

# Water Quality Monitoring Report First 2020 Semi-Annual Event

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## Vista Landfill Class III

Vista Landfill, LLC



August 17, 2020

### PREPARED FOR:



Vista Landfill, LLC  
242 West Keene Road  
Apopka, Florida 32703

### PREPARED BY:

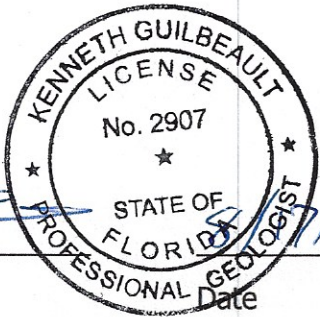


Carlson Environmental Consultants  
305 South Main Street  
Monroe, North Carolina 28112

**STATEMENT OF GEOLOGIC REVIEW**

In general accordance with Chapter 62-701, Florida Administrative Code (F.A.C.), Solid Waste Management Facilities, this Groundwater Monitoring Report – First 2020 Semi-Annual Monitoring Event for the Vista Landfill Site, located in Apopka, Florida, has been reviewed, signed and sealed by a registered Professional Geologist in the State of Florida, and is consistent with standard principles related to groundwater monitoring

  
\_\_\_\_\_  
Ken E. Guilbeault, P.G.  
Florida License # 2907

  
Date

**CEC**

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# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

DEP Form #: 62-701.900(31), F.A.C.

Form Title: Water Quality Monitoring Certification

Effective Date: January 6, 2010

Incorporated in Rule 62-701.510(9), F.A.C.

## WATER QUALITY MONITORING CERTIFICATION

### PART I GENERAL INFORMATION

(1) Facility Name Vista Landfill, LLC., Class III

Address 242 West Keene Road

City Apopka Zip 32703 County Orange

Telephone Number (407) 286-2920

(2) WACS Facility ID 87801

(3) DEP Permit Number 0165969-030-SO-MM

(4) Authorized Representative's Name Eric Parker Title Environmental Protection

Address 5110 US Hwy 301

City Baldwin Zip 32234 County Duval

Telephone Number (904) 748-6006

Email address (if available) eparker1@wm.com

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

8/11/2020  
(Date)

[Signature]  
(Owner or Authorized Representative's Signature)

### PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Professional Technical Support Services, Inc. (Pro-Tech)

Analytical Lab NELAC / HRS Certification # NELAP Certification E87667

Lab Name TestAmerica, Inc. (TestAmerica Denver)

Address 4955 Yarrow Street, Arvada, CO 80002

Phone Number (303) 736-0100

Email address (if available) Danielle.Harrington@testamericainc.com

Northwest District  
160 Government Center  
Pensacola, FL 32501-5794  
850-595-8360

Northeast District  
7825 Baymeadows Way, Ste. 200 B  
Jacksonville, FL 32256-7590  
904-807-3300

Central District  
3319 Maguire Blvd., Ste. 232  
Orlando, FL 32803-3767  
407-894-7555

Southwest District  
13051 N. Telecom Pky.  
Tempe Terrace, FL  
813-632-7600

South District  
2295 Victoria Ave., Ste. 364  
Fort Myers, FL 33902-2549  
239-332-6975

Southeast District  
400 North Congress Ave.  
West Palm Beach, FL 33401  
561-681-6600

## **1 INTRODUCTION**

The Vista Landfill Class III (Site or VLF) is owned and operated by Vista Landfill, LLC in accordance with Florida Department of Environmental Protection (FDEP) Operation Permit Number 0165969-030-SO issued November 2, 2017. The Site is an active Class III waste landfill that serves Orange County in central Florida.

Carlson Environmental Consultants, PC (CEC) has been retained to report the results of semi-annual groundwater monitoring at the Site in accordance with the Monitoring Plan Implementation Schedule (MPIS) (Appendix 3) of the referenced permit.

This report was prepared in accordance with Florida Department of Environmental Protection (FDEP) Permit/Certification No. 0165969-030-SO, Specific Condition Section 2.D, MPIS, and Chapter 62-701.510(8)(a) Florida Administrative Code (FAC). The Permit expires on June 1, 2036.

The first semi-annual 2020 sampling data was obtained during the routine semi-annual monitoring event conducted June 1, 2, and July 6, 2020 (due to laboratory and shipping errors) (Appendix A). An electronic data deliverable (EDD) of the results in "ADaPT format" is attached as Appendix B. This EDD has been verified as uploadable into the latest version of ADaPT.

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## **2 BACKGROUND**

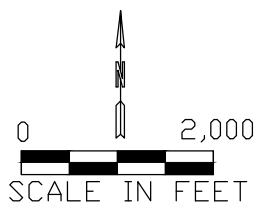
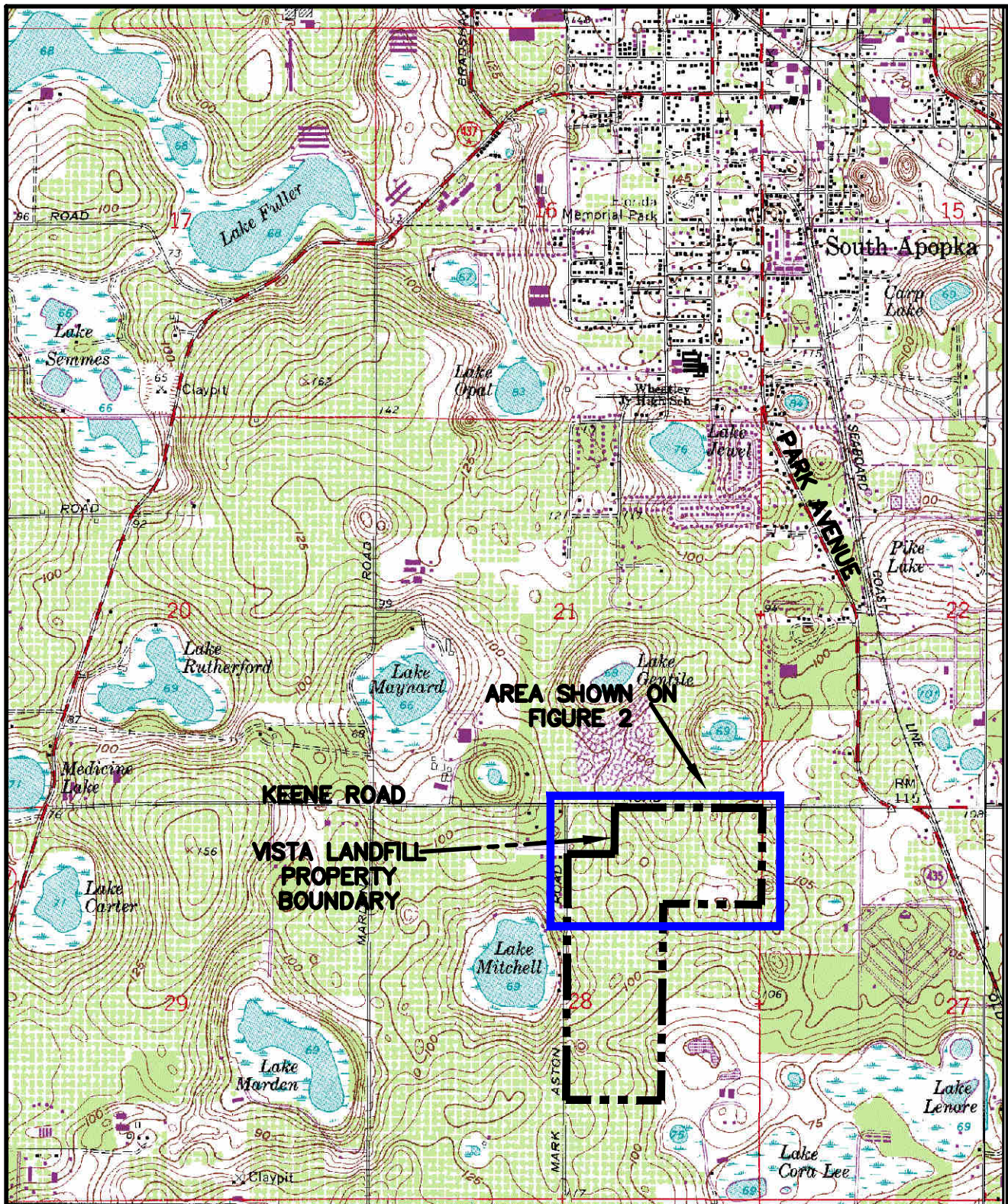
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### **2.1 Site Location and Description**

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The Site is located approximately two miles south of Apopka, Florida, at 242 West Keene Road. The VLF lies south of Keene Road, west of Old Apopka-Clarcona Road, and east of Lake Mitchell in Orange County Florida (Figure 1). The Site is a Class III lined landfill with a leachate collection system. The bottom-liner system consists of three layers (from top to bottom): a 2-foot thick sand liner protective layer, a double-sided geocomposite drainage layer, and a 50-mil high density polyethylene (HDPE) geomembrane layer. Waste was initially placed in the landfill on November 17, 2008. The locations of the monitoring sites are shown on Figure 2.

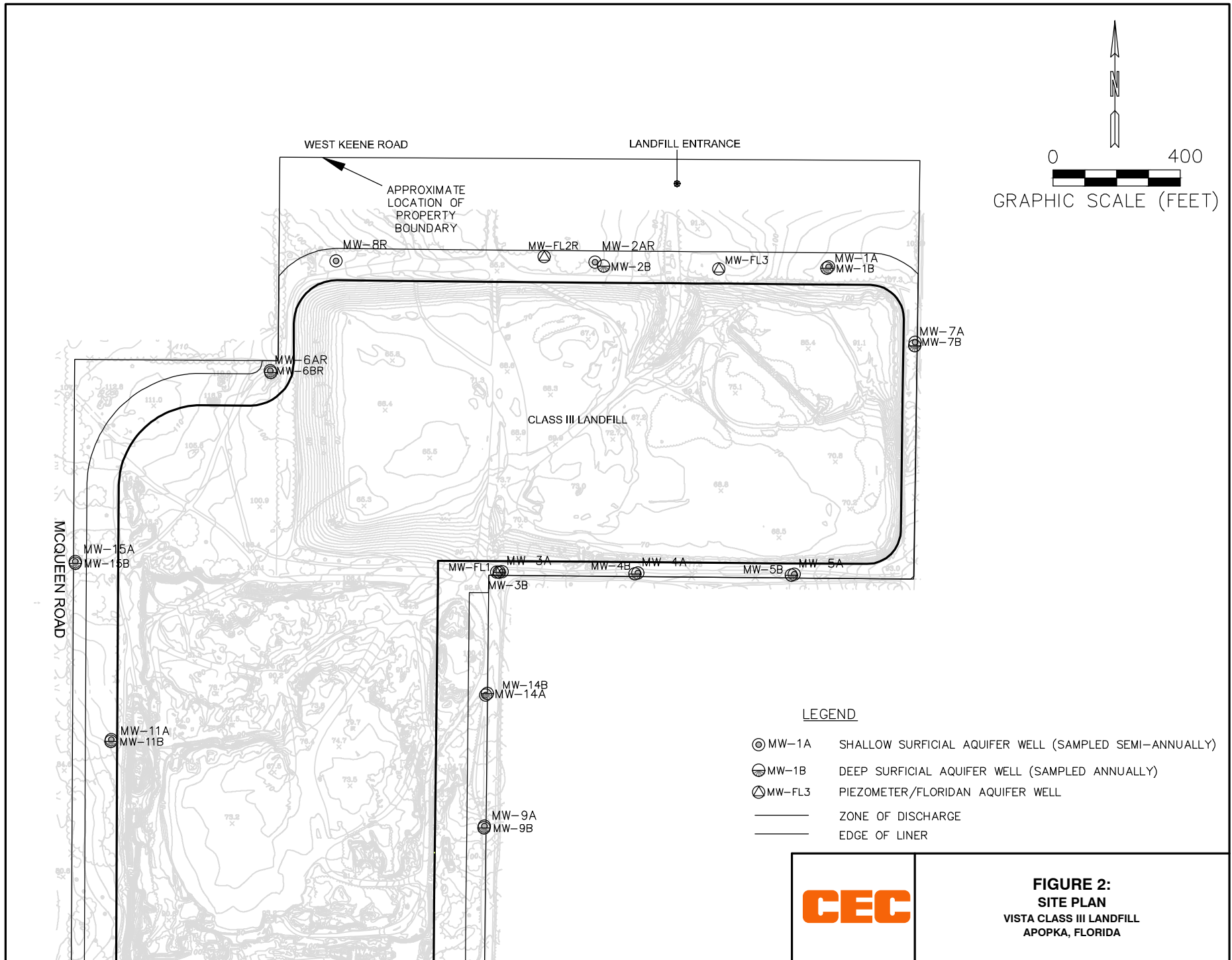




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**FIGURE 1:**  
**SITE LOCATION MAP**  
**VISTA CLASS III LANDFILL**  
**APOPKA, FLORIDA**







### 3 GEOLOGIC AND HYDROGEOLOGIC CHARACTERISTICS

Figure 1 shows the topography of the Site and region prior to the site being developed as a borrow pit and then as a landfill. The topography indicates the site is located in a region that is internally drained.

Based on evaluation of the Site hydrogeologic data, the groundwater at the Site primarily occurs in the Hawthorn Group and the underlying Floridan aquifer. The “surficial aquifer” consists of the water-bearing permeable zones of the Hawthorn Group that overlay the Floridan aquifer. The groundwater flow direction of the lower Hawthorn Group tends to mimic the pre-construction topography of the Site.

The Floridan aquifer underlies the surficial aquifer at the Site and is separated from it by the clay units of the Hawthorn Group.<sup>1</sup> Karst features (e.g., sinkholes) developed historically in the sediments overlying the upper Floridan aquifer, resulting in the internal drainage characteristics of the region. As a result, runoff and surficial aquifer groundwater flow moves toward and into these karst features, often resulting in development of surface water bodies such as Lake Mitchell, which is located west of the Site (Figure 1).

For this semi-annual report, CEC performed the groundwater flow assessment of the surficial aquifer using groundwater depth to water measurements obtained on June 1, 2020. The assessment included the compilation of groundwater depth measurements, the calculation of groundwater elevations, and plotting the data onto site figures depicting the estimated groundwater flow direction. Table 1 lists the monitoring locations, depths to water, and groundwater elevations. Water level maps generated for the shallow surficial aquifer and lower surficial aquifer are presented in Figures 3 and 4. These maps are generated using Surfer® Version 16, groundwater contouring computer program, with the interpretation verified by an CEC hydrogeologist.

#### 3.1 Shallow Surficial Aquifer (Upper Zone)

The shallow surficial aquifer is defined here as the uppermost water-bearing zone of the undifferentiated sands and clayey sands that are part of the Hawthorn Group. A water level map of the shallow surficial aquifer was prepared from shallow surficial well data for the June 2020 sampling event and is provided on Figure 3.

Groundwater flow typically is expected to be perpendicular to the water level contours. Therefore, the approximate direction of groundwater flow in the shallow surficial aquifer is primarily to the southwest. A portion of the groundwater enters from the northwest section of the site and flows south. At MW-14A, there is a groundwater high and flow radiates outward. This groundwater flow configuration results from a combination of recharge from rainfall infiltration outside the bottom liner, interchange of groundwater with the underlying intermediate surficial aquifer, and

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<sup>1</sup> The Rust Environment and Infrastructure (RUST) August 1996 (Revised September 1998) report entitled “Keene Road Hydrogeologic Evaluation” Prepared for Waste Management Inc.

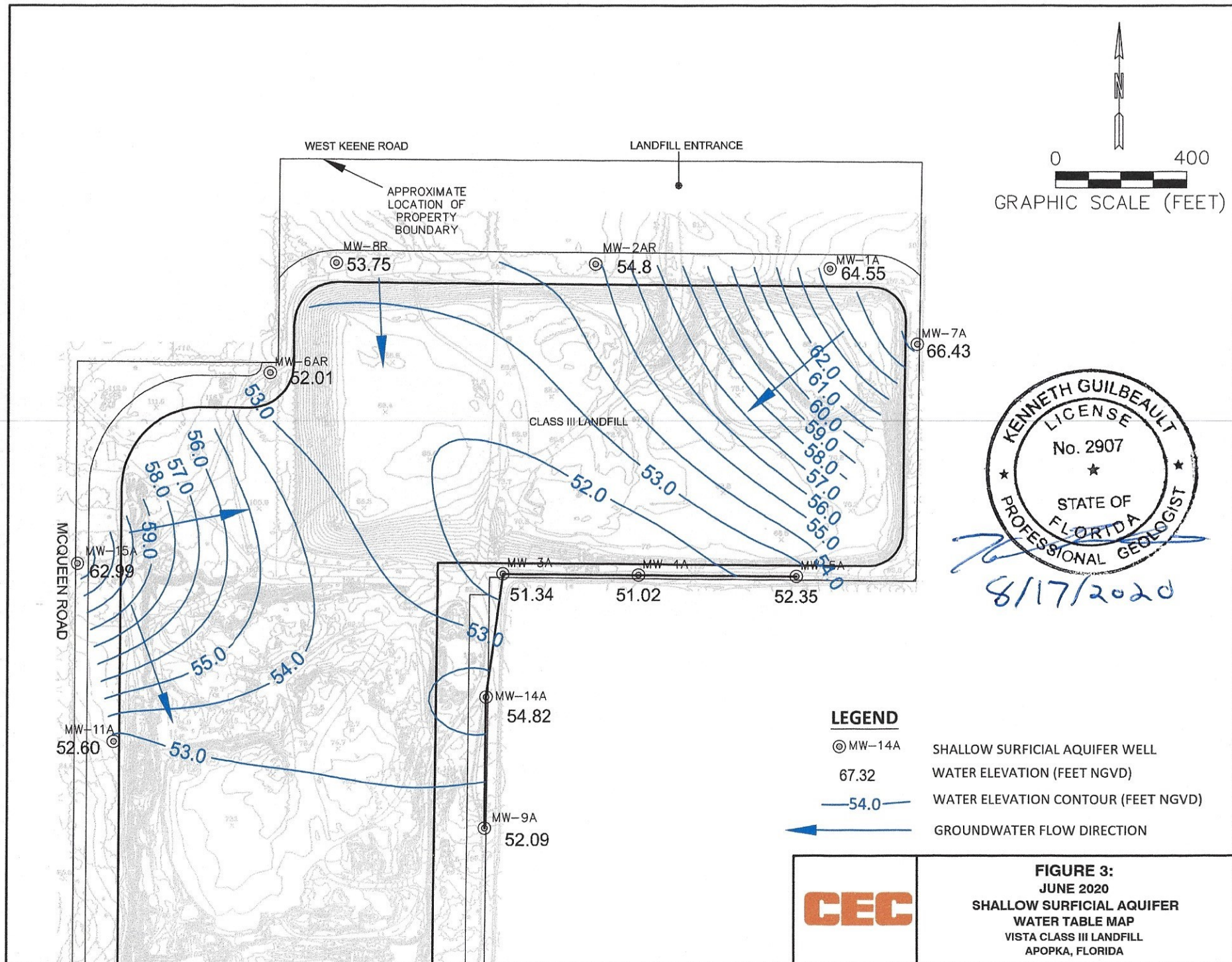
**Table 1. Groundwater Elevation Measurements  
Vista Landfill, Apopka, Florida**

| <b>Well No.</b> | <b>TOC Elevation<br/>(Feet NGVD)</b> | <b>Depth to Water<br/>(Feet Below Top of<br/>Casing)</b> | <b>June 1, 2020<br/>Groundwater Elevation<br/>(Feet NGVD)</b> |
|-----------------|--------------------------------------|----------------------------------------------------------|---------------------------------------------------------------|
| MW-1A           | 109.47                               | 44.92                                                    | 64.55                                                         |
| MW-1B           | 109.53                               | 55.31                                                    | 54.22                                                         |
| MW-2AR          | 87.22                                | 32.42                                                    | 54.80                                                         |
| MW-2B           | 88.46                                | 37.13                                                    | 51.33                                                         |
| MW-3A           | 92.87                                | 41.53                                                    | 51.34                                                         |
| MW-3B           | 93.06                                | 41.73                                                    | 51.33                                                         |
| MW-4A           | 82.04                                | 31.02                                                    | 51.02                                                         |
| MW-4B           | 83.18                                | 31.18                                                    | 52.00                                                         |
| MW-5A           | 81.86                                | 29.51                                                    | 52.35                                                         |
| MW-5B           | 81.27                                | 30.26                                                    | 51.01                                                         |
| MW-6AR          | 104.11                               | 52.10                                                    | 52.01                                                         |
| MW-6BR          | 103.99                               | 52.04                                                    | 51.95                                                         |
| MW-7A           | 109.26                               | 42.83                                                    | 66.43                                                         |
| MW-7B           | 109.13                               | 56.29                                                    | 52.84                                                         |
| MW-8R           | 99.60                                | 45.85                                                    | 53.75                                                         |
| MW-9A           | 99.45                                | 47.36                                                    | 52.09                                                         |
| MW-9B           | 99.52                                | 47.65                                                    | 51.87                                                         |
| MW-11A          | 96.35                                | 43.75                                                    | 52.60                                                         |
| MW-11B          | 96.37                                | 43.49                                                    | 52.88                                                         |
| MW-14A          | 100.62                               | 45.80                                                    | 54.82                                                         |
| MW-14B          | 100.10                               | 48.37                                                    | 51.73                                                         |
| MW-15A          | 105.27                               | 42.28                                                    | 62.99                                                         |
| MW-15B          | 105.15                               | 52.29                                                    | 52.86                                                         |
| MW-FL1          | 93.16                                | 41.83                                                    | 51.33                                                         |
| MW-FL2R         | 86.76                                | 33.26                                                    | 53.50                                                         |
| MW-FL3          | 97.49                                | 46.45                                                    | 51.04                                                         |

Notes:

NGVD = National Geodetic Vertical Datum, 1929.

TOC = Top of Casing.







lateral inflow to the shallow surficial aquifer from outside the Site. The flow direction is consistent with previous flow assessments at the Site.

### **3.2 Intermediate Surficial Aquifer (Lower Zone)**

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A potentiometric map of the intermediate surficial aquifer was prepared from intermediate surficial well data for the June 2020 sampling event (Figure 4). Groundwater flow within the intermediate surficial aquifer beneath the Site apparently consists of multiple flow regimes, as indicated by the groundwater flow direction arrows on Figure 4. Groundwater entering from the site's western boundary flows east and northeast towards a slight low on the site's northern boundary. A portion of the groundwater enters near the northeast corner of the site and moves to the south and southwest. This groundwater flow configuration is a combination of interchange of groundwater with the overlying shallow surficial aquifer and lateral inflow to the intermediate surficial aquifer from outside the Site. These flow directions are consistent with previous flow assessments at the Site.

### **3.3 Floridan Aquifer (Deep Zone)**

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Due to the limited number of "FL" zone wells for the site (MW-FL2R is a deep surficial aquifer monitoring well), potentiometric maps were not prepared. Regional potentiometric maps for the Floridan aquifer indicate that flow in the aquifer at the Site is towards the northeast. This is confirmed by the water levels observed at the Site at Floridan aquifer groundwater monitoring wells MW-FL1 and MW-FL3 (see Table 1).

## 4 MONITORING PROGRAM

The monitoring program consists of Shallow and Intermediate surficial aquifer groundwater monitoring and Floridan Aquifer groundwater monitoring. Semi-annual reporting of the results of groundwater sampling is performed in accordance with the Site's MPIS and rule 62-701.730 (8)(c).

### 4.1 Groundwater Monitoring Program

The surficial aquifer groundwater currently is monitored at the site at 23 locations. The surficial aquifer is monitored in two zones: the shallow zone ("A" wells) and the lower zone ("B" wells). The shallow zone is monitored semi-annually and the lower zone is sampled annually, during the December sampling event. The lower zone wells were sampled during the December 2019 sampling event. The deep zone wells are used as piezometers with no routine sampling unless there are verified landfill impacts in the lower zone water unit.

Well and well/piezometer locations are shown on Figure 2. The monitoring wells, with their monitored zone and permitted designations as background or compliance, are listed in Table 2. The construction details for the 26 monitoring wells and piezometers comprising the monitoring system are included in Table 3.

Table 2. Active Surficial Aquifer Groundwater Monitoring Wells at the Vista Landfill

| Shallow Zone                       | Lower Zone |
|------------------------------------|------------|
| <b>Background Monitoring Wells</b> |            |
| MW-1A                              | MW-1B      |
| MW-2AR                             | MW-2B      |
| MW-6AR                             | MW-6BR     |
| MW-7A                              |            |
| MW-8R                              |            |
| <b>Compliance Monitoring Wells</b> |            |
| MW-3A                              | MW-3B      |
| MW-4A                              | MW-4B      |
| MW-5A                              | MW-5B      |
|                                    | MW-7B      |
| MW-9A                              | MW-9B      |
| MW-11A                             | MW-11B     |
| MW-14A                             | MW-14B     |
| MW-15A                             | MW-15B     |

Note:

1. Wells listed on the same row are part of a cluster of wells.



TABLE 3. EXISTING MONITORING LOCATIONS AND CONSTRUCTION DETAILS, VISTA LANDFILL, APOPKA, FLORIDA

| WACS ID | Water Quality Monitoring Site ID | Date Installed | Date Abandoned | Well Type | Aquifer Monitored      | Top of Casing Elevation (NGVD) | Total Well Depth (Feet BLS) | Outer Casing Diameter/ Depth | Well Diameter | Screen Slot Size | Screen Length (feet) | Top of Screen (Feet BLS) | Bottom of Screen (Feet BLS) | Top of Screen (Feet NGVD) | Bottom of Screen (Feet NGVD) | Northing (NAD 1983) | Easting (NAD 1983) | Latitude (NAD 1983) | Longitude (NAD 1983) |
|---------|----------------------------------|----------------|----------------|-----------|------------------------|--------------------------------|-----------------------------|------------------------------|---------------|------------------|----------------------|--------------------------|-----------------------------|---------------------------|------------------------------|---------------------|--------------------|---------------------|----------------------|
| 19335   | MW-1A <sup>1</sup>               | 4/20/2004      | NA             | BG        | Shallow Surficial      | 109.47                         | 69                          | NA                           | 2             | 0.006            | 20                   | 49                       | 69                          | 57                        | 37                           | 1565469.28          | 492550.11          | 28° 38' 21.30"      | 81° 30' 36.28"       |
| 19336   | MW-1B                            | 4/20/2004      | NA             | BG        | Intermediate Surficial | 109.53                         | 96                          | NA                           | 2             | 0.010            | 10                   | 86                       | 96                          | 20                        | 10                           | 1565465.40          | 492545.32          | 28° 38' 21.27"      | 81° 30' 36.33"       |
| 19337   | MW-2AR                           | 1/23/2007      | NA             | BG        | Shallow Surficial      | 87.22                          | 39.94                       | NA                           | 2             | 0.006            | 10                   | 29.44                    | 39.44                       | 59.91                     | 49.91                        | 1565481.98          | 491815.07          | 28° 38' 21.40"      | 81° 30' 44.53"       |
| 19338   | MW-2B                            | 4/22/2004      | NA             | BG        | Intermediate Surficial | 88.46                          | 73                          | NA                           | 2             | 0.006            | 10                   | 63                       | 73                          | 20                        | 10                           | 1565471.82          | 491843.09          | 28° 38' 21.30"      | 81° 30' 44.21"       |
| 19339   | MW-3A                            | 4/13/2004      | NA             | CO        | Shallow Surficial      | 92.87                          | 56                          | NA                           | 2             | 0.006            | 30                   | 36                       | 56                          | 57                        | 37                           | 1564509.87          | 491522.95          | 28° 38' 11.76"      | 81° 30' 47.76"       |
| 19340   | MW-3B                            | 4/13/2004      | NA             | CO        | Intermediate Surficial | 93.06                          | 83                          | NA                           | 2             | 0.010            | 10                   | 73                       | 83                          | 20                        | 10                           | 1564509.53          | 491514.75          | 28° 38' 11.76"      | 81° 30' 47.85"       |
| 19341   | MW-4A                            | 4/14/2004      | NA             | CO        | Shallow Surficial      | 82.04                          | 42                          | NA                           | 2             | 0.006            | 20                   | 22                       | 42                          | 57                        | 37                           | 1564505.59          | 491949.09          | 28° 38' 11.74"      | 81° 30' 42.98"       |
| 19342   | MW-4B                            | 4/14/2004      | NA             | CO        | Intermediate Surficial | 83.18                          | 69                          | NA                           | 2             | 0.006            | 10                   | 59                       | 69                          | 20                        | 10                           | 1564505.16          | 491941.64          | 28° 38' 11.73"      | 81° 30' 43.06"       |
| 19343   | MW-5A                            | 4/14/2004      | NA             | CO        | Shallow Surficial      | 81.86                          | 40                          | NA                           | 2             | 0.006            | 20                   | 20                       | 40                          | 57                        | 37                           | 1564500.86          | 492441.55          | 28° 38' 11.71"      | 81° 30' 37.45"       |
| 19344   | MW-5B                            | 4/14/2004      | NA             | CO        | Intermediate Surficial | 81.27                          | 67                          | NA                           | 2             | 0.006            | 10                   | 57                       | 67                          | 20                        | 10                           | 1564500.47          | 492433.39          | 28° 38' 11.71"      | 81° 30' 37.54"       |
| 19345   | MW-6AR                           | 1/30/2007      | NA             | BG        | Shallow Surficial      | 104.11                         | 69.37                       | NA                           | 2             | 0.010            | 20                   | 48.87                    | 68.87                       | 52.27                     | 32.27                        | 1565140.42          | 490793.55          | 28° 38' 17.97"      | 81° 30' 55.98"       |
| 19346   | MW-6BR                           | 1/30/2007      | NA             | BG        | Intermediate Surficial | 103.99                         | 88.58                       | NA                           | 2             | 0.010            | 10                   | 78.08                    | 88.08                       | 22.98                     | 12.98                        | 1565137.25          | 490795.56          | 28° 38' 17.94"      | 81° 30' 55.95"       |
| 19347   | MW-7A                            | 4/20/2004      | NA             | BG        | Shallow Surficial      | 109.26                         | 69                          | NA                           | 2             | 0.006            | 20                   | 49                       | 69                          | 57                        | 37                           | 1565230.04          | 492821.74          | 28° 38' 18.95"      | 81° 30' 33.22"       |
| 19348   | MW-7B                            | 4/19/2004      | NA             | CO        | Intermediate Surficial | 109.13                         | 96                          | NA                           | 2             | 0.01             | 10                   | 86                       | 96                          | 20                        | 10                           | 1565222.30          | 492821.61          | 28° 38' 18.87"      | 81° 30' 33.22"       |
| 19868   | MW-8R                            | 1/25/2007      | NA             | BG        | Shallow Surficial      | 99.6                           | 72.12                       | NA                           | 2             | 0.006            | 10                   | 61.62                    | 71.72                       | 35.05                     | 25.05                        | 1565489.06          | 490997.80          | 28° 38' 21.43"      | 81° 30' 53.70"       |
| 19869   | MW-9A                            | 5/26/2017      | NA             | CO        | Shallow Surficial      | 99.45                          | 60                          | NA                           | 2             | 0.010            | 20                   | 40                       | 60                          |                           |                              | 1563710.84          | 491467.69          | 28° 38' 03.85"      | 81° 30' 48.345"      |
| 19870   | MW-9B                            | 5/26/2017      | NA             | CO        | Lower Surficial        | 99.52                          | 85                          | NA                           | 2             | 0.006            | 10                   | 75                       | 85                          |                           |                              | 1563705.66          | 491466.69          | 28° 38' 03.79"      | 81° 30' 48.355"      |
| 19873   | MW-11A                           | 8/18/2017      | NA             | DE        | Shallow Surficial      | 96.35                          | 55                          | NA                           | 2             | 0.010            | 20                   | 35                       | 55                          |                           |                              | 1563983.69          | 490293.90          | 28° 38' 03.79"      | 81° 30' 48.355"      |
| 19874   | MW-11B                           | 8/25/2017      | NA             | DE        | Lower Surficial        | 96.37                          | 85                          | NA                           | 2             | 0.006            | 10                   | 75                       | 85                          |                           |                              | 1563977.43          | 490292.60          | 28° 38' 06.437"     | 81° 30' 01.542"      |
| 21926   | MW-14A                           | 5/26/2017      | NA             | CO        | Shallow Surficial      | 100.62                         | 55                          | NA                           | 2             | 0.010            | 20                   | 35                       | 55                          |                           |                              | 1564122.62          | 491470.84          | 28° 38' 07.927"     | 81° 30' 48.306"      |
| 21927   | MW-14B                           | ND             | NA             | CO        | Lower Surficial        | 100.1                          | ND                          | ND                           | 2             | ND               | ND                   | ND                       | ND                          | ND                        | ND                           | 1564128.82          | 491477.36          | 28° 38' 07.987"     | 81° 30' 48.254"      |
| 21928   | MW-15A                           | 5/26/2017      | NA             | CO        | Shallow Surficial      | 105.27                         | 65                          | NA                           | 2             | 0.010            | 20                   | 45                       | 65                          |                           |                              | 1564542.92          | 490180.97          | 28° 38' 12.032"     | 81° 31' 02.823"      |
| 21929   | MW-15B                           | 5/26/2017      | NA             | CO        | Lower Surficial        | 105.15                         | 90                          | NA                           | 2             | 0.006            | 10                   | 80                       | 90                          |                           |                              | 1564537.75          | 490180.69          | 28° 38' 11.979"     | 81° 31' 02.823"      |
| 19879   | MW-FL1                           | 4/13/2004      | NA             | CO        | Floridan               | 93.16                          | 125                         | NA                           | 2             | 0.010            | 10                   | 115                      | 125                         | -45                       | -35                          | 1564509.43          | 491507.05          | 28° 38' 11.76"      | 81° 30' 47.94"       |
| 19880   | MW-FL2R                          | 1/29/2007      | NA             | CO        | Deep Surficial         | 86.76                          | 129.95                      | 6"/0' to 80'                 | 2             | 0.006            | 10                   | 119.45                   | 129.45                      | -45.54                    | -35.54                       | 1565501.29          | 491655.91          | 28° 38' 21.58"      | 81° 30' 46.32"       |
| 19881   | MW-FL3                           | 4/21/2004      | NA             | CO        | Floridan               | 97.49                          | 140                         | NA                           | 2             | 0.010            | 10                   | 130                      | 140                         | -45                       | -35                          | 1565463.35          | 492205.45          | 28° 38' 21.23"      | 81° 30' 40.15"       |

Notes:

- Survey Information was obtained from the May 25, 2007 Geosyntec Consultants Environmental Monitoring Location Map.
- Well construction information obtained from the July 2004, Collinas Group, Inc., Groundwater Monitoring Well Installation Report, Buttrey Landfill Parcel.
- Well construction information obtained from the March 15, 2007, Professional Service Industries, Inc., Monitoring Well Completion and Well Abandonment Report.
- NGVD = National Geodetic Vertical Datum of 1929.
- NAD 1983 = North American Datum of 1983.
- WACS = State Water Assurance Compliance System.
- BLS = Below Landsurface.
- NA = Not Applicable.
- BG = Background.
- CO = Compliance.
- ND = Data not available.
- OT = Other.
- ID = Identification.
- DE= Detection.

The current permit requires semi-annual sampling of the shallow zone and annual sampling of the lower zone for the field and laboratory parameters listed below.

**Field Parameters**

- Static Water Level (before purging)
- Specific Conductivity
- pH
- Dissolved Oxygen
- Turbidity
- Temperature

**Shallow Zone Laboratory Parameters**

- Total ammonia-nitrogen
- Chloride
- Iron
- Mercury
- Nitrate
- Sodium
- Total dissolved solids (TDS)
- Parameters listed in 40 Code of Federal Regulations (CFR) Part 258, Appendix I

**Lower Zone Laboratory Parameters**

- Total ammonia-nitrogen
- Chloride
- Sodium
- Nitrate

Lower zone wells should be sampled for the full list of parameters (see shallow zone laboratory parameters) if:

- The shallow well for the well cluster(s) shows a verified landfill impact; or
- The indicator data suggests through an increasing trend (or verified sudden jump far above background) that there is a landfill impact to the lower zone well(s).

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## 4.2 Sample Collection Analysis

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Groundwater sampling was conducted in accordance with F.A.C. Chapter 62-160 and FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01). ProTech field personnel collected groundwater samples for laboratory analysis from all monitoring wells listed in Section 4.1 between June 1, 2, and July 6, 2020.

Groundwater monitoring wells that were sampled were purged with dedicated QED bladder pumps with Teflon-lined tubing extending to the top of the well casing. Wells were purged using low-flow sampling methods; a minimum of one well volume was purged prior to stabilization for wells where the water table is located within the well screen. Field parameters including static water level, pH, specific conductance, temperature, turbidity, dissolved oxygen, oxidation-reduction potential and color/sheen (by observation) were recorded during purging and prior to sampling. Once purging was complete, ProTech field personnel collected groundwater samples from the dedicated pumps and tubing in laboratory-provided containers, and placed the samples in coolers with ice. Pace Analytical National (Pace) is certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP).

## 5 WATER QUALITY MONITORING RESULTS

This section summarizes the results of the groundwater quality sampling for the first semi-annual sampling event performed June 1, 2, and July 6, 2020.

