetrachloride | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Chlorobenzene | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Chlorodibromomethane | ND | | ug/L | 1.0 | 0.45 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Chloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Chloroform | ND | | ug/L | 1.0 | 0.21 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Chloromethane | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 7.0 | 1.5 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 1,2-Dibromoethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Dichlorodifluoromethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 1,1-Dichloroethane | ND | | ug/L | 1.0 | 0.28 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 1,2-Dichloroethane | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 1,1-Dichloroethene | ND | 1 | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 1.0 | 0.32 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| trans-1,2-Dichloroethene | ND | 4 | ug/L | 1.0 | 0.26 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Dichlorofluoromethane | ND | | ug/L | 1.0 | 0.37 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 1,2-Dichloropropane | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.31 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 1.0 | 0.29 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Diisopropyl ether | ND | | ug/L | 1.0 | 0.25 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Ethyl tert-butyl ether | ND | | ug/L | 1.0 | 0.19 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Ethylbenzene | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 2-Hexanone | ND | | ug/L | 5.0 | 1.3 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| Methyl t-Butyl Ether | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | 4/6/20 19:06 | DPC | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 5.0 | 1.5 | SW846 8260C | | 4/6/20 19:06 | DPC | A |

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# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

Lab ID: **3095011018** Date Collected: 3/31/2020 00:00 Matrix: Ground Water

Sample ID: **FB-002** Date Received: 4/1/2020 20:00

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | 2 | ug/L | 1.0 | 0.45 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| Styrene | ND | | ug/L | 1.0 | 0.24 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 1.0 | 0.34 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| Tetrachloroethene | ND | | ug/L | 1.0 | 0.35 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| Toluene | ND | | ug/L | 1.0 | 0.23 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| Total Xylenes | ND | | ug/L | 3.0 | 0.66 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 1.0 | 0.22 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| Trichloroethene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| Vinyl Chloride | ND | | ug/L | 1.0 | 0.30 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| o-Xylene | ND | | ug/L | 1.0 | 0.33 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| mp-Xylene | ND | | ug/L | 2.0 | 0.52 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (S) | 99.2 | | % | 62 - 133 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| 4-Bromofluorobenzene (S) | 109 | | % | 79 - 114 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| Dibromofluoromethane (S) | 95.3 | | % | 78 - 116 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |
| Toluene-d8 (S) | 97 | | % | 76 - 127 | SW846 8260C | | | 4/6/20 19:06 | DPC | A |

Susan J. Scherer

Ms. Susan J Scherer
Project Coordinator

# ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

**PARAMETER QUALIFIERS**

| Lab ID | # | Sample ID | Analytical Method | Analyte |
|---|---|---|---|---|
| **3095011001** | 1 | MP-001 | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 132 and the control limits were 63 to 128. | | | | |
| **3095011002** | 1 | MP-002 | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 132 and the control limits were 63 to 128. | | | | |
| **3095011003** | 1 | MW-001R | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 132 and the control limits were 63 to 128. | | | | |
| **3095011004** | 1 | MW-002 | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 132 and the control limits were 63 to 128. | | | | |
| **3095011005** | 2 | MW-003 | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 136 and the control limits were 63 to 128. | | | | |
| **3095011005** | 3 | MW-003 | SW846 8260C | Methylene Chloride |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 124 and the control limits were 76 to 121. | | | | |
| **3095011005** | 4 | MW-003 | SW846 8260C | Carbon Disulfide |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 136 and the control limits were 57 to 131. | | | | |
| **3095011005** | 5 | MW-003 | SW846 8260C | trans-1,2-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 127 and the control limits were 71 to 122. | | | | |
| **3095011006** | 1 | MW-005 | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 132 and the control limits were 63 to 128. | | | | |
| **3095011007** | 1 | MW-006 | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 132 and the control limits were 63 to 128. | | | | |
| **3095011008** | 1 | MW-007 | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 132 and the control limits were 63 to 128. | | | | |
| **3095011009** | 1 | MW-008 | SW846 8260C | 1,1-Dichloroethene |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 149 and the control limits were 63 to 128. | | | | |
| **3095011009** | 2 | MW-008 | SW846 8260C | Methylene Chloride |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 125 and the control limits were 76 to 121. | | | | |
| **3095011009** | 3 | MW-008 | SW846 8260C | Carbon Disulfide |
| The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 144 and the control limits were 57 to 131. | | | | |

## ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

| | | | | |
|---|---|---|---|---|
| **3095011009** | 4 | MW-008 | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 132 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011010** | 1 | MW-008D | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 149 and the control limits were 63 to 128.

| | | | | |
|---|---|---|---|---|
| **3095011010** | 2 | MW-008D | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 125 and the control limits were 76 to 121.

| | | | | |
|---|---|---|---|---|
| **3095011010** | 3 | MW-008D | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 144 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011010** | 4 | MW-008D | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 132 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011011** | 1 | MW-009 | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 149 and the control limits were 63 to 128.

| | | | | |
|---|---|---|---|---|
| **3095011011** | 2 | MW-009 | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 125 and the control limits were 76 to 121.

| | | | | |
|---|---|---|---|---|
| **3095011011** | 3 | MW-009 | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 144 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011011** | 4 | MW-009 | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 132 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011012** | 1 | MW-009D | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 124 and the control limits were 76 to 121.

| | | | | |
|---|---|---|---|---|
| **3095011012** | 2 | MW-009D | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 136 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011012** | 3 | MW-009D | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 127 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011012** | 4 | MW-009D | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 136 and the control limits were 63 to 128.

| | | | | |
|---|---|---|---|---|
| **3095011013** | 1 | MW-010 | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 136 and the control limits were 63 to 128.

| | | | | |
|---|---|---|---|---|
| **3095011013** | 2 | MW-010 | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 124 and the control limits were 76 to 121.

## ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

| | | | | |
|---|---|---|---|---|
| **3095011013** | 3 | MW-010 | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 136 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011013** | 4 | MW-010 | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 127 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011014** | 1 | MW-010D | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 136 and the control limits were 63 to 128.

| | | | | |
|---|---|---|---|---|
| **3095011014** | 2 | MW-010D | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 124 and the control limits were 76 to 121.

| | | | | |
|---|---|---|---|---|
| **3095011014** | 3 | MW-010D | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 136 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011014** | 4 | MW-010D | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 127 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011015** | 1 | DUP-001 | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 136 and the control limits were 63 to 128.

| | | | | |
|---|---|---|---|---|
| **3095011015** | 2 | DUP-001 | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 124 and the control limits were 76 to 121.

| | | | | |
|---|---|---|---|---|
| **3095011015** | 3 | DUP-001 | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 136 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011015** | 4 | DUP-001 | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 127 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011016** | 1 | TB-001 | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 144 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011016** | 2 | TB-001 | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 132 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011016** | 3 | TB-001 | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 149 and the control limits were 63 to 128.

| | | | | |
|---|---|---|---|---|
| **3095011016** | 4 | TB-001 | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 125 and the control limits were 76 to 121.

| | | | | |
|---|---|---|---|---|
| **3095011017** | 1 | FB-001 | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 149 and the control limits were 63 to 128.

## ANALYTICAL RESULTS

Workorder: 3095011 CALVERT CITGO/5977

| | | | | |
|---|---|---|---|---|
| **3095011017** | 2 | FB-001 | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 125 and the control limits were 76 to 121.

| | | | | |
|---|---|---|---|---|
| **3095011017** | 3 | FB-001 | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 144 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011017** | 4 | FB-001 | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 132 and the control limits were 71 to 122.

| | | | | |
|---|---|---|---|---|
| **3095011018** | 1 | FB-002 | SW846 8260C | 1,1-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 149 and the control limits were 63 to 128.

| | | | | |
|---|---|---|---|---|
| **3095011018** | 2 | FB-002 | SW846 8260C | Methylene Chloride |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 125 and the control limits were 76 to 121.

| | | | | |
|---|---|---|---|---|
| **3095011018** | 3 | FB-002 | SW846 8260C | Carbon Disulfide |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 144 and the control limits were 57 to 131.

| | | | | |
|---|---|---|---|---|
| **3095011018** | 4 | FB-002 | SW846 8260C | trans-1,2-Dichloroethene |

The QC sample type LCS for method SW846 8260C was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 132 and the control limits were 71 to 122.

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

## ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3095011 CALVERT CITGO/5977

| Lab ID | Sample ID | Analysis Method | Prep Method |
|---|---|---|---|
| 3095011001 | MP-001 | SW846 8260C | |
| 3095011002 | MP-002 | SW846 8260C | |
| 3095011003 | MW-001R | SW846 8260C | |
| 3095011004 | MW-002 | SW846 8260C | |
| 3095011005 | MW-003 | SW846 8260C | |
| 3095011006 | MW-005 | SW846 8260C | |
| 3095011007 | MW-006 | SW846 8260C | |
| 3095011008 | MW-007 | SW846 8260C | |
| 3095011009 | MW-008 | SW846 8260C | |
| 3095011010 | MW-008D | SW846 8260C | |
| 3095011011 | MW-009 | SW846 8260C | |
| 3095011012 | MW-009D | SW846 8260C | |
| 3095011013 | MW-010 | SW846 8260C | |
| 3095011014 | MW-010D | SW846 8260C | |
| 3095011015 | DUP-001 | SW846 8260C | |
| 3095011016 | TB-001 | SW846 8260C | |
| 3095011017 | FB-001 | SW846 8260C | |
| 3095011018 | FB-002 | SW846 8260C | |

ALS Environmental
34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 3

Courier:

Tracking #:

*30950 11*

Co. Name: REPSG Inc.

Contact (Report to): Natalie Griffith

Phone: 215-729-3200

Address: 6901 Kingsessing Ave Philadelphia, PA 19142

Bill to (if different than Report to): Same as above

PO#: 19328

Project Name/#: Calvert Citgo/5977

ALS Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.

Date Required:

Approved By:

Email? X Y ngriffith@repsg.com

Fax? Y No.:

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Container Type | VOA | | | | | | | | | | | | | | | | | | | | | | |
| ***Container Size | 40ml | | | | | | | | | | | | | | | | | | | | | | |
| *** Preservative | HCl | | | | | | | | | | | | | | | | | | | | | | |

ANALYSES/METHOD REQUESTED

| | Sample Description/Location (as it will appear on the lab report) | COC Comments | Sample Date | Military Time | *G or C | **Matrix | VOCs via 8260C + Fuel Oxygenates | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Enter Number of Containers Per Analysis | | | | | | | | | | | | | | | | |
| 1 | MP-001 | | 3/30/20 | 1453 | G | GW | 3 | | | | | | | | | | | | | | | | |
| 2 | MP-002 | | 3/31/20 | 1245 | G | GW | 3 | | | | | | | | | | | | | | | | |
| 3 | MW-001R | | 3/31/20 | 1435 | G | GW | 3 | | | | | | | | | | | | | | | | |
| 4 | MW-002 | | 3/31/20 | 1320 | G | GW | 3 | | | | | | | | | | | | | | | | |
| 5 | MW-003 | | 3/31/20 | 1418 | G | GW | 3 | | | | | | | | | | | | | | | | |
| 6 | MW-005 | | 3/31/20 | 1426 | G | GW | 3 | | | | | | | | | | | | | | | | |
| 7 | MW-006 | | 3/31/20 | 1308 | G | GW | 3 | | | | | | | | | | | | | | | | |
| 8 | MW-007 | | 3/31/20 | 1450 | G | GW | 3 | | | | | | | | | | | | | | | | |

(completed by Sample Receiving)

Performed by: INITIAL HERE

Cooler Temp: 2

Therm. ID: 441

No. of Coolers:

Notes:

| | Correct containers? | Correct sample volume? | Correct preservation? | Headspace/Volatiles? | Circle appropriate Y or N. |
|---|---|---|---|---|---|
| | N | N | N | N | |
| | Y | Y | Y | Y | |

| | Custody seals Present? | (if present) Seals intact? | Received on Ice? | COC/Labels complete/accurate? | Container in good condition? |
|---|---|---|---|---|---|
| | N | N | N | N | N |
| | Y | Y | Y | Y | Y |

SAMPLED BY (Please Print): Anton Adams

Project Comments: EQuIS EDD Required

| Relinquished By / Company Name | Date | Time | Received By / Company Name | Date | Time |
|---|---|---|---|---|---|
| 1 Anton Adams / REPSG | 4/1/20 | 1112 | 2 [signature] | 4/1/2020 | 1112 |
| 3 [signature] | 4/1/2020 | | 4 COMMON COURIER/ALS COURIER | | |
| 5 COMMON COURIER/ALS COURIER | | | 6 [signature] 4/1/2020 | 2000 | |
| 7 | | | 8 | | |
| 9 | | | 10 | | |

Data Deliverables: [X] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

SDWA Forms? yes / yes / yes / yes

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

EDDs Required? [X] If yes, format type: REPSG EQuIS

Enter PWSID No.

DOD Criteria Required?

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

*G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Rev 01-2013

ALS Environmental

34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.



Courier:
Tracking #: 3495841

Co. Name: REPSG, Inc.
Contact (Report to): Natalie Griffith
Phone: 215-729-3200
Address: 6901 Kingsessing Ave
Philadelphia, PA 19142

Bill to (if different than Report to): same as above
PO#: 19328

Project Name/#: Calvert Citgo / 5977
ALS Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [X] Y ngriffith@repsg.com
Fax? [ ] Y No.:

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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| | | | | | | | | | | | | | | | | | | | | | | | |

ANALYSES/METHOD REQUESTED

| Sample Description/Location (as it will appear on the lab report) | COC Comments | Sample Date | Military Time | *G or C | **Matrix | VOCs via 8260C + Fuel Oxygenates | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 MW-008 | | 3/30/20 | 1520 | G | GW | 3 | | | | | | | | | | | | | | | | | |
| 2 MW-008D | | 3/30/20 | 1507 | G | GW | 3 | | | | | | | | | | | | | | | | | |
| 3 MW-009 | | 3/30/20 | 1416 | G | GW | 3 | | | | | | | | | | | | | | | | | |
| 4 MW-009D | | 3/31/20 | 1358 | G | GW | 3 | | | | | | | | | | | | | | | | | |
| 5 MW-010 | | 3/31/20 | 1350 | G | GW | 3 | | | | | | | | | | | | | | | | | |
| 6 MW-010D | | 3/31/20 | 1337 | G | GW | 3 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | |

Enter Number of Containers Per Analysis

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Container Type | VOC | | | | | | | | | | | | | | | | | | | | | | |
| ***Container Size | 40 ml | | | | | | | | | | | | | | | | | | | | | | |
| *** Preservative | HCl | | | | | | | | | | | | | | | | | | | | | | |

Receipt Information (completed by Sang's Receiving)
Performed by: INITIAL HERE
Cooler Temp: 2
Therm. ID: 941
No. of Coolers:
Notes:

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Correct containers? | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| Correct sample volume? | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| Correct preservation? | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| Headspace/Volatiles? | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| Circle appropriate Y or N. | | | | | | | | | | | | | | | | | | | | | | | |
| Custody seals Present? | | | | | | | | | | | | | | | | | | | | | | | |
| (if present) Seals intact? | | | | | | | | | | | | | | | | | | | | | | | |
| Received on ice? | | | | | | | | | | | | | | | | | | | | | | | |
| COC/Labels complete/accurate? | | | | | | | | | | | | | | | | | | | | | | | |
| Container in good condition? | | | | | | | | | | | | | | | | | | | | | | | |

SAMPLED BY (Please Print): Anton Adams

Project Comments: EQuIS EDD Required

| Relinquished By / Company Name | Date | Time | Received By / Company Name | Date | Time |
|---|---|---|---|---|---|
| 1 Anton Adams / REPSG | 4/1/20 | 1112 | 2 [signature] | 4/1/2020 | 1112 |
| 3 [signature] | 4/1/2020 | | 4 COMMON COURIER/ALS CUSTODY | | |
| 5 COMMON COURIER/ALS CUSTODY | | | 6 [signature] | 4/1/2020 | 2000 |
| 7 | | | 8 | | |
| 9 | | | 10 | | |

Data Deliverables: [X] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

SDWA Forms? ⇨ yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

EDDs Required? [X] If yes, format type: REPSG EQuIS

Enter PWSID No.

DQO Criteria Required?

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY ***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Rev 01-2013

ALS Environmental

34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.



Courier:
Tracking #:

36852411

Co. Name: REPSG, Inc.
Contact (Report to): Natalie Griffith
Phone: 215-729-3220
Address: 6901 Kingressing Ave
Philadelphia, PA 19142

Bill to (if different than Report to): same as above
PO#: 19328

Project Name/#:
ALS Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [X] -Y NGriffith@repsg.com
Fax? [ ] -Y No:

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Container Type | VOA | | | | | | | | | | | | | | | | | | | | | | |
| ***Container Size | 40ml | | | | | | | | | | | | | | | | | | | | | | |
| *** Preservative | HCl | | | | | | | | | | | | | | | | | | | | | | |
| ANALYSES/METHOD REQUESTED | | | | | | | | | | | | | | | | | | | | | | | |
| | | | VOCs via 8260C + Full Oxygenates | | | | | | | | | | | | | | | | | | | | |

| Sample Description/Location (as it will appear on the lab report) | COC Comments | Sample Date | Military Time | *G or C | **Matrix | Enter Number of Containers Per Analysis | | | | | | | | | Correct containers? | Correct sample volume? | Correct preservation? | Headspace/Volatiles? | Circle appropriate Y or N. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 DUP-001 | | 3/31/20 | — | G | GW | 3 | | | | | | | | | N Y | N Y | N Y | N Y | |
| 2 TB-001 | | 3/31/20 | — | G | GW | 2 | | | | | | | | | N | N | N | N | N |
| 3 FB-001 | | 3/31/20 | — | G | GW | 3 | | | | | | | | | Y | Y | Y | Y | Y |
| 4 FB-002 | | 3/31/20 | — | G | GW | 3 | | | | | | | | | Custody seals Present? | (if present) Seals intact? | Received on ice? | COC/Labels complete/accurate? | Container in good condition? |
| 5 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | |

Receipt Information (completed by Sample Receiving)
Performed by: INITIAL HERE
Cooler Temp: 2
Therm. ID: 441
No. of Coolers:
Notes:

SAMPLED BY (Please Print): Anton Adams

Project Comments: EQuIS EDD Required

| Relinquished By / Company Name | Date | Time | Received By / Company Name | Date | Time |
|---|---|---|---|---|---|
| 1 Anton Adams / REPSG | 4/1/20 | 1112 | 2 [signature] | 4/1/20 | 1112 |
| 3 [signature] | 4/1/2020 | | 4 COMMON COURIER/ALS [signature] | | |
| 5 COMMON COURIER/ALS [signature] | | | 6 [signature] | 4/1/2020 | 2000 |
| 7 | | | 8 | | |
| 9 | | | 10 | | |

Data Deliverables: [X] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] new

SDWA Forms? ⇨ yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ]

Other

EDDs Required? [X] If yes, format type: REPSG EQuIS

⇨ Enter PWSID No.

QQD Criteria Required?

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite
**Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 01-2013

301 Fulling Mill Road
Middletown, PA 17057
P: (717) 944-5541
F: (717) 944-1430

# Condition of Sample Receipt Form

| Client: | Work Order #: | Initials: | Date: |
|---|---|---|---|
| TCEPSG | 3095011 | LW | 4-2-20 |

| | | | |
|---|---|---|---|
| 1. Were airbills / tracking numbers present and recorded? | NONE | YES | NO |
| Tracking number: _____ | | | |
| 2. Are Custody Seals on shipping containers intact? | NONE | YES | NO |
| 3. Are Custody Seals on sample containers intact? | NONE | YES | NO |
| 4. Is there a COC (Chain-of-Custody) present? | | YES | NO |
| 5. Are the COC and bottle labels complete, legible and in agreement? | | YES | NO |
| 5a. Does the COC contain sample locations? | | YES | NO |
| 5b. Does the COC contain date and time of sample collection for all samples? | | YES | NO |
| 5c. Does the COC contain sample collectors name? | | YES | NO |
| 5d. Does the COC note the type(s) of preservation for all bottles? | | YES | NO |
| 5e. Does the COC note the number of bottles submitted for each sample? | | YES | NO |
| 5f. Does the COC note the type of sample, composite or grab? | | YES | NO |
| 5g. Does the COC note the matrix of the sample(s)? | | YES | NO |
| 6. Are all aqueous samples requiring preservation preserved correctly?[1] | N/A | YES | NO |
| 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume? | | YES | NO |
| 8. Are all samples within holding times for the requested analyses? | | YES | NO |
| 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.) | | YES | NO |
| 10. Did we receive trip blanks ( applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)? | N/A | YES | NO |
| 11. Were the samples received on ice? | | YES | NO |
| 12. Were sample temperatures measured at 0.0-6.0°C | | YES | NO |
| 13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below | | YES | NO |
| 13a. Are the samples required for SDWA compliance reporting? | N/A | YES | NO |
| 13b. Did the client provide a SDWA PWS ID#? | N/A | YES | NO |
| 13c. Are all aqueous unpreserved SDWA samples pH 5-9? | N/A | YES | NO |
| 13d. Did the client provide the SDWA sample location ID/Description? | N/A | YES | NO |
| 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)? | N/A | YES | NO |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Cooler #: | 1 | | | | | | | |
| Temperature (°C): | 2 | | | | | | | |
| Thermometer ID: | 441 | | | | | | | |
| Radiological (µCi): | | | | | | | | |

COMMENTS (Required for all NO responses above and any sample non-conformance):

[1]Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

Rev 1/20/2020

# 2794 NORTHEAST ROAD

## LABORATORY REPORTS AND CHAINS OF CUSTODY

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

January 24, 2020

Mr. John Filoon
REPSG
6901 Kingsessing Avenue
Suite 201
Philadelphia, PA 19142

# Certificate of Analysis

| | | | |
|---|---|---|---|
| Project Name: | **CALVERT CITGO/5977** | Workorder: | **3081721** |
| Purchase Order: | **19107** | Workorder ID: | **CALVERT CITGO/5977** |

Dear Mr. Filoon:

Enclosed are the analytical results for samples received by the laboratory on Monday, January 20, 2020.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Natalie Griffith , Ms. S Shourds , Ms. Brenda MacPhail Kellogg

*This page is included as part of the Analytical Report and must be retained as a permanent record thereof.*

Susan J. Scherer

Ms. Susan J Scherer
Project Coordinator

ALS Environmental

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

## SAMPLE SUMMARY

Workorder: 3081721 CALVERT CITGO/5977

| Lab ID | Sample ID | Matrix | Date Collected | Date Received | Collected By |
|---|---|---|---|---|---|
| 3081721001 | DW-004C | Drinking Water | 1/17/2020 10:10 | 1/20/2020 19:30 | Collected by Client |
| 3081721002 | DW-004I | Drinking Water | 1/17/2020 10:20 | 1/20/2020 19:30 | Collected by Client |
| 3081721003 | DW-004J | Drinking Water | 1/17/2020 10:25 | 1/20/2020 19:30 | Collected by Client |
| 3081721004 | DW-004K | Drinking Water | 1/17/2020 10:30 | 1/20/2020 19:30 | Collected by Client |
| 3081721005 | TB-001 | Drinking Water | 1/20/2020 19:30 | 1/20/2020 19:30 | Collected by Client |

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# SAMPLE SUMMARY

Workorder: 3081721 CALVERT CITGO/5977

**Notes**

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
-- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

**Standard Acronyms/Flags**

| | |
|---|---|
| J | Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte |
| U | Indicates that the analyte was Not Detected (ND) |
| N | Indicates presumptive evidence of the presence of a compound |
| MDL | Method Detection Limit |
| PQL | Practical Quantitation Limit |
| RDL | Reporting Detection Limit |
| ND | Not Detected - indicates that the analyte was Not Detected at the RDL |
| Cntr | Analysis was performed using this container |
| RegLmt | Regulatory Limit |
| LCS | Laboratory Control Sample |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| DUP | Sample Duplicate |
| %Rec | Percent Recovery |
| RPD | Relative Percent Difference |
| LOD | DoD Limit of Detection |
| LOQ | DoD Limit of Quantitation |
| DL | DoD Detection Limit |
| I | Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL) |
| (S) | Surrogate Compound |
| NC | Not Calculated |
| * | Result outside of QC limits |

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# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721001** Date Collected: 1/17/2020 10:10 Matrix: Drinking Water