### 5.1 Quality Assurance and Quality Control (QA/QC) Results

ProTech field personnel collected one equipment blank during the June 2020 sampling event and submitted the samples with trip blanks in coolers containing volatile organic compound (VOC) samples to Pace for analysis. The samples were received in good condition, properly preserved, and at proper temperatures. The laboratory provided additional QA/QC including analysis of method blanks, surrogates, laboratory control samples/laboratory control sample duplicates (LCS/LCSD), and matrix spike/matrix spike duplicates (MS/MSD). The QA/QC results for the laboratory reports associated with groundwater monitoring points from Pace Reports L1224093 and L1242951 are summarized below:

- A packaged cooler containing nitrate bottles for this sample set (L1224093) experienced a one day FedEx delay due to ongoing COVID-19 circumstances. Due to this delay, the laboratory was unable to process nitrate samples within holding time for these sampling points: MW-3A, MW-4A, MW-9A, MW-11A, MW-14A, MW-15A. Combined nitrate-nitrite was analyzed on these sampling points and the results are summarized in an email attached to the chain of custody within this report.
- The sample containers for MW-2AR were also affected by the FedEx cooler delay, and the volatiles and semi-volatiles were inadvertently not logged at the time of receipt. Unfortunately, hold time expired before this was identified and the volatiles and semi-volatiles were recollected for MW-2AR.
- Low levels of chloride and nitrate as (n) are present in the method blank associated with QC batch WG1486251. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.
- Low levels of sodium is present in the method blank associated with QC batch WG1487368. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.
- The relative percent difference (RPD) for ammonia nitrogen was outside control criteria. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the MS, MSD, and associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.
- Laboratory generated MS/MSD analysis data have been provided. The MS/MSD for method 7470A exhibited spike compound recoveries outside the QC limits for mercury. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.
- Laboratory generated MS/MSD analysis data have been provided. The MS/MSD for sodium exhibited spike compound recoveries outside the QC limits. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.
- The 1,2-dichlorobenzene, 1,4-dichlorobenzene, and bromochloromethane LCS and LCSD recovery was marginally above control limits at 122%, 121%, and 123%, respectively, (limits 79-121, limits 79-120, and limits 76-122, respectively). Recoveries in the MS and



MSD were acceptable, which indicates the analytical batch was in control. No further corrective action was required.

- The relative percent difference (RPD) for methylene chloride was outside control criteria. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the MS, MSD, and associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.
- Due to high analyte concentration, several samples were analyzed at a dilution for various analyses. The reporting limits have been adjusted relative to the dilution required.
- Other QA/QC issues were not identified; therefore, the remaining results from the June 2020 event are considered acceptable without qualification.

## 5.2 Groundwater Quality

---

The groundwater quality detections and exceedances of the primary or secondary drinking water standards are summarized in Table 4. In accordance with Chapter 62-701, FAC, groundwater results were compared to their respective PDWS or secondary drinking water standard (SDWS) established in Chapter 62-550, FAC and incorporated via reference in Chapter 62-520, FAC. For this routine groundwater monitoring report, groundwater cleanup target levels (GCTLs) in Rule 62-777, FAC, were used for constituents that do not have a PDWS or SDWS to evaluate if a parameter is significantly above background levels. GCTLs are used as a screening tool for potential anomalies in the concentration data that may require further consideration or review. Appendix A includes the laboratory analytical data and field forms.

### 5.2.1 Metals Exceedances

Metals with concentrations in excess of applicable groundwater standards in select wells include:

- Iron
- Mercury

These exceedances are discussed below and are listed in Table 4.

#### 5.2.1.1 Iron

The concentration of iron in the groundwater ranged from non-detect to 615 micrograms per liter ( $\mu\text{g/L}$ ) during the June 2020 sampling event. The FDEP SDWS of 300  $\mu\text{g/L}$  for iron was exceeded at MW-7A (615  $\mu\text{g/L}$ ). The iron concentrations are not due to landfill operations. Iron at MW-7A will continue to be closely monitored in subsequent sampling events.

#### 5.2.1.2 Mercury

During the June 2020 sampling event, mercury exceeded its PDWS in background monitoring well MW-6AR. The FDEP PDWS of 2  $\mu\text{g/L}$  for mercury was exceeded during the first semi-annual monitoring period in background monitoring well MW-6AR (2.78  $\mu\text{g/L}$ ). In order to assess if landfill gas was causing the mercury detection, a dissolved methane sample was collected during the December 2017 monitoring event. Dissolved methane was not detected in a sample collected during the December 2017 monitoring event. This indicates that the source is not related to landfill gas and since this well is up-gradient from the landfill, the source appears to be from off-site (possibly the Rapid Infiltration Basins (RIBs) facilities). Mercury analysis will continue to be performed during the next monitoring event.

**Table 4. Summary of Groundwater Quality Analytical Results (Detected Parameters Only)**  
**Vista Landfill, June 2020**

| Parameter                         | Units    | MCL     | Standard | MW-1A   | MW-2AR  | MW-3A   | MW-4A   | MW-5A   | MW-6AR  | MW-7A   | MW-8R   | MW-9A    | MW-11A  | MW-14A  | MW-15A   |
|-----------------------------------|----------|---------|----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|---------|----------|
| Well Type                         |          |         |          | BG      | BG      | CO      | CO      | CO      | BG      | BG      | BG      | CO       | DE      | CO      | CO       |
| <b>Volatile Organic Compounds</b> |          |         |          |         |         |         |         |         |         |         |         |          |         |         |          |
| Acetone                           | ug/l     | NS      | NS       | 1.05 U  | 1.92 I  | 1.05 U  | 1.05 U  | 1.05 U  | 1.05 U  | 1.4 I   | 1.05 U  | 1.05 U   | 1.05 U  | 1.06 I  | 1.05 U   |
| Chloroform                        | ug/l     | NS      | NS       | 0.231 I | 0.086 U | 0.086 U | 0.086 U | 0.086 U | 0.086 U | 0.086 U | 0.086 U | 0.086 U  | 0.086 U | 0.086 U | 0.086 U  |
| <b>Metals</b>                     |          |         |          |         |         |         |         |         |         |         |         |          |         |         |          |
| Antimony                          | ug/l     | 6       | PDWS     | 0.754 U | 0.925 I | 0.754 U | 0.754 U | 0.754 U | 0.754 U | 0.754 U | 0.754 U | 0.754 U  | 0.754 U | 0.754 U | 0.754 U  |
| Arsenic                           | ug/l     | 10      | PDWS     | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.568 I | 0.907 I | 0.25 U   | 1.83 I  | 0.818 I | 0.25 U   |
| Barium                            | ug/l     | 2000    | PDWS     | 32.1    | 9.9     | 37.9    | 12.8    | 75.4    | 25.7    | 17      | 29.5    | 5.28     | 14.5    | 9.91    | 5.8      |
| Beryllium                         | ug/l     | 4       | PDWS     | 0.12 U  | 0.12 U  | 0.12 U  | 0.12 U  | 0.189 I | 0.12 U  | 0.12 U  | 0.12 U  | 0.12 U   | 0.12 U  | 0.12 U  | 0.12 U   |
| Chromium                          | ug/l     | 100     | PDWS     | 1.4 U   | 1.4 U   | 1.4 U   | 1.4 U   | 1.44 I  | 1.51 I  | 1.4 U   | 1.89 I  | 2.89 I   | 4.85 I  | 2.45 I  | 1.4 U    |
| Copper                            | ug/l     | 1000    | SDWS     | 5.72 I  | 5.3 U   | 5.3 U   | 5.3 U   | 5.3 U   | 5.3 U   | 5.3 U   | 5.3 U   | 5.3 U    | 5.3 U   | 5.3 U   | 5.3 U    |
| Iron                              | ug/l     | 300     | SDWS     | 35.8 I  | 17.8 I  | 64.6 I  | 14.7 I  | 29.3 I  | 14.1 U  | 615     | 254     | 189      | 104     | 101     | 44.9 I   |
| Mercury                           | ug/l     | 2       | PDWS     | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.141 I | 2.78    | 0.049 U | 0.049 U | 0.049 U  | 0.049 U | 0.049 U | 0.56     |
| Sodium                            | mg/l     | 160     | PDWS     | 8.13    | 1.71    | 2.29    | 1.6     | 2.69    | 11.7    | 6.31    | 7.33    | 3.08     | 8.96    | 4.79    | 4.41     |
| Thallium                          | ug/l     | 2       | PDWS     | 0.19 U  | 0.19 U  | 0.19 U  | 0.19 U  | 0.19 U  | 0.19 U  | 0.19 U  | 0.19 U  | 0.19 U   | 0.528 I | 0.19 U  | 0.19 U   |
| Vanadium                          | ug/l     | NS      | NS       | 2.4 U   | 2.4 U   | 2.4 U   | 2.4 U   | 2.4 U   | 3.59 I  | 2.4 U   | 2.4 U   | 2.4 U    | 2.4 U   | 2.4 U   | 2.4 U    |
| Zinc                              | ug/l     | 5000    | SDWS     | 5.9 U   | 5.9 U   | 5.9 U   | 179     | 5.9 U   | 5.9 U   | 5.9 U   | 5.9 U   | 5.9 U    | 5.9 U   | 5.9 U   | 5.9 U    |
| <b>General Chemistry</b>          |          |         |          |         |         |         |         |         |         |         |         |          |         |         |          |
| Alkalinity                        | mg/l     | NS      | NS       | 141     | 3.58 I  | 20.7    | 6.57 I  | 4.42 I  | 14.8 I  | 98.3    | 113     | 21.2     | 133     |         | 6 I      |
| Chloride                          | mg/l     | 250     | SDWS     | 15.4    | 2.18    | 3.82 V  | 1.77 V  | 7.38    | 39.7    | 11.7    | 12      | 3 V      | 6.26    | 7.98    | 8.13     |
| Nitrate (N)                       | mg/l     | 10      | PDWS     | 11.5    | 0.456   | 1.05 Q  | 0.65 QV | 4.63    | 5.45    | 10.8    | 4       | 0.377 QV | 9.67    | 1.75 Q  | 0.698 QV |
| Nitrate-Nitrite (N)               | mg/l     | 10      | PDWS     | ---     | ---     | 1.24    | 0.613   | ---     | ---     | ---     | ---     | 0.294    | ---     | 2       | 0.873    |
| Residues- Filterable (TDS)        | mg/l     | 500     | SDWS     | 257     | 21      | 63      | 38      | 67      | 171     | 233     | 154     | 55       | 208     | 98      | 34       |
| <b>Field Parameters</b>           |          |         |          |         |         |         |         |         |         |         |         |          |         |         |          |
| Dissolved Oxygen                  | MG/L     | NS      | NS       | 0.6     | 0.5     | 1.3     | 3.5     | 3.3     | 2       | 0.7     | 0.6     | 1.3      | 2.4     | 1.5     | 2.5      |
| Dissolved Oxygen                  | % Sat.   | <20     | MPIS     | 4.1     | 3.42    | 8.89    | 23.93   | 22.56   | 13.67   | 4.79    | 4.1     | 8.89     | 16.41   | 10.26   | 17.09    |
| Oxidation Reduction Potential     | mV       | NS      | NS       | 118     | 186     | 160     | 180     | 226     | 204     | 110     | 111     | 171      | 151     | 176     | 180      |
| pH                                | S.U.     | 6.5-8.5 | SDWS     | 7.46    | 4.97    | 5.71    | 5.61    | 5.31    | 5.35    | 7.79    | 6.65    | 6.73     | 7.65    | 5.92    | 4.86     |
| Specific Conductance              | UMHOS/CM | NS      | NS       | 447     | 43      | 97      | 70      | 97      | 225     | 322     | 273     | 85       | 319     | 108     | 75       |
| Temperature, Water                | Deg C    | NS      | NS       | 26.9    | 25.6    | 26.8    | 26.2    | 26      | 25.1    | 25.4    | 25      | 25.1     | 24.1    | 25.1    | 25.8     |
| Turbidity                         | NTU      | NS      | NS       | 3.61    | 3.62    | 4.56    | 3       | 4.02    | 2.96    | 3.03    | 4.28    | 4.23     | 3.53    | 8.05    | 3.71     |

**NOTES:**

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. Groundwater Clean-Up Target Level (62-777 F.A.C.) are used for screening purposes only to evaluate if a parameter is significantly above background levels.
4. MPIS = Monitoring Plan Implementation Schedule
5. NS = No numeric standard has been set for this analyte.
6. mg/L = milligrams per liter
7. ug/L= micrograms per liter
8. NTU = nephelometric turbidity units
9. Yellow shaded values indicate parameter concentrations exceeded respective PDWS or SDWS.
10. Degrees C = Degrees Celcius
11. umhos/cm = micromhos per centimeter
12. % Sat = Percent saturation
13. U = Analyte concentration was below the laboratory detection limit (value shown).
14. I = Analyte concentration was between the laboratory detection limit and laboratory practical.
15. V = Analyte was detected in the sample and an associated method blank.
16. Q = Sample held beyond the accepted holding time.
17. BG= Background well
18. CO = Compliance well
19. Percent saturation of dissolved oxygen calculated from <http://www.fivecreeks.org/monitor/do.html>.
20. --- = Parameter not collected.

### 5.2.2 Inorganic Parameters Exceedances

Nitrate and dissolved oxygen exceeded their applicable standards at specific wells. Additionally, the pH concentrations at some monitoring wells fell outside the SDWS range for pH. These parameters are discussed below.

#### 5.2.2.1 Nitrate

The FDEP PDWS of 10 milligrams per liter (mg/L) for nitrate was exceeded at background wells MW-1A (11.5 mg/L) and MW-7A (10.8 mg/L). These results were consistent with recent nitrate values obtained from these wells.

No exceedances of nitrate occurred at other monitoring wells. The exceedances at MW-1A and MW-7A are not due to the landfill. These wells are located hydraulically up gradient and, in the case of MW-7A, nitrate was detected in previous monitoring events prior to the placement of waste. Nitrate exceedances may be related to Rapid Infiltration Basin (RIB) facilities, which have been previously documented as potential sources for nitrates.<sup>2</sup>

#### 5.2.2.2 Dissolved Oxygen

Dissolved oxygen values (calculated from field measurements) were above the Site's MPIS limit of not greater than 20 percent oxygen saturation in monitoring wells MW-4A (23.93%) and MW-5A (22.56%).

The monitoring wells were purged and sampled with a bladder pump at low flow rates as indicated by their relative gallons per minute (gpm) pumping rates as follows: MW-4A (0.22 gpm) and MW-5A (0.19 gpm). During the stabilization readings, the dissolved oxygen concentrations remained relatively steady. These measurements were collected using low flow techniques and are considered to be a natural characteristic of the aquifer system at these wells.

#### 5.2.2.3 pH

The pH was below the SDWS range of 6.5 to 8.5 units in background monitoring wells MW-2AR (4.97 units) and MW-6AR (5.35 units) and in compliance wells MW-3A (5.71 units), MW-4A (5.61 units), MW-5A (5.31 units), MW-14A (5.92 units), and MW-15A (4.86 units). Low groundwater pH in this region is the result of low pH in precipitation, rapid recharge, and little buffering capacity of the surficial sands. The pH levels observed at the Site are characteristic of the groundwater in this region of Florida.

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<sup>2</sup> Special Publication SJ2006-SP3, *Estimates Of Upper Floridan Aquifer Recharge Augmentation Based On Hydraulic And Water-Quality Data (1986-2002) From The Water Conserv II RIB Systems, Orange County, Florida* (<http://sjr.state.fl.us/programs/outreach/pubs/techpubs/pdfs/SP/SJ2006-SP3.pdf>)

### 5.2.3 Organic Parameters Exceedances

There were no exceedances of organic parameters during the June 2020 monitoring event.

There were low level volatile organic compound (VOC) detections of acetone and chloroform. acetone was detected at an estimated concentration in background monitoring wells MW-2AR (1.92 **I** µg/L) and MW-7A (1.4 **I** µg/L) and compliance well MW-14A (1.06 **I** µg/L). Chloroform was detected at an estimated concentration in background monitoring well MW-1A (0.231 **I** µg/L). The "**I**" qualifier indicates that the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.



## 6 SUMMARY

This section summarizes the June 2020 semi-annual findings based on the groundwater sampling results.

### 6.1 Groundwater Sampling Results

The groundwater flow assessment shows the following:

- Shallow surficial aquifer groundwater in the vicinity of the site flows primarily toward the southwest corner of the landfill.
- Groundwater flow direction in the intermediate surficial aquifer is variable with groundwater flowing into the site from the northeast corner and flowing to the south and southwest.
- In the intermediate surficial aquifer, the groundwater also flows into the site from the southern and western boundaries flowing to the northern boundary and southeast corner of the site.
- Regional potentiometric maps for the Floridan aquifer indicate that flow is towards the northeast and is confirmed by the data from the Floridan aquifer monitoring wells.

The analytical results from analysis of the groundwater samples shows the following:

- There were no verified landfill impacts during the June 2020 monitoring event.
- Nitrate exceeded its PDWS in background monitoring wells MW-1A and MW-7A. The nitrate levels are attributed to background conditions, possibly associated with local RIBs facilities.
- Iron exceeded its SDWS in background monitoring well MW-7A.
- Mercury exceeded its PDWS in background monitoring well MW-6AR. The mercury concentration is from an off-site source (possibly associated with local RIBs facilities) and not related to landfill operations.
- Dissolved oxygen values (field measurement) were above the Site's MPIS limit of not greater than 20% oxygen saturation in the groundwater monitoring wells MW-4A and MW-5A. These measurements were collected using low flow techniques and are considered to be a natural characteristic of the aquifer system at these wells.
- Field pH levels fell outside the SDWS range for pH at select monitoring wells. The low pH levels in select monitoring wells are attributed to Florida's ambient groundwater quality characteristics due to low pH rainfall, rapid recharge, and the limited buffering capability of Florida's sandy soils.

Detection monitoring should continue as outlined in the MPIS.

APPENDIX A  
LABORATORY ANALYTICAL RESULTS  
AND FIELD FORMS

July 30, 2020

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## Vista

Sample Delivery Group: L1224093  
Samples Received: 06/02/2020  
Project Number: 200  
Description: Vista-Semiannual GW Parameters June Dec  
Site: FL26  
Report To: Eric Parker  
5110 US Hwy 301 South  
Baldwin, FL 32234

Entire Report Reviewed By:



Stacy Kennedy  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



|                                                    |    |
|----------------------------------------------------|----|
| Cp: Cover Page                                     | 1  |
| Tc: Table of Contents                              | 2  |
| Ss: Sample Summary                                 | 3  |
| Cn: Case Narrative                                 | 7  |
| Sr: Sample Results                                 | 9  |
| MW-1A L1224093-01                                  | 9  |
| MW-3A L1224093-02                                  | 12 |
| MW-4A L1224093-03                                  | 15 |
| MW-5A L1224093-04                                  | 18 |
| MW-7A L1224093-05                                  | 21 |
| MW-9A L1224093-06                                  | 24 |
| MW-11A L1224093-07                                 | 27 |
| MW-14A L1224093-08                                 | 30 |
| MW-15A L1224093-09                                 | 33 |
| TRIP BLANK 1 L1224093-10                           | 36 |
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| MW-6AR L1224093-12                                 | 39 |
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| Volatile Organic Compounds (GC/MS) by Method 8260B | 75 |
| EDB / DBCP by Method 8011                          | 84 |
| Gl: Glossary of Terms                              | 86 |
| Al: Accreditations & Locations                     | 87 |
| Sc: Sample Chain of Custody                        | 88 |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-1A L1224093-01 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 12:08

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1491199 | 1        | 06/11/20 19:58        | 06/11/20 19:58     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1485759 | 1        | 06/02/20 12:54        | 06/02/20 12:54     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1485759 | 5        | 06/02/20 13:05        | 06/02/20 13:05     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 13:45        | 06/11/20 13:45     | MCG     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486137 | 1        | 06/03/20 11:31        | 06/03/20 19:24     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1486102 | 1        | 06/06/20 16:36        | 06/07/20 17:45     | EL      | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1486103 | 1        | 06/03/20 23:10        | 06/04/20 18:00     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 08:54        | 06/09/20 08:54     | BMB     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1489913 | 1        | 06/10/20 09:10        | 06/11/20 00:21     | LEL     | Mt. Juliet, TN |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## MW-3A L1224093-02 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 09:17

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1491199 | 1        | 06/11/20 20:05        | 06/11/20 20:05     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1486251 | 1        | 06/03/20 13:24        | 06/03/20 13:24     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 13:50        | 06/11/20 13:50     | MCG     | Mt. Juliet, TN |
| Wet Chemistry by Method 353.2                      | WG1489405 | 1        | 06/15/20 13:17        | 06/15/20 13:17     | BAM     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486728 | 1        | 06/04/20 10:13        | 06/04/20 19:01     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1486875 | 1        | 06/04/20 06:49        | 06/04/20 11:05     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1491230 | 1        | 06/12/20 17:26        | 06/12/20 19:42     | JPD     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 09:14        | 06/09/20 09:14     | BMB     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1489913 | 1        | 06/10/20 09:10        | 06/10/20 23:58     | LEL     | Mt. Juliet, TN |

## MW-4A L1224093-03 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 09:54

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1491199 | 1        | 06/11/20 20:11        | 06/11/20 20:11     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1486251 | 1        | 06/03/20 13:35        | 06/03/20 13:35     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 13:51        | 06/11/20 13:51     | MCG     | Mt. Juliet, TN |
| Wet Chemistry by Method 353.2                      | WG1489405 | 1        | 06/15/20 13:19        | 06/15/20 13:19     | BAM     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486728 | 1        | 06/04/20 10:13        | 06/04/20 19:09     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1487368 | 1        | 06/09/20 09:16        | 06/10/20 16:28     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1491230 | 1        | 06/12/20 17:26        | 06/12/20 19:46     | JPD     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 09:33        | 06/09/20 09:33     | BMB     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1489913 | 1        | 06/10/20 09:10        | 06/11/20 00:33     | LEL     | Mt. Juliet, TN |

## MW-5A L1224093-04 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 10:39

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488086 | 1        | 06/06/20 11:07        | 06/06/20 14:16     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1491199 | 1        | 06/11/20 20:19        | 06/11/20 20:19     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1485759 | 1        | 06/02/20 13:16        | 06/02/20 13:16     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 13:53        | 06/11/20 13:53     | MCG     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486137 | 1        | 06/03/20 11:31        | 06/03/20 19:26     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1486102 | 1        | 06/06/20 16:36        | 06/07/20 17:56     | EL      | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1486103 | 1        | 06/03/20 23:10        | 06/04/20 18:03     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 09:52        | 06/09/20 09:52     | BMB     | Mt. Juliet, TN |

ACCOUNT:

Vista

PROJECT:

200

SDG:

L1224093

DATE/TIME:

07/30/20 13:06

PAGE:

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-5A L1224093-04 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 10:39

Received date/time  
06/02/20 08:15

| Method                    | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|---------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| EDB / DBCP by Method 8011 | WG1489913 | 1        | 06/10/20 09:10        | 06/11/20 00:44     | LEL     | Mt. Juliet, TN |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

## MW-7A L1224093-05 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 11:28

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1491199 | 1        | 06/11/20 20:25        | 06/11/20 20:25     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1485759 | 1        | 06/02/20 13:37        | 06/02/20 13:37     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1485759 | 5        | 06/02/20 13:48        | 06/02/20 13:48     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 13:55        | 06/11/20 13:55     | MCG     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486728 | 1        | 06/04/20 10:13        | 06/04/20 19:11     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1486102 | 1        | 06/06/20 16:36        | 06/07/20 17:58     | EL      | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1486103 | 1        | 06/03/20 23:10        | 06/04/20 17:15     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 10:11        | 06/09/20 10:11     | BMB     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1489913 | 1        | 06/10/20 09:10        | 06/11/20 00:56     | LEL     | Mt. Juliet, TN |

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## MW-9A L1224093-06 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 08:06

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1491199 | 1        | 06/11/20 20:32        | 06/11/20 20:32     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1486251 | 1        | 06/03/20 13:46        | 06/03/20 13:46     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 13:56        | 06/11/20 13:56     | MCG     | Mt. Juliet, TN |
| Wet Chemistry by Method 353.2                      | WG1489405 | 1        | 06/15/20 13:21        | 06/15/20 13:21     | BAM     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486728 | 1        | 06/04/20 10:13        | 06/04/20 19:13     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1487368 | 1        | 06/09/20 09:16        | 06/10/20 16:30     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1487373 | 1        | 06/13/20 12:09        | 06/14/20 21:44     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 10:31        | 06/09/20 10:31     | BMB     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1489913 | 1        | 06/10/20 09:10        | 06/11/20 01:07     | LEL     | Mt. Juliet, TN |

## MW-11A L1224093-07 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 07:37

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1491199 | 1        | 06/11/20 20:40        | 06/11/20 20:40     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1486251 | 1        | 06/03/20 14:18        | 06/03/20 14:18     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 14:03        | 06/11/20 14:03     | MCG     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486728 | 1        | 06/04/20 10:13        | 06/04/20 19:15     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1487368 | 1        | 06/09/20 09:16        | 06/10/20 16:33     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1487373 | 1        | 06/13/20 12:09        | 06/14/20 21:47     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 10:50        | 06/09/20 10:50     | BMB     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1489913 | 1        | 06/10/20 09:10        | 06/11/20 01:19     | LEL     | Mt. Juliet, TN |

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-14A L1224093-08 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 08:41

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1486251 | 1        | 06/03/20 14:40        | 06/03/20 14:40     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 14:05        | 06/11/20 14:05     | MCG     | Mt. Juliet, TN |
| Wet Chemistry by Method 353.2                      | WG1489405 | 1        | 06/15/20 13:23        | 06/15/20 13:23     | BAM     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486728 | 1        | 06/04/20 10:13        | 06/04/20 19:17     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1487368 | 1        | 06/09/20 09:16        | 06/10/20 16:36     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1487373 | 1        | 06/13/20 12:09        | 06/14/20 21:51     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 11:09        | 06/09/20 11:09     | BMB     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1489913 | 1        | 06/10/20 09:10        | 06/11/20 01:30     | LEL     | Mt. Juliet, TN |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## MW-15A L1224093-09 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 07:01

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1491199 | 1        | 06/11/20 20:48        | 06/11/20 20:48     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1486251 | 1        | 06/03/20 14:51        | 06/03/20 14:51     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490493 | 1        | 06/11/20 14:06        | 06/11/20 14:06     | MCG     | Mt. Juliet, TN |
| Wet Chemistry by Method 353.2                      | WG1489405 | 1        | 06/15/20 13:24        | 06/15/20 13:24     | BAM     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486728 | 1        | 06/04/20 10:13        | 06/04/20 19:19     | TCT     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1487368 | 1        | 06/09/20 09:16        | 06/10/20 16:44     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1487373 | 1        | 06/13/20 12:09        | 06/14/20 21:54     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 11:29        | 06/09/20 11:29     | BMB     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1489913 | 1        | 06/10/20 09:10        | 06/11/20 01:42     | LEL     | Mt. Juliet, TN |

## TRIP BLANK 1 L1224093-10 GW

Collected by  
Danny Armour

Collected date/time  
06/01/20 00:00

Received date/time  
06/02/20 08:15

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1489187 | 1        | 06/09/20 08:16        | 06/09/20 08:16     | BMB     | Mt. Juliet, TN |

## MW-2AR L1224093-11 GW

Collected by  
Danny Armour

Collected date/time  
06/02/20 07:31

Received date/time  
06/03/20 08:45

| Method                                     | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|--------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011 | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011        | WG1492555 | 1        | 06/15/20 23:30        | 06/15/20 23:30     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0              | WG1486343 | 1        | 06/03/20 12:21        | 06/03/20 12:21     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1              | WG1490497 | 1        | 06/14/20 23:39        | 06/14/20 23:39     | DGR     | Mt. Juliet, TN |
| Mercury by Method 7470A                    | WG1486486 | 1        | 06/03/20 22:00        | 06/04/20 10:11     | ABL     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B               | WG1487368 | 1        | 06/09/20 09:16        | 06/10/20 16:47     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020              | WG1487373 | 1        | 06/13/20 12:09        | 06/14/20 22:05     | LD      | Mt. Juliet, TN |

## MW-6AR L1224093-12 GW

Collected by  
Danny Armour

Collected date/time  
06/02/20 08:15

Received date/time  
06/03/20 08:45

| Method                                     | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|--------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011 | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011        | WG1492555 | 1        | 06/15/20 23:36        | 06/15/20 23:36     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0              | WG1486343 | 1        | 06/03/20 12:57        | 06/03/20 12:57     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1              | WG1490497 | 1        | 06/14/20 23:44        | 06/14/20 23:44     | DGR     | Mt. Juliet, TN |
| Mercury by Method 7470A                    | WG1486486 | 1        | 06/03/20 22:00        | 06/04/20 10:13     | ABL     | Mt. Juliet, TN |

ACCOUNT:  
Vista

PROJECT:  
200

SDG:  
L1224093

DATE/TIME:  
07/30/20 13:06

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-6AR L1224093-12 GW

Collected by  
Danny Armour

Collected date/time  
06/02/20 08:15

Received date/time  
06/03/20 08:45

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Metals (ICP) by Method 6010B                       | WG1487368 | 1        | 06/09/20 09:16        | 06/10/20 16:49     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1487373 | 1        | 06/13/20 12:09        | 06/14/20 22:08     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1492363 | 1        | 06/14/20 11:20        | 06/14/20 11:20     | JHH     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1493090 | 1        | 06/16/20 06:09        | 06/16/20 19:12     | LEL     | Mt. Juliet, TN |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## MW-8R L1224093-13 GW

Collected by  
Danny Armour

Collected date/time  
06/02/20 06:58

Received date/time  
06/03/20 08:45

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011         | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011                | WG1492555 | 1        | 06/15/20 23:42        | 06/15/20 23:42     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0                      | WG1486343 | 1        | 06/03/20 13:34        | 06/03/20 13:34     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1                      | WG1490497 | 1        | 06/14/20 23:47        | 06/14/20 23:47     | DGR     | Mt. Juliet, TN |
| Mercury by Method 7470A                            | WG1486486 | 1        | 06/03/20 22:00        | 06/04/20 10:15     | ABL     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B                       | WG1487369 | 1        | 06/16/20 16:53        | 06/17/20 00:41     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                      | WG1487373 | 1        | 06/13/20 12:09        | 06/14/20 22:11     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1492363 | 1        | 06/14/20 11:39        | 06/14/20 11:39     | JHH     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1493090 | 1        | 06/16/20 06:09        | 06/16/20 19:24     | LEL     | Mt. Juliet, TN |

## TRIP BLANK 2 L1224093-14 GW

Collected by  
Danny Armour

Collected date/time  
06/02/20 00:00

Received date/time  
06/03/20 08:45

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1492775 | 1        | 06/15/20 14:45        | 06/15/20 14:45     | ACG     | Mt. Juliet, TN |

## Equipment Blank L1224093-15 GW

Collected by  
Danny Armour

Collected date/time  
06/02/20 08:40

Received date/time  
06/03/20 08:45

| Method                                     | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|--------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Gravimetric Analysis by Method 2540 C-2011 | WG1488083 | 1        | 06/06/20 10:48        | 06/06/20 12:12     | TH      | Mt. Juliet, TN |
| Wet Chemistry by Method 2320 B-2011        | WG1492555 | 1        | 06/15/20 23:50        | 06/15/20 23:50     | LEB     | Mt. Juliet, TN |
| Wet Chemistry by Method 300.0              | WG1486343 | 1        | 06/03/20 14:11        | 06/03/20 14:11     | ELN     | Mt. Juliet, TN |
| Wet Chemistry by Method 350.1              | WG1490497 | 1        | 06/14/20 23:49        | 06/14/20 23:49     | DGR     | Mt. Juliet, TN |
| Mercury by Method 7470A                    | WG1486486 | 1        | 06/03/20 22:00        | 06/04/20 10:17     | ABL     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B               | WG1487369 | 1        | 06/16/20 16:53        | 06/17/20 00:44     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020              | WG1487373 | 1        | 06/13/20 12:09        | 06/14/20 22:15     | LD      | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                  | WG1493090 | 1        | 06/16/20 06:09        | 06/16/20 19:36     | LEL     | Mt. Juliet, TN |

## MW-2AR L1224093-16 GW

Collected by  
Danny Armour

Collected date/time  
07/06/20 08:40

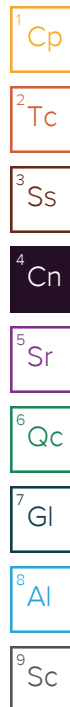
Received date/time  
07/07/20 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|--------|-------|----------|-----------------------|--------------------|---------|----------|
|--------|-------|----------|-----------------------|--------------------|---------|----------|



Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Stacy Kennedy  
Project Manager



### Project Comments

A packaged cooler containing nitrate bottles for this sample set (L1224093) experienced a one day FedEx delay due to ongoing COVID-19 circumstances. Due to this delay, the laboratory was unable to process nitrate samples within holding time for these sampling points: MW-3A, MW-4A, MW-9A, MW-11A, MW-14A, MW-15A. Combined nitrate-nitrite was analyzed on these sampling points and the results are summarized in an email attached to the chain of custody within this report. SK 7/4/20

The sample containers for MW-2AR were also affected by the FedEx cooler delay, and the volatiles and semi-volatiles were inadvertently not logged at the time of receipt. Unfortunately, hold time expired before this was identified and the volatiles and semi-volatiles were recollected for MW-2AR. SK 7/20/20

### Sample Delivery Group (SDG) Narrative

Sample held beyond the accepted holding time.

| Batch     | Method | Lab Sample ID               |
|-----------|--------|-----------------------------|
| WG1486251 | 300.0  | L1224093-02, 03, 06, 08, 09 |

### Wet Chemistry by Method 300.0

Indicates the analyte was detected in both the sample and method blank.

| Batch     | Analyte        | Lab Sample ID       |
|-----------|----------------|---------------------|
| WG1486251 | Chloride       | L1224093-02, 03, 06 |
| WG1486251 | Nitrate as (N) | L1224093-03, 06, 09 |

### Wet Chemistry by Method 350.1

The value is outside laboratory established criteria.

| Batch     | Lab Sample ID    | Analytes         |
|-----------|------------------|------------------|
| WG1490493 | (DUP) R3537692-8 | Ammonia Nitrogen |

### Wet Chemistry by Method 353.2

The value is outside laboratory established criteria.

| Batch     | Lab Sample ID                     | Analytes        |
|-----------|-----------------------------------|-----------------|
| WG1489405 | (MS) R3538843-4, (MSD) R3538843-5 | Nitrate-Nitrite |



## Mercury by Method 7470A

The value is outside laboratory established criteria.

| Batch     | Lab Sample ID                     | Analytes |
|-----------|-----------------------------------|----------|
| WG1486137 | (MS) R3534792-3, (MSD) R3534792-4 | Mercury  |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Metals (ICP) by Method 6010B

The value is outside laboratory established criteria.

| Batch     | Lab Sample ID                     | Analytes |
|-----------|-----------------------------------|----------|
| WG1487368 | (MS) R3537297-4, (MSD) R3537297-5 | Sodium   |

## Volatile Organic Compounds (GC/MS) by Method 8260B

The value is outside laboratory established criteria.

| Batch     | Lab Sample ID                                                      | Analytes            |
|-----------|--------------------------------------------------------------------|---------------------|
| WG1489187 | (LCSD) R3537695-2, L1224093-01, 02, 03, 04, 05, 06, 07, 08, 09, 10 | 1,4-Dichlorobenzene |
| WG1492775 | (LCS) R3538899-1, L1224093-14                                      | Bromochloromethane  |

The value is outside laboratory established criteria.

| Batch     | Lab Sample ID                      | Analytes           |
|-----------|------------------------------------|--------------------|
| WG1492363 | (LCSD) R3538766-2, L1224093-12, 13 | Methylene Chloride |





## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 64.55  | ft     |
| pH (On Site)                   | 7.46   | su     |
| Temperature (on-site)          | 26.9   | Deg. C |
| Specific Conductance (on site) | 447    | uS/cm  |
| Dissolved Oxygen (on-site)     | .6     | mg/l   |
| Turbidity                      | 3.61   | NTU    |
| ORP                            | 118    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 257    |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 141    |           | 2.71 | 20.0 | 1        | 06/11/2020 19:58     | <a href="#">WG1491199</a> |

## Sample Narrative:

L1224093-01 WG1491199: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 15.4   |           | 0.0519 | 1.00  | 1        | 06/02/2020 12:54     | <a href="#">WG1485759</a> |
| Nitrate as (N) | 11.5   |           | 0.114  | 0.500 | 5        | 06/02/2020 13:05     | <a href="#">WG1485759</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | <u>U</u>  | 0.0317 | 0.100 | 1        | 06/11/2020 13:45     | <a href="#">WG1490493</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | <u>U</u>  | 0.0490 | 0.200 | 1        | 06/03/2020 19:24     | <a href="#">WG1486137</a> |

## Metals (ICP) by Method 6010B

|                             | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|-----------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable   | 8.13   |           | 0.0111 | 1.00 | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |
|                             |        |           |        |      |          |                      |                           |
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Silver, Total Recoverable   | 2.80   | <u>U</u>  | 2.80   | 5.00 | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |
| Barium, Total Recoverable   | 32.1   |           | 1.70   | 5.00 | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |
| Cadmium, Total Recoverable  | 0.700  | <u>U</u>  | 0.700  | 2.00 | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |
| Cobalt, Total Recoverable   | 2.30   | <u>U</u>  | 2.30   | 10.0 | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |
| Chromium, Total Recoverable | 1.40   | <u>U</u>  | 1.40   | 10.0 | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |
| Copper, Total Recoverable   | 5.72   | <u>I</u>  | 5.30   | 10.0 | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |
| Iron, Total Recoverable     | 35.8   | <u>I</u>  | 14.1   | 100  | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |
| Nickel, Total Recoverable   | 4.90   | <u>U</u>  | 4.90   | 10.0 | 1        | 06/07/2020 17:45     | <a href="#">WG1486102</a> |