Sample ID: **DW-004C** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | 22.8 | | ug/L | 5.0 | 2.2 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Acrylonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| tert-Amyl methyl ether | 3.1 | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| tert-Amyl Alcohol | ND | | ug/L | 5.0 | 1.6 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| tert-Amyl Ethylether | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Benzene | ND | | ug/L | 0.50 | 0.070 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Bromobenzene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Bromochloromethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Bromodichloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Bromoform | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Bromomethane | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 2-Butanone | ND | | ug/L | 2.5 | 1.3 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| tert-Butyl Alcohol | 3970 | | ug/L | 500 | 140 | EPA 524.2 | | 1/24/20 04:45 | PDK | B |
| n-Butylbenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| tert-Butylbenzene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| sec-Butylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Carbon Disulfide | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Carbon Tetrachloride | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Chloroacetonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Chlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1-Chlorobutane | ND | | ug/L | 1.0 | 0.28 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Chlorodibromomethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Chloroethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Chloroform | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Chloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 3-Chloro-1-propene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| o-Chlorotoluene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| p-Chlorotoluene | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,2-Dibromoethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Dibromomethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| trans-1,4-Dichloro-2-butene | ND | | ug/L | 1.0 | 0.27 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,1-Dichloro-2-Propanone | ND | | ug/L | 12.5 | 2.2 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,2-Dichlorobenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,3-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,4-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721001** Date Collected: 1/17/2020 10:10 Matrix: Drinking Water

Sample ID: **DW-004C** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,1-Dichloroethane | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,2-Dichloroethane | 12.6 | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,1-Dichloroethene | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Dichlorofluoromethane | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,3-Dichloropropane | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 2,2-Dichloropropane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,2-Dichloropropane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,1-Dichloropropene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,3-Dichloropropene, Total | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Diisopropyl ether | 6.4 | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 1,4-Dioxane | ND | 1 | ug/L | 50.0 | 4.0 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Ethyl Ether | 0.30J | J | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Ethyl Methacrylate | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Ethyl tert-butyl ether | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Ethylbenzene | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Hexachlorobutadiene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Hexachloroethane | ND | | ug/L | 1.0 | 0.32 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Hexane | ND | 4 | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 2-Hexanone | ND | | ug/L | 2.5 | 0.82 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Iodomethane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Isopropyl Alcohol | ND | 3 | ug/L | 25.0 | 3.9 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Isopropylbenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| p-Isopropyltoluene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Methacrylonitrile | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Methyl methacrylate | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Methyl acrylate | ND | | ug/L | 1.0 | 0.21 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Methyl t-Butyl Ether | 415 | | ug/L | 50.0 | 9.0 | EPA 524.2 | | 1/24/20 04:45 | PDK | B |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 2.5 | 0.56 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Methylene Chloride | ND | | ug/L | 0.50 | 0.32 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Naphthalene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Nitrobenzene | ND | 2 | ug/L | 5.0 | 1.8 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| 2-Nitropropane | ND | | ug/L | 2.5 | 0.80 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |
| Pentachloroethane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 18:44 | TMP | A |

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# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721001** Date Collected: 1/17/2020 10:10 Matrix: Drinking Water

Sample ID: **DW-004C** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Propionitrile | ND | | ug/L | 2.5 | 0.70 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| n-Propylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Styrene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Tetrachloroethene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Tetrahydrofuran | ND | | ug/L | 2.5 | 0.81 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Toluene | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Total Xylenes | ND | | ug/L | 0.50 | 0.27 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,2,3-Trichlorobenzene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,2,4-Trichlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Trichloroethene | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Trichlorofluoromethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,2,3-Trichloropropane | ND | | ug/L | 0.50 | 0.28 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Vinyl Acetate | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| Vinyl Chloride | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| o-Xylene | ND | | ug/L | 0.25 | 0.050 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| mp-Xylene | ND | | ug/L | 0.25 | 0.080 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene-d4 (S) | 94.2 | | % | 70 - 130 | EPA 524.2 | | | 1/24/20 04:45 | PDK | B |
| 1,2-Dichlorobenzene-d4 (S) | 92.7 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |
| 4-Bromofluorobenzene (S) | 88.5 | | % | 70 - 130 | EPA 524.2 | | | 1/24/20 04:45 | PDK | B |
| 4-Bromofluorobenzene (S) | 88.6 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 18:44 | TMP | A |

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# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721002** Date Collected: 1/17/2020 10:20 Matrix: Drinking Water

Sample ID: **DW-004I** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | 6.9 | | ug/L | 5.0 | 2.2 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Acrylonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| tert-Amyl methyl ether | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| tert-Amyl Alcohol | ND | | ug/L | 5.0 | 1.6 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| tert-Amyl Ethylether | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Benzene | ND | | ug/L | 0.50 | 0.070 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Bromobenzene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Bromochloromethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Bromodichloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Bromoform | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Bromomethane | 0.21J | J | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 2-Butanone | ND | | ug/L | 2.5 | 1.3 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| tert-Butyl Alcohol | 4790 | | ug/L | 500 | 140 | EPA 524.2 | | 1/24/20 05:09 | PDK | B |
| n-Butylbenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| tert-Butylbenzene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| sec-Butylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Carbon Disulfide | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Carbon Tetrachloride | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Chloroacetonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Chlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1-Chlorobutane | ND | | ug/L | 1.0 | 0.28 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Chlorodibromomethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Chloroethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Chloroform | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Chloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 3-Chloro-1-propene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| o-Chlorotoluene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| p-Chlorotoluene | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,2-Dibromoethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Dibromomethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| trans-1,4-Dichloro-2-butene | ND | | ug/L | 1.0 | 0.27 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,1-Dichloro-2-Propanone | ND | | ug/L | 12.5 | 2.2 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,2-Dichlorobenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,3-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,4-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |

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# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721002** Date Collected: 1/17/2020 10:20 Matrix: Drinking Water

Sample ID: **DW-004I** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,1-Dichloroethane | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,2-Dichloroethane | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,1-Dichloroethene | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Dichlorofluoromethane | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,3-Dichloropropane | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 2,2-Dichloropropane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,2-Dichloropropane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,1-Dichloropropene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,3-Dichloropropene, Total | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Diisopropyl ether | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 1,4-Dioxane | ND | 1 | ug/L | 50.0 | 4.0 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Ethyl Ether | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Ethyl Methacrylate | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Ethyl tert-butyl ether | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Ethylbenzene | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Hexachlorobutadiene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Hexachloroethane | ND | | ug/L | 1.0 | 0.32 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Hexane | ND | 4 | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 2-Hexanone | ND | | ug/L | 2.5 | 0.82 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Iodomethane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Isopropyl Alcohol | ND | 3 | ug/L | 25.0 | 3.9 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Isopropylbenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| p-Isopropyltoluene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Methacrylonitrile | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Methyl methacrylate | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Methyl acrylate | ND | | ug/L | 1.0 | 0.21 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Methyl t-Butyl Ether | 19.3 | | ug/L | 0.50 | 0.090 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 2.5 | 0.56 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Methylene Chloride | ND | | ug/L | 0.50 | 0.32 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Naphthalene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Nitrobenzene | ND | 2 | ug/L | 5.0 | 1.8 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| 2-Nitropropane | ND | | ug/L | 2.5 | 0.80 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |
| Pentachloroethane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 18:20 | TMP | A |

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# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721002** Date Collected: 1/17/2020 10:20 Matrix: Drinking Water
Sample ID: **DW-004I** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Propionitrile | ND | | ug/L | 2.5 | 0.70 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| n-Propylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Styrene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Tetrachloroethene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Tetrahydrofuran | ND | | ug/L | 2.5 | 0.81 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Toluene | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Total Xylenes | ND | | ug/L | 0.50 | 0.27 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,2,3-Trichlorobenzene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,2,4-Trichlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Trichloroethene | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Trichlorofluoromethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,2,3-Trichloropropane | ND | | ug/L | 0.50 | 0.28 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Vinyl Acetate | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| Vinyl Chloride | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| o-Xylene | ND | | ug/L | 0.25 | 0.050 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| mp-Xylene | ND | | ug/L | 0.25 | 0.080 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene-d4 (S) | 92.3 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |
| 1,2-Dichlorobenzene-d4 (S) | 101 | | % | 70 - 130 | EPA 524.2 | | | 1/24/20 05:09 | PDK | B |
| 4-Bromofluorobenzene (S) | 91.9 | | % | 70 - 130 | EPA 524.2 | | | 1/24/20 05:09 | PDK | B |
| 4-Bromofluorobenzene (S) | 86.7 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 18:20 | TMP | A |

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# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721003** Date Collected: 1/17/2020 10:25 Matrix: Drinking Water

Sample ID: **DW-004J** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | 7.2 | | ug/L | 5.0 | 2.2 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Acrylonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| tert-Amyl methyl ether | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| tert-Amyl Alcohol | ND | | ug/L | 5.0 | 1.6 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| tert-Amyl Ethylether | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Benzene | ND | | ug/L | 0.50 | 0.070 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Bromobenzene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Bromochloromethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Bromodichloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Bromoform | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Bromomethane | 0.48J | J | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 2-Butanone | ND | | ug/L | 2.5 | 1.3 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| tert-Butyl Alcohol | 4560 | | ug/L | 500 | 140 | EPA 524.2 | | 1/24/20 05:34 | PDK | B |
| n-Butylbenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| tert-Butylbenzene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| sec-Butylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Carbon Disulfide | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Carbon Tetrachloride | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Chloroacetonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Chlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1-Chlorobutane | ND | | ug/L | 1.0 | 0.28 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Chlorodibromomethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Chloroethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Chloroform | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Chloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 3-Chloro-1-propene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| o-Chlorotoluene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| p-Chlorotoluene | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,2-Dibromoethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Dibromomethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| trans-1,4-Dichloro-2-butene | ND | | ug/L | 1.0 | 0.27 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,1-Dichloro-2-Propanone | ND | | ug/L | 12.5 | 2.2 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,2-Dichlorobenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,3-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,4-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721003** Date Collected: 1/17/2020 10:25 Matrix: Drinking Water

Sample ID: **DW-004J** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,1-Dichloroethane | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,2-Dichloroethane | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,1-Dichloroethene | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Dichlorofluoromethane | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,3-Dichloropropane | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 2,2-Dichloropropane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,2-Dichloropropane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,1-Dichloropropene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,3-Dichloropropene, Total | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Diisopropyl ether | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 1,4-Dioxane | ND | 1 | ug/L | 50.0 | 4.0 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Ethyl Ether | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Ethyl Methacrylate | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Ethyl tert-butyl ether | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Ethylbenzene | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Hexachlorobutadiene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Hexachloroethane | ND | | ug/L | 1.0 | 0.32 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Hexane | ND | 4 | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 2-Hexanone | ND | | ug/L | 2.5 | 0.82 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Iodomethane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Isopropyl Alcohol | ND | 3 | ug/L | 25.0 | 3.9 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Isopropylbenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| p-Isopropyltoluene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Methacrylonitrile | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Methyl methacrylate | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Methyl acrylate | ND | | ug/L | 1.0 | 0.21 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Methyl t-Butyl Ether | 0.37J | J | ug/L | 0.50 | 0.090 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 2.5 | 0.56 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Methylene Chloride | ND | | ug/L | 0.50 | 0.32 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Naphthalene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Nitrobenzene | ND | 2 | ug/L | 5.0 | 1.8 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| 2-Nitropropane | ND | | ug/L | 2.5 | 0.80 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |
| Pentachloroethane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:55 | TMP | A |

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

## ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721003** Date Collected: 1/17/2020 10:25 Matrix: Drinking Water
Sample ID: **DW-004J** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Propionitrile | ND | | ug/L | 2.5 | 0.70 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| n-Propylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Styrene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Tetrachloroethene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Tetrahydrofuran | ND | | ug/L | 2.5 | 0.81 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Toluene | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Total Xylenes | ND | | ug/L | 0.50 | 0.27 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,2,3-Trichlorobenzene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,2,4-Trichlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Trichloroethene | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Trichlorofluoromethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,2,3-Trichloropropane | ND | | ug/L | 0.50 | 0.28 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Vinyl Acetate | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| Vinyl Chloride | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| o-Xylene | ND | | ug/L | 0.25 | 0.050 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| mp-Xylene | ND | | ug/L | 0.25 | 0.080 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene-d4 (S) | 97.6 | | % | 70 - 130 | EPA 524.2 | | | 1/24/20 05:34 | PDK | B |
| 1,2-Dichlorobenzene-d4 (S) | 91.6 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 4-Bromofluorobenzene (S) | 88 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 17:55 | TMP | A |
| 4-Bromofluorobenzene (S) | 91 | | % | 70 - 130 | EPA 524.2 | | | 1/24/20 05:34 | PDK | B |

Ms. Susan J Scherer
Project Coordinator

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721004** Date Collected: 1/17/2020 10:30 Matrix: Drinking Water

Sample ID: **DW-004K** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | 16.6 | | ug/L | 5.0 | 2.2 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Acrylonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| tert-Amyl methyl ether | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| tert-Amyl Alcohol | ND | | ug/L | 5.0 | 1.6 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| tert-Amyl Ethylether | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Benzene | ND | | ug/L | 0.50 | 0.070 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Bromobenzene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Bromochloromethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Bromodichloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Bromoform | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Bromomethane | 0.29J | J | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 2-Butanone | ND | | ug/L | 2.5 | 1.3 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| tert-Butyl Alcohol | 4490 | | ug/L | 500 | 140 | EPA 524.2 | | 1/24/20 05:58 | PDK | B |
| n-Butylbenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| tert-Butylbenzene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| sec-Butylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Carbon Disulfide | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Carbon Tetrachloride | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Chloroacetonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Chlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1-Chlorobutane | ND | | ug/L | 1.0 | 0.28 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Chlorodibromomethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Chloroethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Chloroform | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Chloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 3-Chloro-1-propene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| o-Chlorotoluene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| p-Chlorotoluene | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,2-Dibromoethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Dibromomethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| trans-1,4-Dichloro-2-butene | ND | | ug/L | 1.0 | 0.27 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,1-Dichloro-2-Propanone | ND | | ug/L | 12.5 | 2.2 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,2-Dichlorobenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,3-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,4-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721004** Date Collected: 1/17/2020 10:30 Matrix: Drinking Water

Sample ID: **DW-004K** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,1-Dichloroethane | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,2-Dichloroethane | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,1-Dichloroethene | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Dichlorofluoromethane | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,3-Dichloropropane | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 2,2-Dichloropropane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,2-Dichloropropane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,1-Dichloropropene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,3-Dichloropropene, Total | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Diisopropyl ether | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 1,4-Dioxane | ND | 1 | ug/L | 50.0 | 4.0 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Ethyl Ether | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Ethyl Methacrylate | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Ethyl tert-butyl ether | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Ethylbenzene | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Hexachlorobutadiene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Hexachloroethane | ND | | ug/L | 1.0 | 0.32 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Hexane | ND | 4 | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 2-Hexanone | ND | | ug/L | 2.5 | 0.82 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Iodomethane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Isopropyl Alcohol | ND | 3 | ug/L | 25.0 | 3.9 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Isopropylbenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| p-Isopropyltoluene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Methacrylonitrile | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Methyl methacrylate | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Methyl acrylate | ND | | ug/L | 1.0 | 0.21 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Methyl t-Butyl Ether | ND | | ug/L | 0.50 | 0.090 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 2.5 | 0.56 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Methylene Chloride | ND | | ug/L | 0.50 | 0.32 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Naphthalene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Nitrobenzene | ND | 2 | ug/L | 5.0 | 1.8 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| 2-Nitropropane | ND | | ug/L | 2.5 | 0.80 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |
| Pentachloroethane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:31 | TMP | A |

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## ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721004** Date Collected: 1/17/2020 10:30 Matrix: Drinking Water
Sample ID: **DW-004K** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Propionitrile | ND | | ug/L | 2.5 | 0.70 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| n-Propylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Styrene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Tetrachloroethene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Tetrahydrofuran | ND | | ug/L | 2.5 | 0.81 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Toluene | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Total Xylenes | ND | | ug/L | 0.50 | 0.27 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,2,3-Trichlorobenzene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,2,4-Trichlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Trichloroethene | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Trichlorofluoromethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,2,3-Trichloropropane | ND | | ug/L | 0.50 | 0.28 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Vinyl Acetate | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| Vinyl Chloride | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| o-Xylene | ND | | ug/L | 0.25 | 0.050 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| mp-Xylene | ND | | ug/L | 0.25 | 0.080 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene-d4 (S) | 96.5 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |
| 1,2-Dichlorobenzene-d4 (S) | 93.6 | | % | 70 - 130 | EPA 524.2 | | | 1/24/20 05:58 | PDK | B |
| 4-Bromofluorobenzene (S) | 87.7 | | % | 70 - 130 | EPA 524.2 | | | 1/24/20 05:58 | PDK | B |
| 4-Bromofluorobenzene (S) | 91.9 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 17:31 | TMP | A |

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# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721005** Date Collected: 1/20/2020 19:30 Matrix: Drinking Water

Sample ID: **TB-001** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | | |
| Acetone | 185 | | ug/L | 5.0 | 2.2 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Acrylonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| tert-Amyl methyl ether | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| tert-Amyl Alcohol | ND | | ug/L | 5.0 | 1.6 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| tert-Amyl Ethylether | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Benzene | ND | | ug/L | 0.50 | 0.070 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Bromobenzene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Bromochloromethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Bromodichloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Bromoform | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Bromomethane | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 2-Butanone | ND | | ug/L | 2.5 | 1.3 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| tert-Butyl Alcohol | 17.8 | | ug/L | 5.0 | 1.4 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| n-Butylbenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| tert-Butylbenzene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| sec-Butylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Carbon Disulfide | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Carbon Tetrachloride | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Chloroacetonitrile | ND | | ug/L | 2.5 | 0.88 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Chlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1-Chlorobutane | ND | | ug/L | 1.0 | 0.28 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Chlorodibromomethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Chloroethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Chloroform | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Chloromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 3-Chloro-1-propene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| o-Chlorotoluene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| p-Chlorotoluene | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,2-Dibromoethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Dibromomethane | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| trans-1,4-Dichloro-2-butene | ND | | ug/L | 1.0 | 0.27 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,1-Dichloro-2-Propanone | ND | | ug/L | 12.5 | 2.2 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,2-Dichlorobenzene | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,3-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,4-Dichlorobenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |

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# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721005** Date Collected: 1/20/2020 19:30 Matrix: Drinking Water

Sample ID: **TB-001** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared By | Analyzed | By | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,1-Dichloroethane | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,2-Dichloroethane | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,1-Dichloroethene | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| cis-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| trans-1,2-Dichloroethene | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Dichlorofluoromethane | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,3-Dichloropropane | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 2,2-Dichloropropane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,2-Dichloropropane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,1-Dichloropropene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| cis-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| trans-1,3-Dichloropropene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,3-Dichloropropene, Total | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Diisopropyl ether | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 1,4-Dioxane | ND | 1 | ug/L | 50.0 | 4.0 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Ethyl Ether | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Ethyl Methacrylate | ND | | ug/L | 0.50 | 0.16 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Ethyl tert-butyl ether | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Ethylbenzene | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Hexachlorobutadiene | ND | | ug/L | 0.50 | 0.24 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Hexachloroethane | ND | | ug/L | 1.0 | 0.32 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Hexane | ND | 4 | ug/L | 0.50 | 0.22 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 2-Hexanone | ND | | ug/L | 2.5 | 0.82 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Iodomethane | ND | | ug/L | 0.50 | 0.19 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Isopropyl Alcohol | ND | 3 | ug/L | 25.0 | 3.9 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Isopropylbenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| p-Isopropyltoluene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Methacrylonitrile | ND | | ug/L | 1.0 | 0.23 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Methyl methacrylate | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Methyl acrylate | ND | | ug/L | 1.0 | 0.21 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Methyl t-Butyl Ether | ND | | ug/L | 0.50 | 0.090 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 4-Methyl-2-Pentanone(MIBK) | ND | | ug/L | 2.5 | 0.56 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Methylene Chloride | ND | | ug/L | 0.50 | 0.32 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Naphthalene | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Nitrobenzene | ND | 2 | ug/L | 5.0 | 1.8 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| 2-Nitropropane | ND | | ug/L | 2.5 | 0.80 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |
| Pentachloroethane | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | 1/22/20 17:06 | TMP | A |

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## ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

Lab ID: **3081721005** Date Collected: 1/20/2020 19:30 Matrix: Drinking Water

Sample ID: **TB-001** Date Received: 1/20/2020 19:30

| Parameters | Results | Flag | Units | RDL | MDL | Method | Prepared | By | Analyzed | By | Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Propionitrile | ND | | ug/L | 2.5 | 0.70 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| n-Propylbenzene | ND | | ug/L | 0.50 | 0.10 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Styrene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.50 | 0.13 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Tetrachloroethene | ND | | ug/L | 0.50 | 0.17 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Tetrahydrofuran | ND | | ug/L | 2.5 | 0.81 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Toluene | ND | | ug/L | 0.50 | 0.12 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Total Xylenes | ND | | ug/L | 0.50 | 0.27 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,2,3-Trichlorobenzene | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,2,4-Trichlorobenzene | ND | | ug/L | 0.50 | 0.14 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,1,1-Trichloroethane | ND | | ug/L | 0.50 | 0.15 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,1,2-Trichloroethane | ND | | ug/L | 0.50 | 0.20 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Trichloroethene | ND | | ug/L | 0.50 | 0.21 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Trichlorofluoromethane | ND | | ug/L | 0.50 | 0.18 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,2,3-Trichloropropane | ND | | ug/L | 0.50 | 0.28 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 0.50 | 0.11 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Vinyl Acetate | ND | | ug/L | 0.50 | 0.22 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| Vinyl Chloride | ND | | ug/L | 0.50 | 0.23 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| o-Xylene | ND | | ug/L | 0.25 | 0.050 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| mp-Xylene | ND | | ug/L | 0.25 | 0.080 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |

| *Surrogate Recoveries* | *Results* | *Flag* | *Units* | *Limits* | *Method* | *Prepared* | *By* | *Analyzed* | *By* | *Cntr* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene-d4 (S) | 95.5 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |
| 4-Bromofluorobenzene (S) | 90.9 | | % | 70 - 130 | EPA 524.2 | | | 1/22/20 17:06 | TMP | A |

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Ms. Susan J Scherer
Project Coordinator

# ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

**PARAMETER QUALIFIERS**

| Lab ID | # | Sample ID | Analytical Method | Analyte |
|---|---|---|---|---|
| **3081721001** | 1 | DW-004C | EPA 524.2 | 1,4-Dioxane |
| The QC sample type LCSLOW for method EPA 524.2 was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 133 and the control limits were 70 to 130. | | | | |
| **3081721001** | 2 | DW-004C | EPA 524.2 | Nitrobenzene |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Nitrobenzene. The % Recovery was reported as 139 and the control limits were 70 to 130. | | | | |
| **3081721001** | 3 | DW-004C | EPA 524.2 | Isopropyl Alcohol |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Isopropyl Alcohol. The % Recovery was reported as 139 and the control limits were 70 to 130. | | | | |
| **3081721001** | 4 | DW-004C | EPA 524.2 | Hexane |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Hexane. The % Recovery was reported as 132 and the control limits were 70 to 130. | | | | |
| **3081721002** | 1 | DW-004I | EPA 524.2 | 1,4-Dioxane |
| The QC sample type LCSLOW for method EPA 524.2 was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 133 and the control limits were 70 to 130. | | | | |
| **3081721002** | 2 | DW-004I | EPA 524.2 | Nitrobenzene |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Nitrobenzene. The % Recovery was reported as 139 and the control limits were 70 to 130. | | | | |
| **3081721002** | 3 | DW-004I | EPA 524.2 | Isopropyl Alcohol |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Isopropyl Alcohol. The % Recovery was reported as 139 and the control limits were 70 to 130. | | | | |
| **3081721002** | 4 | DW-004I | EPA 524.2 | Hexane |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Hexane. The % Recovery was reported as 132 and the control limits were 70 to 130. | | | | |
| **3081721003** | 1 | DW-004J | EPA 524.2 | 1,4-Dioxane |
| The QC sample type LCSLOW for method EPA 524.2 was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 133 and the control limits were 70 to 130. | | | | |
| **3081721003** | 2 | DW-004J | EPA 524.2 | Nitrobenzene |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Nitrobenzene. The % Recovery was reported as 139 and the control limits were 70 to 130. | | | | |
| **3081721003** | 3 | DW-004J | EPA 524.2 | Isopropyl Alcohol |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Isopropyl Alcohol. The % Recovery was reported as 139 and the control limits were 70 to 130. | | | | |
| **3081721003** | 4 | DW-004J | EPA 524.2 | Hexane |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Hexane. The % Recovery was reported as 132 and the control limits were 70 to 130. | | | | |
| **3081721004** | 1 | DW-004K | EPA 524.2 | 1,4-Dioxane |
| The QC sample type LCSLOW for method EPA 524.2 was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 133 and the control limits were 70 to 130. | | | | |
| **3081721004** | 2 | DW-004K | EPA 524.2 | Nitrobenzene |
| The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Nitrobenzene. The % Recovery was reported as 139 and the control limits were 70 to 130. | | | | |