Collected date/time: 06/01/20 12:08

L1224093

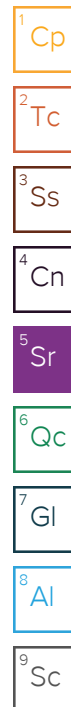
| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Lead, Total Recoverable     | 1.90           | U         | 1.90        | 5.00        | 1        | 06/07/2020 17:45        | <a href="#">WG1486102</a> |
| Selenium, Total Recoverable | 7.40           | U         | 7.40        | 10.0        | 1        | 06/07/2020 17:45        | <a href="#">WG1486102</a> |
| Vanadium, Total Recoverable | 2.40           | U         | 2.40        | 20.0        | 1        | 06/07/2020 17:45        | <a href="#">WG1486102</a> |
| Zinc, Total Recoverable     | 5.90           | U         | 5.90        | 50.0        | 1        | 06/07/2020 17:45        | <a href="#">WG1486102</a> |

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.250          | U         | 0.250       | 2.00        | 1        | 06/04/2020 18:00        | <a href="#">WG1486103</a> |
| Beryllium, Total Recoverable | 0.120          | U         | 0.120       | 2.00        | 1        | 06/04/2020 18:00        | <a href="#">WG1486103</a> |
| Antimony, Total Recoverable  | 0.754          | U         | 0.754       | 2.00        | 1        | 06/04/2020 18:00        | <a href="#">WG1486103</a> |
| Thallium, Total Recoverable  | 0.190          | U         | 0.190       | 2.00        | 1        | 06/04/2020 18:00        | <a href="#">WG1486103</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Acetone                     | 1.05           | U         | 1.05        | 25.0        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.231          | U         | 0.0860      | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |





Collected date/time: 06/01/20 12:08

L1224093

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 96.6           |           |             | 77.0-126    |          | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 106            |           |             | 80.0-120    |          | 06/09/2020 08:54        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 103            |           |             | 70.0-130    |          | 06/09/2020 08:54        | <a href="#">WG1489187</a> |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/11/2020 00:21        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/11/2020 00:21        | <a href="#">WG1489913</a> |



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 51.34  | ft     |
| pH (On Site)                   | 5.71   | su     |
| Temperature (on-site)          | 26.8   | Deg. C |
| Specific Conductance (on site) | 97     | uS/cm  |
| Dissolved Oxygen (on-site)     | 1.3    | mg/l   |
| Turbidity                      | 4.56   | NTU    |
| ORP                            | 160    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 63.0   |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 20.7   |           | 2.71 | 20.0 | 1        | 06/11/2020 20:05     | <a href="#">WG1491199</a> |

## Sample Narrative:

L1224093-02 WG1491199: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 3.82   | V         | 0.0519 | 1.00  | 1        | 06/03/2020 13:24     | <a href="#">WG1486251</a> |
| Nitrate as (N) | 1.05   | Q         | 0.0227 | 0.100 | 1        | 06/03/2020 13:24     | <a href="#">WG1486251</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | U         | 0.0317 | 0.100 | 1        | 06/11/2020 13:50     | <a href="#">WG1490493</a> |

## Wet Chemistry by Method 353.2

|                 | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|-----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>  |        |           |        |       |          |                      |                           |
| Nitrate-Nitrite | 1.24   |           | 0.0197 | 0.100 | 1        | 06/15/2020 13:17     | <a href="#">WG1489405</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | U         | 0.0490 | 0.200 | 1        | 06/04/2020 19:01     | <a href="#">WG1486728</a> |

## Metals (ICP) by Method 6010B

|                           | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|---------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>            |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable | 2.29   |           | 0.0111 | 1.00 | 1        | 06/04/2020 11:05     | <a href="#">WG1486875</a> |



Collected date/time: 06/01/20 09:17

L1224093

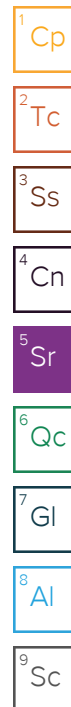
| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Silver, Total Recoverable   | 2.80           | U         | 2.80        | 5.00        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Barium, Total Recoverable   | 37.9           |           | 1.70        | 5.00        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Cadmium, Total Recoverable  | 0.700          | U         | 0.700       | 2.00        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Cobalt, Total Recoverable   | 2.30           | U         | 2.30        | 10.0        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Chromium, Total Recoverable | 1.40           | U         | 1.40        | 10.0        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Copper, Total Recoverable   | 5.30           | U         | 5.30        | 10.0        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Iron, Total Recoverable     | 64.6           | U         | 14.1        | 100         | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Nickel, Total Recoverable   | 4.90           | U         | 4.90        | 10.0        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Lead, Total Recoverable     | 1.90           | U         | 1.90        | 5.00        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Selenium, Total Recoverable | 7.40           | U         | 7.40        | 10.0        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Vanadium, Total Recoverable | 2.40           | U         | 2.40        | 20.0        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |
| Zinc, Total Recoverable     | 5.90           | U         | 5.90        | 50.0        | 1        | 06/04/2020 11:05        | <a href="#">WG1486875</a> |

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.250          | U         | 0.250       | 2.00        | 1        | 06/12/2020 19:42        | <a href="#">WG1491230</a> |
| Beryllium, Total Recoverable | 0.120          | U         | 0.120       | 2.00        | 1        | 06/12/2020 19:42        | <a href="#">WG1491230</a> |
| Antimony, Total Recoverable  | 0.754          | U         | 0.754       | 2.00        | 1        | 06/12/2020 19:42        | <a href="#">WG1491230</a> |
| Thallium, Total Recoverable  | 0.190          | U         | 0.190       | 2.00        | 1        | 06/12/2020 19:42        | <a href="#">WG1491230</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Acetone                     | 1.05           | U         | 1.05        | 25.0        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860         | U         | 0.0860      | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |







Collected date/time: 06/01/20 09:17

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## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 95.8           |           |             | 77.0-126    |          | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 104            |           |             | 80.0-120    |          | 06/09/2020 09:14        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 102            |           |             | 70.0-130    |          | 06/09/2020 09:14        | <a href="#">WG1489187</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/10/2020 23:58        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/10/2020 23:58        | <a href="#">WG1489913</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 51.02  | ft     |
| pH (On Site)                   | 5.61   | su     |
| Temperature (on-site)          | 26.2   | Deg. C |
| Specific Conductance (on site) | 70     | uS/cm  |
| Dissolved Oxygen (on-site)     | 3.5    | mg/l   |
| Turbidity                      | 3      | NTU    |
| ORP                            | 180    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 38.0   |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 6.57   | ↓         | 2.71 | 20.0 | 1        | 06/11/2020 20:11     | <a href="#">WG1491199</a> |

## Sample Narrative:

L1224093-03 WG1491199: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 1.77   | V         | 0.0519 | 1.00  | 1        | 06/03/2020 13:35     | <a href="#">WG1486251</a> |
| Nitrate as (N) | 0.650  | Q V       | 0.0227 | 0.100 | 1        | 06/03/2020 13:35     | <a href="#">WG1486251</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | U         | 0.0317 | 0.100 | 1        | 06/11/2020 13:51     | <a href="#">WG1490493</a> |

## Wet Chemistry by Method 353.2

|                 | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|-----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>  |        |           |        |       |          |                      |                           |
| Nitrate-Nitrite | 0.613  |           | 0.0197 | 0.100 | 1        | 06/15/2020 13:19     | <a href="#">WG1489405</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | U         | 0.0490 | 0.200 | 1        | 06/04/2020 19:09     | <a href="#">WG1486728</a> |

## Metals (ICP) by Method 6010B

|                           | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|---------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>            |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable | 1.60   |           | 0.0111 | 1.00 | 1        | 06/10/2020 16:28     | <a href="#">WG1487368</a> |



Collected date/time: 06/01/20 09:54

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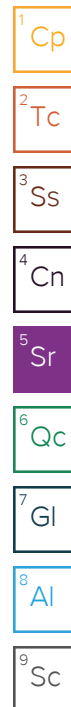
| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Silver, Total Recoverable   | 2.80           | U         | 2.80        | 5.00        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Barium, Total Recoverable   | 12.8           |           | 1.70        | 5.00        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Cadmium, Total Recoverable  | 0.700          | U         | 0.700       | 2.00        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Cobalt, Total Recoverable   | 2.30           | U         | 2.30        | 10.0        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Chromium, Total Recoverable | 1.40           | U         | 1.40        | 10.0        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Copper, Total Recoverable   | 5.30           | U         | 5.30        | 10.0        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Iron, Total Recoverable     | 14.7           | U         | 14.1        | 100         | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Nickel, Total Recoverable   | 4.90           | U         | 4.90        | 10.0        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Lead, Total Recoverable     | 1.90           | U         | 1.90        | 5.00        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Selenium, Total Recoverable | 7.40           | U         | 7.40        | 10.0        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Vanadium, Total Recoverable | 2.40           | U         | 2.40        | 20.0        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |
| Zinc, Total Recoverable     | 179            |           | 5.90        | 50.0        | 1        | 06/10/2020 16:28        | <a href="#">WG1487368</a> |

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.250          | U         | 0.250       | 2.00        | 1        | 06/12/2020 19:46        | <a href="#">WG1491230</a> |
| Beryllium, Total Recoverable | 0.120          | U         | 0.120       | 2.00        | 1        | 06/12/2020 19:46        | <a href="#">WG1491230</a> |
| Antimony, Total Recoverable  | 0.754          | U         | 0.754       | 2.00        | 1        | 06/12/2020 19:46        | <a href="#">WG1491230</a> |
| Thallium, Total Recoverable  | 0.190          | U         | 0.190       | 2.00        | 1        | 06/12/2020 19:46        | <a href="#">WG1491230</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Acetone                     | 1.05           | U         | 1.05        | 25.0        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860         | U         | 0.0860      | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |





Collected date/time: 06/01/20 09:54

L1224093

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 96.5           |           |             | 77.0-126    |          | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 106            |           |             | 80.0-120    |          | 06/09/2020 09:33        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 101            |           |             | 70.0-130    |          | 06/09/2020 09:33        | <a href="#">WG1489187</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/11/2020 00:33        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/11/2020 00:33        | <a href="#">WG1489913</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 52.35  | ft     |
| pH (On Site)                   | 5.31   | su     |
| Temperature (on-site)          | 26     | Deg. C |
| Specific Conductance (on site) | 97     | uS/cm  |
| Dissolved Oxygen (on-site)     | 3.3    | mg/l   |
| Turbidity                      | 4.02   | NTU    |
| ORP                            | 226    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 67.0   |           | 2.82 | 10.0 | 1        | 06/06/2020 14:16     | <a href="#">WG1488086</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 4.42   | ↓         | 2.71 | 20.0 | 1        | 06/11/2020 20:19     | <a href="#">WG1491199</a> |

## Sample Narrative:

L1224093-04 WG1491199: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 7.38   |           | 0.0519 | 1.00  | 1        | 06/02/2020 13:16     | <a href="#">WG1485759</a> |
| Nitrate as (N) | 4.63   |           | 0.0227 | 0.100 | 1        | 06/02/2020 13:16     | <a href="#">WG1485759</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | U         | 0.0317 | 0.100 | 1        | 06/11/2020 13:53     | <a href="#">WG1490493</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.141  | ↓         | 0.0490 | 0.200 | 1        | 06/03/2020 19:26     | <a href="#">WG1486137</a> |

## Metals (ICP) by Method 6010B

|                             | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|-----------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable   | 2.69   |           | 0.0111 | 1.00 | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Silver, Total Recoverable   | 2.80   | U         | 2.80   | 5.00 | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |
| Barium, Total Recoverable   | 75.4   |           | 1.70   | 5.00 | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |
| Cadmium, Total Recoverable  | 0.700  | U         | 0.700  | 2.00 | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |
| Cobalt, Total Recoverable   | 2.30   | U         | 2.30   | 10.0 | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |
| Chromium, Total Recoverable | 1.44   | ↓         | 1.40   | 10.0 | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |
| Copper, Total Recoverable   | 5.30   | U         | 5.30   | 10.0 | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |
| Iron, Total Recoverable     | 29.3   | ↓         | 14.1   | 100  | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |
| Nickel, Total Recoverable   | 4.90   | U         | 4.90   | 10.0 | 1        | 06/07/2020 17:56     | <a href="#">WG1486102</a> |



Collected date/time: 06/01/20 10:39

L1224093

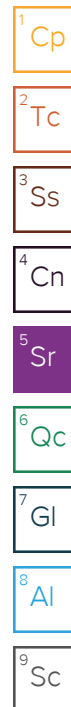
| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Lead, Total Recoverable     | 1.90           | U         | 1.90        | 5.00        | 1        | 06/07/2020 17:56        | <a href="#">WG1486102</a> |
| Selenium, Total Recoverable | 7.40           | U         | 7.40        | 10.0        | 1        | 06/07/2020 17:56        | <a href="#">WG1486102</a> |
| Vanadium, Total Recoverable | 2.40           | U         | 2.40        | 20.0        | 1        | 06/07/2020 17:56        | <a href="#">WG1486102</a> |
| Zinc, Total Recoverable     | 5.90           | U         | 5.90        | 50.0        | 1        | 06/07/2020 17:56        | <a href="#">WG1486102</a> |

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.250          | U         | 0.250       | 2.00        | 1        | 06/04/2020 18:03        | <a href="#">WG1486103</a> |
| Beryllium, Total Recoverable | 0.189          | U         | 0.120       | 2.00        | 1        | 06/04/2020 18:03        | <a href="#">WG1486103</a> |
| Antimony, Total Recoverable  | 0.754          | U         | 0.754       | 2.00        | 1        | 06/04/2020 18:03        | <a href="#">WG1486103</a> |
| Thallium, Total Recoverable  | 0.190          | U         | 0.190       | 2.00        | 1        | 06/04/2020 18:03        | <a href="#">WG1486103</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Acetone                     | 1.05           | U         | 1.05        | 25.0        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860         | U         | 0.0860      | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |







Collected date/time: 06/01/20 10:39

L1224093

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 96.2           |           |             | 77.0-126    |          | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 104            |           |             | 80.0-120    |          | 06/09/2020 09:52        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 105            |           |             | 70.0-130    |          | 06/09/2020 09:52        | <a href="#">WG1489187</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/11/2020 00:44        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/11/2020 00:44        | <a href="#">WG1489913</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 66.43  | ft     |
| pH (On Site)                   | 7.79   | su     |
| Temperature (on-site)          | 25.4   | Deg. C |
| Specific Conductance (on site) | 322    | uS/cm  |
| Dissolved Oxygen (on-site)     | .7     | mg/l   |
| Turbidity                      | 3.03   | NTU    |
| ORP                            | 110    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 233    |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 98.3   |           | 2.71 | 20.0 | 1        | 06/11/2020 20:25     | <a href="#">WG1491199</a> |

## Sample Narrative:

L1224093-05 WG1491199: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 11.7   |           | 0.0519 | 1.00  | 1        | 06/02/2020 13:37     | <a href="#">WG1485759</a> |
| Nitrate as (N) | 10.8   |           | 0.114  | 0.500 | 5        | 06/02/2020 13:48     | <a href="#">WG1485759</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | <u>U</u>  | 0.0317 | 0.100 | 1        | 06/11/2020 13:55     | <a href="#">WG1490493</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | <u>U</u>  | 0.0490 | 0.200 | 1        | 06/04/2020 19:11     | <a href="#">WG1486728</a> |

## Metals (ICP) by Method 6010B

|                             | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|-----------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable   | 6.31   |           | 0.0111 | 1.00 | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Silver, Total Recoverable   | 2.80   | <u>U</u>  | 2.80   | 5.00 | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |
| Barium, Total Recoverable   | 17.0   |           | 1.70   | 5.00 | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |
| Cadmium, Total Recoverable  | 0.700  | <u>U</u>  | 0.700  | 2.00 | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |
| Cobalt, Total Recoverable   | 2.30   | <u>U</u>  | 2.30   | 10.0 | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |
| Chromium, Total Recoverable | 1.40   | <u>U</u>  | 1.40   | 10.0 | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |
| Copper, Total Recoverable   | 5.30   | <u>U</u>  | 5.30   | 10.0 | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |
| Iron, Total Recoverable     | 615    |           | 14.1   | 100  | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |
| Nickel, Total Recoverable   | 4.90   | <u>U</u>  | 4.90   | 10.0 | 1        | 06/07/2020 17:58     | <a href="#">WG1486102</a> |



Collected date/time: 06/01/20 11:28

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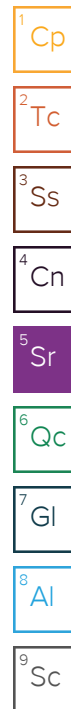
| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Lead, Total Recoverable     | 1.90           | U         | 1.90        | 5.00        | 1        | 06/07/2020 17:58        | <a href="#">WG1486102</a> |
| Selenium, Total Recoverable | 7.40           | U         | 7.40        | 10.0        | 1        | 06/07/2020 17:58        | <a href="#">WG1486102</a> |
| Vanadium, Total Recoverable | 3.59           | U         | 2.40        | 20.0        | 1        | 06/07/2020 17:58        | <a href="#">WG1486102</a> |
| Zinc, Total Recoverable     | 5.90           | U         | 5.90        | 50.0        | 1        | 06/07/2020 17:58        | <a href="#">WG1486102</a> |

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.568          | U         | 0.250       | 2.00        | 1        | 06/04/2020 17:15        | <a href="#">WG1486103</a> |
| Beryllium, Total Recoverable | 0.120          | U         | 0.120       | 2.00        | 1        | 06/04/2020 17:15        | <a href="#">WG1486103</a> |
| Antimony, Total Recoverable  | 0.754          | U         | 0.754       | 2.00        | 1        | 06/04/2020 17:15        | <a href="#">WG1486103</a> |
| Thallium, Total Recoverable  | 0.190          | U         | 0.190       | 2.00        | 1        | 06/04/2020 17:15        | <a href="#">WG1486103</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Acetone                     | 1.40           | U         | 1.05        | 25.0        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860         | U         | 0.0860      | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |





Collected date/time: 06/01/20 11:28

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## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 96.7           |           |             | 77.0-126    |          | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 104            |           |             | 80.0-120    |          | 06/09/2020 10:11        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 105            |           |             | 70.0-130    |          | 06/09/2020 10:11        | <a href="#">WG1489187</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/11/2020 00:56        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/11/2020 00:56        | <a href="#">WG1489913</a> |

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr6  
Qc7  
Gl8  
Al9  
Sc



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| pH (On Site)                   | 6.73   | su     |
| Temperature (on-site)          | 25.1   | Deg. C |
| Specific Conductance (on site) | 85     | uS/cm  |
| Dissolved Oxygen (on-site)     | 1.3    | mg/l   |
| Turbidity                      | 4.23   | NTU    |
| ORP                            | 171    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 55.0   |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 21.2   |           | 2.71 | 20.0 | 1        | 06/11/2020 20:32     | <a href="#">WG1491199</a> |

## Sample Narrative:

L1224093-06 WG1491199: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier  | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|------------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |            |        |       |          |                      |                           |
| Chloride       | 3.00   | <u>V</u>   | 0.0519 | 1.00  | 1        | 06/03/2020 13:46     | <a href="#">WG1486251</a> |
| Nitrate as (N) | 0.377  | <u>Q V</u> | 0.0227 | 0.100 | 1        | 06/03/2020 13:46     | <a href="#">WG1486251</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | <u>U</u>  | 0.0317 | 0.100 | 1        | 06/11/2020 13:56     | <a href="#">WG1490493</a> |

## Wet Chemistry by Method 353.2

|                 | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|-----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>  |        |           |        |       |          |                      |                           |
| Nitrate-Nitrite | 0.294  |           | 0.0197 | 0.100 | 1        | 06/15/2020 13:21     | <a href="#">WG1489405</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | <u>U</u>  | 0.0490 | 0.200 | 1        | 06/04/2020 19:13     | <a href="#">WG1486728</a> |

## Metals (ICP) by Method 6010B

|                           | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|---------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>            |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable | 3.08   |           | 0.0111 | 1.00 | 1        | 06/10/2020 16:30     | <a href="#">WG1487368</a> |



Collected date/time: 06/01/20 08:06

L1224093

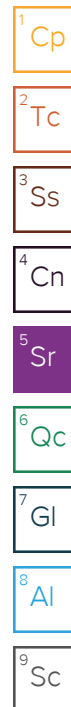
| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Silver, Total Recoverable   | 2.80           | U         | 2.80        | 5.00        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Barium, Total Recoverable   | 5.28           |           | 1.70        | 5.00        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Cadmium, Total Recoverable  | 0.700          | U         | 0.700       | 2.00        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Cobalt, Total Recoverable   | 2.30           | U         | 2.30        | 10.0        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Chromium, Total Recoverable | 2.89           | U         | 1.40        | 10.0        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Copper, Total Recoverable   | 5.30           | U         | 5.30        | 10.0        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Iron, Total Recoverable     | 189            |           | 14.1        | 100         | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Nickel, Total Recoverable   | 4.90           | U         | 4.90        | 10.0        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Lead, Total Recoverable     | 1.90           | U         | 1.90        | 5.00        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Selenium, Total Recoverable | 7.40           | U         | 7.40        | 10.0        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Vanadium, Total Recoverable | 2.40           | U         | 2.40        | 20.0        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |
| Zinc, Total Recoverable     | 5.90           | U         | 5.90        | 50.0        | 1        | 06/10/2020 16:30        | <a href="#">WG1487368</a> |

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.250          | U         | 0.250       | 2.00        | 1        | 06/14/2020 21:44        | <a href="#">WG1487373</a> |
| Beryllium, Total Recoverable | 0.120          | U         | 0.120       | 2.00        | 1        | 06/14/2020 21:44        | <a href="#">WG1487373</a> |
| Antimony, Total Recoverable  | 0.754          | U         | 0.754       | 2.00        | 1        | 06/14/2020 21:44        | <a href="#">WG1487373</a> |
| Thallium, Total Recoverable  | 0.190          | U         | 0.190       | 2.00        | 1        | 06/14/2020 21:44        | <a href="#">WG1487373</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Acetone                     | 1.05           | U         | 1.05        | 25.0        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860         | U         | 0.0860      | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |







Collected date/time: 06/01/20 08:06

L1224093

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 96.5           |           |             | 77.0-126    |          | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 105            |           |             | 80.0-120    |          | 06/09/2020 10:31        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 101            |           |             | 70.0-130    |          | 06/09/2020 10:31        | <a href="#">WG1489187</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/11/2020 01:07        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/11/2020 01:07        | <a href="#">WG1489913</a> |



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| pH (On Site)                   | 7.65   | su     |
| Temperature (on-site)          | 24.1   | Deg. C |
| Specific Conductance (on site) | 319    | uS/cm  |
| Dissolved Oxygen (on-site)     | 2.4    | mg/l   |
| Turbidity                      | 3.53   | NTU    |
| ORP                            | 151    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 208    |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 133    |           | 2.71 | 20.0 | 1        | 06/11/2020 20:40     | <a href="#">WG1491199</a> |

## Sample Narrative:

L1224093-07 WG1491199: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |      |          |                      |                           |
| Chloride       | 6.26   |           | 0.0519 | 1.00 | 1        | 06/03/2020 14:18     | <a href="#">WG1486251</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | <u>U</u>  | 0.0317 | 0.100 | 1        | 06/11/2020 14:03     | <a href="#">WG1490493</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | <u>U</u>  | 0.0490 | 0.200 | 1        | 06/04/2020 19:15     | <a href="#">WG1486728</a> |

## Metals (ICP) by Method 6010B

|                             | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|-----------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable   | 8.96   |           | 0.0111 | 1.00 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Silver, Total Recoverable   | 2.80   | <u>U</u>  | 2.80   | 5.00 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Barium, Total Recoverable   | 14.5   |           | 1.70   | 5.00 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Cadmium, Total Recoverable  | 0.700  | <u>U</u>  | 0.700  | 2.00 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Cobalt, Total Recoverable   | 2.30   | <u>U</u>  | 2.30   | 10.0 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Chromium, Total Recoverable | 4.85   | <u>I</u>  | 1.40   | 10.0 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Copper, Total Recoverable   | 5.30   | <u>U</u>  | 5.30   | 10.0 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Iron, Total Recoverable     | 104    |           | 14.1   | 100  | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Nickel, Total Recoverable   | 4.90   | <u>U</u>  | 4.90   | 10.0 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Lead, Total Recoverable     | 1.90   | <u>U</u>  | 1.90   | 5.00 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |
| Selenium, Total Recoverable | 7.40   | <u>U</u>  | 7.40   | 10.0 | 1        | 06/10/2020 16:33     | <a href="#">WG1487368</a> |



Collected date/time: 06/01/20 07:37

L1224093

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Vanadium, Total Recoverable | 2.40           | U         | 2.40        | 20.0        | 1        | 06/10/2020 16:33        | <a href="#">WG1487368</a> |
| Zinc, Total Recoverable     | 5.90           | U         | 5.90        | 50.0        | 1        | 06/10/2020 16:33        | <a href="#">WG1487368</a> |

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 1.83           | I         | 0.250       | 2.00        | 1        | 06/14/2020 21:47        | <a href="#">WG1487373</a> |
| Beryllium, Total Recoverable | 0.120          | U         | 0.120       | 2.00        | 1        | 06/14/2020 21:47        | <a href="#">WG1487373</a> |
| Antimony, Total Recoverable  | 0.754          | U         | 0.754       | 2.00        | 1        | 06/14/2020 21:47        | <a href="#">WG1487373</a> |
| Thallium, Total Recoverable  | 0.528          | I         | 0.190       | 2.00        | 1        | 06/14/2020 21:47        | <a href="#">WG1487373</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Acetone                     | 1.05           | U         | 1.05        | 25.0        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860         | U         | 0.0860      | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |





Collected date/time: 06/01/20 07:37

L1224093

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | <u>Qualifier</u> | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|-----------------------------|----------------|------------------|-------------|-------------|----------|-------------------------|---------------------------|
| trans-1,3-Dichloropropene   | 0.222          | <u>U</u>         | 0.222       | 0.500       | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | <u>U</u>         | 0.257       | 5.00        | 1        | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 96.6           |                  |             | 77.0-126    |          | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 105            |                  |             | 80.0-120    |          | 06/09/2020 10:50        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 104            |                  |             | 70.0-130    |          | 06/09/2020 10:50        | <a href="#">WG1489187</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | <u>Qualifier</u> | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|-----------------------------|----------------|------------------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | <u>U</u>         | 0.00430     | 0.0200      | 1        | 06/11/2020 01:19        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | <u>U</u>         | 0.00240     | 0.0100      | 1        | 06/11/2020 01:19        | <a href="#">WG1489913</a> |

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr6  
Qc7  
Gl8  
Al9  
Sc



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| pH (On Site)                   | 5.92   | su     |
| Temperature (on-site)          | 25.1   | Deg. C |
| Specific Conductance (on site) | 108    | uS/cm  |
| Dissolved Oxygen (on-site)     | 1.5    | mg/l   |
| Turbidity                      | 8.05   | NTU    |
| ORP                            | 176    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

| Analyte          | Result<br>mg/l | Qualifier | MDL<br>mg/l | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Dissolved Solids | 98.0           |           | 2.82        | 10.0        | 1        | 06/06/2020 12:12        | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 300.0

| Analyte        | Result<br>mg/l | Qualifier | MDL<br>mg/l | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|----------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Chloride       | 7.98           |           | 0.0519      | 1.00        | 1        | 06/03/2020 14:40        | <a href="#">WG1486251</a> |
| Nitrate as (N) | 1.75           | <u>Q</u>  | 0.0227      | 0.100       | 1        | 06/03/2020 14:40        | <a href="#">WG1486251</a> |

## Wet Chemistry by Method 350.1

| Analyte          | Result<br>mg/l | Qualifier | MDL<br>mg/l | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Ammonia Nitrogen | 0.0317         | <u>U</u>  | 0.0317      | 0.100       | 1        | 06/11/2020 14:05        | <a href="#">WG1490493</a> |

## Wet Chemistry by Method 353.2

| Analyte         | Result<br>mg/l | Qualifier | MDL<br>mg/l | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Nitrate-Nitrite | 2.00           |           | 0.0197      | 0.100       | 1        | 06/15/2020 13:23        | <a href="#">WG1489405</a> |

## Mercury by Method 7470A

| Analyte | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|---------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Mercury | 0.0490         | <u>U</u>  | 0.0490      | 0.200       | 1        | 06/04/2020 19:17        | <a href="#">WG1486728</a> |

## Metals (ICP) by Method 6010B

| Analyte                     | Result<br>mg/l | Qualifier | MDL<br>mg/l | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Sodium, Total Recoverable   | 4.79           |           | 0.0111      | 1.00        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
| Silver, Total Recoverable   | 2.80           | <u>U</u>  | 2.80        | 5.00        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Barium, Total Recoverable   | 9.91           |           | 1.70        | 5.00        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Cadmium, Total Recoverable  | 0.700          | <u>U</u>  | 0.700       | 2.00        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Cobalt, Total Recoverable   | 2.30           | <u>U</u>  | 2.30        | 10.0        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Chromium, Total Recoverable | 2.45           | <u>I</u>  | 1.40        | 10.0        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Copper, Total Recoverable   | 5.30           | <u>U</u>  | 5.30        | 10.0        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Iron, Total Recoverable     | 101            |           | 14.1        | 100         | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Nickel, Total Recoverable   | 4.90           | <u>U</u>  | 4.90        | 10.0        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Lead, Total Recoverable     | 1.90           | <u>U</u>  | 1.90        | 5.00        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Selenium, Total Recoverable | 7.40           | <u>U</u>  | 7.40        | 10.0        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Vanadium, Total Recoverable | 2.40           | <u>U</u>  | 2.40        | 20.0        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |
| Zinc, Total Recoverable     | 5.90           | <u>U</u>  | 5.90        | 50.0        | 1        | 06/10/2020 16:36        | <a href="#">WG1487368</a> |



Collected date/time: 06/01/20 08:41

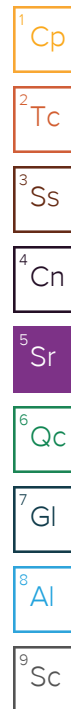
L1224093

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.818          | 1         | 0.250       | 2.00        | 1        | 06/14/2020 21:51        | <a href="#">WG1487373</a> |
| Beryllium, Total Recoverable | 0.120          | 1         | 0.120       | 2.00        | 1        | 06/14/2020 21:51        | <a href="#">WG1487373</a> |
| Antimony, Total Recoverable  | 0.754          | 1         | 0.754       | 2.00        | 1        | 06/14/2020 21:51        | <a href="#">WG1487373</a> |
| Thallium, Total Recoverable  | 0.190          | 1         | 0.190       | 2.00        | 1        | 06/14/2020 21:51        | <a href="#">WG1487373</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | 1         | 0.120       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | 1         | 0.0940      | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | 1         | 0.130       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | 1         | 0.0940      | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | 1         | 0.114       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | 1         | 0.188       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | 1         | 0.247       | 2.50        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | 1         | 0.101       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | 1         | 0.108       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | 1         | 0.190       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | 1         | 0.121       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | 1         | 1.28        | 5.00        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | 1         | 0.757       | 5.00        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | 1         | 0.823       | 5.00        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Acetone                     | 1.06           | 1         | 1.05        | 25.0        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | 1         | 0.873       | 5.00        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | 1         | 0.0896      | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | 1         | 0.145       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | 1         | 0.0800      | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | 1         | 0.186       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | 1         | 0.157       | 2.50        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | 1         | 0.101       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | 1         | 0.159       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | 1         | 0.140       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | 1         | 0.141       | 2.50        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860         | 1         | 0.0860      | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | 1         | 0.153       | 1.25        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | 1         | 0.128       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | 1         | 0.117       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | 1         | 0.158       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | 1         | 0.377       | 10.0        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | 1         | 1.07        | 2.50        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | 1         | 0.117       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Tetrachloroethene           | 0.199          | 1         | 0.199       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | 1         | 0.412       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | 1         | 0.153       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | 1         | 0.130       | 2.50        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | 1         | 0.645       | 5.00        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | 1         | 0.118       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | 1         | 0.316       | 1.50        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | 1         | 0.0933      | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| cis-1,3-Dichloropropene     | 0.0976         | 1         | 0.0976      | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | 1         | 0.152       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222          | 1         | 0.222       | 0.500       | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | 1         | 0.257       | 5.00        | 1        | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 95.7           |           |             | 77.0-126    |          | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 104            |           |             | 80.0-120    |          | 06/09/2020 11:09        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 104            |           |             | 70.0-130    |          | 06/09/2020 11:09        | <a href="#">WG1489187</a> |







Collected date/time: 06/01/20 08:41

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EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/11/2020 01:30        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/11/2020 01:30        | <a href="#">WG1489913</a> |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| pH (On Site)                   | 4.86   | su     |
| Temperature (on-site)          | 25.8   | Deg. C |
| Specific Conductance (on site) | 75     | uS/cm  |
| Dissolved Oxygen (on-site)     | 2.5    | mg/l   |
| Turbidity                      | 3.71   | NTU    |
| ORP                            | 180    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 34.0   |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 6.00   | !         | 2.71 | 20.0 | 1        | 06/11/2020 20:48     | <a href="#">WG1491199</a> |

## Sample Narrative:

L1224093-09 WG1491199: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 8.13   |           | 0.0519 | 1.00  | 1        | 06/03/2020 14:51     | <a href="#">WG1486251</a> |
| Nitrate as (N) | 0.698  | Q V       | 0.0227 | 0.100 | 1        | 06/03/2020 14:51     | <a href="#">WG1486251</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | U         | 0.0317 | 0.100 | 1        | 06/11/2020 14:06     | <a href="#">WG1490493</a> |

## Wet Chemistry by Method 353.2

|                 | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|-----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>  |        |           |        |       |          |                      |                           |
| Nitrate-Nitrite | 0.873  |           | 0.0197 | 0.100 | 1        | 06/15/2020 13:24     | <a href="#">WG1489405</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.560  |           | 0.0490 | 0.200 | 1        | 06/04/2020 19:19     | <a href="#">WG1486728</a> |

## Metals (ICP) by Method 6010B

|                           | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|---------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>            |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable | 4.41   |           | 0.0111 | 1.00 | 1        | 06/10/2020 16:44     | <a href="#">WG1487368</a> |



Collected date/time: 06/01/20 07:01

L1224093

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Silver, Total Recoverable   | 2.80           | U         | 2.80        | 5.00        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Barium, Total Recoverable   | 5.80           |           | 1.70        | 5.00        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Cadmium, Total Recoverable  | 0.700          | U         | 0.700       | 2.00        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Cobalt, Total Recoverable   | 2.30           | U         | 2.30        | 10.0        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Chromium, Total Recoverable | 1.40           | U         | 1.40        | 10.0        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Copper, Total Recoverable   | 5.30           | U         | 5.30        | 10.0        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Iron, Total Recoverable     | 44.9           | U         | 14.1        | 100         | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Nickel, Total Recoverable   | 4.90           | U         | 4.90        | 10.0        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Lead, Total Recoverable     | 1.90           | U         | 1.90        | 5.00        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Selenium, Total Recoverable | 7.40           | U         | 7.40        | 10.0        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Vanadium, Total Recoverable | 2.40           | U         | 2.40        | 20.0        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |
| Zinc, Total Recoverable     | 5.90           | U         | 5.90        | 50.0        | 1        | 06/10/2020 16:44        | <a href="#">WG1487368</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.250          | U         | 0.250       | 2.00        | 1        | 06/14/2020 21:54        | <a href="#">WG1487373</a> |
| Beryllium, Total Recoverable | 0.120          | U         | 0.120       | 2.00        | 1        | 06/14/2020 21:54        | <a href="#">WG1487373</a> |
| Antimony, Total Recoverable  | 0.754          | U         | 0.754       | 2.00        | 1        | 06/14/2020 21:54        | <a href="#">WG1487373</a> |
| Thallium, Total Recoverable  | 0.190          | U         | 0.190       | 2.00        | 1        | 06/14/2020 21:54        | <a href="#">WG1487373</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Acetone                     | 1.05           | U         | 1.05        | 25.0        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101          | U         | 0.101       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860         | U         | 0.0860      | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |



Collected date/time: 06/01/20 07:01

L1224093

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 97.8           |           |             | 77.0-126    |          | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 107            |           |             | 80.0-120    |          | 06/09/2020 11:29        | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 104            |           |             | 70.0-130    |          | 06/09/2020 11:29        | <a href="#">WG1489187</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/11/2020 01:42        | <a href="#">WG1489913</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/11/2020 01:42        | <a href="#">WG1489913</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Additional Information

| Analyte         | Result | Units |
|-----------------|--------|-------|
| Sampling Method | Z      |       |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result | Qualifier | MDL    | RDL      | Dilution | Analysis         | Batch                     |
|-----------------------------|--------|-----------|--------|----------|----------|------------------|---------------------------|
|                             | ug/l   |           | ug/l   | ug/l     |          | date / time      |                           |
| 1,1,1,2-Tetrachloroethane   | 0.120  | C         | 0.120  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,1,1-Trichloroethane       | 0.0940 | C         | 0.0940 | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130  | C         | 0.130  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,1,2-Trichloroethane       | 0.0940 | C         | 0.0940 | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,1-Dichloroethane          | 0.114  | C         | 0.114  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,1-Dichloroethene          | 0.188  | C         | 0.188  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,2,3-Trichloropropane      | 0.247  | C         | 0.247  | 2.50     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,2-Dichlorobenzene         | 0.101  | C         | 0.101  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,2-Dichloroethane          | 0.108  | C         | 0.108  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,2-Dichloropropane         | 0.190  | C         | 0.190  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 1,4-Dichlorobenzene         | 0.121  | C         | 0.121  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 2-Butanone (MEK)            | 1.28   | C         | 1.28   | 5.00     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 2-Hexanone                  | 0.757  | C         | 0.757  | 5.00     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823  | C         | 0.823  | 5.00     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Acetone                     | 2.82   | C         | 1.05   | 25.0     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Acrylonitrile               | 0.873  | C         | 0.873  | 5.00     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Benzene                     | 0.0896 | C         | 0.0896 | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Bromochloromethane          | 0.145  | C         | 0.145  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Bromodichloromethane        | 0.0800 | C         | 0.0800 | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Bromoform                   | 0.186  | C         | 0.186  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Bromomethane                | 0.157  | C         | 0.157  | 2.50     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Carbon disulfide            | 0.101  | C         | 0.101  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Carbon tetrachloride        | 0.159  | C         | 0.159  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Chlorobenzene               | 0.140  | C         | 0.140  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Chloroethane                | 0.141  | C         | 0.141  | 2.50     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Chloroform                  | 0.0860 | C         | 0.0860 | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Chloromethane               | 0.153  | C         | 0.153  | 1.25     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Dibromochloromethane        | 0.128  | C         | 0.128  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Dibromomethane              | 0.117  | C         | 0.117  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Ethylbenzene                | 0.158  | C         | 0.158  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Iodomethane                 | 0.377  | C         | 0.377  | 10.0     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Methylene Chloride          | 1.07   | C         | 1.07   | 2.50     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Styrene                     | 0.117  | C         | 0.117  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Tetrachloroethene           | 0.199  | C         | 0.199  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Toluene                     | 0.412  | C         | 0.412  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Trichloroethene             | 0.153  | C         | 0.153  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Trichlorofluoromethane      | 0.130  | C         | 0.130  | 2.50     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Vinyl acetate               | 0.645  | C         | 0.645  | 5.00     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Vinyl chloride              | 0.118  | C         | 0.118  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| Xylenes, Total              | 0.316  | C         | 0.316  | 1.50     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| cis-1,2-Dichloroethene      | 0.0933 | C         | 0.0933 | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| cis-1,3-Dichloropropene     | 0.0976 | C         | 0.0976 | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| trans-1,2-Dichloroethene    | 0.152  | C         | 0.152  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| trans-1,3-Dichloropropene   | 0.222  | C         | 0.222  | 0.500    | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| trans-1,4-Dichloro-2-butene | 0.257  | C         | 0.257  | 5.00     | 1        | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| (S) 4-Bromofluorobenzene    | 98.1   |           |        | 77.0-126 |          | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| (S) Toluene-d8              | 103    |           |        | 80.0-120 |          | 06/09/2020 08:16 | <a href="#">WG1489187</a> |
| (S) 1,2-Dichloroethane-d4   | 105    |           |        | 70.0-130 |          | 06/09/2020 08:16 | <a href="#">WG1489187</a> |



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 54.8   | ft     |
| pH (On Site)                   | 4.97   | su     |
| Temperature (on-site)          | 25.6   | Deg. C |
| Specific Conductance (on site) | 43     | uS/cm  |
| Dissolved Oxygen (on-site)     | .5     | mg/l   |
| Turbidity                      | 3.62   | NTU    |
| ORP                            | 186    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 21.0   |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 3.58   | !         | 2.71 | 20.0 | 1        | 06/15/2020 23:30     | <a href="#">WG1492555</a> |

## Sample Narrative:

L1224093-11 WG1492555: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 2.18   |           | 0.0519 | 1.00  | 1        | 06/03/2020 12:21     | <a href="#">WG1486343</a> |
| Nitrate as (N) | 0.456  |           | 0.0227 | 0.100 | 1        | 06/03/2020 12:21     | <a href="#">WG1486343</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | U         | 0.0317 | 0.100 | 1        | 06/14/2020 23:39     | <a href="#">WG1490497</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | U         | 0.0490 | 0.200 | 1        | 06/04/2020 10:11     | <a href="#">WG1486486</a> |

## Metals (ICP) by Method 6010B

|                             | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|-----------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable   | 1.71   |           | 0.0111 | 1.00 | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Silver, Total Recoverable   | 2.80   | U         | 2.80   | 5.00 | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |
| Barium, Total Recoverable   | 9.90   |           | 1.70   | 5.00 | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |
| Cadmium, Total Recoverable  | 0.700  | U         | 0.700  | 2.00 | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |
| Cobalt, Total Recoverable   | 2.30   | U         | 2.30   | 10.0 | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |
| Chromium, Total Recoverable | 1.40   | U         | 1.40   | 10.0 | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |
| Copper, Total Recoverable   | 5.30   | U         | 5.30   | 10.0 | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |
| Iron, Total Recoverable     | 17.8   | !         | 14.1   | 100  | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |
| Nickel, Total Recoverable   | 4.90   | U         | 4.90   | 10.0 | 1        | 06/10/2020 16:47     | <a href="#">WG1487368</a> |



Collected date/time: 06/02/20 07:31

L1224093

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Lead, Total Recoverable     | 1.90           | U         | 1.90        | 5.00        | 1        | 06/10/2020 16:47        | <a href="#">WG1487368</a> |
| Selenium, Total Recoverable | 7.40           | U         | 7.40        | 10.0        | 1        | 06/10/2020 16:47        | <a href="#">WG1487368</a> |
| Vanadium, Total Recoverable | 2.40           | U         | 2.40        | 20.0        | 1        | 06/10/2020 16:47        | <a href="#">WG1487368</a> |
| Zinc, Total Recoverable     | 5.90           | U         | 5.90        | 50.0        | 1        | 06/10/2020 16:47        | <a href="#">WG1487368</a> |

Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.250          | U         | 0.250       | 2.00        | 1        | 06/14/2020 22:05        | <a href="#">WG1487373</a> |
| Beryllium, Total Recoverable | 0.120          | U         | 0.120       | 2.00        | 1        | 06/14/2020 22:05        | <a href="#">WG1487373</a> |
| Antimony, Total Recoverable  | 0.925          | U         | 0.754       | 2.00        | 1        | 06/14/2020 22:05        | <a href="#">WG1487373</a> |
| Thallium, Total Recoverable  | 0.190          | U         | 0.190       | 2.00        | 1        | 06/14/2020 22:05        | <a href="#">WG1487373</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc





## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 52.01  | ft     |
| pH (On Site)                   | 5.35   | su     |
| Temperature (on-site)          | 25.1   | Deg. C |
| Specific Conductance (on site) | 225    | uS/cm  |
| Dissolved Oxygen (on-site)     | 2      | mg/l   |
| Turbidity                      | 2.96   | NTU    |
| ORP                            | 204    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 171    |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 14.8   | ↓         | 2.71 | 20.0 | 1        | 06/15/2020 23:36     | <a href="#">WG1492555</a> |

## Sample Narrative:

L1224093-12 WG1492555: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 39.7   |           | 0.0519 | 1.00  | 1        | 06/03/2020 12:57     | <a href="#">WG1486343</a> |
| Nitrate as (N) | 5.45   |           | 0.0227 | 0.100 | 1        | 06/03/2020 12:57     | <a href="#">WG1486343</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | U         | 0.0317 | 0.100 | 1        | 06/14/2020 23:44     | <a href="#">WG1490497</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 2.78   |           | 0.0490 | 0.200 | 1        | 06/04/2020 10:13     | <a href="#">WG1486486</a> |

## Metals (ICP) by Method 6010B

|                             | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|-----------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable   | 11.7   |           | 0.0111 | 1.00 | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |
|                             |        |           |        |      |          |                      |                           |
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Silver, Total Recoverable   | 2.80   | U         | 2.80   | 5.00 | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |
| Barium, Total Recoverable   | 25.7   |           | 1.70   | 5.00 | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |
| Cadmium, Total Recoverable  | 0.700  | U         | 0.700  | 2.00 | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |
| Cobalt, Total Recoverable   | 2.30   | U         | 2.30   | 10.0 | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |
| Chromium, Total Recoverable | 1.51   | ↓         | 1.40   | 10.0 | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |
| Copper, Total Recoverable   | 5.30   | U         | 5.30   | 10.0 | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |
| Iron, Total Recoverable     | 14.1   | U         | 14.1   | 100  | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |
| Nickel, Total Recoverable   | 4.90   | U         | 4.90   | 10.0 | 1        | 06/10/2020 16:49     | <a href="#">WG1487368</a> |



Collected date/time: 06/02/20 08:15

L1224093

|                             | Result | Qualifier | MDL  | RDL  | Dilution | Analysis         | Batch                     |
|-----------------------------|--------|-----------|------|------|----------|------------------|---------------------------|
| Analyte                     | ug/l   |           | ug/l | ug/l |          | date / time      |                           |
| Lead, Total Recoverable     | 1.90   | U         | 1.90 | 5.00 | 1        | 06/10/2020 16:49 | <a href="#">WG1487368</a> |
| Selenium, Total Recoverable | 7.40   | U         | 7.40 | 10.0 | 1        | 06/10/2020 16:49 | <a href="#">WG1487368</a> |
| Vanadium, Total Recoverable | 2.40   | U         | 2.40 | 20.0 | 1        | 06/10/2020 16:49 | <a href="#">WG1487368</a> |
| Zinc, Total Recoverable     | 5.90   | U         | 5.90 | 50.0 | 1        | 06/10/2020 16:49 | <a href="#">WG1487368</a> |

## Metals (ICPMS) by Method 6020

|                              | Result | Qualifier | MDL   | RDL  | Dilution | Analysis         | Batch                     |
|------------------------------|--------|-----------|-------|------|----------|------------------|---------------------------|
| Analyte                      | ug/l   |           | ug/l  | ug/l |          | date / time      |                           |
| Arsenic, Total Recoverable   | 0.250  | U         | 0.250 | 2.00 | 1        | 06/14/2020 22:08 | <a href="#">WG1487373</a> |
| Beryllium, Total Recoverable | 0.120  | U         | 0.120 | 2.00 | 1        | 06/14/2020 22:08 | <a href="#">WG1487373</a> |
| Antimony, Total Recoverable  | 0.754  | U         | 0.754 | 2.00 | 1        | 06/14/2020 22:08 | <a href="#">WG1487373</a> |
| Thallium, Total Recoverable  | 0.190  | U         | 0.190 | 2.00 | 1        | 06/14/2020 22:08 | <a href="#">WG1487373</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

|                             | Result | Qualifier | MDL    | RDL   | Dilution | Analysis         | Batch                     |
|-----------------------------|--------|-----------|--------|-------|----------|------------------|---------------------------|
| Analyte                     | ug/l   |           | ug/l   | ug/l  |          | date / time      |                           |
| 1,1,1,2-Tetrachloroethane   | 0.120  | U         | 0.120  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,1,1-Trichloroethane       | 0.0940 | U         | 0.0940 | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130  | U         | 0.130  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,1,2-Trichloroethane       | 0.0940 | U         | 0.0940 | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,1-Dichloroethane          | 0.114  | U         | 0.114  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,1-Dichloroethene          | 0.188  | U         | 0.188  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,2,3-Trichloropropane      | 0.247  | U         | 0.247  | 2.50  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,2-Dichlorobenzene         | 0.101  | U         | 0.101  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,2-Dichloroethane          | 0.108  | U         | 0.108  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,2-Dichloropropane         | 0.190  | U         | 0.190  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 1,4-Dichlorobenzene         | 0.121  | U         | 0.121  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 2-Butanone (MEK)            | 1.28   | U         | 1.28   | 5.00  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 2-Hexanone                  | 0.757  | U         | 0.757  | 5.00  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823  | U         | 0.823  | 5.00  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Acetone                     | 1.05   | U         | 1.05   | 25.0  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Acrylonitrile               | 0.873  | U         | 0.873  | 5.00  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Benzene                     | 0.0896 | U         | 0.0896 | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Bromochloromethane          | 0.145  | U         | 0.145  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Bromodichloromethane        | 0.0800 | U         | 0.0800 | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Bromoform                   | 0.186  | U         | 0.186  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Bromomethane                | 0.157  | U         | 0.157  | 2.50  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Carbon disulfide            | 0.101  | U         | 0.101  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Carbon tetrachloride        | 0.159  | U         | 0.159  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Chlorobenzene               | 0.140  | U         | 0.140  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Chloroethane                | 0.141  | U         | 0.141  | 2.50  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Chloroform                  | 0.0860 | U         | 0.0860 | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Chloromethane               | 0.153  | U         | 0.153  | 1.25  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Dibromochloromethane        | 0.128  | U         | 0.128  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Dibromomethane              | 0.117  | U         | 0.117  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Ethylbenzene                | 0.158  | U         | 0.158  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Iodomethane                 | 0.377  | U         | 0.377  | 10.0  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Methylene Chloride          | 1.07   | U         | 1.07   | 2.50  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Styrene                     | 0.117  | U         | 0.117  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Tetrachloroethene           | 0.199  | U         | 0.199  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Toluene                     | 0.412  | U         | 0.412  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Trichloroethene             | 0.153  | U         | 0.153  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Trichlorofluoromethane      | 0.130  | U         | 0.130  | 2.50  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Vinyl acetate               | 0.645  | U         | 0.645  | 5.00  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Vinyl chloride              | 0.118  | U         | 0.118  | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| Xylenes, Total              | 0.316  | U         | 0.316  | 1.50  | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |
| cis-1,2-Dichloroethene      | 0.0933 | U         | 0.0933 | 0.500 | 1        | 06/14/2020 11:20 | <a href="#">WG1492363</a> |





Collected date/time: 06/02/20 08:15

L1224093

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/14/2020 11:20        | <a href="#">WG1492363</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/14/2020 11:20        | <a href="#">WG1492363</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/14/2020 11:20        | <a href="#">WG1492363</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/14/2020 11:20        | <a href="#">WG1492363</a> |
| (S) 4-Bromofluorobenzene    | 94.6           |           |             | 77.0-126    |          | 06/14/2020 11:20        | <a href="#">WG1492363</a> |
| (S) Toluene-d8              | 106            |           |             | 80.0-120    |          | 06/14/2020 11:20        | <a href="#">WG1492363</a> |
| (S) 1,2-Dichloroethane-d4   | 112            |           |             | 70.0-130    |          | 06/14/2020 11:20        | <a href="#">WG1492363</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/16/2020 19:12        | <a href="#">WG1493090</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/16/2020 19:12        | <a href="#">WG1493090</a> |

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr6  
Qc7  
Gl8  
Al9  
Sc



## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 53.75  | ft     |
| pH (On Site)                   | 6.65   | su     |
| Temperature (on-site)          | 25     | Deg. C |
| Specific Conductance (on site) | 273    | uS/cm  |
| Dissolved Oxygen (on-site)     | .6     | mg/l   |
| Turbidity                      | 4.28   | NTU    |
| ORP                            | 111    | mV     |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 154    |           | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 113    |           | 2.71 | 20.0 | 1        | 06/15/2020 23:42     | <a href="#">WG1492555</a> |

## Sample Narrative:

L1224093-13 WG1492555: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 12.0   |           | 0.0519 | 1.00  | 1        | 06/03/2020 13:34     | <a href="#">WG1486343</a> |
| Nitrate as (N) | 4.00   |           | 0.0227 | 0.100 | 1        | 06/03/2020 13:34     | <a href="#">WG1486343</a> |

## Wet Chemistry by Method 350.1

|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | <u>U</u>  | 0.0317 | 0.100 | 1        | 06/14/2020 23:47     | <a href="#">WG1490497</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | <u>U</u>  | 0.0490 | 0.200 | 1        | 06/04/2020 10:15     | <a href="#">WG1486486</a> |

## Metals (ICP) by Method 6010B

|                           | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|---------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>            |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable | 7.33   |           | 0.0111 | 1.00 | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |

|                             | Result | Qualifier | MDL   | RDL  | Dilution | Analysis date / time | Batch                     |
|-----------------------------|--------|-----------|-------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>              |        |           |       |      |          |                      |                           |
| Silver, Total Recoverable   | 2.80   | <u>U</u>  | 2.80  | 5.00 | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |
| Barium, Total Recoverable   | 29.5   |           | 1.70  | 5.00 | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |
| Cadmium, Total Recoverable  | 0.700  | <u>U</u>  | 0.700 | 2.00 | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |
| Cobalt, Total Recoverable   | 2.30   | <u>U</u>  | 2.30  | 10.0 | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |
| Chromium, Total Recoverable | 1.89   | <u>I</u>  | 1.40  | 10.0 | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |
| Copper, Total Recoverable   | 5.30   | <u>U</u>  | 5.30  | 10.0 | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |
| Iron, Total Recoverable     | 254    |           | 14.1  | 100  | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |
| Nickel, Total Recoverable   | 4.90   | <u>U</u>  | 4.90  | 10.0 | 1        | 06/17/2020 00:41     | <a href="#">WG1487369</a> |



Collected date/time: 06/02/20 06:58

L1224093

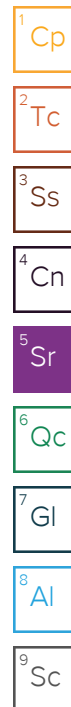
|                             | Result | Qualifier | MDL  | RDL  | Dilution | Analysis         | Batch                     |
|-----------------------------|--------|-----------|------|------|----------|------------------|---------------------------|
| Analyte                     | ug/l   |           | ug/l | ug/l |          | date / time      |                           |
| Lead, Total Recoverable     | 1.90   | U         | 1.90 | 5.00 | 1        | 06/17/2020 00:41 | <a href="#">WG1487369</a> |
| Selenium, Total Recoverable | 7.40   | U         | 7.40 | 10.0 | 1        | 06/17/2020 00:41 | <a href="#">WG1487369</a> |
| Vanadium, Total Recoverable | 2.40   | U         | 2.40 | 20.0 | 1        | 06/17/2020 00:41 | <a href="#">WG1487369</a> |
| Zinc, Total Recoverable     | 5.90   | U         | 5.90 | 50.0 | 1        | 06/17/2020 00:41 | <a href="#">WG1487369</a> |

## Metals (ICPMS) by Method 6020

|                              | Result | Qualifier | MDL   | RDL  | Dilution | Analysis         | Batch                     |
|------------------------------|--------|-----------|-------|------|----------|------------------|---------------------------|
| Analyte                      | ug/l   |           | ug/l  | ug/l |          | date / time      |                           |
| Arsenic, Total Recoverable   | 0.907  | I         | 0.250 | 2.00 | 1        | 06/14/2020 22:11 | <a href="#">WG1487373</a> |
| Beryllium, Total Recoverable | 0.120  | U         | 0.120 | 2.00 | 1        | 06/14/2020 22:11 | <a href="#">WG1487373</a> |
| Antimony, Total Recoverable  | 0.754  | U         | 0.754 | 2.00 | 1        | 06/14/2020 22:11 | <a href="#">WG1487373</a> |
| Thallium, Total Recoverable  | 0.190  | U         | 0.190 | 2.00 | 1        | 06/14/2020 22:11 | <a href="#">WG1487373</a> |

## Volatile Organic Compounds (GC/MS) by Method 8260B

|                             | Result | Qualifier | MDL    | RDL   | Dilution | Analysis         | Batch                     |
|-----------------------------|--------|-----------|--------|-------|----------|------------------|---------------------------|
| Analyte                     | ug/l   |           | ug/l   | ug/l  |          | date / time      |                           |
| 1,1,1,2-Tetrachloroethane   | 0.120  | U         | 0.120  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,1,1-Trichloroethane       | 0.0940 | U         | 0.0940 | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130  | U         | 0.130  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,1,2-Trichloroethane       | 0.0940 | U         | 0.0940 | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,1-Dichloroethane          | 0.114  | U         | 0.114  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,1-Dichloroethene          | 0.188  | U         | 0.188  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,2,3-Trichloropropane      | 0.247  | U         | 0.247  | 2.50  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,2-Dichlorobenzene         | 0.101  | U         | 0.101  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,2-Dichloroethane          | 0.108  | U         | 0.108  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,2-Dichloropropane         | 0.190  | U         | 0.190  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 1,4-Dichlorobenzene         | 0.121  | U         | 0.121  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 2-Butanone (MEK)            | 1.28   | U         | 1.28   | 5.00  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 2-Hexanone                  | 0.757  | U         | 0.757  | 5.00  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823  | U         | 0.823  | 5.00  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Acetone                     | 1.05   | U         | 1.05   | 25.0  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Acrylonitrile               | 0.873  | U         | 0.873  | 5.00  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Benzene                     | 0.0896 | U         | 0.0896 | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Bromochloromethane          | 0.145  | U         | 0.145  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Bromodichloromethane        | 0.0800 | U         | 0.0800 | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Bromoform                   | 0.186  | U         | 0.186  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Bromomethane                | 0.157  | U         | 0.157  | 2.50  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Carbon disulfide            | 0.101  | U         | 0.101  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Carbon tetrachloride        | 0.159  | U         | 0.159  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Chlorobenzene               | 0.140  | U         | 0.140  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Chloroethane                | 0.141  | U         | 0.141  | 2.50  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Chloroform                  | 0.0860 | U         | 0.0860 | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Chloromethane               | 0.153  | U         | 0.153  | 1.25  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Dibromochloromethane        | 0.128  | U         | 0.128  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Dibromomethane              | 0.117  | U         | 0.117  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Ethylbenzene                | 0.158  | U         | 0.158  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Iodomethane                 | 0.377  | U         | 0.377  | 10.0  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Methylene Chloride          | 1.07   | U         | 1.07   | 2.50  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Styrene                     | 0.117  | U         | 0.117  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Tetrachloroethene           | 0.199  | U         | 0.199  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Toluene                     | 0.412  | U         | 0.412  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Trichloroethene             | 0.153  | U         | 0.153  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Trichlorofluoromethane      | 0.130  | U         | 0.130  | 2.50  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Vinyl acetate               | 0.645  | U         | 0.645  | 5.00  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Vinyl chloride              | 0.118  | U         | 0.118  | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| Xylenes, Total              | 0.316  | U         | 0.316  | 1.50  | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |
| cis-1,2-Dichloroethene      | 0.0933 | U         | 0.0933 | 0.500 | 1        | 06/14/2020 11:39 | <a href="#">WG1492363</a> |





## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 06/14/2020 11:39        | <a href="#">WG1492363</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 06/14/2020 11:39        | <a href="#">WG1492363</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 06/14/2020 11:39        | <a href="#">WG1492363</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 06/14/2020 11:39        | <a href="#">WG1492363</a> |
| (S) 4-Bromofluorobenzene    | 94.8           |           |             | 77.0-126    |          | 06/14/2020 11:39        | <a href="#">WG1492363</a> |
| (S) Toluene-d8              | 105            |           |             | 80.0-120    |          | 06/14/2020 11:39        | <a href="#">WG1492363</a> |
| (S) 1,2-Dichloroethane-d4   | 110            |           |             | 70.0-130    |          | 06/14/2020 11:39        | <a href="#">WG1492363</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | U         | 0.00430     | 0.0200      | 1        | 06/16/2020 19:24        | <a href="#">WG1493090</a> |
| Ethylene Dibromide          | 0.00240        | U         | 0.00240     | 0.0100      | 1        | 06/16/2020 19:24        | <a href="#">WG1493090</a> |

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr6  
Qc7  
Gl8  
Al9  
Sc



## Additional Information

| Analyte         | Result | Units |
|-----------------|--------|-------|
| Sampling Method | Z      |       |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | C         | 0.120       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,1,1-Trichloroethane       | 0.0940         | C         | 0.0940      | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | C         | 0.130       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,1,2-Trichloroethane       | 0.0940         | C         | 0.0940      | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,1-Dichloroethane          | 0.114          | C         | 0.114       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,1-Dichloroethene          | 0.188          | C         | 0.188       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,2,3-Trichloropropane      | 0.247          | C         | 0.247       | 2.50        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,2-Dichlorobenzene         | 0.101          | C         | 0.101       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,2-Dichloroethane          | 0.108          | C         | 0.108       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,2-Dichloropropane         | 0.190          | C         | 0.190       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 1,4-Dichlorobenzene         | 0.121          | C         | 0.121       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 2-Butanone (MEK)            | 1.28           | C         | 1.28        | 5.00        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 2-Hexanone                  | 0.757          | C         | 0.757       | 5.00        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | C         | 0.823       | 5.00        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Acetone                     | 1.77           | C         | 1.05        | 25.0        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Acrylonitrile               | 0.873          | C         | 0.873       | 5.00        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Benzene                     | 0.0896         | C         | 0.0896      | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Bromochloromethane          | 0.145          | C         | 0.145       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Bromodichloromethane        | 0.0800         | C         | 0.0800      | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Bromoform                   | 0.186          | C         | 0.186       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Bromomethane                | 0.157          | C         | 0.157       | 2.50        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Carbon disulfide            | 0.101          | C         | 0.101       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Carbon tetrachloride        | 0.159          | C         | 0.159       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Chlorobenzene               | 0.140          | C         | 0.140       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Chloroethane                | 0.141          | C         | 0.141       | 2.50        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Chloroform                  | 0.0860         | C         | 0.0860      | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Chloromethane               | 0.153          | C         | 0.153       | 1.25        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Dibromochloromethane        | 0.128          | C         | 0.128       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Dibromomethane              | 0.117          | C         | 0.117       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Ethylbenzene                | 0.158          | C         | 0.158       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Iodomethane                 | 0.377          | C         | 0.377       | 10.0        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Methylene Chloride          | 1.07           | C         | 1.07        | 2.50        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Styrene                     | 0.117          | C         | 0.117       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Tetrachloroethene           | 0.199          | C         | 0.199       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Toluene                     | 0.412          | C         | 0.412       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Trichloroethene             | 0.153          | C         | 0.153       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Trichlorofluoromethane      | 0.130          | C         | 0.130       | 2.50        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Vinyl acetate               | 0.645          | C         | 0.645       | 5.00        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Vinyl chloride              | 0.118          | C         | 0.118       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| Xylenes, Total              | 0.316          | C         | 0.316       | 1.50        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| cis-1,2-Dichloroethene      | 0.0933         | C         | 0.0933      | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| cis-1,3-Dichloropropene     | 0.0976         | C         | 0.0976      | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| trans-1,2-Dichloroethene    | 0.152          | C         | 0.152       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| trans-1,3-Dichloropropene   | 0.222          | C         | 0.222       | 0.500       | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | C         | 0.257       | 5.00        | 1        | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| (S) 4-Bromofluorobenzene    | 99.9           |           |             | 77.0-126    |          | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| (S) Toluene-d8              | 104            |           |             | 80.0-120    |          | 06/15/2020 14:45        | <a href="#">WG1492775</a> |
| (S) 1,2-Dichloroethane-d4   | 109            |           |             | 70.0-130    |          | 06/15/2020 14:45        | <a href="#">WG1492775</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc





## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| pH (On Site)                   | 6.76   | su     |
| Temperature (on-site)          | 25.2   | Deg. C |
| Specific Conductance (on site) | 6      | uS/cm  |
| Dissolved Oxygen (on-site)     | 1      | mg/l   |
| Turbidity                      | 0      | NTU    |
| ORP                            | 29     | mV     |

## Gravimetric Analysis by Method 2540 C-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Dissolved Solids | 2.82   | <u>U</u>  | 2.82 | 10.0 | 1        | 06/06/2020 12:12     | <a href="#">WG1488083</a> |

## Wet Chemistry by Method 2320 B-2011

|                  | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |      |      |          |                      |                           |
| Total Alkalinity | 4.19   | <u>I</u>  | 2.71 | 20.0 | 1        | 06/15/2020 23:50     | <a href="#">WG1492555</a> |

## Sample Narrative:

L1224093-15 WG1492555: Endpoint pH 4.5

## Wet Chemistry by Method 300.0

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Chloride       | 0.330  | <u>I</u>  | 0.0519 | 1.00  | 1        | 06/03/2020 14:11     | <a href="#">WG1486343</a> |
| Nitrate as (N) | 0.0227 | <u>U</u>  | 0.0227 | 0.100 | 1        | 06/03/2020 14:11     | <a href="#">WG1486343</a> |

## Wet Chemistry by Method 350.1

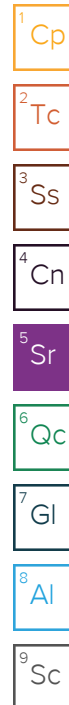
|                  | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b>   |        |           |        |       |          |                      |                           |
| Ammonia Nitrogen | 0.0317 | <u>U</u>  | 0.0317 | 0.100 | 1        | 06/14/2020 23:49     | <a href="#">WG1490497</a> |

## Mercury by Method 7470A

|                | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| <b>Analyte</b> |        |           |        |       |          |                      |                           |
| Mercury        | 0.0490 | <u>U</u>  | 0.0490 | 0.200 | 1        | 06/04/2020 10:17     | <a href="#">WG1486486</a> |

## Metals (ICP) by Method 6010B

|                             | Result | Qualifier | MDL    | RDL  | Dilution | Analysis date / time | Batch                     |
|-----------------------------|--------|-----------|--------|------|----------|----------------------|---------------------------|
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Sodium, Total Recoverable   | 0.115  | <u>I</u>  | 0.0111 | 1.00 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| <b>Analyte</b>              |        |           |        |      |          |                      |                           |
| Silver, Total Recoverable   | 2.80   | <u>U</u>  | 2.80   | 5.00 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Barium, Total Recoverable   | 1.70   | <u>U</u>  | 1.70   | 5.00 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Cadmium, Total Recoverable  | 0.700  | <u>U</u>  | 0.700  | 2.00 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Cobalt, Total Recoverable   | 2.30   | <u>U</u>  | 2.30   | 10.0 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Chromium, Total Recoverable | 1.40   | <u>U</u>  | 1.40   | 10.0 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Copper, Total Recoverable   | 5.64   | <u>I</u>  | 5.30   | 10.0 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Iron, Total Recoverable     | 14.1   | <u>U</u>  | 14.1   | 100  | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Nickel, Total Recoverable   | 4.90   | <u>U</u>  | 4.90   | 10.0 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Lead, Total Recoverable     | 2.62   | <u>I</u>  | 1.90   | 5.00 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |
| Selenium, Total Recoverable | 7.40   | <u>U</u>  | 7.40   | 10.0 | 1        | 06/17/2020 00:44     | <a href="#">WG1487369</a> |





| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Vanadium, Total Recoverable | 2.40           | <u>U</u>  | 2.40        | 20.0        | 1        | 06/17/2020 00:44        | <a href="#">WG1487369</a> |
| Zinc, Total Recoverable     | 5.90           | <u>U</u>  | 5.90        | 50.0        | 1        | 06/17/2020 00:44        | <a href="#">WG1487369</a> |

## Metals (ICPMS) by Method 6020

| Analyte                      | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|------------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Arsenic, Total Recoverable   | 0.250          | <u>U</u>  | 0.250       | 2.00        | 1        | 06/14/2020 22:15        | <a href="#">WG1487373</a> |
| Beryllium, Total Recoverable | 0.120          | <u>U</u>  | 0.120       | 2.00        | 1        | 06/14/2020 22:15        | <a href="#">WG1487373</a> |
| Antimony, Total Recoverable  | 0.754          | <u>U</u>  | 0.754       | 2.00        | 1        | 06/14/2020 22:15        | <a href="#">WG1487373</a> |
| Thallium, Total Recoverable  | 0.224          | <u>I</u>  | 0.190       | 2.00        | 1        | 06/14/2020 22:15        | <a href="#">WG1487373</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | <u>U</u>  | 0.00430     | 0.0200      | 1        | 06/16/2020 19:36        | <a href="#">WG1493090</a> |
| Ethylene Dibromide          | 0.00240        | <u>U</u>  | 0.00240     | 0.0100      | 1        | 06/16/2020 19:36        | <a href="#">WG1493090</a> |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



Method Blank (MB)

(MB) R3535868-1 06/06/20 12:12

| Analyte          | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|------------------|-------------------|--------------|----------------|----------------|
| Dissolved Solids | 2820              | U            | 2820           | 10000          |

L1224093-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1224093-07 06/06/20 12:12 • (DUP) R3535868-3 06/06/20 12:12

| Analyte          | Original Result<br>ug/l | DUP Result<br>ug/l | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|------------------|-------------------------|--------------------|----------|--------------|---------------|------------------------|
| Dissolved Solids | 208000                  | 204000             | 1        | 1.94         |               | 5                      |

L1224093-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1224093-12 06/06/20 12:12 • (DUP) R3535868-4 06/06/20 12:12

| Analyte          | Original Result<br>ug/l | DUP Result<br>ug/l | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|------------------|-------------------------|--------------------|----------|--------------|---------------|------------------------|
| Dissolved Solids | 171000                  | 171000             | 1        | 0.000        |               | 5                      |

Laboratory Control Sample (LCS)

(LCS) R3535868-2 06/06/20 12:12

| Analyte          | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------|----------------------|--------------------|---------------|------------------|---------------|
| Dissolved Solids | 8800000              | 7730000            | 87.8          | 85.0-115         |               |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3535876-1 06/06/20 14:16

|                  | MB Result | MB Qualifier | MB MDL | MB RDL |
|------------------|-----------|--------------|--------|--------|
| Analyte          | ug/l      |              | ug/l   | ug/l   |
| Dissolved Solids | 2820      | U            | 2820   | 10000  |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1224550-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1224550-02 06/06/20 14:16 • (DUP) R3535876-3 06/06/20 14:16

|                  | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte          | ug/l            | ug/l       |          | %       |               | %              |
| Dissolved Solids | 3110000         | 3060000    | 1        | 1.62    |               | 5              |

7 Gl

8 Al

Laboratory Control Sample (LCS)

(LCS) R3535876-2 06/06/20 14:16

|                  | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|------------------|--------------|------------|----------|-------------|---------------|
| Analyte          | ug/l         | ug/l       | %        | %           |               |
| Dissolved Solids | 8800000      | 7740000    | 88.0     | 85.0-115    |               |

9 Sc

Method Blank (MB)

(MB) R3537817-1 06/11/20 19:18

|            | MB Result | MB Qualifier | MB MDL | MB RDL |
|------------|-----------|--------------|--------|--------|
| Analyte    | ug/l      |              | ug/l   | ug/l   |
| Alkalinity | 2710      | U            | 2710   | 20000  |

Sample Narrative:  
BLANK: Endpoint pH 4.5

L1227883-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1227883-01 06/11/20 19:25 • (DUP) R3537817-2 06/11/20 19:33

|            | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte    | ug/l            | ug/l       |          | %       |               | %              |
| Alkalinity | 350000          | 354000     | 1        | 0.980   |               | 20             |

Sample Narrative:  
OS: Endpoint pH 4.5  
DUP: Endpoint pH 4.5

L1226503-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1226503-07 06/11/20 22:06 • (DUP) R3537817-4 06/11/20 22:13

|            | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte    | ug/l            | ug/l       |          | %       |               | %              |
| Alkalinity | 199000          | 198000     | 1        | 0.186   |               | 20             |

Sample Narrative:  
OS: Endpoint pH 4.5  
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3537817-3 06/11/20 19:49

|            | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|------------|--------------|------------|----------|-------------|---------------|
| Analyte    | ug/l         | ug/l       | %        | %           |               |
| Alkalinity | 100000       | 105000     | 105      | 85.0-115    |               |

Sample Narrative:  
LCS: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3539033-1 06/15/20 23:17

|            | MB Result | MB Qualifier | MB MDL | MB RDL |
|------------|-----------|--------------|--------|--------|
| Analyte    | ug/l      |              | ug/l   | ug/l   |
| Alkalinity | 2710      | U            | 2710   | 20000  |

Sample Narrative:

BLANK: Endpoint pH 4.5

L1224093-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1224093-15 06/15/20 23:50 • (DUP) R3539033-2 06/15/20 23:59

|            | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte    | ug/l            | ug/l       |          | %       |               | %              |
| Alkalinity | 4190            | 4160       | 1        | 0.000   |               | 20             |

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1227110-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1227110-03 06/16/20 01:19 • (DUP) R3539033-4 06/16/20 01:26

|            | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte    | ug/l            | ug/l       |          | %       |               | %              |
| Alkalinity | 163000          | 163000     | 1        | 0.123   |               | 20             |

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3539033-3 06/16/20 00:37

|            | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|------------|--------------|------------|----------|-------------|---------------|
| Analyte    | ug/l         | ug/l       | %        | %           |               |
| Alkalinity | 100000       | 102000     | 102      | 85.0-115    |               |

Sample Narrative:

LCS: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3534409-1 06/02/20 08:30

|          | MB Result | MB Qualifier | MB MDL | MB RDL |
|----------|-----------|--------------|--------|--------|
| Analyte  | ug/l      |              | ug/l   | ug/l   |
| Chloride | 351       |              | 51.9   | 1000   |
| Nitrate  | 22.7      | U            | 22.7   | 100    |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1224093-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1224093-04 06/02/20 13:16 • (DUP) R3534409-3 06/02/20 13:27

|          | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|----------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte  | ug/l            | ug/l       |          | %       |               | %              |
| Chloride | 7380            | 7310       | 1        | 0.999   |               | 20             |
| Nitrate  | 4630            | 4690       | 1        | 1.12    |               | 20             |

L1224051-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1224051-01 06/02/20 17:58 • (DUP) R3534409-6 06/02/20 18:09

|          | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|----------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte  | ug/l            | ug/l       |          | %       |               | %              |
| Chloride | 38000           | 38500      | 1        | 1.34    |               | 20             |
| Nitrate  | 2880            | 2900       | 1        | 0.679   |               | 20             |

Laboratory Control Sample (LCS)

(LCS) R3534409-2 06/02/20 08:41

|          | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|----------|--------------|------------|----------|-------------|---------------|
| Analyte  | ug/l         | ug/l       | %        | %           |               |
| Chloride | 40000        | 39000      | 97.6     | 90.0-110    |               |
| Nitrate  | 8000         | 7880       | 98.5     | 90.0-110    |               |

L1224046-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224046-01 06/02/20 16:09 • (MS) R3534409-4 06/02/20 16:20 • (MSD) R3534409-5 06/02/20 16:53

|          | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD   | RPD Limits |
|----------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| Analyte  | ug/l         | ug/l            | ug/l      | ug/l       | %       | %        |          | %           |              |               | %     | %          |
| Chloride | 50000        | 150000          | 193000    | 192000     | 84.6    | 82.3     | 1        | 80.0-120    | L            | L             | 0.600 | 20         |
| Nitrate  | 5000         | 4890            | 10100     | 10100      | 105     | 104      | 1        | 80.0-120    | L            | L             | 0.675 | 20         |





[L1224093-01,04,05](#)

L1224053-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1224053-01 06/02/20 18:20 • (MS) R3534409-7 06/02/20 18:31

| Analyte  | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MS Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier |
|----------|----------------------|-------------------------|-------------------|--------------|----------|------------------|--------------|
| Chloride | 50000                | 19100                   | 69200             | 100          | 1        | 80.0-120         |              |
| Nitrate  | 5000                 | 6450                    | 11700             | 106          | 1        | 80.0-120         | L            |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3534966-1 06/03/20 08:01

|          | MB Result | MB Qualifier | MB MDL | MB RDL |
|----------|-----------|--------------|--------|--------|
| Analyte  | ug/l      |              | ug/l   | ug/l   |
| Chloride | 576       | ⬇️           | 51.9   | 1000   |
| Nitrate  | 86.3      | ⬇️           | 22.7   | 100    |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1224445-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1224445-01 06/03/20 10:19 • (DUP) R3534966-3 06/03/20 10:30

|          | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|----------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte  | ug/l            | ug/l       |          | %       |               | %              |
| Chloride | 33300           | 32900      | 1        | 1.04    |               | 20             |
| Nitrate  | 2450            | 2390       | 1        | 2.14    |               | 20             |

L1224477-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1224477-05 06/03/20 18:05 • (DUP) R3534966-9 06/03/20 18:16

|          | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|----------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte  | ug/l            | ug/l       |          | %       |               | %              |
| Chloride | 45200           | 44600      | 1        | 1.20    |               | 20             |
| Nitrate  | 2130            | 2170       | 1        | 1.56    |               | 20             |

Laboratory Control Sample (LCS)

(LCS) R3534966-2 06/03/20 08:12

|          | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|----------|--------------|------------|----------|-------------|---------------|
| Analyte  | ug/l         | ug/l       | %        | %           |               |
| Chloride | 40000        | 38700      | 96.7     | 90.0-110    |               |
| Nitrate  | 8000         | 7860       | 98.3     | 90.0-110    |               |

L1224445-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224445-02 06/03/20 10:41 • (MS) R3534966-4 06/03/20 10:52 • (MSD) R3534966-5 06/03/20 11:03

|          | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD   | RPD Limits |
|----------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| Analyte  | ug/l         | ug/l            | ug/l      | ug/l       | %       | %        |          | %           |              |               | %     | %          |
| Chloride | 50000        | 4950            | 56000     | 56100      | 102     | 102      | 1        | 80.0-120    |              |               | 0.174 | 20         |
| Nitrate  | 5000         | 790             | 5940      | 5920       | 103     | 103      | 1        | 80.0-120    |              |               | 0.229 | 20         |



L1224477-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1224477-02 06/03/20 17:21 • (MS) R3534966-8 06/03/20 17:32

| Analyte  | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MS Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> |
|----------|----------------------|-------------------------|-------------------|--------------|----------|------------------|---------------------|
| Chloride | 50000                | 5920                    | 55000             | 98.1         | 1        | 80.0-120         |                     |
| Nitrate  | 5000                 | 488                     | 5710              | 104          | 1        | 80.0-120         |                     |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3534995-1 06/03/20 08:37

| Analyte  | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|----------|-------------------|--------------|----------------|----------------|
| Chloride | 51.9              | U            | 51.9           | 1000           |
| Nitrate  | 22.7              | U            | 22.7           | 100            |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1224093-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1224093-11 06/03/20 12:21 • (DUP) R3534995-3 06/03/20 12:39

| Analyte  | Original Result<br>ug/l | DUP Result<br>ug/l | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------|-------------------------|--------------------|----------|--------------|---------------|------------------------|
| Chloride | 2180                    | 2130               | 1        | 2.42         |               | 20                     |
| Nitrate  | 456                     | 514                | 1        | 12.0         |               | 20                     |

L1224571-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1224571-03 06/03/20 18:15 • (DUP) R3534995-6 06/03/20 19:10

| Analyte  | Original Result<br>ug/l | DUP Result<br>ug/l | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------|-------------------------|--------------------|----------|--------------|---------------|------------------------|
| Chloride | 157000                  | 157000             | 10       | 0.0269       |               | 20                     |
| Nitrate  | 2000                    | 2010               | 10       | 0.249        |               | 20                     |

Laboratory Control Sample (LCS)

(LCS) R3534995-2 06/03/20 08:55

| Analyte  | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|----------------------|--------------------|---------------|------------------|---------------|
| Chloride | 40000                | 40300              | 101           | 90.0-110         |               |
| Nitrate  | 8000                 | 8290               | 104           | 90.0-110         |               |

L1224514-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224514-01 06/03/20 14:34 • (MS) R3534995-4 06/03/20 15:29 • (MSD) R3534995-5 06/03/20 15:48

| Analyte  | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Chloride | 50000                | 220000                  | 261000            | 262000             | 82.8         | 84.8          | 1        | 80.0-120         | L            | L             | 0.380    | 20              |
| Nitrate  | 5000                 | 907                     | 6100              | 6310               | 104          | 108           | 1        | 80.0-120         |              |               | 3.42     | 20              |



L1224568-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1224568-07 06/04/20 01:18 • (MS) R3534995-7 06/04/20 01:37

| Analyte  | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MS Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier |
|----------|----------------------|-------------------------|-------------------|--------------|----------|------------------|--------------|
| Chloride | 50000                | 41800                   | 93600             | 103          | 1        | 80.0-120         |              |
| Nitrate  | 5000                 | 132                     | 5440              | 106          | 1        | 80.0-120         |              |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3537692-1 06/11/20 13:41

|                  | MB Result | MB Qualifier | MB MDL | MB RDL |
|------------------|-----------|--------------|--------|--------|
| Analyte          | ug/l      |              | ug/l   | ug/l   |
| Ammonia Nitrogen | 31.7      | U            | 31.7   | 100    |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1227103-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1227103-01 06/11/20 15:20 • (DUP) R3537692-6 06/11/20 15:22

|                  | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte          | ug/l            | ug/l       |          | %       |               | %              |
| Ammonia Nitrogen | 8320            | 8890       | 1        | 6.61    |               | 10             |

L1225782-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1225782-01 06/11/20 15:32 • (DUP) R3537692-8 06/11/20 15:33

|                  | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte          | ug/l            | ug/l       |          | %       |               | %              |
| Ammonia Nitrogen | 147000          | 164000     | 50       | 10.8    | J             | 10             |

Laboratory Control Sample (LCS)

(LCS) R3537692-2 06/11/20 13:43

|                  | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|------------------|--------------|------------|----------|-------------|---------------|
| Analyte          | ug/l         | ug/l       | %        | %           |               |
| Ammonia Nitrogen | 7500         | 7060       | 94.1     | 90.0-110    |               |

L1224093-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224093-01 06/11/20 13:45 • (MS) R3537692-3 06/11/20 13:46 • (MSD) R3537692-4 06/11/20 13:48

|                  | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD  | RPD Limits |
|------------------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte          | ug/l         | ug/l            | ug/l      | ug/l       | %       | %        |          | %           |              |               | %    | %          |
| Ammonia Nitrogen | 5000         | 31.7            | 4890      | 4820       | 97.7    | 96.4     | 1        | 90.0-110    |              |               | 1.34 | 10         |

L1227103-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1227103-02 06/11/20 15:23 • (MS) R3537692-7 06/11/20 15:25

|                  | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte          | ug/l         | ug/l            | ug/l      | %       |          | %           |              |
| Ammonia Nitrogen | 5000         | 31.7            | 4780      | 95.5    | 1        | 90.0-110    |              |



Method Blank (MB)

(MB) R3538602-1 06/14/20 23:34

|                  | MB Result | MB Qualifier | MB MDL | MB RDL |
|------------------|-----------|--------------|--------|--------|
| Analyte          | ug/l      |              | ug/l   | ug/l   |
| Ammonia Nitrogen | 31.7      | <u>U</u>     | 31.7   | 100    |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1224093-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1224093-12 06/14/20 23:44 • (DUP) R3538602-5 06/14/20 23:46

|                  | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte          | ug/l            | ug/l       |          | %       |               | %              |
| Ammonia Nitrogen | 31.7            | 31.7       | 1        | 0.000   | <u>U</u>      | 10             |

L1227138-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1227138-01 06/15/20 00:12 • (DUP) R3538602-7 06/15/20 00:19

|                  | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte          | ug/l            | ug/l       |          | %       |               | %              |
| Ammonia Nitrogen | 33.0            | 31.7       | 1        | 0.000   | <u>U</u>      | 10             |

Laboratory Control Sample (LCS)

(LCS) R3538602-2 06/14/20 23:36

|                  | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|------------------|--------------|------------|----------|-------------|---------------|
| Analyte          | ug/l         | ug/l       | %        | %           |               |
| Ammonia Nitrogen | 7500         | 7370       | 98.2     | 90.0-110    |               |

L1224093-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224093-11 06/14/20 23:39 • (MS) R3538602-3 06/14/20 23:41 • (MSD) R3538602-4 06/14/20 23:42

|                  | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD  | RPD Limits |
|------------------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte          | ug/l         | ug/l            | ug/l      | ug/l       | %       | %        |          | %           |              |               | %    | %          |
| Ammonia Nitrogen | 5000         | 31.7            | 4990      | 5050       | 99.8    | 101      | 1        | 90.0-110    |              |               | 1.25 | 10         |





Method Blank (MB)

(MB) R3538843-1 06/15/20 13:14

|                 | MB Result | MB Qualifier | MB MDL | MB RDL |
|-----------------|-----------|--------------|--------|--------|
| Analyte         | ug/l      |              | ug/l   | ug/l   |
| Nitrate-Nitrite | 19.7      | U            | 19.7   | 100    |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1224093-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1224093-02 06/15/20 13:17 • (DUP) R3538843-3 06/15/20 13:18

|                 | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|-----------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte         | ug/l            | ug/l       |          | %       |               | %              |
| Nitrate-Nitrite | 1240            | 1240       | 1        | 0.000   |               | 20             |

L1227140-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1227140-02 06/15/20 13:53 • (DUP) R3538843-7 06/15/20 13:54

|                 | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|-----------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte         | ug/l            | ug/l       |          | %       |               | %              |
| Nitrate-Nitrite | 288             | 287        | 1        | 0.348   |               | 20             |

Laboratory Control Sample (LCS)

(LCS) R3538843-2 06/15/20 13:16

|                 | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|-----------------|--------------|------------|----------|-------------|---------------|
| Analyte         | ug/l         | ug/l       | %        | %           |               |
| Nitrate-Nitrite | 4000         | 4090       | 102      | 90.0-110    |               |

L1226416-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1226416-16 06/15/20 13:33 • (MS) R3538843-4 06/15/20 13:34 • (MSD) R3538843-5 06/15/20 13:36

|                 | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD  | RPD Limits |
|-----------------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte         | ug/l         | ug/l            | ug/l      | ug/l       | %       | %        |          | %           |              |               | %    | %          |
| Nitrate-Nitrite | 2500         | 19.7            | 2770      | 2950       | 111     | 118      | 1        | 90.0-110    | J            | J             | 6.29 | 20         |

L1226416-20 Original Sample (OS) • Matrix Spike (MS)

(OS) L1226416-20 06/15/20 13:39 • (MS) R3538843-6 06/15/20 13:41

|                 | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|-----------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte         | ug/l         | ug/l            | ug/l      | %       |          | %           |              |
| Nitrate-Nitrite | 2500         | 19.7            | 2600      | 104     | 1        | 90.0-110    |              |



Method Blank (MB)

(MB) R3534792-1 06/03/20 19:14

| Analyte | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|---------|-------------------|--------------|----------------|----------------|
| Mercury | 0.0490            | <u>U</u>     | 0.0490         | 0.200          |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

Laboratory Control Sample (LCS)

(LCS) R3534792-2 06/03/20 19:16

| Analyte | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|---------|----------------------|--------------------|---------------|------------------|---------------|
| Mercury | 3.00                 | 3.16               | 105           | 80.0-120         |               |

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1223847-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223847-04 06/03/20 19:18 • (MS) R3534792-3 06/03/20 19:20 • (MSD) R3534792-4 06/03/20 19:22

| Analyte | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Mercury | 3.00                 | 0.0490                  | 1.33              | 1.11               | 44.5         | 36.9          | 1        | 75.0-125         | <u>J</u>     | <u>J</u>      | 18.7     | 20              |

Method Blank (MB)

(MB) R3534971-1 06/04/20 09:55

|         | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|--------|--------|
| Analyte | ug/l      |              | ug/l   | ug/l   |
| Mercury | 0.0490    | <u>U</u>     | 0.0490 | 0.200  |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Laboratory Control Sample (LCS)

(LCS) R3534971-2 06/04/20 09:57

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | ug/l         | ug/l       | %        | %           |               |
| Mercury | 3.00         | 3.21       | 107      | 80.0-120    |               |

L1224461-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224461-01 06/04/20 09:59 • (MS) R3534971-3 06/04/20 10:07 • (MSD) R3534971-4 06/04/20 10:09

|         | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD  | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | ug/l         | ug/l            | ug/l      | ug/l       | %       | %        |          | %           |              |               | %    | %          |
| Mercury | 3.00         | 0.0490          | 2.97      | 3.01       | 99.0    | 100      | 1        | 75.0-125    |              |               | 1.47 | 20         |



Method Blank (MB)

(MB) R3535229-1 06/04/20 18:52

|         | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|--------|--------|
| Analyte | ug/l      |              | ug/l   | ug/l   |
| Mercury | 0.0490    | U            | 0.0490 | 0.200  |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

Laboratory Control Sample (LCS)

(LCS) R3535229-2 06/04/20 18:54

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | ug/l         | ug/l       | %        | %           |               |
| Mercury | 3.00         | 2.99       | 99.7     | 80.0-120    |               |

7Gl

8Al

9Sc

L1224852-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224852-03 06/04/20 18:55 • (MS) R3535229-3 06/04/20 18:57 • (MSD) R3535229-4 06/04/20 18:59

|         | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD  | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | ug/l         | ug/l            | ug/l      | ug/l       | %       | %        |          | %           |              |               | %    | %          |
| Mercury | 3.00         | 0.0490          | 3.12      | 3.25       | 104     | 108      | 1        | 75.0-125    |              |               | 3.91 | 20         |



Method Blank (MB)

(MB) R3535934-1 06/07/20 17:40

| Analyte  | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|----------|-------------------|--------------|----------------|----------------|
| Barium   | 1.70              | ⌈            | 1.70           | 5.00           |
| Cadmium  | 0.700             | ⌈            | 0.700          | 2.00           |
| Chromium | 1.40              | ⌈            | 1.40           | 10.0           |
| Cobalt   | 2.30              | ⌈            | 2.30           | 10.0           |
| Copper   | 5.30              | ⌈            | 5.30           | 10.0           |
| Iron     | 14.1              | ⌈            | 14.1           | 100            |
| Lead     | 1.90              | ⌈            | 1.90           | 5.00           |
| Nickel   | 4.90              | ⌈            | 4.90           | 10.0           |
| Selenium | 7.40              | ⌈            | 7.40           | 10.0           |
| Silver   | 2.80              | ⌈            | 2.80           | 5.00           |
| Sodium   | 11.1              | ⌈            | 11.1           | 1000           |
| Vanadium | 3.35              | ⌈            | 2.40           | 20.0           |
| Zinc     | 5.90              | ⌈            | 5.90           | 50.0           |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS)

(LCS) R3535934-2 06/07/20 17:43

| Analyte  | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|----------------------|--------------------|---------------|------------------|---------------|
| Barium   | 1000                 | 983                | 98.3          | 80.0-120         |               |
| Cadmium  | 1000                 | 936                | 93.6          | 80.0-120         |               |
| Chromium | 1000                 | 969                | 96.9          | 80.0-120         |               |
| Cobalt   | 1000                 | 983                | 98.3          | 80.0-120         |               |
| Copper   | 1000                 | 953                | 95.3          | 80.0-120         |               |
| Iron     | 10000                | 9540               | 95.4          | 80.0-120         |               |
| Lead     | 1000                 | 964                | 96.4          | 80.0-120         |               |
| Nickel   | 1000                 | 981                | 98.1          | 80.0-120         |               |
| Selenium | 1000                 | 930                | 93.0          | 80.0-120         |               |
| Silver   | 200                  | 179                | 89.6          | 80.0-120         |               |
| Sodium   | 10000                | 9730               | 97.3          | 80.0-120         |               |
| Vanadium | 1000                 | 983                | 98.3          | 80.0-120         |               |
| Zinc     | 1000                 | 936                | 93.6          | 80.0-120         |               |



L1224093-01,04,05

L1224093-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224093-01 06/07/20 17:45 • (MS) R3535934-4 06/07/20 17:50 • (MSD) R3535934-5 06/07/20 17:53

| Analyte  | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Barium   | 1000                 | 32100000                | 995               | 1000               | 96.3         | 97.2          | 1        | 75.0-125         |              |               | 0.948    | 20              |
| Cadmium  | 1000                 | 295000                  | 933               | 942                | 93.3         | 94.2          | 1        | 75.0-125         |              |               | 1.02     | 20              |
| Chromium | 1000                 | 652000                  | 960               | 968                | 96.0         | 96.8          | 1        | 75.0-125         |              |               | 0.828    | 20              |
| Cobalt   | 1000                 | 2120000                 | 979               | 989                | 97.7         | 98.6          | 1        | 75.0-125         |              |               | 0.977    | 20              |
| Copper   | 1000                 | 5720000                 | 948               | 959                | 94.3         | 95.3          | 1        | 75.0-125         |              |               | 1.10     | 20              |
| Iron     | 10000                | 35800000                | 9510              | 9600               | 95.1         | 96.0          | 1        | 75.0-125         |              |               | 0.956    | 20              |
| Lead     | 1000                 | 1900                    | 955               | 966                | 95.5         | 96.6          | 1        | 75.0-125         |              |               | 1.13     | 20              |
| Nickel   | 1000                 | 4190000                 | 975               | 985                | 97.1         | 98.0          | 1        | 75.0-125         |              |               | 0.947    | 20              |
| Selenium | 1000                 | 7400                    | 941               | 950                | 94.1         | 95.0          | 1        | 75.0-125         |              |               | 0.931    | 20              |
| Silver   | 200                  | 2800                    | 180               | 182                | 89.8         | 91.0          | 1        | 75.0-125         |              |               | 1.29     | 20              |
| Sodium   | 10000                | 8130                    | 17900             | 17700              | 97.4         | 95.8          | 1        | 75.0-125         |              |               | 0.935    | 20              |
| Vanadium | 1000                 | 2280000                 | 982               | 989                | 98.2         | 98.9          | 1        | 75.0-125         |              |               | 0.641    | 20              |
| Zinc     | 1000                 | 5900                    | 929               | 935                | 92.9         | 93.5          | 1        | 75.0-125         |              |               | 0.587    | 20              |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3535004-1 06/04/20 10:59

| Analyte  | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|----------|-------------------|--------------|----------------|----------------|
| Barium   | 1.70              | ⌋            | 1.70           | 5.00           |
| Cadmium  | 0.700             | ⌋            | 0.700          | 2.00           |
| Chromium | 1.40              | ⌋            | 1.40           | 10.0           |
| Cobalt   | 2.30              | ⌋            | 2.30           | 10.0           |
| Copper   | 5.30              | ⌋            | 5.30           | 10.0           |
| Iron     | 14.1              | ⌋            | 14.1           | 100            |
| Lead     | 1.90              | ⌋            | 1.90           | 5.00           |
| Nickel   | 4.90              | ⌋            | 4.90           | 10.0           |
| Selenium | 7.40              | ⌋            | 7.40           | 10.0           |
| Silver   | 2.80              | ⌋            | 2.80           | 5.00           |
| Sodium   | 23.7              |              | 11.1           | 1000           |
| Vanadium | 2.40              | ⌋            | 2.40           | 20.0           |
| Zinc     | 5.90              | ⌋            | 5.90           | 50.0           |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3535004-2 06/04/20 11:02

| Analyte  | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|----------------------|--------------------|---------------|------------------|---------------|
| Barium   | 1000                 | 946                | 94.6          | 80.0-120         |               |
| Cadmium  | 1000                 | 910                | 91.0          | 80.0-120         |               |
| Chromium | 1000                 | 912                | 91.2          | 80.0-120         |               |
| Cobalt   | 1000                 | 941                | 94.1          | 80.0-120         |               |
| Copper   | 1000                 | 887                | 88.7          | 80.0-120         |               |
| Iron     | 10000                | 9360               | 93.6          | 80.0-120         |               |
| Lead     | 1000                 | 916                | 91.6          | 80.0-120         |               |
| Nickel   | 1000                 | 935                | 93.5          | 80.0-120         |               |
| Selenium | 1000                 | 896                | 89.6          | 80.0-120         |               |
| Silver   | 200                  | 178                | 89.2          | 80.0-120         |               |
| Sodium   | 10000                | 9390               | 93.9          | 80.0-120         |               |
| Vanadium | 1000                 | 921                | 92.1          | 80.0-120         |               |
| Zinc     | 1000                 | 925                | 92.5          | 80.0-120         |               |



L1224093-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224093-02 06/04/20 11:05 • (MS) R3535004-4 06/04/20 11:10 • (MSD) R3535004-5 06/04/20 11:13

| Analyte  | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Barium   | 1000                 | 37900000                | 984               | 974                | 94.6         | 93.6          | 1        | 75.0-125         |                     |                      | 1.09     | 20              |
| Cadmium  | 1000                 | 126000                  | 913               | 904                | 91.3         | 90.4          | 1        | 75.0-125         |                     |                      | 0.915    | 20              |
| Chromium | 1000                 | 1140000                 | 911               | 916                | 91.1         | 91.6          | 1        | 75.0-125         |                     |                      | 0.617    | 20              |
| Cobalt   | 1000                 | 323000                  | 948               | 939                | 94.8         | 93.9          | 1        | 75.0-125         |                     |                      | 0.959    | 20              |
| Copper   | 1000                 | 344000                  | 884               | 894                | 88.4         | 89.4          | 1        | 75.0-125         |                     |                      | 1.11     | 20              |
| Iron     | 10000                | 64600000                | 9440              | 9310               | 93.8         | 92.4          | 1        | 75.0-125         |                     |                      | 1.47     | 20              |
| Lead     | 1000                 | 1900                    | 922               | 911                | 92.2         | 91.1          | 1        | 75.0-125         |                     |                      | 1.18     | 20              |
| Nickel   | 1000                 | 541000                  | 939               | 933                | 93.9         | 93.3          | 1        | 75.0-125         |                     |                      | 0.689    | 20              |
| Selenium | 1000                 | 5960000                 | 909               | 904                | 90.9         | 90.4          | 1        | 75.0-125         |                     |                      | 0.546    | 20              |
| Silver   | 200                  | 2800                    | 179               | 181                | 89.4         | 90.3          | 1        | 75.0-125         |                     |                      | 1.00     | 20              |
| Sodium   | 10000                | 2290                    | 11600             | 11500              | 93.2         | 92.0          | 1        | 75.0-125         |                     |                      | 1.02     | 20              |
| Vanadium | 1000                 | 1750000                 | 932               | 920                | 93.2         | 92.0          | 1        | 75.0-125         |                     |                      | 1.36     | 20              |
| Zinc     | 1000                 | 1910000                 | 933               | 922                | 93.3         | 92.2          | 1        | 75.0-125         |                     |                      | 1.17     | 20              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc





[L1224093-03,06,07,08,09,11,12](#)

Method Blank (MB)

(MB) R3537297-1 06/10/20 16:12

| Analyte  | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|----------|-------------------|--------------|----------------|----------------|
| Barium   | 1.70              | ⌈            | 1.70           | 5.00           |
| Cadmium  | 0.700             | ⌈            | 0.700          | 2.00           |
| Chromium | 1.40              | ⌈            | 1.40           | 10.0           |
| Cobalt   | 2.30              | ⌈            | 2.30           | 10.0           |
| Copper   | 5.30              | ⌈            | 5.30           | 10.0           |
| Iron     | 14.1              | ⌈            | 14.1           | 100            |
| Lead     | 1.90              | ⌈            | 1.90           | 5.00           |
| Nickel   | 4.90              | ⌈            | 4.90           | 10.0           |
| Selenium | 7.40              | ⌈            | 7.40           | 10.0           |
| Silver   | 2.80              | ⌈            | 2.80           | 5.00           |
| Sodium   | 94.7              |              | 11.1           | 1000           |
| Vanadium | 2.40              | ⌈            | 2.40           | 20.0           |
| Zinc     | 5.90              | ⌈            | 5.90           | 50.0           |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3537297-2 06/10/20 16:14

| Analyte  | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|----------------------|--------------------|---------------|------------------|---------------|
| Barium   | 1000                 | 984                | 98.4          | 80.0-120         |               |
| Cadmium  | 1000                 | 933                | 93.3          | 80.0-120         |               |
| Chromium | 1000                 | 965                | 96.5          | 80.0-120         |               |
| Cobalt   | 1000                 | 999                | 99.9          | 80.0-120         |               |
| Copper   | 1000                 | 958                | 95.8          | 80.0-120         |               |
| Iron     | 10000                | 9650               | 96.5          | 80.0-120         |               |
| Lead     | 1000                 | 974                | 97.4          | 80.0-120         |               |
| Nickel   | 1000                 | 996                | 99.6          | 80.0-120         |               |
| Selenium | 1000                 | 948                | 94.8          | 80.0-120         |               |
| Silver   | 200                  | 180                | 90.1          | 80.0-120         |               |
| Sodium   | 10000                | 9820               | 98.2          | 80.0-120         |               |
| Vanadium | 1000                 | 987                | 98.7          | 80.0-120         |               |
| Zinc     | 1000                 | 943                | 94.3          | 80.0-120         |               |



[L1224093-03,06,07,08,09,11,12](#)

L1225282-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1225282-01 06/10/20 16:17 • (MS) R3537297-4 06/10/20 16:22 • (MSD) R3537297-5 06/10/20 16:25

| Analyte  | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Barium   | 1000                 | 264                     | 1210              | 1210               | 94.3         | 95.1          | 1        | 75.0-125         |              |               | 0.622    | 20              |
| Cadmium  | 1000                 | 0.700                   | 971               | 975                | 97.1         | 97.5          | 1        | 75.0-125         |              |               | 0.476    | 20              |
| Chromium | 1000                 | 1.99                    | 965               | 968                | 96.5         | 96.8          | 1        | 75.0-125         |              |               | 0.245    | 20              |
| Cobalt   | 1000                 | 2.30                    | 1070              | 1070               | 107          | 107           | 1        | 75.0-125         |              |               | 0.173    | 20              |
| Copper   | 1000                 | 5.30                    | 956               | 953                | 95.6         | 95.3          | 1        | 75.0-125         |              |               | 0.296    | 20              |
| Iron     | 10000                | 1490                    | 11000             | 11000              | 95.4         | 95.0          | 1        | 75.0-125         |              |               | 0.415    | 20              |
| Lead     | 1000                 | 1.90                    | 1000              | 1000               | 100          | 100           | 1        | 75.0-125         |              |               | 0.281    | 20              |
| Nickel   | 1000                 | 4.90                    | 1070              | 1080               | 107          | 108           | 1        | 75.0-125         |              |               | 0.124    | 20              |
| Selenium | 1000                 | 7.40                    | 1030              | 1020               | 103          | 102           | 1        | 75.0-125         |              |               | 0.119    | 20              |
| Silver   | 200                  | 2.80                    | 190               | 190                | 95.1         | 95.0          | 1        | 75.0-125         |              |               | 0.180    | 20              |
| Sodium   | 10000                | 939000                  | 934000            | 926000             | 0.000        | 0.000         | 1        | 75.0-125         | ⌋            | ⌋             | 0.827    | 20              |
| Vanadium | 1000                 | 5.20                    | 993               | 993                | 99.3         | 99.3          | 1        | 75.0-125         |              |               | 0.0718   | 20              |
| Zinc     | 1000                 | 5.90                    | 1000              | 1010               | 100          | 101           | 1        | 75.0-125         |              |               | 0.468    | 20              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3539453-1 06/17/20 00:26

| Analyte  | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|----------|-------------------|--------------|----------------|----------------|
| Barium   | 1.70              | ⌈            | 1.70           | 5.00           |
| Cadmium  | 0.700             | ⌈            | 0.700          | 2.00           |
| Chromium | 1.40              | ⌈            | 1.40           | 10.0           |
| Cobalt   | 2.30              | ⌈            | 2.30           | 10.0           |
| Copper   | 5.30              | ⌈            | 5.30           | 10.0           |
| Iron     | 14.1              | ⌈            | 14.1           | 100            |
| Lead     | 1.90              | ⌈            | 1.90           | 5.00           |
| Nickel   | 4.90              | ⌈            | 4.90           | 10.0           |
| Selenium | 7.40              | ⌈            | 7.40           | 10.0           |
| Silver   | 2.80              | ⌈            | 2.80           | 5.00           |
| Sodium   | 11.1              | ⌈            | 11.1           | 1000           |
| Vanadium | 2.40              | ⌈            | 2.40           | 20.0           |
| Zinc     | 5.90              | ⌈            | 5.90           | 50.0           |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3539453-2 06/17/20 00:28

| Analyte  | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|----------------------|--------------------|---------------|------------------|---------------|
| Barium   | 1000                 | 975                | 97.5          | 80.0-120         |               |
| Cadmium  | 1000                 | 913                | 91.3          | 80.0-120         |               |
| Chromium | 1000                 | 965                | 96.5          | 80.0-120         |               |
| Cobalt   | 1000                 | 980                | 98.0          | 80.0-120         |               |
| Copper   | 1000                 | 948                | 94.8          | 80.0-120         |               |
| Iron     | 10000                | 9780               | 97.8          | 80.0-120         |               |
| Lead     | 1000                 | 945                | 94.5          | 80.0-120         |               |
| Nickel   | 1000                 | 975                | 97.5          | 80.0-120         |               |
| Selenium | 1000                 | 904                | 90.4          | 80.0-120         |               |
| Silver   | 200                  | 175                | 87.7          | 80.0-120         |               |
| Sodium   | 10000                | 9690               | 96.9          | 80.0-120         |               |
| Vanadium | 1000                 | 972                | 97.2          | 80.0-120         |               |
| Zinc     | 1000                 | 941                | 94.1          | 80.0-120         |               |



[L1224093-13,15](#)

L1225436-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1225436-31 06/17/20 00:31 • (MS) R3539453-4 06/17/20 00:36 • (MSD) R3539453-5 06/17/20 00:38

| Analyte  | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Barium   | 1000                 | 40800                   | 1010              | 1010               | 96.9         | 97.2          | 1        | 75.0-125         |                     |                      | 0.380    | 20              |
| Cadmium  | 1000                 | 700                     | 943               | 943                | 94.3         | 94.3          | 1        | 75.0-125         |                     |                      | 0.0109   | 20              |
| Chromium | 1000                 | 3110                    | 962               | 967                | 96.2         | 96.7          | 1        | 75.0-125         |                     |                      | 0.505    | 20              |
| Cobalt   | 1000                 | 2300                    | 1010              | 1020               | 101          | 101           | 1        | 75.0-125         |                     |                      | 0.510    | 20              |
| Copper   | 1000                 | 12300                   | 944               | 948                | 93.2         | 93.5          | 1        | 75.0-125         |                     |                      | 0.344    | 20              |
| Iron     | 10000                | 1270000                 | 10900             | 10900              | 96.4         | 96.5          | 1        | 75.0-125         |                     |                      | 0.0791   | 20              |
| Lead     | 1000                 | 5100                    | 958               | 963                | 95.3         | 95.8          | 1        | 75.0-125         |                     |                      | 0.467    | 20              |
| Nickel   | 1000                 | 14300                   | 1010              | 1020               | 99.9         | 100           | 1        | 75.0-125         |                     |                      | 0.220    | 20              |
| Selenium | 1000                 | 7400                    | 947               | 952                | 94.7         | 95.2          | 1        | 75.0-125         |                     |                      | 0.441    | 20              |
| Silver   | 200                  | 2800                    | 179               | 180                | 88.4         | 88.9          | 1        | 75.0-125         |                     |                      | 0.528    | 20              |
| Sodium   | 10000                | 20400                   | 30000             | 29800              | 95.9         | 93.9          | 1        | 75.0-125         |                     |                      | 0.639    | 20              |
| Vanadium | 1000                 | 2400                    | 983               | 983                | 98.3         | 98.3          | 1        | 75.0-125         |                     |                      | 0.0449   | 20              |
| Zinc     | 1000                 | 14000                   | 965               | 973                | 95.1         | 95.9          | 1        | 75.0-125         |                     |                      | 0.848    | 20              |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3535210-1 06/04/20 17:08

| Analyte   | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------|-------------------|--------------|----------------|----------------|
| Antimony  | 0.754             | U            | 0.754          | 2.00           |
| Arsenic   | 0.250             | U            | 0.250          | 2.00           |
| Beryllium | 0.120             | U            | 0.120          | 2.00           |
| Thallium  | 0.190             | U            | 0.190          | 2.00           |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3535210-2 06/04/20 17:12

| Analyte   | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|-----------|----------------------|--------------------|---------------|------------------|---------------|
| Antimony  | 50.0                 | 46.9               | 93.7          | 80.0-120         |               |
| Arsenic   | 50.0                 | 46.7               | 93.5          | 80.0-120         |               |
| Beryllium | 50.0                 | 46.6               | 93.1          | 80.0-120         |               |
| Thallium  | 50.0                 | 47.0               | 94.0          | 80.0-120         |               |

L1224093-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224093-05 06/04/20 17:15 • (MS) R3535210-4 06/04/20 17:22 • (MSD) R3535210-5 06/04/20 17:25

| Analyte   | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Antimony  | 50.0                 | 74000                   | 48.0              | 46.7               | 96.1         | 93.3          | 1        | 75.0-125         |              |               | 2.94     | 20              |
| Arsenic   | 50.0                 | 568000                  | 48.0              | 48.5               | 96.0         | 97.1          | 1        | 75.0-125         |              |               | 1.15     | 20              |
| Beryllium | 50.0                 | 95200                   | 48.0              | 46.0               | 96.1         | 92.0          | 1        | 75.0-125         |              |               | 4.36     | 20              |
| Thallium  | 50.0                 | 84900                   | 47.2              | 48.1               | 94.4         | 96.3          | 1        | 75.0-125         |              |               | 2.03     | 20              |



Method Blank (MB)

(MB) R3538583-1 06/14/20 21:23

| Analyte   | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------|-------------------|--------------|----------------|----------------|
| Antimony  | 0.837             |              | 0.754          | 2.00           |
| Arsenic   | 0.250             | U            | 0.250          | 2.00           |
| Beryllium | 0.120             | U            | 0.120          | 2.00           |
| Thallium  | 0.190             | U            | 0.190          | 2.00           |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS)

(LCS) R3538583-2 06/14/20 21:26

| Analyte   | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|-----------|----------------------|--------------------|---------------|------------------|---------------|
| Antimony  | 50.0                 | 49.7               | 99.4          | 80.0-120         |               |
| Arsenic   | 50.0                 | 48.9               | 97.9          | 80.0-120         |               |
| Beryllium | 50.0                 | 49.5               | 98.9          | 80.0-120         |               |
| Thallium  | 50.0                 | 47.6               | 95.2          | 80.0-120         |               |

L1225455-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1225455-07 06/14/20 21:30 • (MS) R3538583-4 06/14/20 21:37 • (MSD) R3538583-5 06/14/20 21:40

| Analyte   | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Antimony  | 50.0                 | 0.754                   | 51.5              | 52.9               | 103          | 106           | 1        | 75.0-125         |              |               | 2.73     | 20              |
| Arsenic   | 50.0                 |                         | 53.0              | 53.4               | 92.6         | 93.3          | 1        | 75.0-125         |              |               | 0.654    | 20              |
| Beryllium | 50.0                 |                         | 50.3              | 47.9               | 101          | 95.9          | 1        | 75.0-125         |              |               | 4.75     | 20              |
| Thallium  | 50.0                 | 0.190                   | 48.7              | 48.5               | 97.3         | 96.9          | 1        | 75.0-125         |              |               | 0.403    | 20              |



Method Blank (MB)

(MB) R3538196-1 06/12/20 19:23

| Analyte   | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------|-------------------|--------------|----------------|----------------|
| Antimony  | 0.754             | U            | 0.754          | 2.00           |
| Arsenic   | 0.250             | U            | 0.250          | 2.00           |
| Beryllium | 0.120             | U            | 0.120          | 2.00           |
| Thallium  | 0.190             | U            | 0.190          | 2.00           |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS)

(LCS) R3538196-2 06/12/20 19:26

| Analyte   | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|-----------|----------------------|--------------------|---------------|------------------|---------------|
| Antimony  | 50.0                 | 48.9               | 97.8          | 80.0-120         |               |
| Arsenic   | 50.0                 | 49.3               | 98.6          | 80.0-120         |               |
| Beryllium | 50.0                 | 51.4               | 103           | 80.0-120         |               |
| Thallium  | 50.0                 | 48.8               | 97.5          | 80.0-120         |               |

L1226515-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1226515-01 06/12/20 19:29 • (MS) R3538196-4 06/12/20 19:36 • (MSD) R3538196-5 06/12/20 19:39

| Analyte   | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MSD Result<br>ug/l | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Antimony  | 50.0                 | 0.754                   | 48.8              | 49.0               | 97.5         | 97.9          | 1        | 75.0-125         |              |               | 0.440    | 20              |
| Arsenic   | 50.0                 | 43.8                    | 93.0              | 93.4               | 98.5         | 99.4          | 1        | 75.0-125         |              |               | 0.469    | 20              |
| Beryllium | 50.0                 | 0.120                   | 49.1              | 50.3               | 98.1         | 101           | 1        | 75.0-125         |              |               | 2.45     | 20              |
| Thallium  | 50.0                 | 0.190                   | 49.9              | 48.8               | 99.8         | 97.5          | 1        | 75.0-125         |              |               | 2.31     | 20              |