## ANALYTICAL RESULTS

Workorder: 3081721 CALVERT CITGO/5977

| | | | | |
|---|---|---|---|---|
| **3081721004** | 3 | DW-004K | EPA 524.2 | Isopropyl Alcohol |

The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Isopropyl Alcohol. The % Recovery was reported as 139 and the control limits were 70 to 130.

| | | | | |
|---|---|---|---|---|
| **3081721004** | 4 | DW-004K | EPA 524.2 | Hexane |

The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Hexane. The % Recovery was reported as 132 and the control limits were 70 to 130.

| | | | | |
|---|---|---|---|---|
| **3081721005** | 1 | TB-001 | EPA 524.2 | 1,4-Dioxane |

The QC sample type LCSLOW for method EPA 524.2 was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 133 and the control limits were 70 to 130.

| | | | | |
|---|---|---|---|---|
| **3081721005** | 2 | TB-001 | EPA 524.2 | Nitrobenzene |

The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Nitrobenzene. The % Recovery was reported as 139 and the control limits were 70 to 130.

| | | | | |
|---|---|---|---|---|
| **3081721005** | 3 | TB-001 | EPA 524.2 | Isopropyl Alcohol |

The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Isopropyl Alcohol. The % Recovery was reported as 139 and the control limits were 70 to 130.

| | | | | |
|---|---|---|---|---|
| **3081721005** | 4 | TB-001 | EPA 524.2 | Hexane |

The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Hexane. The % Recovery was reported as 132 and the control limits were 70 to 130.

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

## ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3081721 CALVERT CITGO/5977

| Lab ID | Sample ID | Analysis Method | Prep Method |
|---|---|---|---|
| 3081721001 | DW-004C | EPA 524.2 | |
| 3081721002 | DW-004I | EPA 524.2 | |
| 3081721003 | DW-004J | EPA 524.2 | |
| 3081721004 | DW-004K | EPA 524.2 | |
| 3081721005 | TB-001 | EPA 524.2 | |

2794 NE

ALS Environmental

34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #:

*3081721*

Co. Name: Repsg, Inc.
Contact (Report to): John Filoom
Phone: 215 729 3720
Address: 6901 Kingsessing Ave
Philadelphia, PA 19142

Bill to (if different than Report to): Same
PO#: 19107

Project Name/#: Calvert Citgo / 5977
ALS Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [X] Y JFiloom@repsg.com
Fax? [ ] Y No.:

| | Sample Description/Location (as it will appear on the lab report) | COC Comments | Sample Date | Military Time | *G or C | **Matrix | VOCs via 524 + fuel oxygenates | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Container Type | | | | | | VOA | | | | | | | | | |
| | ***Container Size | | | | | | 40ml | | | | | | | | | |
| | *** Preservative | | | | | | *SC HCL | | | | | | | | | |
| 1 | DW-004C | Pre | 1/17/20 | 1010 | G | DW | 3 | | | | | | | | | |
| 2 | DW-004I | Mid 1 | ↓ | 1020 | G | DW | 3 | | | | | | | | | |
| 3 | DW-004J | Mid 2 | | 1025 | G | DW | 3 | | | | | | | | | |
| 4 | DW-004K | Post | | 1030 | G | DW | 3 | | | | | | | | | |
| 5 | TB-001 | Trip Blank | | | G | DI | 3 | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |

ANALYSES/METHOD REQUESTED — Enter Number of Containers Per Analysis

Cooler Temp: 3
Therm. ID: 815
No. of Coolers:
Notes:

Circle appropriate Y or N.: Correct containers? Y N; Correct sample volume? Y N; Correct preservation? Y N; Headspace/Volatiles? Y N; Custody seals Present? Y N; (if present) Seals intact? Y N; Received on Ice? Y N; COC/Labels complete/accurate? Y N; Container in good condition? Y N

SAMPLED BY (Please Print): Anton Adams

Project Comments: EQUIS EDD

| Relinquished By / Company Name | Date | Time | Received By / Company Name | Date | Time |
|---|---|---|---|---|---|
| 1 Robert Hesse / REPSG | 1/20/20 | 10:48 | 2 Chris Francis | 1-20-20 | 1048 |
| 3 Chris Francis | 1/20/20 | 1900 | 4 COMMON COURIER / ALS COURIER | | |
| 5 COMMON COURIER / ALS COURIER | | | 6 COM | 1/21/2020 | 1930 |
| 7 | | | 8 | | |
| 9 | | | 10 | | |

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other
EDDs Required? [ ] If yes, format type:
DOD Criteria Required?

SDWA Forms? yes yes yes yes
State Samples Collected In? ND NJ NY PA
Other
Enter PWSID No

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY ***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc. Rev 01-2013

301 Fulling Mill Road
Middletown, PA 17057
P: (717) 944-5541
F: (717) 944-1430

# Condition of Sample Receipt Form

| Client: | Work Order #: | Initials: | Date: |
|---|---|---|---|
| Repsg, Inc. | 3081721 | gn | 1/21/2020 |

| | | | |
|---|---|---|---|
| 1. Were airbills / tracking numbers present and recorded? | NONE | YES | NO |
| Tracking number: | | | |
| 2. Are Custody Seals on shipping containers intact? | NONE | YES | NO |
| 3. Are Custody Seals on sample containers intact? | NONE | YES | NO |
| 4. Is there a COC (Chain-of-Custody) present? | | YES | NO |
| 5. Are the COC and bottle labels complete, legible and in agreement? | | YES | NO |
| 5a. Does the COC contain sample locations? | | YES | NO |
| 5b. Does the COC contain date and time of sample collection for all samples? | | YES | NO |
| 5c. Does the COC contain sample collectors name? | | YES | NO |
| 5d. Does the COC note the type(s) of preservation for all bottles? | | YES | NO |
| 5e. Does the COC note the number of bottles submitted for each sample? | | YES | NO |
| 5f. Does the COC note the type of sample, composite or grab? | | YES | NO |
| 5g. Does the COC note the matrix of the sample(s)? | | YES | NO |
| 6. Are all aqueous samples requiring preservation preserved correctly? | N/A | YES | NO |
| 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume? | | YES | NO |
| 8. Are all samples within holding times for the requested analyses? | | YES | NO |
| 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.) | | YES | NO |
| 10. Did we receive trip blanks ( applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)? | N/A | YES | NO |
| 11. Were the samples received on ice? | | YES | NO |
| 12. Were sample temperatures measured at 0.0-6.0°C | | YES | NO |
| 13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below | | YES | NO |
| 13a. Are the samples required for SDWA compliance reporting? | N/A | YES | NO |
| 13b. Did the client provide a SDWA PWS ID#? | N/A | YES | NO |
| 13c. Are all aqueous unpreserved SDWA samples pH 5-9? | N/A | YES | NO |
| 13d. Did the client provide the SDWA sample location ID/Description? | N/A | YES | NO |
| 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)? | N/A | YES | NO |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Cooler #: | | | | | | | | |
| Temperature (°C): | 3 | | | | | | | |
| Thermometer ID: | 318 | | | | | | | |
| Radiological (µCi): | | | | | | | | |

COMMENTS (Required for all NO responses above and any sample non-conformance):

Rev. 4/29/2019

# ATTACHMENT 4: FIELD SAMPLING SHEETS

REPSG
React Environmental
Professional Services Group, Inc.

# Daily Field Log

| | | | |
|---|---|---|---|
| **Project Name:** | Calvert | **REPSG Project #** | 5977.130.02 |
| **Project Address:** | 2815 Northeast Rd, NE, MO | | |
| **Date of Work:** | 3/30/2020 | **Weather/Site Conditions:** | 50s - 60s Partly Cloudy |
| **Scope:** Gauge and PID all wells. Start sampling the wells. | | | |

| **Personnel On-Site** | Company | Arrive | Depart | Vehicle |
|---|---|---|---|---|
| Anton Adams | REPSG | 1000 | 1530 | Tundra |
| | | | | |
| | | | | |

| **Equipment/Materials** | Owned/Rental | # |
|---|---|---|
| PID | Rental | 37647 |
| 4 Bailers Used | Owned | |

| **Deliveries -Supplier / Vendor** | Arrive | Depart | Item |
|---|---|---|---|
| | | | |

**Health & Safety**

Tailgate Safety Meeting Held:

Incidents/Resloutions:

**Notes**

Well 008D and 008 seemed to be switched around on-site. Also noticed that there were existing wells onsite that was not including on the Field Map. MW-008D had the highest PID reading of 418.4.

REPSG
React Environmental
Professional Services Group, Inc.

# Daily Field Log

| | | | |
|---|---|---|---|
| **Project Name:** | Calvert | **REPSG Project #** | 5977.130.02 |
| **Project Address:** | 2815 N E Rd, NE, MD | | |
| **Date of Work:** | 3/31/2020 | **Weather/Site Conditions:** | 40s-50s, light rain |
| **Scope:** Sample the well network. | | | |

| **Personnel On-Site** | Company | Arrive | Depart | Vehicle |
|---|---|---|---|---|
| Anton Adams | REPSG | 1215 | 1515 | Tundra |
| | | | | |
| | | | | |

| **Equipment/Materials** | Owned/Rental | # |
|---|---|---|
| PID | Rental | 37647 |
| Bailers | | 10 |

| **Deliveries -Supplier / Vendor** | Arrive | Depart | Item |
|---|---|---|---|
| | | | |

**Health & Safety**

Tailgate Safety Meeting Held:

Incidents/Resloutions:

**Notes**

Tubing from MW-007 was disposed of.

REPSG
React Environmental
Professional Services Group, Inc.

# Daily Field Log

| | | | |
|---|---|---|---|
| **Project Name:** | Calvert | **REPSG Project #** | 5977.130.02 |
| **Project Address:** | 2815 N E Rd, NE, MD | | |
| **Date of Work:** | 3/31/2020 | **Weather/Site Conditions:** | 40s-50s, light rain |
| **Scope:** | | | |

| **Personnel On-Site** | Company | Arrive | Depart | Vehicle |
|---|---|---|---|---|
| Anton Adams | REPSG | 1215 | 1515 | Tundra |
| | | | | |
| | | | | |

| **Equipment/Materials** | Owned/Rental | # |
|---|---|---|
| PID | Rental | 37647 |
| Bailers | | 10 |

| **Deliveries -Supplier / Vendor** | Arrive | Depart | Item |
|---|---|---|---|
| | | | |

**Health & Safety**

Tailgate Safety Meeting Held:

Incidents/Resloutions:

**Notes**

Tubing from MW-007 was disposed of.

REPSG
React Environmental
Professional Services Group, Inc.

# Daily Field Log

| | | | |
|---|---|---|---|
| **Project Name:** | Calvert | **REPSG Project #** | 5977.130.02 |
| **Project Address:** | 2815 Northeast Rd, NE, MO | | |
| **Date of Work:** | 3/30/2020 | **Weather/Site Conditions:** | 50s - 60s Partly Cloudy |
| **Scope:** | | | |

| **Personnel On-Site** | Company | Arrive | Depart | Vehicle |
|---|---|---|---|---|
| Anton Adams | REPSG | 1000 | 1530 | Tundra |
| | | | | |
| | | | | |

| **Equipment/Materials** | Owned/Rental | # |
|---|---|---|
| PID | Rental | 37647 |
| 4 Bailers Used | Owned | |

| **Deliveries -Supplier / Vendor** | Arrive | Depart | Item |
|---|---|---|---|
| | | | |

**Health & Safety**

Tailgate Safety Meeting Held:

Incidents/Resloutions:

**Notes**

Well 008D and 008 seemed to be switched around on-site. Also noticed that there were existing wells onsite that was not including on the Field Map. MW-008D had the highest PID reading of 418.4.