Method Blank (MB)

(MB) R3537695-3 06/09/20 06:29

| Analyte                     | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------------------------|-------------------|--------------|----------------|----------------|
| 1,1,1,2-Tetrachloroethane   | 0.120             | IC           | 0.120          | 0.500          |
| 1,1,1-Trichloroethane       | 0.0940            | IC           | 0.0940         | 0.500          |
| 1,1,2,2-Tetrachloroethane   | 0.130             | IC           | 0.130          | 0.500          |
| 1,1,2-Trichloroethane       | 0.0940            | IC           | 0.0940         | 0.500          |
| 1,1-Dichloroethane          | 0.114             | IC           | 0.114          | 0.500          |
| 1,1-Dichloroethene          | 0.188             | IC           | 0.188          | 0.500          |
| 1,2,3-Trichloropropane      | 0.247             | IC           | 0.247          | 2.50           |
| 1,2-Dichlorobenzene         | 0.101             | IC           | 0.101          | 0.500          |
| 1,2-Dichloroethane          | 0.108             | IC           | 0.108          | 0.500          |
| 1,2-Dichloropropane         | 0.190             | IC           | 0.190          | 0.500          |
| 1,4-Dichlorobenzene         | 0.121             | IC           | 0.121          | 0.500          |
| 2-Butanone (MEK)            | 1.28              | IC           | 1.28           | 5.00           |
| 2-Hexanone                  | 0.757             | IC           | 0.757          | 5.00           |
| 4-Methyl-2-pentanone (MIBK) | 0.823             | IC           | 0.823          | 5.00           |
| Acetone                     | 1.05              | IC           | 1.05           | 25.0           |
| Acrylonitrile               | 0.873             | IC           | 0.873          | 5.00           |
| Benzene                     | 0.0896            | IC           | 0.0896         | 0.500          |
| Bromochloromethane          | 0.145             | IC           | 0.145          | 0.500          |
| Bromodichloromethane        | 0.0800            | IC           | 0.0800         | 0.500          |
| Bromoform                   | 0.186             | IC           | 0.186          | 0.500          |
| Bromomethane                | 0.157             | IC           | 0.157          | 2.50           |
| Carbon disulfide            | 0.101             | IC           | 0.101          | 0.500          |
| Carbon tetrachloride        | 0.159             | IC           | 0.159          | 0.500          |
| Chlorobenzene               | 0.140             | IC           | 0.140          | 0.500          |
| Chlorodibromomethane        | 0.128             | IC           | 0.128          | 0.500          |
| Chloroethane                | 0.141             | IC           | 0.141          | 2.50           |
| Chloroform                  | 0.0860            | IC           | 0.0860         | 0.500          |
| Chloromethane               | 0.153             | IC           | 0.153          | 1.25           |
| cis-1,2-Dichloroethene      | 0.0933            | IC           | 0.0933         | 0.500          |
| cis-1,3-Dichloropropene     | 0.0976            | IC           | 0.0976         | 0.500          |
| Dibromomethane              | 0.117             | IC           | 0.117          | 0.500          |
| Ethylbenzene                | 0.158             | IC           | 0.158          | 0.500          |
| Iodomethane                 | 0.377             | IC           | 0.377          | 10.0           |
| Methylene Chloride          | 1.07              | IC           | 1.07           | 2.50           |
| Styrene                     | 0.117             | IC           | 0.117          | 0.500          |
| Tetrachloroethene           | 0.199             | IC           | 0.199          | 0.500          |
| Toluene                     | 0.412             | IC           | 0.412          | 0.500          |
| trans-1,2-Dichloroethene    | 0.152             | IC           | 0.152          | 0.500          |
| trans-1,3-Dichloropropene   | 0.222             | IC           | 0.222          | 0.500          |
| trans-1,4-Dichloro-2-butene | 0.257             | IC           | 0.257          | 5.00           |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc





Method Blank (MB)

(MB) R3537695-3 06/09/20 06:29

| Analyte                   | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|---------------------------|-------------------|--------------|----------------|----------------|
| Trichloroethene           | 0.153             | U            | 0.153          | 0.500          |
| Trichlorofluoromethane    | 0.130             | U            | 0.130          | 2.50           |
| Vinyl acetate             | 0.645             | U            | 0.645          | 5.00           |
| Vinyl chloride            | 0.118             | U            | 0.118          | 0.500          |
| Xylenes, Total            | 0.316             | U            | 0.316          | 1.50           |
| (S) 1,2-Dichloroethane-d4 | 101               |              |                | 70.0-130       |
| (S) Toluene-d8            | 105               |              |                | 80.0-120       |
| (S) 4-Bromofluorobenzene  | 97.8              |              |                | 77.0-126       |

1  
Cp

2  
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Al

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Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3537695-1 06/09/20 04:38 • (LCSD) R3537695-2 06/09/20 04:57

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| 1,1,1,2-Tetrachloroethane   | 5.00                 | 5.43               | 5.55                | 109           | 111            | 75.0-125         |               |                | 2.19     | 20              |
| 1,1,1-Trichloroethane       | 5.00                 | 5.70               | 5.92                | 114           | 118            | 73.0-124         |               |                | 3.79     | 20              |
| 1,1,2,2-Tetrachloroethane   | 5.00                 | 4.81               | 5.21                | 96.2          | 104            | 65.0-130         |               |                | 7.98     | 20              |
| 1,1,2-Trichloroethane       | 5.00                 | 5.28               | 5.42                | 106           | 108            | 80.0-120         |               |                | 2.62     | 20              |
| 1,1-Dichloroethane          | 5.00                 | 5.40               | 5.48                | 108           | 110            | 70.0-126         |               |                | 1.47     | 20              |
| 1,1-Dichloroethene          | 5.00                 | 5.63               | 5.69                | 113           | 114            | 71.0-124         |               |                | 1.06     | 20              |
| 1,2,3-Trichloropropane      | 5.00                 | 5.38               | 5.64                | 108           | 113            | 73.0-130         |               |                | 4.72     | 20              |
| 1,2-Dichlorobenzene         | 5.00                 | 5.36               | 5.64                | 107           | 113            | 79.0-121         |               |                | 5.09     | 20              |
| 1,2-Dichloroethane          | 5.00                 | 4.99               | 5.28                | 99.8          | 106            | 70.0-128         |               |                | 5.65     | 20              |
| 1,2-Dichloropropane         | 5.00                 | 5.55               | 5.75                | 111           | 115            | 77.0-125         |               |                | 3.54     | 20              |
| 1,4-Dichlorobenzene         | 5.00                 | 5.51               | 6.04                | 110           | 121            | 79.0-120         |               | U              | 9.18     | 20              |
| 2-Butanone (MEK)            | 25.0                 | 21.4               | 21.9                | 85.6          | 87.6           | 44.0-160         |               |                | 2.31     | 20              |
| 2-Hexanone                  | 25.0                 | 23.9               | 25.0                | 95.6          | 100            | 67.0-149         |               |                | 4.50     | 20              |
| 4-Methyl-2-pentanone (MIBK) | 25.0                 | 24.4               | 25.3                | 97.6          | 101            | 68.0-142         |               |                | 3.62     | 20              |
| Acetone                     | 25.0                 | 16.2               | 17.3                | 64.8          | 69.2           | 19.0-160         |               |                | 6.57     | 27              |
| Acrylonitrile               | 25.0                 | 21.5               | 20.5                | 86.0          | 82.0           | 55.0-149         |               |                | 4.76     | 20              |
| Benzene                     | 5.00                 | 5.27               | 5.45                | 105           | 109            | 70.0-123         |               |                | 3.36     | 20              |
| Bromochloromethane          | 5.00                 | 5.44               | 5.80                | 109           | 116            | 76.0-122         |               |                | 6.41     | 20              |
| Bromodichloromethane        | 5.00                 | 4.83               | 5.05                | 96.6          | 101            | 75.0-120         |               |                | 4.45     | 20              |
| Bromoform                   | 5.00                 | 4.61               | 4.83                | 92.2          | 96.6           | 68.0-132         |               |                | 4.66     | 20              |
| Bromomethane                | 5.00                 | 5.33               | 5.52                | 107           | 110            | 10.0-160         |               |                | 3.50     | 25              |
| Carbon disulfide            | 5.00                 | 5.22               | 5.59                | 104           | 112            | 61.0-128         |               |                | 6.85     | 20              |
| Carbon tetrachloride        | 5.00                 | 5.64               | 5.87                | 113           | 117            | 68.0-126         |               |                | 4.00     | 20              |
| Chlorobenzene               | 5.00                 | 5.71               | 5.81                | 114           | 116            | 80.0-121         |               |                | 1.74     | 20              |
| Chlorodibromomethane        | 5.00                 | 5.29               | 5.39                | 106           | 108            | 77.0-125         |               |                | 1.87     | 20              |



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3537695-1 06/09/20 04:38 • (LCSD) R3537695-2 06/09/20 04:57

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Chloroethane                | 5.00                 | 5.54               | 5.73                | 111           | 115            | 47.0-150         |                      |                       | 3.37     | 20              |
| Chloroform                  | 5.00                 | 4.99               | 5.06                | 99.8          | 101            | 73.0-120         |                      |                       | 1.39     | 20              |
| Chloromethane               | 5.00                 | 5.72               | 5.79                | 114           | 116            | 41.0-142         |                      |                       | 1.22     | 20              |
| cis-1,2-Dichloroethene      | 5.00                 | 4.98               | 5.17                | 99.6          | 103            | 73.0-120         |                      |                       | 3.74     | 20              |
| cis-1,3-Dichloropropene     | 5.00                 | 4.97               | 5.06                | 99.4          | 101            | 80.0-123         |                      |                       | 1.79     | 20              |
| Dibromomethane              | 5.00                 | 4.90               | 5.20                | 98.0          | 104            | 80.0-120         |                      |                       | 5.94     | 20              |
| Ethylbenzene                | 5.00                 | 5.79               | 5.85                | 116           | 117            | 79.0-123         |                      |                       | 1.03     | 20              |
| Iodomethane                 | 25.0                 | 27.7               | 28.4                | 111           | 114            | 33.0-147         |                      |                       | 2.50     | 26              |
| Methylene Chloride          | 5.00                 | 5.28               | 5.42                | 106           | 108            | 67.0-120         |                      |                       | 2.62     | 20              |
| Styrene                     | 5.00                 | 5.42               | 5.48                | 108           | 110            | 73.0-130         |                      |                       | 1.10     | 20              |
| Tetrachloroethene           | 5.00                 | 5.78               | 6.02                | 116           | 120            | 72.0-132         |                      |                       | 4.07     | 20              |
| Toluene                     | 5.00                 | 5.39               | 5.50                | 108           | 110            | 79.0-120         |                      |                       | 2.02     | 20              |
| trans-1,2-Dichloroethene    | 5.00                 | 5.47               | 5.69                | 109           | 114            | 73.0-120         |                      |                       | 3.94     | 20              |
| trans-1,3-Dichloropropene   | 5.00                 | 4.90               | 5.07                | 98.0          | 101            | 78.0-124         |                      |                       | 3.41     | 20              |
| trans-1,4-Dichloro-2-butene | 5.00                 | 3.52               | 3.99                | 70.4          | 79.8           | 33.0-144         |                      |                       | 12.5     | 20              |
| Trichloroethene             | 5.00                 | 5.81               | 5.63                | 116           | 113            | 78.0-124         |                      |                       | 3.15     | 20              |
| Trichlorofluoromethane      | 5.00                 | 5.42               | 5.48                | 108           | 110            | 59.0-147         |                      |                       | 1.10     | 20              |
| Vinyl acetate               | 25.0                 | 22.6               | 25.1                | 90.4          | 100            | 11.0-160         |                      |                       | 10.5     | 20              |
| Vinyl chloride              | 5.00                 | 5.63               | 5.67                | 113           | 113            | 67.0-131         |                      |                       | 0.708    | 20              |
| Xylenes, Total              | 15.0                 | 16.9               | 17.0                | 113           | 113            | 79.0-123         |                      |                       | 0.590    | 20              |
| (S) 1,2-Dichloroethane-d4   |                      |                    |                     | 98.7          | 101            | 70.0-130         |                      |                       |          |                 |
| (S) Toluene-d8              |                      |                    |                     | 105           | 104            | 80.0-120         |                      |                       |          |                 |
| (S) 4-Bromofluorobenzene    |                      |                    |                     | 97.6          | 97.9           | 77.0-126         |                      |                       |          |                 |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3538766-3 06/14/20 08:19

| Analyte                     | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------------------------|-------------------|--------------|----------------|----------------|
| 1,1,1,2-Tetrachloroethane   | 0.120             | IC           | 0.120          | 0.500          |
| 1,1,1-Trichloroethane       | 0.0940            | IC           | 0.0940         | 0.500          |
| 1,1,2,2-Tetrachloroethane   | 0.130             | IC           | 0.130          | 0.500          |
| 1,1,2-Trichloroethane       | 0.0940            | IC           | 0.0940         | 0.500          |
| 1,1-Dichloroethane          | 0.114             | IC           | 0.114          | 0.500          |
| 1,1-Dichloroethene          | 0.188             | IC           | 0.188          | 0.500          |
| 1,2,3-Trichloropropane      | 0.247             | IC           | 0.247          | 2.50           |
| 1,2-Dichlorobenzene         | 0.101             | IC           | 0.101          | 0.500          |
| 1,2-Dichloroethane          | 0.108             | IC           | 0.108          | 0.500          |
| 1,2-Dichloropropane         | 0.190             | IC           | 0.190          | 0.500          |
| 1,4-Dichlorobenzene         | 0.121             | IC           | 0.121          | 0.500          |
| 2-Butanone (MEK)            | 1.28              | IC           | 1.28           | 5.00           |
| 2-Hexanone                  | 0.757             | IC           | 0.757          | 5.00           |
| 4-Methyl-2-pentanone (MIBK) | 0.823             | IC           | 0.823          | 5.00           |
| Acetone                     | 1.05              | IC           | 1.05           | 25.0           |
| Acrylonitrile               | 0.873             | IC           | 0.873          | 5.00           |
| Benzene                     | 0.0896            | IC           | 0.0896         | 0.500          |
| Bromochloromethane          | 0.145             | IC           | 0.145          | 0.500          |
| Bromodichloromethane        | 0.0800            | IC           | 0.0800         | 0.500          |
| Bromoform                   | 0.186             | IC           | 0.186          | 0.500          |
| Bromomethane                | 0.157             | IC           | 0.157          | 2.50           |
| Carbon disulfide            | 0.101             | IC           | 0.101          | 0.500          |
| Carbon tetrachloride        | 0.159             | IC           | 0.159          | 0.500          |
| Chlorobenzene               | 0.140             | IC           | 0.140          | 0.500          |
| Chlorodibromomethane        | 0.128             | IC           | 0.128          | 0.500          |
| Chloroethane                | 0.141             | IC           | 0.141          | 2.50           |
| Chloroform                  | 0.0860            | IC           | 0.0860         | 0.500          |
| Chloromethane               | 0.153             | IC           | 0.153          | 1.25           |
| cis-1,2-Dichloroethene      | 0.0933            | IC           | 0.0933         | 0.500          |
| cis-1,3-Dichloropropene     | 0.0976            | IC           | 0.0976         | 0.500          |
| Dibromomethane              | 0.117             | IC           | 0.117          | 0.500          |
| Ethylbenzene                | 0.158             | IC           | 0.158          | 0.500          |
| Iodomethane                 | 0.377             | IC           | 0.377          | 10.0           |
| Methylene Chloride          | 1.07              | IC           | 1.07           | 2.50           |
| Styrene                     | 0.117             | IC           | 0.117          | 0.500          |
| Tetrachloroethene           | 0.199             | IC           | 0.199          | 0.500          |
| Toluene                     | 0.412             | IC           | 0.412          | 0.500          |
| trans-1,2-Dichloroethene    | 0.152             | IC           | 0.152          | 0.500          |
| trans-1,3-Dichloropropene   | 0.222             | IC           | 0.222          | 0.500          |
| trans-1,4-Dichloro-2-butene | 0.257             | IC           | 0.257          | 5.00           |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3538766-3 06/14/20 08:19

| Analyte                   | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|---------------------------|-------------------|--------------|----------------|----------------|
| Trichloroethene           | 0.153             | U            | 0.153          | 0.500          |
| Trichlorofluoromethane    | 0.130             | U            | 0.130          | 2.50           |
| Vinyl acetate             | 0.645             | U            | 0.645          | 5.00           |
| Vinyl chloride            | 0.118             | U            | 0.118          | 0.500          |
| Xylenes, Total            | 0.316             | U            | 0.316          | 1.50           |
| (S) 1,2-Dichloroethane-d4 | 112               |              |                | 70.0-130       |
| (S) Toluene-d8            | 106               |              |                | 80.0-120       |
| (S) 4-Bromofluorobenzene  | 96.3              |              |                | 77.0-126       |

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3538766-1 06/14/20 07:02 • (LCSD) R3538766-2 06/14/20 07:21

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| 1,1,1,2-Tetrachloroethane   | 5.00                 | 5.09               | 5.30                | 102           | 106            | 75.0-125         |               |                | 4.04     | 20              |
| 1,1,1-Trichloroethane       | 5.00                 | 4.73               | 5.31                | 94.6          | 106            | 73.0-124         |               |                | 11.6     | 20              |
| 1,1,2,2-Tetrachloroethane   | 5.00                 | 4.75               | 4.84                | 95.0          | 96.8           | 65.0-130         |               |                | 1.88     | 20              |
| 1,1,2-Trichloroethane       | 5.00                 | 5.36               | 5.32                | 107           | 106            | 80.0-120         |               |                | 0.749    | 20              |
| 1,1-Dichloroethane          | 5.00                 | 5.00               | 5.03                | 100           | 101            | 70.0-126         |               |                | 0.598    | 20              |
| 1,1-Dichloroethene          | 5.00                 | 4.51               | 4.86                | 90.2          | 97.2           | 71.0-124         |               |                | 7.47     | 20              |
| 1,2,3-Trichloropropane      | 5.00                 | 5.76               | 5.45                | 115           | 109            | 73.0-130         |               |                | 5.53     | 20              |
| 1,2-Dichlorobenzene         | 5.00                 | 5.20               | 5.23                | 104           | 105            | 79.0-121         |               |                | 0.575    | 20              |
| 1,2-Dichloroethane          | 5.00                 | 5.46               | 5.58                | 109           | 112            | 70.0-128         |               |                | 2.17     | 20              |
| 1,2-Dichloropropane         | 5.00                 | 5.42               | 5.56                | 108           | 111            | 77.0-125         |               |                | 2.55     | 20              |
| 1,4-Dichlorobenzene         | 5.00                 | 5.32               | 4.99                | 106           | 99.8           | 79.0-120         |               |                | 6.40     | 20              |
| 2-Butanone (MEK)            | 25.0                 | 24.4               | 24.8                | 97.6          | 99.2           | 44.0-160         |               |                | 1.63     | 20              |
| 2-Hexanone                  | 25.0                 | 24.5               | 25.8                | 98.0          | 103            | 67.0-149         |               |                | 5.17     | 20              |
| 4-Methyl-2-pentanone (MIBK) | 25.0                 | 27.1               | 27.6                | 108           | 110            | 68.0-142         |               |                | 1.83     | 20              |
| Acetone                     | 25.0                 | 23.2               | 23.4                | 92.8          | 93.6           | 19.0-160         |               |                | 0.858    | 27              |
| Acrylonitrile               | 25.0                 | 25.2               | 24.0                | 101           | 96.0           | 55.0-149         |               |                | 4.88     | 20              |
| Benzene                     | 5.00                 | 4.79               | 4.99                | 95.8          | 99.8           | 70.0-123         |               |                | 4.09     | 20              |
| Bromochloromethane          | 5.00                 | 5.42               | 5.55                | 108           | 111            | 76.0-122         |               |                | 2.37     | 20              |
| Bromodichloromethane        | 5.00                 | 4.71               | 4.97                | 94.2          | 99.4           | 75.0-120         |               |                | 5.37     | 20              |
| Bromoform                   | 5.00                 | 4.48               | 4.76                | 89.6          | 95.2           | 68.0-132         |               |                | 6.06     | 20              |
| Bromomethane                | 5.00                 | 4.69               | 4.96                | 93.8          | 99.2           | 10.0-160         |               |                | 5.60     | 25              |
| Carbon disulfide            | 5.00                 | 4.21               | 4.59                | 84.2          | 91.8           | 61.0-128         |               |                | 8.64     | 20              |
| Carbon tetrachloride        | 5.00                 | 4.62               | 4.60                | 92.4          | 92.0           | 68.0-126         |               |                | 0.434    | 20              |
| Chlorobenzene               | 5.00                 | 5.25               | 5.32                | 105           | 106            | 80.0-121         |               |                | 1.32     | 20              |
| Chlorodibromomethane        | 5.00                 | 5.27               | 5.24                | 105           | 105            | 77.0-125         |               |                | 0.571    | 20              |



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3538766-1 06/14/20 07:02 • (LCSD) R3538766-2 06/14/20 07:21

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Chloroethane                | 5.00                 | 4.81               | 5.03                | 96.2          | 101            | 47.0-150         |               |                | 4.47     | 20              |
| Chloroform                  | 5.00                 | 4.78               | 4.93                | 95.6          | 98.6           | 73.0-120         |               |                | 3.09     | 20              |
| Chloromethane               | 5.00                 | 5.59               | 5.83                | 112           | 117            | 41.0-142         |               |                | 4.20     | 20              |
| cis-1,2-Dichloroethene      | 5.00                 | 4.61               | 4.70                | 92.2          | 94.0           | 73.0-120         |               |                | 1.93     | 20              |
| cis-1,3-Dichloropropene     | 5.00                 | 4.69               | 4.87                | 93.8          | 97.4           | 80.0-123         |               |                | 3.77     | 20              |
| Dibromomethane              | 5.00                 | 5.26               | 5.16                | 105           | 103            | 80.0-120         |               |                | 1.92     | 20              |
| Ethylbenzene                | 5.00                 | 4.94               | 5.07                | 98.8          | 101            | 79.0-123         |               |                | 2.60     | 20              |
| Iodomethane                 | 25.0                 | 11.8               | 11.9                | 47.2          | 47.6           | 33.0-147         |               |                | 0.844    | 26              |
| Methylene Chloride          | 5.00                 | 5.15               | 4.11                | 103           | 82.2           | 67.0-120         |               | J              | 22.5     | 20              |
| Styrene                     | 5.00                 | 4.88               | 4.89                | 97.6          | 97.8           | 73.0-130         |               |                | 0.205    | 20              |
| Tetrachloroethene           | 5.00                 | 4.87               | 5.09                | 97.4          | 102            | 72.0-132         |               |                | 4.42     | 20              |
| Toluene                     | 5.00                 | 4.80               | 4.89                | 96.0          | 97.8           | 79.0-120         |               |                | 1.86     | 20              |
| trans-1,2-Dichloroethene    | 5.00                 | 4.70               | 4.81                | 94.0          | 96.2           | 73.0-120         |               |                | 2.31     | 20              |
| trans-1,3-Dichloropropene   | 5.00                 | 4.84               | 4.90                | 96.8          | 98.0           | 78.0-124         |               |                | 1.23     | 20              |
| trans-1,4-Dichloro-2-butene | 5.00                 | 3.76               | 4.20                | 75.2          | 84.0           | 33.0-144         |               |                | 11.1     | 20              |
| Trichloroethene             | 5.00                 | 5.23               | 5.39                | 105           | 108            | 78.0-124         |               |                | 3.01     | 20              |
| Trichlorofluoromethane      | 5.00                 | 4.45               | 4.67                | 89.0          | 93.4           | 59.0-147         |               |                | 4.82     | 20              |
| Vinyl acetate               | 25.0                 | 19.7               | 18.1                | 78.8          | 72.4           | 11.0-160         |               |                | 8.47     | 20              |
| Vinyl chloride              | 5.00                 | 4.77               | 5.12                | 95.4          | 102            | 67.0-131         |               |                | 7.08     | 20              |
| Xylenes, Total              | 15.0                 | 14.6               | 15.1                | 97.3          | 101            | 79.0-123         |               |                | 3.37     | 20              |
| (S) 1,2-Dichloroethane-d4   |                      |                    |                     | 111           | 112            | 70.0-130         |               |                |          |                 |
| (S) Toluene-d8              |                      |                    |                     | 106           | 102            | 80.0-120         |               |                |          |                 |
| (S) 4-Bromofluorobenzene    |                      |                    |                     | 96.0          | 97.5           | 77.0-126         |               |                |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3538899-3 06/15/20 06:19

| Analyte                     | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------------------------|-------------------|--------------|----------------|----------------|
| 1,1,1,2-Tetrachloroethane   | 0.120             | IC           | 0.120          | 0.500          |
| 1,1,1-Trichloroethane       | 0.0940            | IC           | 0.0940         | 0.500          |
| 1,1,2,2-Tetrachloroethane   | 0.130             | IC           | 0.130          | 0.500          |
| 1,1,2-Trichloroethane       | 0.0940            | IC           | 0.0940         | 0.500          |
| 1,1-Dichloroethane          | 0.114             | IC           | 0.114          | 0.500          |
| 1,1-Dichloroethene          | 0.188             | IC           | 0.188          | 0.500          |
| 1,2,3-Trichloropropane      | 0.247             | IC           | 0.247          | 2.50           |
| 1,2-Dichlorobenzene         | 0.101             | IC           | 0.101          | 0.500          |
| 1,2-Dichloroethane          | 0.108             | IC           | 0.108          | 0.500          |
| 1,2-Dichloropropane         | 0.190             | IC           | 0.190          | 0.500          |
| 1,4-Dichlorobenzene         | 0.121             | IC           | 0.121          | 0.500          |
| 2-Butanone (MEK)            | 1.28              | IC           | 1.28           | 5.00           |
| 2-Hexanone                  | 0.757             | IC           | 0.757          | 5.00           |
| 4-Methyl-2-pentanone (MIBK) | 0.823             | IC           | 0.823          | 5.00           |
| Acetone                     | 1.13              |              | 1.05           | 25.0           |
| Acrylonitrile               | 0.873             | IC           | 0.873          | 5.00           |
| Benzene                     | 0.0896            | IC           | 0.0896         | 0.500          |
| Bromochloromethane          | 0.145             | IC           | 0.145          | 0.500          |
| Bromodichloromethane        | 0.0800            | IC           | 0.0800         | 0.500          |
| Bromoform                   | 0.186             | IC           | 0.186          | 0.500          |
| Bromomethane                | 0.157             | IC           | 0.157          | 2.50           |
| Carbon disulfide            | 0.101             | IC           | 0.101          | 0.500          |
| Carbon tetrachloride        | 0.159             | IC           | 0.159          | 0.500          |
| Chlorobenzene               | 0.140             | IC           | 0.140          | 0.500          |
| Chlorodibromomethane        | 0.128             | IC           | 0.128          | 0.500          |
| Chloroethane                | 0.141             | IC           | 0.141          | 2.50           |
| Chloroform                  | 0.0860            | IC           | 0.0860         | 0.500          |
| Chloromethane               | 0.153             | IC           | 0.153          | 1.25           |
| cis-1,2-Dichloroethene      | 0.0933            | IC           | 0.0933         | 0.500          |
| cis-1,3-Dichloropropene     | 0.0976            | IC           | 0.0976         | 0.500          |
| Dibromomethane              | 0.117             | IC           | 0.117          | 0.500          |
| Ethylbenzene                | 0.158             | IC           | 0.158          | 0.500          |
| Iodomethane                 | 0.377             | IC           | 0.377          | 10.0           |
| Methylene Chloride          | 1.07              | IC           | 1.07           | 2.50           |
| Styrene                     | 0.117             | IC           | 0.117          | 0.500          |
| Tetrachloroethene           | 0.199             | IC           | 0.199          | 0.500          |
| Toluene                     | 0.412             | IC           | 0.412          | 0.500          |
| trans-1,2-Dichloroethene    | 0.152             | IC           | 0.152          | 0.500          |
| trans-1,3-Dichloropropene   | 0.222             | IC           | 0.222          | 0.500          |
| trans-1,4-Dichloro-2-butene | 0.257             | IC           | 0.257          | 5.00           |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3538899-3 06/15/20 06:19

| Analyte                   | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|---------------------------|-------------------|--------------|----------------|----------------|
| Trichloroethene           | 0.153             | U            | 0.153          | 0.500          |
| Trichlorofluoromethane    | 0.130             | U            | 0.130          | 2.50           |
| Vinyl acetate             | 0.645             | U            | 0.645          | 5.00           |
| Vinyl chloride            | 0.118             | U            | 0.118          | 0.500          |
| Xylenes, Total            | 0.316             | U            | 0.316          | 1.50           |
| (S) 1,2-Dichloroethane-d4 | 108               |              |                | 70.0-130       |
| (S) Toluene-d8            | 104               |              |                | 80.0-120       |
| (S) 4-Bromofluorobenzene  | 96.3              |              |                | 77.0-126       |

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3538899-1 06/15/20 05:02 • (LCSD) R3538899-2 06/15/20 05:22

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| 1,1,1,2-Tetrachloroethane   | 5.00                 | 5.70               | 5.74                | 114           | 115            | 75.0-125         |               |                | 0.699    | 20              |
| 1,1,1-Trichloroethane       | 5.00                 | 5.90               | 5.94                | 118           | 119            | 73.0-124         |               |                | 0.676    | 20              |
| 1,1,2,2-Tetrachloroethane   | 5.00                 | 5.20               | 5.07                | 104           | 101            | 65.0-130         |               |                | 2.53     | 20              |
| 1,1,2-Trichloroethane       | 5.00                 | 5.56               | 5.59                | 111           | 112            | 80.0-120         |               |                | 0.538    | 20              |
| 1,1-Dichloroethane          | 5.00                 | 5.52               | 5.56                | 110           | 111            | 70.0-126         |               |                | 0.722    | 20              |
| 1,1-Dichloroethene          | 5.00                 | 5.44               | 5.34                | 109           | 107            | 71.0-124         |               |                | 1.86     | 20              |
| 1,2,3-Trichloropropane      | 5.00                 | 5.68               | 5.76                | 114           | 115            | 73.0-130         |               |                | 1.40     | 20              |
| 1,2-Dichlorobenzene         | 5.00                 | 5.48               | 5.56                | 110           | 111            | 79.0-121         |               |                | 1.45     | 20              |
| 1,2-Dichloroethane          | 5.00                 | 5.86               | 5.70                | 117           | 114            | 70.0-128         |               |                | 2.77     | 20              |
| 1,2-Dichloropropane         | 5.00                 | 5.96               | 5.93                | 119           | 119            | 77.0-125         |               |                | 0.505    | 20              |
| 1,4-Dichlorobenzene         | 5.00                 | 5.50               | 5.66                | 110           | 113            | 79.0-120         |               |                | 2.87     | 20              |
| 2-Butanone (MEK)            | 25.0                 | 30.5               | 28.4                | 122           | 114            | 44.0-160         |               |                | 7.13     | 20              |
| 2-Hexanone                  | 25.0                 | 26.2               | 25.8                | 105           | 103            | 67.0-149         |               |                | 1.54     | 20              |
| 4-Methyl-2-pentanone (MIBK) | 25.0                 | 28.7               | 28.0                | 115           | 112            | 68.0-142         |               |                | 2.47     | 20              |
| Acetone                     | 25.0                 | 29.9               | 27.4                | 120           | 110            | 19.0-160         |               |                | 8.73     | 27              |
| Acrylonitrile               | 25.0                 | 32.7               | 28.2                | 131           | 113            | 55.0-149         |               |                | 14.8     | 20              |
| Benzene                     | 5.00                 | 5.32               | 5.25                | 106           | 105            | 70.0-123         |               |                | 1.32     | 20              |
| Bromochloromethane          | 5.00                 | 6.17               | 6.02                | 123           | 120            | 76.0-122         | U             |                | 2.46     | 20              |
| Bromodichloromethane        | 5.00                 | 5.21               | 4.94                | 104           | 98.8           | 75.0-120         |               |                | 5.32     | 20              |
| Bromoform                   | 5.00                 | 4.98               | 4.88                | 99.6          | 97.6           | 68.0-132         |               |                | 2.03     | 20              |
| Bromomethane                | 5.00                 | 5.20               | 5.21                | 104           | 104            | 10.0-160         |               |                | 0.192    | 25              |
| Carbon disulfide            | 5.00                 | 5.04               | 5.00                | 101           | 100            | 61.0-128         |               |                | 0.797    | 20              |
| Carbon tetrachloride        | 5.00                 | 6.04               | 5.73                | 121           | 115            | 68.0-126         |               |                | 5.27     | 20              |
| Chlorobenzene               | 5.00                 | 5.57               | 5.68                | 111           | 114            | 80.0-121         |               |                | 1.96     | 20              |
| Chlorodibromomethane        | 5.00                 | 5.48               | 5.56                | 110           | 111            | 77.0-125         |               |                | 1.45     | 20              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3538899-1 06/15/20 05:02 • (LCSD) R3538899-2 06/15/20 05:22

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Chloroethane                | 5.00                 | 5.25               | 5.23                | 105           | 105            | 47.0-150         |                      |                       | 0.382    | 20              |
| Chloroform                  | 5.00                 | 5.26               | 5.16                | 105           | 103            | 73.0-120         |                      |                       | 1.92     | 20              |
| Chloromethane               | 5.00                 | 6.24               | 6.03                | 125           | 121            | 41.0-142         |                      |                       | 3.42     | 20              |
| cis-1,2-Dichloroethene      | 5.00                 | 5.24               | 5.23                | 105           | 105            | 73.0-120         |                      |                       | 0.191    | 20              |
| cis-1,3-Dichloropropene     | 5.00                 | 5.15               | 4.97                | 103           | 99.4           | 80.0-123         |                      |                       | 3.56     | 20              |
| Dibromomethane              | 5.00                 | 5.52               | 5.37                | 110           | 107            | 80.0-120         |                      |                       | 2.75     | 20              |
| Ethylbenzene                | 5.00                 | 5.62               | 5.67                | 112           | 113            | 79.0-123         |                      |                       | 0.886    | 20              |
| Iodomethane                 | 25.0                 | 15.2               | 15.2                | 60.8          | 60.8           | 33.0-147         |                      |                       | 0.000    | 26              |
| Methylene Chloride          | 5.00                 | 5.64               | 5.50                | 113           | 110            | 67.0-120         |                      |                       | 2.51     | 20              |
| Styrene                     | 5.00                 | 5.31               | 5.38                | 106           | 108            | 73.0-130         |                      |                       | 1.31     | 20              |
| Tetrachloroethene           | 5.00                 | 5.82               | 5.80                | 116           | 116            | 72.0-132         |                      |                       | 0.344    | 20              |
| Toluene                     | 5.00                 | 5.26               | 5.30                | 105           | 106            | 79.0-120         |                      |                       | 0.758    | 20              |
| trans-1,2-Dichloroethene    | 5.00                 | 5.46               | 5.43                | 109           | 109            | 73.0-120         |                      |                       | 0.551    | 20              |
| trans-1,3-Dichloropropene   | 5.00                 | 5.04               | 5.07                | 101           | 101            | 78.0-124         |                      |                       | 0.593    | 20              |
| trans-1,4-Dichloro-2-butene | 5.00                 | 4.60               | 4.82                | 92.0          | 96.4           | 33.0-144         |                      |                       | 4.67     | 20              |
| Trichloroethene             | 5.00                 | 5.88               | 5.68                | 118           | 114            | 78.0-124         |                      |                       | 3.46     | 20              |
| Trichlorofluoromethane      | 5.00                 | 5.62               | 5.24                | 112           | 105            | 59.0-147         |                      |                       | 7.00     | 20              |
| Vinyl acetate               | 25.0                 | 22.4               | 21.7                | 89.6          | 86.8           | 11.0-160         |                      |                       | 3.17     | 20              |
| Vinyl chloride              | 5.00                 | 5.80               | 5.64                | 116           | 113            | 67.0-131         |                      |                       | 2.80     | 20              |
| Xylenes, Total              | 15.0                 | 16.5               | 16.6                | 110           | 111            | 79.0-123         |                      |                       | 0.604    | 20              |
| (S) 1,2-Dichloroethane-d4   |                      |                    |                     | 113           | 110            | 70.0-130         |                      |                       |          |                 |
| (S) Toluene-d8              |                      |                    |                     | 103           | 104            | 80.0-120         |                      |                       |          |                 |
| (S) 4-Bromofluorobenzene    |                      |                    |                     | 97.1          | 98.1           | 77.0-126         |                      |                       |          |                 |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc





Method Blank (MB)

(MB) R3537316-1 06/10/20 23:35

| Analyte                     | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------------------------|-------------------|--------------|----------------|----------------|
| Ethylene Dibromide          | 0.00240           | U            | 0.00240        | 0.0100         |
| 1,2-Dibromo-3-Chloropropane | 0.00430           | U            | 0.00430        | 0.0200         |

L1224093-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1224093-01 06/11/20 00:21 • (DUP) R3537316-3 06/11/20 00:10

| Analyte                     | Original Result<br>ug/l | DUP Result<br>ug/l | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|-----------------------------|-------------------------|--------------------|----------|--------------|---------------|------------------------|
| Ethylene Dibromide          | 2.40                    | 0.00240            | 1        | 0.000        | U             | 20                     |
| 1,2-Dibromo-3-Chloropropane | 4.30                    | 0.00430            | 1        | 0.000        | U             | 20                     |

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3537316-4 06/11/20 02:17 • (LCSD) R3537316-5 06/11/20 04:35

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Ethylene Dibromide          | 0.250                | 0.233              | 0.238               | 93.2          | 95.2           | 60.0-140         |               |                | 2.12     | 20              |
| 1,2-Dibromo-3-Chloropropane | 0.250                | 0.209              | 0.219               | 83.6          | 87.6           | 60.0-140         |               |                | 4.67     | 20              |