Clean

| | Well ID | A | O | I | DTW | DTB | |
|---|---|---|---|---|---|---|---|
| 3/31 | MP-002 | 0.0 | 0.0 | 0.0 | 7.85 | 9.10 | 1245 |
| 3/30 | MP-001 | 0.0 | 0.0 | 0.0 | 7.28 | 11.86 | 1453 |
| 3/31 | MW-006 | 0.0 | 0.0 | 0.0 | 14.48 | 30.50 | 1308 |
| 3/30 | MW-008D (Actually MW-008) | 0.0 | 0.0 | 0.0 | 12.23 | 19.99 | 1520 |
| 3/30 | MW-009 | 0.0 | 0.0 | 0.0 | 15.45 | 30.13 | 1416 |
| 3/31 | MW-007 | 0.0 | 0.0 | 0.0 | 14.00 | 31.53 | 1320 |
| 3/30 | MW-008 (Actually MW-008P) | 0.0 | 0.0 | 418.4 | 13.83 | 71.81 | ~~1503~~ 1502 |
| 3/30 | MW-010D | 0.0 | 0.0 | 24.9 | 14.51 | 65.25 | ~~1537~~ 1537 |
| 3/31 | MW-010 | 0.0 | 0.0 | 0.0 | 14.51 | 30.30 | 1350 |
| 3/31 | MW-009D | 0.0 | 0.0 | 3.0 | 15.38 | 66.25 | 1358 |
| 3/31 | MW-003 | 0.0 | 0.0 | 0.0 | 12.21 | 27.70 | 1418 |
| 3/31 | MW-005 | 0.0 | 0.0 | 50.3 | 14.12 | 29.91 | 1426 |
| 3/31 | MW-001R | 0.0 | 0.0 | 3.7 | 13.73 | 30.58 | 1435 |
| 3/31 | MW-007 | 0.0 | 0.0 | 0.0 | 13.00 | | 1450 |

Dirty

# ATTACHMENT 5: PERMITS

Maryland
Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

SEP - 9 2019

Mr. Prag Patel
Calvert Citgo
2815 North East Road
North East, Maryland 21901

**RE: NOTICE OF INTENT APPROVAL**
**Calvert Citgo**
**2815 North East Road**
**Noerth East, Maryland 21901**
**General Discharge Permit No: 20OGR-25712 (MDG919013)**

Dear Mr. Patel:

This is in response to your Notice of Intent (NOI) request for authorization to discharge under a general discharge permit for the discharge of treated ground water from oil contaminated ground water sources for the following location:

| | |
|---|---|
| Facility Name: | Calvert Citgo |
| Location: | 2815 North East Road<br>North East, Maryland 21901 |
| Cognizant Official: | Prag Patel |
| Phone: | (410) 658-3687 |
| Latitude: | 39°41'49.6" N |
| Longitude: | 75°58'45.9" W |
| Sic Code: | 4953 - Refuse Systems |
| Date received: | August 23, 2019 |
| Analysis Requirement: | BTEX, MTBE, TPH, Napthalene |

The NOI certifies your agreement to comply with terms of this permit, including your responsibility to (a) notify the owner of the receiving surface water system of this authorization and (b) obtain any required approvals from that owner prior to discharging. Your facility's permit coverage extends until December 11, 2022 or as specified in Part I.F of the general discharge permit.

The following documents are enclosed:

1. General Discharge Permit No. 20OGR-25712 (MDG919013).

2. A blank Discharge Monitoring Report (DMR) form set up for your facility's discharge reporting requirements. All DMR forms must be submitted electronically through the EPA's online Central Data Exchange (CDX) system.

3. A Removed Substances Reporting Form as required in Part VII. General Conditions, Paragraph F.

4. A list of Significant Noncompliance Criteria (SNC) Violations.

This general discharge permit only addresses the requirements for the discharge of treated oil contaminated ground water to surface waters of the State. It does not:

1. Authorize the reinjection or infiltration of treated water directly to ground water of the State without specific approval from the Department;

2. Authorize the discharge of treated water into a municipal sanitary system; or

3. Interfere with evaluation and monitoring requirements for testing ground water monitoring wells prior to treatment and that are part of a site's cleanup activities.

This permit may be suspended or revoked upon a final, unreviewable determination that the permittee lacks, or is in violation of, any federal, State, or local approval necessary to conduct the activity authorized by this permit.

A copy of this discharge permit letter shall be maintained at the facility location and be made available for inspection when requested. If you have any questions, please contact me at 410-537-3442 or by email at *chris.ralston@maryland.gov*) or Juraj Masiar at 410-537-3412 or by email at *juraj.masiar@maryland.gov*.

Sincerely,

Christopher Ralston, Program Manager
Oil Control Program

Enclosures

cc: Mr. Juraj Masiar

# ATTACHMENT 1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge treated petroleum hydrocarbon contaminated ground water to surface or ground waters of the State. Each point of discharge shall constitute an individual outfall which is subject to the below listed effluent limitations and monitoring requirements. Such discharge shall be monitored by the permittee and limited at a sampling port at the discharge of the treatment system as specified below:

| EFFLUENT PARAMETERS (1) | Analytical Method | EFFLUENT LIMITATIONS Concentrations | | MONITORING REQUIREMENTS | |
|---|---|---|---|---|---|
| | prep/ test | Quarterly Average | Daily Maximum | Measurement Frequency | Sample Type |
| Flow (gpd) | | (2) | (2) | (5) | estimated |
| Total BTEX(3)(4) | 5030/ 8260 | (2) | 100 ppb | (5) | grab |
| Benzene(4) | 5030/ 8260 | (2) | 5 ppb | (5) | grab |
| Toluene(4) | 5030/ 8260 | (2) | (2) | (5) | grab |
| Ethylbenzene(4) | 5030/ 8260 | (2) | (2) | (5) | grab |
| Xylene(4) | 5030/ 8260 | (2) | (2) | (5) | grab |
| Naphthalene(4) | 5030/ 8260 | (2) | (2) | (5) | grab |
| MtBE(4) | 5030/ 8260 | (2) | (2) | (5) | grab |
| TPH | (6) / 8015B | (2) | 15 ppm | (5) | grab |

For discharges to surface waters, there shall be no discharge of floating solids or persistent foam in other than trace amounts. Persistent foam is foam that does not dissipate within one half-hour of point of discharge. Additionally, there shall be no visible petroleum sheen discharged to waters of the State.

(1) Required effluent characteristics to be monitored for ground water contaminated with:
   a. Gasoline: Flow, Total BTEX, Benzene, Toluene, Ethylbenzene, and Xylene.
   b. Oil products other than gasoline: Flow, Naphthalene, and TPH.
   c. Unknown or mixed sources of contamination: All listed effluent characteristics.
(2) Monitoring required without limits unless specified in the general permit.
(3) Total BTEX is defined as the sum of the benzene, toluene, ethylbenzene, and xylene concentrations.
(4) EPA test method 5030/ 8260 is required for all listed purgeable aromatic hydrocarbons and MtBE.
(5) 1 sample per month (1/month) if treating 25,000 gallons or less per month
   1 sample every two weeks (2/month) if treating 25,001 - 500,000 gallons per month
   1 sample per week (4/month) if treating 500,001 gallons or more per month
(6) TPH preparation method for GRO=5030; for DRO=3510 or 3520.

**PERMITTEE NAME / ADDRESS** (Include Facility Name / Location if different

**Name** Company
**Address** 1234 Street
Baltimore, Maryland 21230

**Facility** Company Fuel, Inc.
**Location** 1234 Street
Baltimore, Maryland 21230

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

| MDG341234 | 001 |
|---|---|
| PERMIT NUMBER | DISCHARGE NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2017 | 01 | 01 | TO | 2017 | 03 | 31 |

Form Approved.
OMB No. 2040-0004

☐ Check here for **no discharge**.

NOTE: Read instructions before completing this form.

| PARAMETER | | QUANTITY OR LOADING | | | QUALITY OR CONCENTRATION | | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | | | |
| FLOW, IN CONDUIT OR THROUGH TREATMENT PLANT 50050 1 0 0 | SAMPLE MEASUREMENT | | | gpd | | | | | | | |
| | PERMIT REQUIREMENT | REPORT QUARTERLY AVERAGE | REPORT DAILY MAXIMUM | | XXXXXXXXXXXXX | XXXXXXXXXXX | XXXXXXXX | | | 1/90 | ESTIMATE |
| PETROLEUM HYDROCARBONS TOTAL RECOVERABLE 45501 1 0 0 EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | [illegible] | [illegible] | | [illegible] | 5 | 10 | | | | |
| | PERMIT REQUIREMENT | XXXXXXXXXXXXXXX | XXXXXXXXXXXX | | XXXXXXXXXXXXX | REPORT QUARTERLY AVG | 15 | mg/l | | 1/90 | GRAB |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

SAMPLE

| NAME / TITLE PRINCIPAL EXECUTIVE OFFICER | | | | | |
|---|---|---|---|---|---|
| **John Smith, VP Operations** TYPED OR PRINTED | I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. §1001 AND 33 U.S.C. §1319 (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years) | *John Smith* SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE (410) 537-5555 (AREA CODE) NUMBER | DATE 2018 YEAR | 4 MO | 30 DAY |

State Discharge Permit No.: **18OGTOGR-1234**

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

# MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard, Suite 620 • Baltimore Maryland 21230-1719

(410) 537-3461 • 1-800-633-6101 (within Maryland) • http://www.mde.state.md.us


Land and Materials Administration • Oil Control Program

## Removed Substances Reporting Form

INSTRUCTIONS: Use this form to report the disposal of substances resulting from (1) treatment of wastewaters and (2) related manufacturing processes as required by the State of Maryland "Water Quality and Water Pollution Control Regulations," COMAR 26.08.01. Use a separate form for each waste, which is disposed of in a different manner. If several wastes are mixed before disposal, each waste must be separately described regardless of the quantity. Note: Submission of this form does not replace annual reporting of hazardous wastes as required by State of Maryland Regulation "Disposal of Controlled Hazardous Substances." COMAR 26.13.01.

1. DISCHARGE PERMIT NUMBER: _____

2. NAME OF FACILITY: _____

3. FACILITY MAILING ADDRESS: _____

_____

4. LOCATION OF FACILITY (if different from Item 3): _____

_____

5. FACILITY CONTACT: _____

6. Describe the nature of the removed substance (waste oil, sludge, etc.): _____

_____

_____

7. Describe the treatment process or the manufacturing process that generated the removed substance (precipitation, settling, etc.)

_____

_____

8. Describe the precise character of the Removed Substance (liquid, solid, sludge, etc.):

_____

_____

If sludge, what percent solids? _____

Is a chemical analysis attached? _____ Yes _____ No

Recycled Paper

# Significant Noncompliance Criteria (SNC) for National Pollutant Discharge Elimination System Violations

## I. Effluent Violations of Daily Maximum Limits

a. A 40% exceedance of any daily maximum limit listed in Table 1 for any two or more months during two consecutive Discharge Monitoring Reporting (DMR) periods is **SNC.**

b. Violations of any daily maximum effluent limit by **any** amount for any four or more months during two consecutive Discharge Monitoring Reporting (DMR) periods is **SNC.**

**Table 1**

| Pollutant | Daily Maximum | SNC 40% exceedance |
|---|---|---|
| MTBE | (1) | |
| TBA | (1) | |
| Total BTEX(3) | 100 ppb | 140ppb |
| Benzene | 5 ppb | 7ppb |
| TPH | 15 ppm | 21ppm |
| Toluene | (2) | |
| Ethylbenzene | (2) | |
| Xylene | (2) | |
| Naphthalene | (2) | |
| Flow (gpd) | (2) | |

(1) MTBE, TBA: (when directed by the Department)
(2) Monitoring required without limits
(3) Total BTEX is defined as the sum of the benzene, toluene, ethylbenzene, and xylene concentrations.

c. Exceedance of 10 times or greater of the Daily Maximum Limits in any one month, regardless of the volume discharged is **SNC.**

## II. Other Effluent Violations

Any effluent violation that causes or has the potential to cause a water quality or human health problem is **SNC.**

## III. Non-Effluent Violations

Any unauthorized bypass, unpermitted discharge, or pass through of pollutants which causes or has the potential to cause a water quality problem (e.g., fish kills, oil sheens) or health problems is **SNC.**

## IV. Reporting Violations

(DMRs) Discharge Monitoring Reports, **including** a final DMR in which a discharge permit expires, or is canceled, that are not submitted at all or are submitted 30 or more days late are **SNC**. Laboratory analyses shall accompany all DMRs.

**DMR Reporting Dates**

| Quarter | Months Reporting | Due Date |
|---|---|---|
| 1 | 01/01 - 03/31 | 04/30 |
| 2 | 04/01 - 06/30 | 07/31 |
| 3 | 07/01 - 09/30 | 10/31 |
| 4 | 10/01 - 12/31 | 01/31 |

DMR mailing address: Maryland Department of the Environment-Oil Control Program
1800 Washington Boulevard, Suite 620
Baltimore MD 21230-1719

Significant Noncompliance Criteria (SNC) for National Pollutant Discharge Elimination System Violations may be subject to an Administrative Action. Questions: Please call the Permits Section, Oil Control Program, 410-537-3442

# GENERAL PERMIT FOR THE DISCHARGE OF TREATED GROUND WATER FROM OIL CONTAMINATED GROUND WATER SOURCES TO SURFACE OR GROUND WATERS OF THE STATE

**DISCHARGE PERMIT NO. 20OGR-25712** **NPDES PERMIT NO. MDG919013**

**Effective Date:** SEP - 9 2019 **Expiration Date:** December 11, 2022


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## PART I. APPLICABILITY AND COVERAGE.

Pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and the provisions of the Federal Clean Water Act (CWA) 33 U.S.C. §1251 et seq. and implementing regulations 40 CFR Parts 122, 123, 124, and 125, the Maryland Department of the Environment (the Department), herein referred to as the "Department", hereby authorizes operators located in the State of Maryland, who have submitted a notice of intent (NOI) and received written approval from the Department, to discharge treated ground water from oil contaminated ground water sources described herein to waters of the State of Maryland in accordance with the eligibility requirements and other conditions set forth in this general permit and consistent with the permittee's NOI on file with the Department.

### A. Geographic Coverage.

This general permit covers discharges to surface or ground waters within the territorial boundaries of the State of Maryland.

### B. Eligible Discharges.

This general permit covers the following discharges: all new and existing discharges of treated ground water from oil-contaminated ground water sources.

### C. Ineligible Discharges.

The following discharges are not eligible for coverage under this general permit:

1. Discharges of treated ground water contaminated with other volatile organic compounds or hazardous materials (such as, but not limited to, TCE, TCA, DCE, etc.), other than oil unless prior written approval is authorized by the Department.

2. Remediation by injection of chemicals into the ground water unless prior written approval is authorized by the Department.

3. Reinjection of treated ground water into ground water wells unless prior written approval is authorized by the Department.

### D. No General Permit Required.

No general permit is required for establishments where there is no discharge of wastewater to waters of the State and where the operator has certified, in accordance with criteria established by the Department on form WMA/MDE/PER.067, that there is no potential for exposure of pollutants to storm water being discharged to waters of the State. This exemption is non-transferable, does not require a fee, and is valid for five years or until conditions change. The form can be found on MDE's website at http://9nl.at/MD-NEC.

### E. Individual Permit Required or Another General Permit Required.

1. If the Department determines that a discharge may cause an in-stream exceedance of water quality standards, the Department may require additional actions, including an application for an individual permit.

2. The Department may require any person authorized by this general permit to apply for and obtain an Individual State or State/NPDES discharge permit or obtain coverage under another type of general permit. If an owner or operator fails to submit, in a timely manner, an application for the Department-required individual State or State/NPDES discharge permit or a Notice of Intent (NOI) for another type of general permit as required by this condition, the applicability of this general permit to the owner or operator is automatically terminated. Effective at the end of such day that was specified by the Department for the application or NOI to be submitted, this general permit is terminated and the permittee's continuance of discharges that are covered by the general permit is no longer authorized.

2. If the Department terminates permit coverage as a result of one of the conditions listed in Section F.1 above, the permittee must apply for an individual permit immediately. The permittee must also cease any and all activities listed in Part I, Section B until coverage is granted under an individual permit. If there are periods of discharge between the termination of the general permit and the effective date of the individual permit, the facility operator and owner are accountable for those discharges and any violations of State and federal law are subject to penalty as detailed in PART VI.

3. Any permittee not requesting termination of general permit coverage remains responsible for meeting all permit requirements, including monitoring and reporting. A permittee should request permit termination by submitting a Notice of Termination (NOT) MDE/LMA/PER.070 form if:

   a. All discharges have permanently ceased;

   b. For discharge of storm water from containment structures, all oil has been permanently removed from storage tanks and all residual contamination in the containment structures has been removed; or

   c. A new owner or operator has taken over responsibility for the facility in accordance with Part I, Section H of this general permit.

**G. Authorization.**

1. To be authorized to discharge under this general permit, a person is required to submit an NOI in accordance with the requirements of PART III of this general permit, pay the required fee, receive notification from the Department of registration, and comply with the terms and conditions of this general permit.

2. Coverage under this general permit is effective on the date that the NOI is accepted by the Department, provided the NOI fee has been paid to the Department in accordance with the terms stipulated in PART III of this general permit. A person, who submits such an NOI, is notified of its acceptance by the Department, complies with the terms and conditions of this general permit, and pays the required fee, is authorized to discharge under the terms and conditions of this general permit.

3. If the NOI fee is paid by check which does not clear for any reason, the person will be given 30 calendar days to make proper payment including any interest and other charges that are due. If payment is not received by the 31st calendar day, coverage under this general permit shall be considered void from the outset. The permittee should save the cancelled check, a copy of the completed NOI, and the registration letter from the Department. These documents shall be provided to the Department upon request.

**H. Transfer of Authorization.**

1. The authorization under this general permit is not transferable to a change in facility location.

2. The authorization under this general permit is not transferable to any person except in accordance with this section.

3. Authorization to discharge under this general permit may be transferred to another person if:

   a. The current permittee notifies the Department's Oil Control Program in writing of the proposed transfer and submits form MDE/LMA/PER.079.

   b. A written agreement, indicating the specific date of the proposed transfer of permit coverage and acknowledging the responsibilities of the current and new permittee for compliance with and liability for the terms and conditions of this general permit, is submitted to the Department;

H. ***"Estimated flow"*** means a calculated volume or discharge rate that is based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters, and batch discharge volumes.

I. ***"Federal Clean Water Act"*** (CWA) means the Federal Water Pollution Control Act Amendments of 1972, its amendments and all rules and regulation adopted there under.

J. ***"General permit"*** means a discharge permit issued for a class of dischargers.

K. ***"Grab sample"*** means an individual sample collected over a period of time not exceeding 15 minutes. Grab samples collected for pH and total residual chlorine shall be analyzed within 15 minutes of time of sample collection.

L. ***"Groundwater"*** means underground water in a zone of saturation.

M. ***"Impaired water"*** means water whose quality does not meet its designated use(s). For purposes of this general permit 'impaired' refers to threatened and impaired waters:
1. For which TMDLs have been established,
2. For which existing controls such as permits are expected to resolve the impairment, or
3. For which a TMDL is required.

Impaired waters compilations are also sometimes referred to as 303(d) lists, and are included in Maryland's most current list of Impaired Surface Waters (as category 4 or 5) which can be found at the following link:

http://mde.maryland.gov/programs/Water/TMDL/DataCenter/Pages/index.aspx

N. ***"Impervious area"*** means any surface that does not allow storm water to infiltrate into the ground. Consistent with the Maryland Critical Area Commission, it also means human-made surfaces that are not vegetated will be considered impervious. Impervious surfaces include roof tops, roads, parking lots, driveways and other surfaces which no longer allow rainfall to soak into the ground.

O. ***"Includes" or "including"*** means includes or including by way of illustration and not by way of limitation.

P. ***"NOI"*** means Notice of Intent to be covered by this general permit (see PART III of this general permit).

Q. ***"NPDES permit"*** means a National Pollutant Discharge Elimination System permit issued under the Federal Clean Water Act.

R. ***"Oil"*** means oil of any kind and in any liquid form including, but not limited to, petroleum, fuel oil, sludge, oil refuse, oil mixed with other waste, crude oils, aviation fuel, gasoline, kerosene, light and heavy fuel oils, diesel motor fuel including biodiesel fuel regardless of whether the fuel is petroleum based, asphalt, ethanol that is to be intended to be used as a motor fuel or fuel source, and regardless of specific gravity, every other non-edible non-substituted liquid petroleum fraction unless that fraction is specifically identified as a hazardous substance under CERCLA. "Oil" does not include liquefied natural gas, liquefied propane, or any edible oils.

S. ***"Operator"*** means that person or those persons with responsibility for the management and performance of each facility.

T. ***"Permittee"*** means the person holding a permit issued by the Department and authorized to discharge under the provisions of this general permit.

**GG.** ***"Waters of the State"*** includes:

1. Both surface and underground waters within the boundaries of this State subject to its jurisdiction, including that part of the Atlantic Ocean within the boundaries of this State, the Chesapeake Bay and its tributaries, and all ponds, lakes, rivers, streams, tidal and non-tidal wetlands, public ditches, tax ditches, and public drainage systems within this State, other than those designed and used to collect, convey, or dispose of sanitary sewage; and

2. The flood plain of free-flowing waters determined by the Department of Natural Resources on the basis of the 100-year flood frequency.

**HH.** ***"Water Quality Standard"*** means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in COMAR 26.08.02.

## PART III. CONDITIONS OF REGISTRATION.

### A. Requests for Registration and Fee Requirements.

1. Notice of Intent (NOI)

   a. Applicants shall complete all required information on this general permit's corresponding NOI Form MDE/ LMA/ PER.009 (http://www.mde.state.md.us/Pages/Home.aspx), including: owner and permittee names, addresses, electronic mail (email) addresses, and telephone numbers; facility address; description of treatment process to be employed; a copy of analytical data generated within the past 6 months; and estimated effluent volume in gallons per day for each outfall.

   b. A site map identifying discharge locations shall be included with the NOI. The map should provide significant points of reference (i.e. roads, buildings, etc.) near the discharge location and must identify all surface waters within a quarter mile of the discharge point and all potable, monitoring, and recovery wells on the site and surrounding properties within ¼ mile. All discharge locations shall correspond to those identified on the NOI.

   c. A latitude and longitude must be provided for each discharge point. All locations are to be provided in North American Datum (NAD83), Geographic Projection of Latitude/Longitude in Decimal Degrees.

   d. If a person operates multiple facilities, a separate NOI is required for each noncontiguous site.

2. Permit Fee

   a. Persons who intend to obtain coverage under this general permit shall submit an initial fee of $120 to the Department with the NOI form.

   b. Facilities owned or operated by local and State governments and their consultants are not required to pay a fee.

   c. All fees shall be made payable to the Maryland Department of the Environment and mailed with the first page of the NOI to:

Maryland Department of the Environment
P.O. Box 1417
Baltimore, MD 21203-1417

c. For a municipal, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

i.) The chief executive officer of the agency; or
ii.) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of the EPA).

3. Report Submission.

a. All reports required by the general permit, and other information requested by the Department shall be signed by a person described in PART III, Section C.2 or by a duly authorized representative of that person. A person is a duly authorized representative only if:

i.) The authorization is made in writing by a person described in PART III, Section C.2;
ii.) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and
iii.) The written authorization is submitted to the Department.

b. If an authorization under this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of PART III, Section C.3(a) must be submitted to the Department prior to or together with any reports, information or applications to be signed by an authorized representative.

**D. Failure to Notify.**

Persons who engage in an activity covered under this general permit, who fail to notify the Department of their intent to be covered under this general permit, and who discharge to waters of the State without an individual State or State/NPDES discharge permit, are in violation of the CWA and of the Environment Article, Annotated Code of Maryland.