L1224093-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1224093-02 06/10/20 23:58 • (MS) R3537316-2 06/10/20 23:46

| Analyte                     | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MS Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier |
|-----------------------------|----------------------|-------------------------|-------------------|--------------|----------|------------------|--------------|
| Ethylene Dibromide          | 0.100                | 2.40                    | 0.106             | 106          | 1        | 64.0-159         |              |
| 1,2-Dibromo-3-Chloropropane | 0.100                | 4.30                    | 0.0940            | 94.0         | 1        | 72.0-148         |              |

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc



Method Blank (MB)

(MB) R3539472-1 06/16/20 18:13

| Analyte                     | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------------------------|-------------------|--------------|----------------|----------------|
| Ethylene Dibromide          | 0.00240           | U            | 0.00240        | 0.0100         |
| 1,2-Dibromo-3-Chloropropane | 0.00430           | U            | 0.00430        | 0.0200         |

L1227546-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1227546-02 06/16/20 19:00 • (DUP) R3539472-3 06/16/20 18:48

| Analyte                     | Original Result<br>ug/l | DUP Result<br>ug/l | Dilution | DUP RPD<br>% | DUP RPD<br>Limits<br>% |
|-----------------------------|-------------------------|--------------------|----------|--------------|------------------------|
| Ethylene Dibromide          | 0.00240                 | 0.00240            | 1        | 0.000        | 20                     |
| 1,2-Dibromo-3-Chloropropane | 0.00430                 | 0.00430            | 1        | 0.000        | 20                     |

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3539472-4 06/16/20 20:47 • (LCSD) R3539472-5 06/16/20 22:59

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Ethylene Dibromide          | 0.250                | 0.221              | 0.218               | 88.4          | 87.2           | 60.0-140         |               |                | 1.37     | 20              |
| 1,2-Dibromo-3-Chloropropane | 0.250                | 0.231              | 0.229               | 92.4          | 91.6           | 60.0-140         |               |                | 0.870    | 20              |

L1227546-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1227546-03 06/16/20 18:36 • (MS) R3539472-2 06/16/20 18:25

| Analyte                     | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MS Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier |
|-----------------------------|----------------------|-------------------------|-------------------|--------------|----------|------------------|--------------|
| Ethylene Dibromide          | 0.100                | 0.00240                 | 0.100             | 100          | 1        | 64.0-159         |              |
| 1,2-Dibromo-3-Chloropropane | 0.100                | 0.00430                 | 0.102             | 102          | 1        | 72.0-148         |              |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MDL                          | Method Detection Limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| RDL                          | Reported Detection Limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Rec.                         | Recovery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| RPD                          | Relative Percent Difference.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| SDG                          | Sample Delivery Group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (S)                          | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.                                                                                                                                                                                                                                               |
| Analyte                      | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.                                                                                                                                                                                                                                                                                                                                                                                                 |
| Dilution                     | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.                                                                                    |
| Limits                       | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.                                                                                                                                                                                                                                                      |
| Original Sample              | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.                                                                                                                                                                                                                                                                                                                            |
| Qualifier                    | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.                                                                                                                                                                  |
| Result                       | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Case Narrative (Cn)          | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.                                                                                                                                                                          |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.                                                                                                                                                                                              |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.                                                              |
| Sample Results (Sr)          | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.                                                                                                                                                                                             |
| Sample Summary (Ss)          | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.                                                                                                                                                                                                                                                                                                                                                            |

### Qualifier Description

|   |                                                                                                                      |
|---|----------------------------------------------------------------------------------------------------------------------|
| I | The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. |
| J | The value is outside laboratory established criteria.                                                                |
| L | Off-scale high. Actual value is known to be greater than value given.                                                |
| Q | Sample held beyond the accepted holding time.                                                                        |
| U | Indicates the compound was analyzed for but not detected above the method detection limit.                           |
| V | Indicates the analyte was detected in both the sample and method blank.                                              |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

## State Accreditations

|                         |             |                             |                  |
|-------------------------|-------------|-----------------------------|------------------|
| Alabama                 | 40660       | Nebraska                    | NE-OS-15-05      |
| Alaska                  | 17-026      | Nevada                      | TN-03-2002-34    |
| Arizona                 | AZ0612      | New Hampshire               | 2975             |
| Arkansas                | 88-0469     | New Jersey–NELAP            | TN002            |
| California              | 2932        | New Mexico <sup>1</sup>     | n/a              |
| Colorado                | TN00003     | New York                    | 11742            |
| Connecticut             | PH-0197     | North Carolina              | Env375           |
| Florida                 | E87487      | North Carolina <sup>1</sup> | DW21704          |
| Georgia                 | NELAP       | North Carolina <sup>3</sup> | 41               |
| Georgia <sup>1</sup>    | 923         | North Dakota                | R-140            |
| Idaho                   | TN00003     | Ohio–VAP                    | CL0069           |
| Illinois                | 200008      | Oklahoma                    | 9915             |
| Indiana                 | C-TN-01     | Oregon                      | TN200002         |
| Iowa                    | 364         | Pennsylvania                | 68-02979         |
| Kansas                  | E-10277     | Rhode Island                | LA000356         |
| Kentucky <sup>1 6</sup> | 90010       | South Carolina              | 84004            |
| Kentucky <sup>2</sup>   | 16          | South Dakota                | n/a              |
| Louisiana               | AI30792     | Tennessee <sup>1 4</sup>    | 2006             |
| Louisiana <sup>1</sup>  | LA180010    | Texas                       | T104704245-18-15 |
| Maine                   | TN0002      | Texas <sup>5</sup>          | LAB0152          |
| Maryland                | 324         | Utah                        | TN00003          |
| Massachusetts           | M-TN003     | Vermont                     | VT2006           |
| Michigan                | 9958        | Virginia                    | 460132           |
| Minnesota               | 047-999-395 | Washington                  | C847             |
| Mississippi             | TN00003     | West Virginia               | 233              |
| Missouri                | 340         | Wisconsin                   | 9980939910       |
| Montana                 | CERT0086    | Wyoming                     | A2LA             |

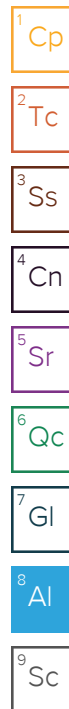
## Third Party Federal Accreditations

|                               |         |                     |               |
|-------------------------------|---------|---------------------|---------------|
| A2LA – ISO 17025              | 1461.01 | AIHA-LAP, LLC EMLAP | 100789        |
| A2LA – ISO 17025 <sup>5</sup> | 1461.02 | DOD                 | 1461.01       |
| Canada                        | 1461.01 | USDA                | P330-15-00234 |
| EPA–Crypto                    | TN00003 |                     |               |

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Vista

5110 US Hwy 301 South  
Baldwin, FL 32234Report to:  
Eric ParkerProject Description  
Vista-Semiannual GW Parameters June DecCity/State  
Collected:Please Circle:  
PT MT CT ET

Phone: 904-562-9755

Client Project #  
200Lab Project #  
WMV15FL-00003

Collected by (print):

DANIEL ARMOUR

Site/Facility ID #  
FL26

P.O. #

Collected by (signature):

Rush? (Lab MUST be notified)

☐ Same Day ☐ Five Day  
☐ Next Day ☐ 5 Day (Rad Only)  
☐ Two Day ☐ 10 Day (Rad Only)  
☐ Three Day

Date Results Needed

No. of

Immediately

Packed on ice: N ☒ Y ☐

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | Conc |
|-----------|-----------|----------|-------|------|------|------|
| MW-1A     | G         | GW       | 6-1   | 1208 | 10   | X    |
| MW-2A     |           | GW       |       |      | 10   | X    |
| MW-3A     | G         | GW       | 6-1   | 0912 | 10   | X    |
| MW-4A     | G         | GW       | 6-1   | 0754 | 10   | X    |
| MW-5A     | G         | GW       | 6-1   | 1039 | 10   | X    |
| MW-6A     |           | GW       |       |      | 10   | X    |
| MW-7A     | G         | GW       | 6-1   | 1128 | 10   | X    |
| MW-8A     |           | GW       |       |      | 10   | X    |
| MW-9A     | G         | GW       | 6-1   | 0806 | 10   | X    |
| MW-11A    | G         | GW       | 6-1   | 0737 | 10   | X    |

\* Matrix:  
 SS - Soil AM - Air F - Filter  
 GW - Groundwater B - Bioassay  
 WW - Wastewater  
 DW - Drinking Water  
 OT - Other

Remarks: Nitrate = 48 hour holding time.

Sample receiving: samples may be received over multiple days and must be logged to same SDG.

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

 Samples returned via  
 UPS ☐ FedEx ☐ Carrier ☐

Tracking # 750 305 3311

Relinquished by (Signature):

Date:

6-1-20

Time:

1600

Received by (Signature):

Trip Blank Received: Yes/No

No/Blank

Relinquished by (Signature):

Date:

Time:

Received by (Signature):

Trip Blank Received: Yes/No

No/Blank

Relinquished by (Signature):

Date:

Time:

Received by (Signature):

Trip Blank Received: Yes/No

No/Blank

If preservation required by Log: Date/Time

Hold: \_\_\_\_\_ Condition: \_\_\_\_\_

Analysis / Component / Preservative

Chain of Custody Page 1 of 1

National Center for Testing & Research  
 12005 Johnson Rd  
 Miami Lakes, FL 33122  
 Phone: 407-558-5852  
 Phone: 800-367-5852  
 Fax: 407-558-5852

D010

Airline: WMV15FL

Template: T168185

Protocol: P774783

PAT: 830 - Linda Cashman

 Shipped via FedEx Ground  
 Form 101 - Samples & Data only

Sample Details/Checklist:  
 C/C Seal: \_\_\_\_\_  
 C/C Label: \_\_\_\_\_  
 C/C Signal: \_\_\_\_\_  
 Seals: \_\_\_\_\_  
 Correct labeling used: \_\_\_\_\_  
 Sufficient volume used: \_\_\_\_\_  
 If applicable:  
 Vol. Sample: \_\_\_\_\_  
 Preservation: \_\_\_\_\_  
 Lab: \_\_\_\_\_

Vista

5110 US Hwy 301 South  
Baldwin, FL 32234Report to:  
Eric ParkerProject Description  
Vista-Semiannual GW Parameters June DecCity/State  
Collected:Please Check:  
PT MT LT ET

Phone 904-562-9755

Client Project #  
200Lab Project #  
WMVISFL-00003Collected by (print):  
DANIEL ARMOURSite/Facility ID #  
FL26

P.O. #

Collected by (signature):  


Rush? (Lab MUST be Notified)

☐ Same Day ☐ Five Day  
☐ Next Day ☐ 5 Day (Rad Only)  
☐ Two Day ☐ 10 Day (Rad Only)  
☐ Three Day

Date Results Needed

No.  
of  
CntrsImmediately  
Packed on Ice: N ☐ Y ☒

| Sample ID       | Comp/Grp | Matrix * | Depth | Date | Time | Cntrs |
|-----------------|----------|----------|-------|------|------|-------|
| MW-14A          | G        | GW       | 6-1   | 0841 | 10   | 6     |
| MW-15A          | G        | GW       | 6-1   | 0701 | 10   | 6     |
| TRIP BLANK      | G        | GW       | 6-1   | -    | 2    | 2     |
| Equipment Blank |          | GW       |       |      | 7    | 7     |
| MW-1A           |          | GW       |       |      | 1    | X     |
| MW-2A           |          | GW       |       |      | 1    | X     |
| MW-3A           |          | GW       |       |      | 1    | X     |
| MW-4A           |          | GW       |       |      | 1    | X     |
| MW-5A           |          | GW       |       |      | 1    | X     |
| MW-6A           |          | GW       |       |      | 1    | X     |

\* Matrix:  
 SS - Soil AIL - Air F - Filter  
 GW - Groundwater B - Biosay  
 WW - Wastewater  
 DW - Drinking Water  
 OT - Other

Remarks/Nitrate = 48 hour holding time.

Sample receiving: samples may be received over multiple days and must be logged to same SDG.

pH Temp

Flow Other

Samples returned via  
Ltr. Fed's Courier

Tracking #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

True Blank Received: Yes / No

HC / Month  
183

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

True Blank Received: Yes / No

HC / Month  
183

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Full

Condition:  
10/1/08

Analysis / Component / Preservative

Chain of Custody Page 1 of 1



3000 Limerick Rd  
Mount Juliet, TN 37122  
Phone: 615-758-5555  
Phone: 800-747-5449  
Fax: 615-758-5405



SDG # 126493

Table #

Accession: WMVISFL

Template: T168185

Project: P7747B3

PI: 850 - Linda Cashman

PI: 15-3-21-20

Shipped Via: FedEx Ground

Remarks Sample # (not only)

Initials, Signature, Date/Time  
 SDG Seal: F000007/00001 - 2/10  
 CDC Seal: 00000000000000000000  
 Bottle Label: 00000000000000000000  
 Current Bottle Label: 00000000000000000000  
 Bottle Label: 00000000000000000000  
 VOA Seal: 00000000000000000000  
 Preservation: Correct/Checked: 00000000000000000000  
 PAC Screen: 00000000000000000000

If preservation required by Logix: Date/Time

|                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                          |  |                               |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  |                                                                                                                                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------|--|------------------------------------------------------------------------------------------------------------------|--|-----------------|--|----------------|--|-----------------------------------------------------------------------------------------------------------------|--|----------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Vista</b><br>5110 US Hwy 301 South<br>Baldwin, FL 32234                                                                            |  | Billing Information<br>Deborah Perez<br>PO BOX 6700<br>Portland, OR 97228-6700                                                                                                                                                                                                                           |  | Print<br>CNA                  |  | Analyte / Container / Preservation                                                                               |  |                 |  |                |  |                                                                                                                 |  |                            |  | Chain of Custody Page 1 of 1                                                                                                                                                                        |  |
| Report to:<br>Eric Parker                                                                                                             |  | Email To:<br>eparker1@wm.com, efoster@wm.com, egulliver                                                                                                                                                                                                                                                  |  |                               |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  | <br>12000 Gateway Rd<br>Miami, FL 33155<br>Phone: 813-759-0800<br>Fax: 813-759-0801<br>Toll Free: 1-800-759-0801 |  |
| Project Description:<br>Vista-Semiannual GW Parameters June Dec                                                                       |  | City/State<br>Collected:                                                                                                                                                                                                                                                                                 |  | Please Circle<br>PT MT CT FT  |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  |                                                                                                                  |  |
| Phone: 904-562-9755                                                                                                                   |  | Client Project #<br>200                                                                                                                                                                                                                                                                                  |  | Lab Project #<br>WMUSFL-00003 |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  | 300-12145                                                                                                                                                                                           |  |
| Collected by (print):<br>Darryl Arnes                                                                                                 |  | Sample ID #<br>FL26                                                                                                                                                                                                                                                                                      |  | P.L.#                         |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  | F197<br>L1227093                                                                                                                                                                                    |  |
| Collected by (signature):<br>                        |  | Rush? (Lab MUST be notified)<br><input type="checkbox"/> Same Day <input type="checkbox"/> First Day<br><input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Next Day)<br><input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Next Day)<br><input type="checkbox"/> Three Day |  | Quote #                       |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  | WMUSFL<br>Template T168155<br>P774783<br>P# 430 - Under Custodian                                                                                                                                   |  |
| Immediately<br>Packed on Ice: <input checked="" type="checkbox"/>                                                                     |  |                                                                                                                                                                                                                                                                                                          |  | Date Results Needed           |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  | Shipped via: FedEx Ground                                                                                                                                                                           |  |
| Sample ID                                                                                                                             |  | Comp/Inst                                                                                                                                                                                                                                                                                                |  | Matrix #                      |  | Depth                                                                                                            |  | Date            |  | Time           |  | Cnts                                                                                                            |  | Remarks                    |  |                                                                                                                                                                                                     |  |
| MW-1A                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                          |  | GW                            |  |                                                                                                                  |  |                 |  |                |  | 10                                                                                                              |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-2A                                                                                                                                 |  | G                                                                                                                                                                                                                                                                                                        |  | GW                            |  | 6-2                                                                                                              |  | 0331            |  | 11:00          |  | X                                                                                                               |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-3A                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                          |  | GW                            |  |                                                                                                                  |  |                 |  |                |  | 10                                                                                                              |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-4A                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                          |  | GW                            |  |                                                                                                                  |  |                 |  |                |  | 10                                                                                                              |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-5A                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                          |  | GW                            |  |                                                                                                                  |  |                 |  |                |  | 10                                                                                                              |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-6A                                                                                                                                 |  | G                                                                                                                                                                                                                                                                                                        |  | GW                            |  | 6-2                                                                                                              |  | 0815            |  | 12:00          |  | X                                                                                                               |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-7A                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                          |  | GW                            |  |                                                                                                                  |  |                 |  |                |  | 10                                                                                                              |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-8A                                                                                                                                 |  | G                                                                                                                                                                                                                                                                                                        |  | GW                            |  | 6-2                                                                                                              |  | 0658            |  | 12:00          |  | X                                                                                                               |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-9A                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                          |  | GW                            |  |                                                                                                                  |  |                 |  |                |  | 10                                                                                                              |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| MW-11A                                                                                                                                |  |                                                                                                                                                                                                                                                                                                          |  | GW                            |  |                                                                                                                  |  |                 |  |                |  | 10                                                                                                              |  | X X X X X X                |  |                                                                                                                                                                                                     |  |
| * Matrix:<br>SS - Soil AIR - Air F - Filter<br>GW - Groundwater B - Biohazard<br>WW - Wastewater<br>DW - Drinking Water<br>OT - Other |  | Remarks: Nitrate = 48 hour holding time.<br>Sample receiving: samples may be received over multiple days and must be logged to same SDG.                                                                                                                                                                 |  |                               |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  |                                                                                                                                                                                                     |  |
| Samples returned via<br>UPS FedEx Courier                                                                                             |  | Tracking # 1770 3029 3353                                                                                                                                                                                                                                                                                |  |                               |  |                                                                                                                  |  |                 |  |                |  |                                                                                                                 |  |                            |  |                                                                                                                                                                                                     |  |
| Requisitioned by (Signature):<br>                  |  | Date:<br>6-2-20                                                                                                                                                                                                                                                                                          |  | Time:<br>1700                 |  | Received by (Signature):<br> |  | Date:<br>6/3/20 |  | Time:<br>08:45 |  | Signature of Receiver:<br> |  | Date/Time:<br>6/3/20 08:45 |  |                                                                                                                                                                                                     |  |
| Requisitioned by (Signature):                                                                                                         |  | Date:                                                                                                                                                                                                                                                                                                    |  | Time:                         |  | Received by (Signature):                                                                                         |  | Date:           |  | Time:          |  | Signature of Receiver:                                                                                          |  | Date/Time:                 |  |                                                                                                                                                                                                     |  |
| Requisitioned by (Signature):                                                                                                         |  | Date:                                                                                                                                                                                                                                                                                                    |  | Time:                         |  | Received by (Signature):                                                                                         |  | Date:           |  | Time:          |  | Signature of Receiver:                                                                                          |  | Date/Time:                 |  |                                                                                                                                                                                                     |  |







## Stacy Kennedy

---

From: Stacy Kennedy  
Sent: Saturday, July 4, 2020 12:16 PM  
To: Ken Guilbeault ([kguilbeault@cecenv.com](mailto:kguilbeault@cecenv.com))  
Subject: Vista Nitrate Summary L1224093

Ken,

As we discussed, I will be attaching this summary of events of the nitrate analyses to the report.

A packaged cooler containing nitrate bottles for this sample set (L1224093) experienced a one day FedEx delay due to ongoing COVID-19 circumstances. Due to this delay, the laboratory was unable to process nitrate samples within holding time for these sampling points: MW-3A, MW-4A, MW-9A, MW-11A, MW-14A, MW-15A. Combined nitrate-nitrite was analyzed on these sampling points and the results are as follows:

| Sample ID | Nitrate | Nitrate-Nitrite |
|-----------|---------|-----------------|
| MW-3A     | 1.05    | 1.24            |
| MW-4A     | 0.65    | 0.613           |
| MW-9A     | 0.377   | 0.294           |
| MW-11A    | 8.52    | 11.2 *          |
| MW-14A    | 1.75    | 2               |
| MW-15A    | 0.698   | 0.873           |

\*Nitrate-nitrite was rerun to confirm. Rerun result was 10.6, analyzed past holding time.

Thank you,

  
**Stacy Kennedy**  
*Project Manager*

Pace Analytical National Center for Testing & Innovation  
12065 Lebanon Road | Mt. Juliet, TN 37122  
(office)615.773.7453 (cell)615-517-1334  
[skennedy@pacenational.com](mailto:skennedy@pacenational.com) | [www.pacenational.com](http://www.pacenational.com)

## Stacy Kennedy

---

From: Ken Guilbeault <[kguilbeault@cecenv.com](mailto:kguilbeault@cecenv.com)>  
Sent: Tuesday, June 30, 2020 1:19 PM  
To: Stacy Kennedy  
Cc: Dan Armour  
Subject: Vista Landfill

Follow Up Flag: Follow up  
Flag Status: Completed

**CAUTION:** This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Stacy,

As we discussed, we will need to recollect the VOCs and semi-vocs from MW-2AR due to the lab error. We will also need to collect a nitrate sample from MW-11A due to the fedex shipping error causing it to go out of hold. Can you please send a kit to the landfill? Danny will be collecting on July 6 so it will need to arrive by Thursday July 2.

Thanks

Ken Guilbeault, P.G.  
Carlson Environmental Consultants, PC  
813-240-4568 (C)

---

**Andy Vann**

**To:** Stacy Kennedy; Project Service  
**Cc:** Linda Cashman  
**Subject:** RE: L1224525 & L1224093 WMVISFL Add NO2NO3

Done. Moved L1224525-01 thru -05 to L1224093-11 thru -15. Added NO2NO3 to 02/-03/-06/-07/-08/-09. Placed CHLORIDE & NITRATE back into WET:WIP:WG1486343.

SS -- Please re-label containers: L1224525-01 thru -05 to L1224093 -11 thru -15.  
Also split volume from L1224093-02/-03/-06/-07/-08/-09 for NO2NO3.

---

**From:** Stacy Kennedy <[skennedy@pacenational.com](mailto:skennedy@pacenational.com)>  
**Sent:** Wednesday, June 3, 2020 12:52 PM  
**To:** Project Service <[ProjServ@pacenational.com](mailto:ProjServ@pacenational.com)>  
**Cc:** Andy Vann <[AVann@pacenational.com](mailto:AVann@pacenational.com)>; Linda Cashman <[LCashman@pacenational.com](mailto:LCashman@pacenational.com)>  
**Subject:** L1224525 & L1224093 WMVISFL Add NO2NO3

Please combine these SDGs. L1224093 was received yesterday. L1224525 was received today. After combination, add NO2NO3 to the samples listed below. Use unpreserved sample volume (from the NITRATE container if possible) that we received to pour the sample for NO2NO3. Samples will be analyzed for both NITRATE and NO2NO3.

MW-3A  
MW-4A  
MW-9A  
MW-11A  
MW-14A  
MW-15A

Thank you,

---

**Stacy Kennedy**  
*Project Manager*

Pace Analytical National Center for Testing & Innovation  
12065 Lebanon Road | Mt. Juliet, TN 37122  
(office) 615.773.7453 (cell) 615-517-1334  
[skennedy@pacenational.com](mailto:skennedy@pacenational.com) | [www.pacenational.com](http://www.pacenational.com)

**Kelsey Stephenson**



|                   |                 |             |                        |
|-------------------|-----------------|-------------|------------------------|
| Login #: L1224093 | Client: WMVISEL | Date: 06/03 | Evaluated by: Kelsey S |
|-------------------|-----------------|-------------|------------------------|

**Non-Conformance (check applicable items)**

| Sample Integrity               | Chain of Custody Clarification                   | If Broken Container:                                 |
|--------------------------------|--------------------------------------------------|------------------------------------------------------|
| Parameter(s) past holding time | Login Clarification Needed                       |                                                      |
| Temperature not in range       | Chain of custody is incomplete                   | Insufficient packing material around container       |
| Improper container type        | Please specify Metals requested                  | Insufficient packing material inside cooler          |
| pH not in range                | Please specify TCLP requested                    | Improper handling by carrier (FedEx / UPS / Courier) |
| Insufficient sample volume     | Received additional samples not listed on coc    | Sample was frozen                                    |
| Sample is biphasic             | Sample ids on containers do not match ids on coc | Container lid not intact                             |
| Vials received with headspace  | Trip Blank not received                          | <b>If no Chain of Custody:</b>                       |
| Broken container               | Client did not "X" analysis                      |                                                      |
| X Broken container             | Chain of Custody is missing                      | Received by:                                         |
|                                |                                                  | Date/Time:                                           |
|                                |                                                  | Temp./Cont. Rec./pH:                                 |
|                                |                                                  | Carrier:                                             |
|                                |                                                  | Tracking#                                            |

**Login Comments:** Received 1 of 3 40ml-NaThio vials broken for MW-2AR.

|                     |                 |       |            |       |       |
|---------------------|-----------------|-------|------------|-------|-------|
| Client informed by: | Call            | Email | Voice Mail | Date: | Time: |
| TSR Initials: SK    | Client Contact: |       |            |       |       |

**Login Instructions:**

Noted. Please proceed with intact sample containers. SK 6/3/20

**Matt Shacklock**



|                 |                |          |                             |
|-----------------|----------------|----------|-----------------------------|
| Login #:1224093 | Client:WMV/SFL | Date:6/2 | Evaluated by:Matt Shacklock |
|-----------------|----------------|----------|-----------------------------|

**Non-Conformance (check applicable items)**

| Sample Integrity<br>Parameter(s) past holding<br>time | Chain of Custody Clarification                                    | If Broken Container:                                                                             |
|-------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Temperature not in<br>range                           | Login Clarification Needed                                        |                                                                                                  |
| Improper container<br>type                            | Chain of custody is incomplete<br>Please specify Metals requested | Insufficient packing material around container<br>Insufficient packing material inside<br>cooler |
| pH not in range                                       | Please specify TUP requested                                      | Improper handling by carrier (FedEx / UPS / Couri<br>Sample was<br>frozen                        |
| Insufficient sample volume                            | Received additional samples not listed on coc                     |                                                                                                  |
| Sample is biphasic                                    | Sample ids on containers do not match ids on<br>coc               | Container lid not intact                                                                         |
| Vials received with headspace                         | Trip Blank not received                                           |                                                                                                  |
| Broken container                                      | Client did not "X" analysis                                       | <b>If no Chain of Custody:</b>                                                                   |
| Broken container                                      | Chain of Custody is missing                                       | Received by:                                                                                     |
| Sufficient sample remains                             |                                                                   | Date/Time:                                                                                       |
|                                                       |                                                                   | Temp./Cont.Rec./pH:                                                                              |
|                                                       |                                                                   | Carrier:                                                                                         |
|                                                       |                                                                   | Tracking#                                                                                        |

**Login Comments: Following IDs have all analysis marked, but only received 3 HCL vials and 3 NATIO vials**

|                            |                            |      |                          |       |                          |            |                          |      |                      |       |                      |
|----------------------------|----------------------------|------|--------------------------|-------|--------------------------|------------|--------------------------|------|----------------------|-------|----------------------|
| Client informed by:        | <input type="checkbox"/>   | Call | <input type="checkbox"/> | Email | <input type="checkbox"/> | Voice Mail | <input type="checkbox"/> | Date | <input type="text"/> | Time: | <input type="text"/> |
| TSR Initials: SK           | <div>Client Contact:</div> |      |                          |       |                          |            |                          |      |                      |       |                      |
| <b>Login Instructions:</b> |                            |      |                          |       |                          |            |                          |      |                      |       |                      |

Due to a FedEx delay, 1 of 2 coolers containing this sample set arrived a day late. SK 6/3/20

Form FD-9000-24

GROUNDWATER SAMPLING LOG

|                                                                                                                                           |  |                                                      |  |                                        |  |                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------|--|----------------------------------------|--|----------------------------------|
| WELL<br>DIAMETER (Inches): 2                                                                                                              |  | TUBING<br>DIAMETER (Inches): 3/4                     |  | PURGING DATA                           |  | DATE: 6-1-20                     |
| WELL ELEVATION TO C (ft NGVD):                                                                                                            |  | WELL SCREEN INTERVAL<br>DEPTH: 92.7 feet to 100 feet |  | STATIC DEPTH<br>TO WATER (feet): 44.92 |  | PURGE PUMP TYPE<br>OR BAILER: BP |
| WELL VOLUME PURGE: 109.42                                                                                                                 |  | GROUNDWATER ELEVATION (ft NGVD):                     |  |                                        |  |                                  |
| (only fill out if applicable) $\text{WELL VOLUME} = (\text{TOTAL WELL DEPTH} - \text{STATIC DEPTH TO WATER}) \times \text{WELL CAPACITY}$ |  |                                                      |  |                                        |  |                                  |

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

feet - (feet) X gallons/foot = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet) = 0.3 gallons + (0.006 gallons/foot X 67.31 feet) + 0.05 gallons

FINAL PUMP OR TUBING

[illegible]

PLE BY (PRINT) / AFFILIATION: \_\_\_\_\_

|                                                                                      |  |                                                                        |  |                                                                                |  |                            |  |
|--------------------------------------------------------------------------------------|--|------------------------------------------------------------------------|--|--------------------------------------------------------------------------------|--|----------------------------|--|
| ARMOUR / PRO-TECH                                                                    |  | SAMPLER(S) SIGNATURE(S):                                               |  | SAMPLING INITIATED AT: 1205                                                    |  | SAMPLING ENDED AT: NR      |  |
| OR TUBING IN WELL (feet): 64.31                                                      |  | TUBING MATERIAL CODE: T                                                |  | FIELD-FILTERED: Y <input checked="" type="checkbox"/> <input type="checkbox"/> |  | FILTER SIZE:               |  |
| DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> <input type="checkbox"/> |  | TUBING: Y <input checked="" type="checkbox"/> <input type="checkbox"/> |  | µm                                                                             |  | Filtration Equipment Type: |  |

| SAMPLE CONTAINER SPECIFICATION |               |        |                   | SAMPLE PRESERVATION           |          |             | INTENDED ANALYSIS AND/OR METHOD |    | SAMPLE PUMP FLOW RATE<br>(ml per minute) |  | SAMPLING EQUIPMENT CODE |  |
|--------------------------------|---------------|--------|-------------------|-------------------------------|----------|-------------|---------------------------------|----|------------------------------------------|--|-------------------------|--|
| CONTAINERS                     | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (ml) | FINAL pH |             |                                 |    |                                          |  |                         |  |
| 3                              | G             | 40ml   | HCl               | -                             | Nm       | VQA         | 0.2h                            | BP |                                          |  |                         |  |
| 1                              | P             | 1000ml | Nothing           | -                             |          | EDD/DAGP    |                                 |    |                                          |  |                         |  |
| 1                              | P             | 500ml  | HNO3              | -                             |          | G-CHEM      |                                 |    |                                          |  |                         |  |
| 1                              | AG            | 500ml  | H2SO4             | -                             |          | METALS      |                                 |    |                                          |  |                         |  |
| 1                              | P             | 1000ml | HNO3              | -                             |          | NH3         |                                 |    |                                          |  |                         |  |
| REMARKS:                       |               |        |                   |                               |          | GROSS ALPHA |                                 |    |                                          |  |                         |  |

Material Codes: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2).  
optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)  
Revision Date: February 12, 2009



Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

|                          |  |                          |  |
|--------------------------|--|--------------------------|--|
| GROUNDWATER SAMPLING LOG |  |                          |  |
| SITE NAME: VISTA         |  | SITE LOCATION: APOKA, FL |  |
| WELL NO: MW-03A          |  | SAMPLE ID:               |  |

|                                                                           |  |                                                       |  |                                        |  |                                  |
|---------------------------------------------------------------------------|--|-------------------------------------------------------|--|----------------------------------------|--|----------------------------------|
| WELL<br>DIAMETER (Inches): 2                                              |  | TUBING<br>DIAMETER (Inches): 1/4                      |  | PURGING DATA                           |  | DATE: 6-1-20                     |
| WELL ELEVATION TOC (ft NGVD):                                             |  | WELL SCREEN INTERVAL<br>DEPTH: 50.2 feet to 50.2 feet |  | STATIC DEPTH<br>TO WATER (feet): 41.53 |  | PURGE PUMP TYPE<br>OR BAILER: BP |
| WELL VOLUME PURGE: 1 WELL VOLUME = 92.83<br>(only fill out if applicable) |  | GROUNDWATER ELEVATION (ft NGVD):                      |  | 51.34                                  |  |                                  |
| EQUIPMENT: = {                                                            |  |                                                       |  |                                        |  |                                  |

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

|                                              |  |  |  |  |  |                                            |  |  |  |  |  |                       |  |  |  |  |  |                   |  |  |  |  |  |                               |  |      |  |                       |  |                  |  |  |  |  |  |
|----------------------------------------------|--|--|--|--|--|--------------------------------------------|--|--|--|--|--|-----------------------|--|--|--|--|--|-------------------|--|--|--|--|--|-------------------------------|--|------|--|-----------------------|--|------------------|--|--|--|--|--|
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): |  |  |  |  |  | FINAL PUMP OR TUBING DEPTH IN WELL (feet): |  |  |  |  |  | PURGING INITIATED AT: |  |  |  |  |  | PURGING ENDED AT: |  |  |  |  |  | TOTAL VOLUME PURGED (gallons) |  |      |  |                       |  |                  |  |  |  |  |  |
| 55.20                                        |  |  |  |  |  | 55.20                                      |  |  |  |  |  | 0857                  |  |  |  |  |  | 0917              |  |  |  |  |  | 3.20                          |  |      |  |                       |  |                  |  |  |  |  |  |
| VOLUME PURGED (gallons)                      |  |  |  |  |  | CUMUL. VOLUME PURGED                       |  |  |  |  |  | PURGE RATE            |  |  |  |  |  | DEPTH TO WATER    |  |  |  |  |  | pH (standard)                 |  | TEMP |  | COND. (micro mhos/cm) |  | DISSOLVED OXYGEN |  |  |  |  |  |
|                                              |  |  |  |  |  |                                            |  |  |  |  |  |                       |  |  |  |  |  |                   |  |  |  |  |  |                               |  |      |  |                       |  |                  |  |  |  |  |  |