**E. Change in Discharge.**

All discharges authorized herein shall be consistent with the terms and conditions of this general permit. The discharge of any pollutant identified in this general permit at a level in excess of that authorized shall constitute a violation of the terms and conditions of this general permit. The permittee shall report any anticipated facility expansions, additional or relocated outfalls, or process modifications which will result in new, different, or an increased discharge of pollutants by submitting a new NOI at least 90 days prior to the commencement of the changed discharge. Based on its evaluation of the revised NOI, the Department may:

1. Continue to authorize the discharge under this general permit; or

2. Require the permittee to apply for an individual State or State/NPDES discharge permit.

**B. Sampling and Analytical Methods.**

The sampling and analytical methods used shall conform to procedures for the analysis of pollutants as identified in 40 CFR 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants" unless otherwise specified.

**C. Data Recording Requirements.**

For each measurement or sample taken to satisfy the requirements of this general permit, the permittee shall record the following information:

1. The exact place, date, and time of sampling or measurement;
2. The person(s) who performed the sampling or measurement;
3. The dates and times the analyses were performed;
4. The person(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of all required analyses.

**D. Monitoring Equipment Maintenance.**

The permittee shall periodically calibrate in accordance with manufacturer's specifications and perform maintenance procedures on all monitoring and analytical instrumentation to insure accuracy of measurements.

**E. Additional Monitoring by Permittee.**

If the permittee monitors any pollutant more frequently than required by this general permit, the permittee shall use approved analytical methods as specified in Part V. Section B and shall report the results of such monitoring, including the increased frequency, in the calculation and reporting of the values as required in Part V. Section F.

**F. Reporting Monitoring Results.**

1. Discharge Monitoring Report (DMR) data obtained by the permittee during each calendar quarter shall be summarized for each outfall as provided with registration under this general permit. DMR data shall be submitted electronically via the EPA's online Central Data Exchange (CDX) system no later than the 28th day of the month following the end of each calendar quarter (March, June, September, and December). To obtain information regarding the CDX system and DMR submissions, please contact the Department's Water and Science Administration via email at mde.netdmr@maryland.gov or by telephone at (410) 537-3520.

2. Permittees shall submit the name and address of the laboratory performing analyses within 30 days of registration under this general permit. If the permittee changes laboratories during the general permit term, the Department shall be notified in writing within 30 days. This information shall be sent to the address listed in Part V, Section F.1

3. All reports required by this general permit and other information requested by the Department shall be signed by a person described in Part III, Section C.2, or by a duly authorized representative of that person, as described in Part III, Section C.3.

**G. Records Retention.**

All records and information resulting from the monitoring activities required by this general permit, including all records of analyses performed, calibration and maintenance of instrumentation, and original recordings from continuous monitoring instrumentation, shall be retained for a minimum of five (5) years. This period shall be extended automatically during the course of litigation, or when requested by the Department.

**D. Civil Penalties for Violations of General Permit Conditions.**

In addition to civil penalties for violations of State water pollution control laws set forth in Section 9-342 of the Environment Article, Annotated Code of Maryland, the Federal Clean Water Act (CWA) provides that any person who violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act or in a permit issued under Section 404 of the CWA, is subject to a civil penalty not to exceed $37,500 per day for each violation.

**E. Criminal Penalties for Violations of General Permit Conditions.**

In addition to criminal penalties for violations of State water pollution control laws set forth in Section 9-343 of the Environment Article, Annotated Code of Maryland, the CWA provides that:

1. Any person who negligently violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, or in a permit issued under Section 404 of the CWA, is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one (1) year, or by both.

2. Any person who knowingly violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, or in a permit issued under Section 404 of the CWA, is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than three (3) years, or by both.

3. Any person who knowingly violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, or in a permit issued under Section 404 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, is subject to a fine of not more than $250,000 or imprisonment of not more than fifteen (15) years, or both. A person that is a corporation, shall, upon conviction, be subject to a penalty of not more than $1,000,000.

**F. Penalties for Falsification and Tampering.**

The Environment Article, §9-343, Annotated Code of Maryland provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. The Federal Clean Water Act provides that any person who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under the CWA, or who knowingly makes any false statement, representation, or certification in any records or other documents submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or by both.

**E. Conditions Necessary for Demonstration of an Upset.**

An upset shall constitute an affirmative defense to an action brought for noncompliance with technology-based effluent limitations only if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

1. An upset occurred and that the permittee can identify the specific cause(s) of the upset;
2. The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;
3. The permittee submitted to the Department notification of an upset within 24 hours in accordance with the reporting requirements identified in PART V, Section H (Noncompliance with Discharge Limits) of this general permit;
4. The permittee submitted to the Department, within five calendar days of becoming aware of the upset, documentation to support and justify the upset in accordance with the reporting requirements identified in Part V, Section H.
5. The permittee complied with any remedial measures required to minimize adverse impact.

**F. Removed Substances.**

Wastes such as solids, sludges, or other pollutants removed from or resulting from treatment or control of wastewaters, or facility operations, shall be disposed in a manner to prevent any removed substances or runoff from such substances from being discharged to Waters of the State. The permittee shall keep a record of the following information and make it available to the Department upon request:

1. The location of all areas used for the disposal of any removed substances as described above;
2. The physical, chemical, and biological characteristics of the removed substances (as appropriate), quantities of any removed substances handled, and the method of disposal; and
3. Identification of the contractor or subcontractor, their mailing addresses, and the information specified in F.1 and F.2 of this Section if disposal is handled by persons other than the permittee.

**G. Facility Operation and Maintenance.**

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with the conditions of the general permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the general permit.

**H. Power Failure**

In order to maintain compliance with the terms and conditions of this general permit, the permittee shall:

1. Provide an alternative power source sufficient to operate the wastewater collection and treatment facilities; or
2. Halt, reduce, or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater collection and treatment facilities.

**I. Other Information.**

When the permittee becomes aware that incorrect information has been included in the NOI or in any other report submitted to the Department, or relevant facts have been omitted from the NOI, or

**P. Impaired Receiving Waters and Total Maximum Daily Loads.**

The NOI for any discharge must identify whether any receiving water is on Maryland's impaired waters list for sediments, which can be found at the Department's 303(d) Searchable Integrated Report Database which can be found at the following link:

http://mde.maryland.gov/programs/water/TMDL/Integrated303dReports/Pages/303d.aspx

If the water body has an approved TMDL for sediments, the Department may require individual permit coverage. The permittee must implement all necessary controls to meet the specified waste load allocation (WLA), if one exists, and verify that the discharge complies with the WLA through the discharge monitoring requirements included in this general permit. Failure to comply with a relevant WLA is a violation of this general permit.

**Q. Total Maximum Daily Load (TMDL).**

The general permit may be reopened in accordance with Maryland's Administrative Procedures Act to incorporate future Total Maximum Daily Load requirements.

**R. Severability.**

The provisions of this general permit are severable. If any provisions of this general permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect. If the application of any provision of this general permit to any circumstances is held invalid, its application to other circumstances shall not be affected.

## PART VIII. AUTHORITY TO ISSUE GENERAL NPDES PERMITS.

On September 5, 1974, the Administrator of the EPA approved the proposal submitted by the State of Maryland for the operation of a permit program for discharges into navigable waters under Section 402 of the Federal Clean Water Act, 33 U.S.C. Section 1342.

On September 30, 1990, the Administrator of the U.S. Environmental Protection Agency approved the proposal submitted by the State of Maryland for the operation of a general permit program.

Under the approvals described above, this general discharge permit is both a State of Maryland general discharge permit and a NPDES general permit.

Christopher Ralston, Program Manager
Oil Control Program

Maryland
Department of
the Environment

TR # 16402

Larry Hogan
Governor

Boyd Rutherford
Lieutenant Governor

Ben Grumbles
Secretary

DEC 2 7 2016

Mr. Chandrakant Patel
Calvert Citgo
2815 North East Road
North East, MD 21901

Dear Mr. Patel:

The Department has received your completed Request for Coverage form and fee for an Air Quality General Permit to Construct for Ground Water Air Strippers and Soil Vapor xtraction Equipment at the following location:

| | |
|---|---|
| Source Name: | Calvert Citgo |
| Street Address: | 2815 North East Road<br>North East, MD 21901 |
| Equipment: | RES Vacuum Extraction Truck |
| I.D. No.: | 015-0173-9-0226 |
| AI No.: | 25712 |

The permit is effective as stated in the General Permit. The cancelled check or other receipt, a copy of the Request for Coverage, the permit conditions from the application package, this letter, and any other supporting documents should be retained on site.

In the event that you have misplaced the permit conditions from the application package, they can be downloaded from the Departments web page: *http://www.mde.state.md.us/programs/Permits/AirManagementPermits/AirQualityGeneralPermit*. The blue bordered pages within the application package are the permit conditions applicable to you.

If you have any questions, please contact Nolan Penney at nolan.penney@maryland.gov or (410) 537-3219.

Sincerely,

Karen G. Irons, P.E., Administrator
Air Quality Permits Program
Air and Radiation Management Administration

KGI\np

## Suzanne Shourds

**From:** Suzanne Shourds
**Sent:** Wednesday, May 3, 2017 10:00 AM
**To:** 'nolan.penney@maryland.gov'
**Subject:** Air Quality General Permit, Source Name Calvert Citgo (ID No. 015-0173-9-0226)
**Attachments:** SVE Air Permit Application Signed11212016.pdf; (20161227) MDE SVE Permit Approval Letter.pdf

Nolan – It was great speaking with you earlier. This email is to confirm that, as discussed, the vacuum extraction truck associated with the attached Air Quality General Permit has a catalytic oxidation component as well as an activated carbon component.

Regards,

Suzanne Shourds
Project Manager

**REPSG**
**React Environmental**
**Professional Services Group, Inc.**

6901 Kingsessing Avenue, Suite 201
P.O. Box 5377
Philadelphia, PA 19142-0377
Phone: 215-729-3220 Ext. 378
Cell: 267-688-7311
Fax: 215-729-1557
Email: sshourds@repsg.com
Website: http://www.repsg.com
**Facebook**, **Twitter**, and **LinkedIn**

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Please consider the environment before printing this email

# MARYLAND DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Management Administration / Air Quality Permits Program
1800 Washington Boulevard, STE 720 Baltimore, MD 21230-1720
(410) 537-3230 • 1-800-633-6101 • **www.mde.state.md.us**

*Mail application and payment to*
**MDE/ARMA, PO Box 2037**
**Baltimore, MD 21203-2037**
*Don't forget to sign the application!*

*Make checks payable to*
**MDE Clean Air Fund**
*$250 per piece of equipment*

Request for Coverage: Air Quality General Permit to Construct

## SOIL VAPOR EXTRACTION & GROUNDWATER AIR STRIPPING

**1) Business/Institution/Facility where the equipment will be located** ☐ Check if this is a federal facility

Name: Calvert Citgo Phone: (410) 658-3687
Street Address: 2815 North East Road
City: North East State: MD Zip Code: 21901 County: Cecil

**2) Owner** ☐ Check if different than above. If checked, complete the following:

Name: Mr. Chandrakant Patel Phone: (410) 658-3687
Mailing Address: 2815 North East Road
City: North East State: MD Zip Code: 21901

**3) Installer**

Contact Name: Suzanne Shourds (Project Manager at REPSG) Phone: (215)729-3220 x378

**4) Equipment Information**

| Manufacturer / Model | Installation date | Soil / | Water | Activated carbon | Thermal oxidation | Catalytic oxidation |
|---|---|---|---|---|---|---|
| Vacuum Extraction Truck | | ☐ | ☑ | ☑ | ☐ | ☐ |
| (Custom Built by RES) | | ☐ | ☐ | ☐ | ☐ | ☐ |
| | | ☐ | ☐ | ☐ | ☐ | ☐ |
| | | ☐ | ☐ | ☐ | ☐ | ☐ |

*Projected Installation Date for all equipment is before 12/31/2016.

**5) Site Information**

Site status: ☑ Active ☐ Inactive Type of contamination: BTEX, and MTBE from UST Release

Estimated/anticipated VOC emission per day, per unit: 2.1

**6) Workers Compensation** (Environmental article §1-202)

Workers insurance policy or binder number: WC8555578
☐ Check if self employed or otherwise exempt from this requirement

"I CERTIFY UNDER PENALTY OF LAW THAT THE INFORMATION SUBMITTED IN THIS REQUEST FOR COVERAGE IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

P. Patel — PRAGNESH PATEL / OWNER — 11-21-16.

**Owners Signature** Printed Name & Title Date