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 1.5" = 0.08; 1.75" = 0.10; 2" = 0.12; 2.25" = 0.14; 2.5" = 0.16; 2.75" = 0.18; 3" = 0.20; 3.25" = 0.22; 3.5" = 0.24; 3.75" = 0.26; 4" = 0.28; 4.25" = 0.30; 4.5" = 0.32; 4.75" = 0.34; 5" = 0.36; 5.25" = 0.38; 5.5" = 0.40; 5.75" = 0.42; 6" = 0.44; 6.25" = 0.46; 6.5" = 0.48; 6.75" = 0.50; 7" = 0.52; 7.25" = 0.54; 7.5" = 0.56; 7.75" = 0.58; 8" = 0.60; 8.25" = 0.62; 8.5" = 0.64; 8.75" = 0.66; 9" = 0.68; 9.25" = 0.70; 9.5" = 0.72; 9.75" = 0.74; 10" = 0.76; 10.25" = 0.78; 10.5" = 0.80; 10.75" = 0.82; 11" = 0.84; 11.25" = 0.86; 11.5" = 0.88; 11.75" = 0.90; 12" = 0.92; 12.25" = 0.94; 12.5" = 0.96; 12.75" = 0.98; 13" = 1.00; 13.25" = 1.02; 13.5" = 1.04; 13.75" = 1.06; 14" = 1.08; 14.25" = 1.10; 14.5" = 1.12; 14.75" = 1.14; 15" = 1.16; 15.25" = 1.18; 15.5" = 1.20; 15.75" = 1.22; 16" = 1.24; 16.25" = 1.26; 16.5" = 1.28; 16.75" = 1.30; 17" = 1.32; 17.25" = 1.34; 17.5" = 1.36; 17.75" = 1.38; 18" = 1.40; 18.25" = 1.42; 18.5" = 1.44; 18.75" = 1.46; 19" = 1.48; 19.25" = 1.50; 19.5" = 1.52; 19.75" = 1.54; 20" = 1.56; 20.25" = 1.58; 20.5" = 1.60; 20.75" = 1.62; 21" = 1.64; 21.25" = 1.66; 21.5" = 1.68; 21.75" = 1.70; 22" = 1.72; 22.25" = 1.74; 22.5" = 1.76; 22.75" = 1.78; 23" = 1.80; 23.25" = 1.82; 23.5" = 1.84; 23.75" = 1.86; 24" = 1.88; 24.25" = 1.90; 24.5" = 1.92; 24.75" = 1.94; 25" = 1.96; 25.25" = 1.98; 25.5" = 2.00; 25.75" = 2.02; 26" = 2.04; 26.25" = 2.06; 26.5" = 2.08; 26.75" = 2.10; 27" = 2.12; 27.25" = 2.14; 27.5" = 2.16; 27.75" = 2.18; 28" = 2.20; 28.25" = 2.22; 28.5" = 2.24; 28.75" = 2.26; 29" = 2.28; 29.25" = 2.30; 29.5" = 2.32; 29.75" = 2.34; 30" = 2.36; 30.25" = 2.38; 30.5" = 2.40; 30.75" = 2.42; 31" = 2.44; 31.25" = 2.46; 31.5" = 2.48; 31.75" = 2.50; 32" = 2.52; 32.25" = 2.54; 32.5" = 2.56; 32.75" = 2.58; 33" = 2.60; 33.25" = 2.62; 33.5" = 2.64; 33.75" = 2.66; 34" = 2.68; 34.25" = 2.70; 34.5" = 2.72; 34.75" = 2.74; 35" = 2.76; 35.25" = 2.78; 35.5" = 2.80; 35.75" = 2.82; 36" = 2.84; 36.25" = 2.86; 36.5" = 2.88; 36.75" = 2.90; 37" = 2.92; 37.25" = 2.94; 37.5" = 2.96; 37.75" = 2.98; 38" = 3.00; 38.25" = 3.02; 38.5" = 3.04; 38.75" = 3.06; 39" = 3.08; 39.25" = 3.10; 39.5" = 3.12; 39.75" = 3.14; 40" = 3.16; 40.25" = 3.18; 40.5" = 3.20; 40.75" = 3.22; 41" = 3.24; 41.25" = 3.26; 41.5" = 3.28; 41.75" = 3.30; 42" = 3.32; 42.25" = 3.34; 42.5" = 3.36; 42.75" = 3.38; 43" = 3.40; 43.25" = 3.42; 43.5" = 3.44; 43.75" = 3.46; 44" = 3.48; 44.25" = 3.50; 44.5" = 3.52; 44.75" = 3.54; 45" = 3.56; 45.25" = 3.58; 45.5" = 3.60; 45.75" = 3.62; 46" = 3.64; 46.25" = 3.66; 46.5" = 3.68; 46.75" = 3.70; 47" = 3.72; 47.25" = 3.74; 47.5" = 3.76; 47.75" = 3.78; 48" = 3.80; 48.25" = 3.82; 48.5" = 3.84; 48.75" = 3.86; 49" = 3.88; 49.25" = 3.90; 49.5" = 3.92; 49.75" = 3.94; 50" = 3.96; 50.25" = 3.98; 50.5" = 4.00; 50.75" = 4.02; 51" = 4.04; 51.25" = 4.06; 51.5" = 4.08; 51.75" = 4.10; 52" = 4.12; 52.25" = 4.14; 52.5" = 4.16; 52.75" = 4.18; 53" = 4.20; 53.25" = 4.22; 53.5" = 4.24; 53.75" = 4.26; 54" = 4.28; 54.25" = 4.30; 54.5" = 4.32; 54.75" = 4.34; 55" = 4.36; 55.25" = 4.38; 55.5" = 4.40; 55.75" = 4.42; 56" = 4.44; 56.25" = 4.46; 56.5" = 4.48; 56.75" = 4.50; 57" = 4.52; 57.25" = 4.54; 57.5" = 4.56; 57.75" = 4.58; 58" = 4.60; 58.25" = 4.62; 58.5" = 4.64; 58.75" = 4.66; 59" = 4.68; 59.25" = 4.70; 59.5" = 4.72; 59.75" = 4.74; 60" = 4.76; 60.25" = 4.78; 60.5" = 4.80; 60.75" = 4.82; 61" = 4.84; 61.25" = 4.86; 61.5" = 4.88; 61.75" = 4.90; 62" = 4.92; 62.25" = 4.94; 62.5" = 4.96; 62.75" = 4.98; 63" = 5.00; 63.25" = 5.02; 63.5" = 5.04; 63.75" = 5.06; 64" = 5.08; 64.25" = 5.10; 64.5" = 5.12; 64.75" = 5.14; 65" = 5.16; 65.25" = 5.18; 65.5" = 5.20; 65.75" = 5.22; 66" = 5.24; 66.25" = 5.26; 66.5" = 5.28; 66.75" = 5.30; 67" = 5.32; 67.25" = 5.34; 67.5" = 5.36; 67.75" = 5.38; 68" = 5.40; 68.25" = 5.42; 68.5" = 5.44; 68.75" = 5.46; 69" = 5.48; 69.25" = 5.50; 69.5" = 5.52; 69.75" = 5.54; 70" = 5.56; 70.25" = 5.58; 70.5" = 5.60; 70.75" = 5.62; 71" = 5.64; 71.25" = 5.66; 71.5" = 5.68; 71.75" = 5.70; 72" = 5.72; 72.25" = 5.74; 72.5" = 5.76; 72.75" = 5.78; 73" = 5.80; 73.25" = 5.82; 73.5" = 5.84; 73.75" = 5.86; 74" = 5.88; 74.25" = 5.90; 74.5" = 5.92; 74.75" = 5.94; 75" = 5.96; 75.25" = 5.98; 75.5" = 6.00; 75.75" = 6.02; 76" = 6.04; 76.25" = 6.06; 76.5" = 6.08; 76.75" = 6.10; 77" = 6.12; 77.25" = 6.14; 77.5" = 6.16; 77.75" = 6.18; 78" = 6.20; 78.25" = 6.22; 78.5" = 6.24; 78.75" = 6.26; 79" = 6.28; 79.25" = 6.30; 79.5" = 6.32; 79.75" = 6.3

SAMPLED BY (PRINT) / AFFILIATION: \_\_\_\_\_

|                                            |  |                                                                                                                 |  |                             |  |                       |  |
|--------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------|--|-----------------------------|--|-----------------------|--|
| DAN ARMOUR / PRO-TECH                      |  | SAMPLER(S) SIGNATURE(S):<br> |  | SAMPLING INITIATED AT: 0917 |  | SAMPLING ENDED AT: NR |  |
| PUMP OR TUBING DEPTH IN WELL (feet): 55.30 |  | TUBING MATERIAL CODE:                                                                                           |  | FIELD FILTERED: X           |  |                       |  |

|                        |      |   |     |        |   |                |                            |   |     |              |    |
|------------------------|------|---|-----|--------|---|----------------|----------------------------|---|-----|--------------|----|
| FIELD DECONTAMINATION: | PUMP | Y | (N) | TUBING | Y | (N) (replaced) | FIELD-FILTERED:            | Y | (N) | FILTER SIZE: | NR |
| SAMPLE CONTAINER:      |      |   |     |        |   |                | Filtration Equipment Type: |   |     |              |    |

|                                |  |                        |  |                 |  |
|--------------------------------|--|------------------------|--|-----------------|--|
| SAMPLE CONTAINER SPECIFICATION |  | TUBING Y (N(replaced)) |  | DUPLICATE Y (N) |  |
| SAMPLE                         |  | SAMPLE PRESERVATION    |  | SAMPLE          |  |

| SAMPLE ID CODE | CONTAINERS | MATERIAL CODE | VOLUME  | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (ml per minute) | SAMPLING EQUIPMENT CODE |
|----------------|------------|---------------|---------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
|                |            |               |         | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
|                | 3          | G             | 40ml    | H21                 | -                             |          | VOA                             | 0.16                                  | BP                      |
|                | 3          | G             | 40ml    | Nothid              | -                             | Nm       | GDB/DBCP                        |                                       |                         |
|                | 1          | P             | 1000 ml | -                   | -                             |          | G-CHRM                          |                                       |                         |
|                | 1          | P             | 500 ml  | HNO3                | -                             |          | METALS                          |                                       |                         |
|                | 1          | AG            | 500 ml  | H2SD4               | -                             |          | NH3                             |                                       |                         |
|                | 1          | P             | 1000ml  | HNO3                | -                             |          | GROSS ALPHA                     |                                       |                         |

REMARKS:

Shawn Present YES

REMARKS:

Shawn Present YES NO

**MATERIAL CODES:**  
(Specify)

SAMPLING EQUIPMENT CODES: APP = After Partially Sealed; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;  
RFPF = Reverse Flow Peristaltic Pump; 3M = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2),  
optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009

# Form FD 9000-24 GROUNDWATER SAMPLING LOG

L1224093-03

SITE NAME: VISTA  
WELL NO: MW-04A SAMPLE ID:  SITE LOCATION: APDPA, FL

DATE: 6-1-20

WELL DIAMETER (inches): 2 TUBING DIAMETER (inches): 1/4 PURGING DATA  
WELL SCREEN INTERVAL DEPTH: 46.35 feet to 46.35 feet STATIC DEPTH TO WATER (feet): 31.02  
WELL ELEVATION TOC (ft NGVD): 82.04 GROUNDWATER ELEVATION (ft NGVD): 51.02  
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 $= (46.35 \text{ feet} - 31.02 \text{ feet}) \times 0.163 \text{ gallons/foot} = 2.50 \text{ gallons}$   
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 $= 0.2 \text{ gallons} + (0.002 \text{ gallons/foot} \times 46.35 \text{ feet}) + 0.05 \text{ gallons} = 0.33 \text{ gallons}$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 41.65 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 41.65 PURGING INITIATED AT: 0932 PURGING ENDED AT: 0954 TOTAL VOLUME PURGED (gallons): 4.84

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$ | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOF |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------------------------------------|------------------------------------------------------|------------------|----------|-------|------|
| 0944 | 2.64                    | 2.64                           | 0.22             | 33.88                 | 5.59                | 26.2       | 69                                                           | 3.5                                                  | 3.79             | 178      |       |      |
| 0947 | 0.66                    | 3.30                           | 0.22             | 33.88                 | 5.59                | 26.1       | 69                                                           | 3.5                                                  | 2.81             | 129      |       |      |
| 0950 | 0.66                    | 3.96                           | 0.22             | 33.88                 | 5.59                | 26.1       | 70                                                           | 3.5                                                  | 3.61             | 129      |       |      |
| 0953 | 0.66                    | 4.62                           | 0.22             | 33.88                 | 5.61                | 26.2       | 70                                                           | 3.5                                                  | 3.00             | 180      | None  |      |

WELL CAPACITY (Gallons Per Foot):  $0.75" = 0.02$ ;  $1" = 0.04$ ;  $1.25" = 0.06$ ;  $2" = 0.16$ ;  $3" = 0.37$ ;  $4" = 0.65$ ;  $5" = 1.02$ ;  $6" = 1.47$ ;  $8" = 3.80$   
TUBING INSIDE DIA. CAPACITY (Gal/ft):  $1/8" = 0.0004$ ;  $3/16" = 0.0014$ ;  $1/4" = 0.0026$ ;  $5/16" = 0.004$ ;  $3/8" = 0.006$ ;  $1/2" = 0.016$ ;  $5/8" = 0.016$   
PURGING EQUIPMENT CODES: B = Baller, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump, O = Other (Specify)

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH SAMPLER(S) SIGNATURE(S): [Signature]

PUMP OR TUBING DEPTH IN WELL (feet): 41.65 TUBING MATERIAL CODE: T SAMPLING INITIATED AT: 0954 SAMPLING ENDED AT: NR

FIELD DECONTAMINATION: PUMP Y TUBING Y (replaced) FIELD-FILTERED: Y FILTER SIZE:

Filteration Equipment Type:

| SAMPLE CONTAINER SPECIFICATION |            |               |         | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE $\mu\text{L (mL per minute)}$ | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|---------|---------------------|-------------------------------|----------|---------------------------------|-----------------------------------------------------|-------------------------|
| SAMPLE ID CODE                 | CONTAINERS | MATERIAL CODE | VOLUME  | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                                     |                         |
|                                | 3          | G             | 40ml    | HCl                 | -                             | NM       | VDA                             | 0.22                                                | BP                      |
|                                | 3          | G             | 40ml    | None                | -                             |          | GDB/DGCP                        |                                                     |                         |
|                                | 1          | P             | 1000 ml | -                   | -                             |          | G-CHEM                          |                                                     |                         |
|                                | 1          | P             | 500 ml  | HNO3                | -                             |          | METALS                          |                                                     |                         |
|                                | 1          | AG            | 500 ml  | H2SO4               | -                             |          | NH3                             |                                                     |                         |
|                                | 1          | P             | 1000 ml | HNO3                | -                             |          | GAO: ALPHA                      |                                                     |                         |

REMARKS: Shoen Present YES NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2).  
optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009



L1224093-04

Form FD 9000-24

## GROUNDWATER SAMPLING LOG

SITE NAME: VISTA WELL NO: MW-05A SAMPLE ID:  SITE LOCATION: APOPKA, FL DATE: 6-1-20

WELL DIAMETER (Inches): 2 TUBING DIAMETER (Inches): 1/4 WELL SCREEN INTERVAL DEPTH: 28 feet to 28.08 feet STATIC DEPTH TO WATER (feet): 29.51 GROUNDWATER ELEVATION (ft NGVD): 52.35 PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 $= (43.08 \text{ feet} - 29.51 \text{ feet}) \times 0.163 \text{ gallons/foot} = 2.21 \text{ gallons}$   
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 $= 0.2 \text{ gallons} + (0.0076 \text{ gallons/foot} \times 43.08 \text{ feet}) + 0.05 \text{ gallons} = 0.36 \text{ gallons}$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 38.08 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 38.08 PURGING INITIATED AT: 1017 PURGING ENDED AT: 1039 TOTAL VOLUME PURGED (gallons): 4.18

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOF |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|-------------------------------------------|---------------------------------------------------------|------------------|----------|-------|------|
| 1029 | 2.28                    | 2.28                           | 0.19             | 32.94                 | 5.33                | 26.0       | 97                                        | 3.3                                                     | 3.19             | 224      |       |      |
| 1032 | 0.57                    | 2.85                           | 0.19             | 32.95                 | 5.32                | 26.0       | 97                                        | 3.3                                                     | 2.83             | 224      |       |      |
| 1035 | 0.57                    | 3.42                           | 0.19             | 32.95                 | 5.32                | 26.0       | 96                                        | 3.3                                                     | 3.48             | 226      |       |      |
| 1038 | 0.57                    | 3.99                           | 0.19             | 32.95                 | 5.31                | 26.0       | 97                                        | 3.3                                                     | 4.02             | 226      | NONE  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.31" = 0.06; 2" = 0.15; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 3.88  
 TUBING INSIDE DIA. CAPACITY (GAL/FT): 1/8" = 0.0009; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.016; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH SAMPLER(S) SIGNATURE(S): [Signature] SAMPLING INITIATED AT: 1039 SAMPLING ENDED AT: NR  
 PUMP OR TUBING DEPTH IN WELL (feet): 38.08 TUBING MATERIAL CODE: T FIELD-FILTERED: Y FILTER SIZE: 10 μm  
 FIELD DECONTAMINATION: PUMP Y TUBING Y (replaced) Fibration Equipment Type: Y

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD                           | SAMPLE PUMP FLOW RATE<br>gal (me per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|-----------------------------------------------------------|----------------------------------------------|-------------------------|
| SAMPLE ID CODE                 | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                                           |                                              |                         |
|                                | 3          | G             | 40ml   | HCl                 | -                             |          | VOA<br>COB/DAGP<br>G-chem<br>METALS<br>NHS<br>GROSS ALPHA | 0.19                                         | BP                      |
|                                | 3          | G             | 40ml   | Nothio              | -                             | NM       |                                                           |                                              |                         |
|                                | 1          | P             | 1000ml | -                   | -                             |          |                                                           |                                              |                         |
|                                | 1          | P             | 500ml  | HNO3                | -                             |          |                                                           |                                              |                         |
|                                | 1          | AG            | 500ml  | H2SD4               | -                             |          |                                                           |                                              |                         |
|                                | 1          | P             | 1000ml | HNO3                | -                             |          |                                                           |                                              |                         |

REMARKS:

Shoen Present YES QD

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2).  
 optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

L1224093-05

# Form FD 9000-24 GROUNDWATER SAMPLING LOG

SITE NAME: VISTA  
WELL NO: MW-07A  
SITE LOCATION: APDPA, FL

DATE: 6-1-20  
PURGING DATA  
WELL DIAMETER (Inches): 2 TUBING DIAMETER (Inches): 1/4  
WELL SCREEN INTERVAL DEPTHS: 1.23 feet to 12.23 feet  
WELL ELEVATION TOC (ft NGVD): 109.26  
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable)  $= (71.03 \text{ feet} - 42.83 \text{ feet}) \times 0.163 \text{ gallons/foot} = 4.60 \text{ gallons}$   
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
(only fill out if applicable)  $= 0.2 \text{ gallons} + (0.0026 \text{ gallons/foot} \times 71.03 \text{ feet}) + 0.05 \text{ gallons} = 0.43 \text{ gallons}$

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOF |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|-------------------------------------------|---------------------------------------------------------|------------------|----------|-------|------|
| 1118 | 4.20                    | 4.80                           | 0.24             | 46.14                 | 7.79                | 25.3       | 321                                       | 0.6                                                     | 3.65             | 111      |       |      |
| 1121 | 0.72                    | 5.52                           | 0.24             | 46.14                 | 7.79                | 25.3       | 322                                       | 0.6                                                     | 4.42             | 111      |       |      |
| 1124 | 0.72                    | 6.24                           | 0.24             | 46.64                 | 7.79                | 25.3       | 322                                       | 0.7                                                     | 4.27             | 110      |       |      |
| 1127 | 0.72                    | 6.96                           | 0.24             | 46.65                 | 7.79                | 25.4       | 322                                       | 0.7                                                     | 3.03             | 110      | None  |      |

WELL CAPACITY (Gallons Per Foot):  $0.75" = 0.02$ ;  $1" = 0.04$ ;  $1.25" = 0.06$ ;  $1.5" = 0.10$ ;  $2" = 0.16$ ;  $2.5" = 0.25$ ;  $3" = 0.37$ ;  $3.5" = 0.55$ ;  $4" = 0.85$ ;  $4.5" = 1.02$ ;  $5" = 1.47$ ;  $5.5" = 1.88$   
TUBING INSIDE DIA. CAPACITY (Gal./ft.):  $1/8" = 0.0008$ ;  $3/16" = 0.0014$ ;  $1/4" = 0.0026$ ;  $5/16" = 0.004$ ;  $3/8" = 0.008$ ;  $1/2" = 0.016$ ;  $5/8" = 0.032$   
PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PAO-TECH  
PUMP OR TUBING DEPTH IN WELL (feet): 66.03  
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)  
SAMPLER(S) SIGNATURE(S): [Signature]  
TUBING MATERIAL CODE: T  
SAMPLING INITIATED AT: 1128  
SAMPLING ENDED AT: NR  
FIELD FILTERED: Y (N) FILTER SIZE: 10 μm  
Filtration Equipment Type: Y (N)

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE<br>gal (ml) per minute | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|----------------------------------------------|-------------------------|
| SAMPLE ID CODE                 | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (ml) | FINAL pH |                                 |                                              |                         |
|                                | 3          | G             | 40ml   | HCl                 | -                             |          | VQA                             | 0.24                                         | BP                      |
|                                | 3          | G             | 40ml   | NaOH                | -                             | NM       | EDB/DAGP                        |                                              |                         |
|                                | 1          | P             | 1000ml | -                   | -                             |          | G-CHEM                          |                                              |                         |
|                                | 1          | P             | 500ml  | HNO3                | -                             |          | METALS                          |                                              |                         |
|                                | 1          | AG            | 500ml  | H2SO4               | -                             |          | NH3                             |                                              |                         |
|                                | 1          | P             | 1000ml | HNO3                | -                             |          | GROSS ALPHA                     |                                              |                         |

REMARKS:

Shoen Present: YES (N)

MATERIAL CODES: (Specify)

SAMPLING EQUIPMENT CODES:

APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2), optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)  
Revision Date: February 12, 2009



Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

|                  |  |        |  |                          |  |              |  |
|------------------|--|--------|--|--------------------------|--|--------------|--|
| SITE NAME: VISTA |  |        |  | SITE LOCATION: APTKA, FL |  |              |  |
| WELL NO: MW-9A   |  |        |  | SAMPLE ID:               |  |              |  |
| WELL DIAMETER: 3 |  | TUBING |  | PURGING DATA             |  | DATE: 6-1-20 |  |

|                                                                                       |  |                                                       |  |                                        |  |                                  |
|---------------------------------------------------------------------------------------|--|-------------------------------------------------------|--|----------------------------------------|--|----------------------------------|
| WELL<br>DIAMETER (Inches): 2                                                          |  | TUBING<br>DIAMETER (Inches): 1 1/4                    |  | PURGING DATA                           |  | DATE: 6-1-20                     |
| WELL ELEVATION TOO (R NGVD):                                                          |  | WELL SCREEN INTERVAL<br>DEPTH: 43.5 feet to 63.4 feet |  | STATIC DEPTH<br>TO WATER (feet): 47.36 |  | PURGE PUMP TYPE<br>OR BAILER: BP |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - (only fill out if applicable)) |  | GROUNDWATER ELEVATION (R NGVD):                       |  |                                        |  |                                  |

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable)

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
(only fill out if applicable)

INITIAL DISCHARGE

|                                                    |               |                                                  |       |                            |    |                        |           |                                     |  |
|----------------------------------------------------|---------------|--------------------------------------------------|-------|----------------------------|----|------------------------|-----------|-------------------------------------|--|
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 53.05 |               | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 53.05 |       | PURGING INITIATED AT: 0743 |    | PURGING ENDED AT: 0806 |           | TOTAL VOLUME PURGED (gallons): 4.83 |  |
| TIME                                               | VOLUME PURGED | CUMUL. VOLUME PURGED                             | PURGE | DEPTH TO                   | pH | COND.                  | DISSOLVED |                                     |  |

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.68; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0004; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.018  
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

|                                                                                        |  |                                                                |  |                                                                         |                                 |
|----------------------------------------------------------------------------------------|--|----------------------------------------------------------------|--|-------------------------------------------------------------------------|---------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION:<br><b>DAN ARMOUR / PRO-TECH</b>                      |  | SAMPLER(S) SIGNATURE(S):<br><i>[Signature]</i>                 |  | SAMPLING DATA                                                           |                                 |
| PUMP OR TUBING DEPTH IN WELL (feet):<br><b>53.05</b>                                   |  | TUBING MATERIAL CODE:<br><b>T</b>                              |  | SAMPLING INITIATED AT:<br><b>0801</b>                                   | SAMPLING ENDED AT:<br><b>NR</b> |
| FIELD DECONTAMINATION:<br>PUMP <b>Y</b> <input checked="" type="checkbox"/> <b>(N)</b> |  | TUBING <b>Y</b> <input checked="" type="checkbox"/> <b>(N)</b> |  | FIELD FILTERED: <b>Y</b> <input checked="" type="checkbox"/> <b>(N)</b> | FILTER SIZE:<br><b>10</b>       |

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |              | ANALYSIS AND/OR METHOD          |                                            |                         | SAMPLING EQUIPMENT CODE |  |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|--------------|---------------------------------|--------------------------------------------|-------------------------|-------------------------|--|
| SAMPLE ID CODE                 | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE gal (min per minute) | SAMPLING EQUIPMENT CODE |                         |  |
| 3                              | G          | 40ml          | HCl    | -                   | N/A                           | VOA          | 0.21                            | BP                                         |                         |                         |  |
| 3                              | G          | 40ml          | Nathio | -                   | -                             | SOIL         |                                 |                                            |                         |                         |  |
| 1                              | P          | 1000ml        | -      | -                   | -                             | G-CHEM       |                                 |                                            |                         |                         |  |
| 1                              | P          | 500ml         | HNO3   | -                   | -                             | METALS       |                                 |                                            |                         |                         |  |
| 1                              | AG         | 500ml         | H2SO4  | -                   | -                             | HL3          |                                 |                                            |                         |                         |  |
| 1                              | P          | 1000ml        | HNO3   | -                   | -                             | SPRINT ALPHA |                                 |                                            |                         |                         |  |

|                                     |                                                                                                                                                                                                       |      |   |   |   |     |             |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|---|---|-----|-------------|
| <b>REMARKS:</b>                     | 1000 ml                                                                                                                                                                                               | HND3 | - | - | - | AHS | Spray Alpha |
| <b>SCREEN:</b>                      | No.                                                                                                                                                                                                   |      |   |   |   |     |             |
| <b>MATERIAL CODES:</b><br>(Specify) | AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicates; T = Teflon; O = Other                                                                                       |      |   |   |   |     |             |
| <b>SAMPLING EQUIPMENT CODES:</b>    | APP = After Peristaltic Pump; B = Baffler; BP = Bladder Pump; ESP = Electric Submersible Pump;<br>RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |      |   |   |   |     |             |
| <b>NOTES:</b>                       | 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.<br>2. STABILIZATION CRITERIA FOR RANGE OF VARIATION                                                          |      |   |   |   |     |             |

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2);  
optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

**Revision Date:** February 12, 2009

Form FD 9000-24;  
GROUNDWATER SAMPLING LOG

L 1224093-07

SITE NAME: VISTA SITE LOCATION: APOTKA FL  
WELL NO: MW-11A SAMPLE ID: \_\_\_\_\_ DATE: 6-1-20

PURGING DATA

WELL DIAMETER (Inches): 2 TUBING DIAMETER (Inches): 1.4 WELL SCREEN INTERVAL DEPTH: 37.5 feet to 52.5 feet STATIC DEPTH TO WATER (feet): 43.75 PURGE PUMP TYPE OR BAILER: BP  
WELL ELEVATION TOG (ft NGVD): NA GROUNDWATER ELEVATION (ft NGVD): NA  
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable) = 157.50 feet - 43.75 feet X 0.163 gallons/foot = 2.24 gallons  
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
(only fill out if applicable) = 0.2 gallons + (0.002 gallons/foot X 52.50 feet) + 0.05 gallons = 0.4 gallons  
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 49.50 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 42.50 PURGING INITIATED AT: 0715 PURGING ENDED AT: 0737 TOTAL VOLUME PURGED (gallons): 4.40

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm at 25°C) | DISSOLVED OXYGEN (micro units mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|-------------------------------|-----------------------------------------------------|------------------|----------|-------|------|
| 0727 | 2.40                    | 2.40                           | 0.2              | 43.85                 | 7.60                | 24.1       | 320                           | 2.4                                                 | 4.37             | 153      |       |      |
| 0730 | 0.60                    | 3.00                           | 0.2              | 43.85                 | 7.64                | 24.1       | 319                           | 2.4                                                 | 4.49             | 153      |       |      |
| 0733 | 0.60                    | 3.60                           | 0.2              | 43.85                 | 7.64                | 24.1       | 319                           | 2.4                                                 | 3.34             | 152      |       |      |
| 0736 | 0.60                    | 4.20                           | 0.2              | 43.86                 | 7.65                | 24.1       | 319                           | 2.4                                                 | 3.53             | 151      | NONE  |      |

WELL CAPACITY (Gallons Per Foot): 0.78" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.55  
TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0006; 1/4" = 0.0014; 3/8" = 0.0028; 1/2" = 0.004; 5/8" = 0.006; 3/4" = 0.008; 7/8" = 0.010; 1" = 0.016  
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
PUMP OR TUBING DEPTH IN WELL (feet): 42.50 TUBING MATERIAL CODE: T SAMPLING INITIATED AT: 0737 SAMPLING ENDED AT: NR  
FIELD DECONTAMINATION: PUMP Y TUBING Y (replaced) FIELD FILTERED: Y FILTER SIZE: \_\_\_\_\_  
Filtration Equipment Type: \_\_\_\_\_ DUPLICATE: Y

SAMPLE CONTAINER SPECIFICATION

SAMPLE PRESERVATION

INTENDED ANALYSIS AND/OR METHOD

SAMPLE PUMP FLOW RATE (gal (min per minute))

SAMPLING EQUIPMENT CODE

| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (gal (min per minute)) | SAMPLING EQUIPMENT CODE |
|----------------|--------------|---------------|--------|-------------------|-------------------------------|----------|---------------------------------|----------------------------------------------|-------------------------|
|                | 3            | G             | 40ml   | HCl               | -                             | NA       | VOA                             | 0.20                                         | BP                      |
|                | 3            | G             | 40ml   | NaOH              | -                             |          | 2011                            |                                              |                         |
|                | 1            | P             | 1000ml | -                 | -                             |          | G-CHEM                          |                                              |                         |
|                | 1            | P             | 500ml  | HNO3              | -                             |          | METALS                          |                                              |                         |
|                | 1            | AG            | 500ml  | H2SO4             | -                             |          | NH3                             |                                              |                         |
|                | 1            | P             | 1000ml | HNO3              | -                             |          | GRAV ALPHA                      |                                              |                         |

REMARKS:

SHEEN: No

MATERIAL CODES: (Specify)

AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES:

APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

- NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009



Form FD 9000-24;  
**GROUNDWATER SAMPLING LOG**

|                  |            |                         |  |
|------------------|------------|-------------------------|--|
| SITE NAME: VISTA |            | SITE LOCATION: APOKA FL |  |
| WELL NO: MW-14A  | SAMPLE ID: | DATE: 6-1-20            |  |
| PURGING DATA     |            |                         |  |

|                                                                                                                                               |  |                                                  |  |                                                     |  |                                     |  |                               |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--|-----------------------------------------------------|--|-------------------------------------|--|-------------------------------|--|
| WELL DIAMETER (Inches): 2                                                                                                                     |  | TUBING DIAMETER (Inches): 1/4                    |  | WELL SCREEN INTERVAL DEPTH (38.1 feet to 58.1 feet) |  | STATIC DEPTH TO WATER (feet): 45.80 |  | PURGE PUMP TYPE OR BAILEY: BP |  |
| WELL ELEVATION TOC (ft NGVD): NA                                                                                                              |  |                                                  |  | GROUNDWATER ELEVATION (ft NGVD): NA                 |  |                                     |  |                               |  |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)                |  |                                                  |  |                                                     |  |                                     |  |                               |  |
| = 158.15 feet - 45.80 feet X 0.163 gallons/foot = 2.01 gallons                                                                                |  |                                                  |  |                                                     |  |                                     |  |                               |  |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable) |  |                                                  |  |                                                     |  |                                     |  |                               |  |
| = 0.2 gallons + (0.006 gallons/foot X 58.15 feet) + 0.05 gallons = 0.40 gallons                                                               |  |                                                  |  |                                                     |  |                                     |  |                               |  |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 38.15                                                                                            |  | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58.15 |  | PURGING                                             |  | PUMPING                             |  |                               |  |

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.55; 5" = 1.02; 6" = 1.47; 12" = 5.85  
TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0004; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.018; 3/4" = 0.016  
PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

|                                                                       |  |                                                                                                                 |  |                                                                     |  |                                                      |  |
|-----------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------|--|------------------------------------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION:<br><b>DAN ARMOUR / PRO-TECH</b>     |  | SAMPLER(S) SIGNATURE(S):<br> |  | SAMPLING INITIATED AT: <b>0841</b>                                  |  | SAMPLING ENDED AT: <b>NR</b>                         |  |
| PUMP OR TUBING DEPTH IN WELL (feet):<br><b>48.15</b>                  |  | TUBING MATERIAL CODE: <b>T</b>                                                                                  |  | FIELD FILTERED: <b>Y</b> <input checked="" type="radio"/> <b>µm</b> |  | FILTER SIZE: <b>NR</b>                               |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="radio"/> |  | TUBING <b>Y</b> <input checked="" type="radio"/> (replaced)                                                     |  | Filtration Equipment Type:                                          |  | DUPLICATE: <b>Y</b> <input checked="" type="radio"/> |  |

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE gal (mlt per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|--------------------------------------------|-------------------------|
| SAMPLE ID CODE                 | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (ml) | FINAL pH |                                 |                                            |                         |
|                                | 3          | C             | 40ml   | HCl                 | -                             | N/A      | VOA                             | 0.21                                       | BP                      |
|                                | 3          | G             | 40ml   | Nathio              | -                             | -        | 2011                            |                                            |                         |
|                                | 1          | P             | 1000ml | -                   | -                             | -        | G-CHEM                          |                                            |                         |
|                                | 1          | P             | 500ml  | HNO3                | -                             | -        | METALS                          |                                            |                         |
|                                | 1          | AG            | 500ml  | H2SO4               | -                             | -        | NH3                             |                                            |                         |
|                                | 1          | P             | 1000ml | HNO3                | -                             | -        | SPRINT ALPHA                    |                                            |                         |

REMARKS:

SACEN: No

**MATERIAL CODES:**  
(Specify)

**SAMPLING EQUIPMENT CODES:** **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other

**SAMPLING EQUIPMENT CODES:**

APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;  
RFPF = Reverse Flow Peristaltic Pump; SSM = Siphon Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 22.12, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2);  
optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

**Revision Date:** February 12, 2009

L1224093-09

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

SITE NAME: **VISTA** SITE LOCATION: **APOTKA, FL**  
WELL NO: **MW-15A** SAMPLE ID: DATE: **6-1-20**

## PURGING DATA

WELL DIAMETER (inches): **2** TUBING DIAMETER (inches): **1/4** WELL SCREEN INTERVAL DEPTH: **49.3** feet to **69.3** feet STATIC DEPTH TO WATER (feet): **42.28** PURGE PUMP TYPE OR BAILER: **BP**  
WELL ELEVATION TOG (ft NGVD): **NA** GROUNDWATER ELEVATION (ft NGVD): **NA**  
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
= **169.30** feet - **42.28** feet X **0.163** gallons/foot = **4.40** gallons  
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
= **0.2** gallons + (**0.0026** gallons/foot X **69.30** feet) + **0.05** gallons = **0.43** gallons  
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **64.30** FINAL PUMP OR TUBING DEPTH IN WELL (feet): **64.30** PURGING INITIATED AT: **0633** PURGING ENDED AT: **0701** TOTAL VOLUME PURGED (gallons): **7.00**

| TIME | VOLUME PURGED (gallons) | CUMUL VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm at 25°C) | DISSOLVED OXYGEN (mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|-------------------------------|------------------|-----------------------|---------------------|------------|-------------------------------|-----------------------------------------|------------------|----------|-------|------|
| 0651 | 4.50                    | 4.50                          | 0.25             | 43.02                 | 4.85                | 25.8       | 77                            | 2.4                                     | 3.99             | 195      |       |      |
| 0654 | 0.75                    | 5.25                          | 0.25             | 43.02                 | 4.85                | 25.8       | 76                            | 2.5                                     | 3.72             | 177      |       |      |
| 0657 | 0.75                    | 6.00                          | 0.25             | 43.02                 | 4.85                | 25.8       | 76                            | 2.5                                     | 3.71             | 179      |       |      |
| 0700 | 0.75                    | 6.75                          | 0.25             | 43.02                 | 4.86                | 25.8       | 75                            | 2.5                                     | 3.71             | 180      | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.63; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0004; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / PRO-TECH** SAMPLER(S) SIGNATURE(S):   
PUMP OR TUBING DEPTH IN WELL (feet): **64.30** TUBING MATERIAL CODE: **T** SAMPLING INITIATED AT: **0701** SAMPLING ENDED AT: **NR**  
FIELD DECONTAMINATION: PUMP **Y** (checked) TUBING **Y** (checked) (replaced) FIELD FILTERED: **Y** (checked) FILTER SIZE: **NR**  
Filtration Equipment Type: **NR**

## SAMPLE CONTAINER SPECIFICATION

## SAMPLE PRESERVATION

| SAMPLE ID CODE | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (gal per minute) | SAMPLING EQUIPMENT CODE |
|----------------|------------|---------------|--------|-------------------|-------------------------------|----------|---------------------------------|----------------------------------------|-------------------------|
|                | 3          | G             | 40ml   | HCl               | -                             | ALM      | VOA                             | 0.25                                   | BP                      |
|                | 3          | G             | 40ml   | Nathio            | -                             |          | 8011                            |                                        |                         |
|                | 1          | P             | 1000ml | -                 | -                             |          | G-CHEM                          |                                        |                         |
|                | 1          | P             | 500ml  | HNO3              | -                             |          | METALS                          |                                        |                         |
|                | 1          | AG            | 500ml  | H2SO4             | -                             |          | HH3                             |                                        |                         |
|                | 1          | P             | 1000ml | HNO3              | -                             |          | SPRUS ALPHA                     |                                        |                         |

## REMARKS:

SCREEN: **NO**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-186, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009

L1224093-11

Form FD 9000-24

## GROUNDWATER SAMPLING LOG

SITE NAME: VISTA WELL NO: MW-02AR SAMPLE ID:  SITE LOCATION: APDPA, FL DATE: 6-2-20

WELL DIAMETER (Inches): 2 TUBING DIAMETER (Inches): 1/4 PURGING DATA

WELL ELEVATION TOC (ft NGVD): 82.22 WELL SCREEN INTERVAL DEPTH (ft) to 91.06 STATIC DEPTH TO WATER (ft): 32.42 PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable)  $= 141.06 \text{ feet} - 32.42 \text{ feet} \times 0.163 \text{ gallons/foot} = 1.41 \text{ gallons}$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
(only fill out if applicable)  $= 0.2 \text{ gallons} + (0.002 \text{ gallons/foot} \times 41.06 \text{ feet}) + 0.05 \text{ gallons} = 0.31 \text{ gallons}$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 36.06 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 36.06 PURGING INITIATED AT: 0711 PURGING ENDED AT: 0731 TOTAL VOLUME PURGED (gallons): 3.00

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$ | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOUR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------------------------------------|------------------------------------------------------|------------------|----------|-------|-------|
| 0721 | 1.50                    | 1.50                           | 0.15             | 35.39                 | 4.93                | 25.6       | 43                                                           | 0.5                                                  | 3.87             | 183      |       |       |
| 0724 | 0.45                    | 1.95                           | 0.15             | 35.39                 | 4.96                | 25.6       | 43                                                           | 0.5                                                  | 3.72             | 185      |       |       |
| 0727 | 0.45                    | 2.40                           | 0.15             | 35.39                 | 4.98                | 25.6       | 43                                                           | 0.5                                                  | 3.39             | 186      |       |       |
| 0730 | 0.45                    | 2.85                           | 0.15             | 35.39                 | 4.97                | 25.6       | 43                                                           | 0.5                                                  | 3.62             | 181      | None  |       |

WELL CAPACITY (Gallons Per Foot):  $0.75" = 0.02$ ;  $1" = 0.04$ ;  $1.25" = 0.06$ ;  $1.5" = 0.08$ ;  $1.75" = 0.10$ ;  $2" = 0.12$ ;  $2.25" = 0.14$ ;  $2.5" = 0.16$ ;  $2.75" = 0.18$ ;  $3" = 0.20$ ;  $3.25" = 0.22$ ;  $3.5" = 0.24$ ;  $3.75" = 0.26$ ;  $4" = 0.28$ ;  $4.25" = 0.30$ ;  $4.5" = 0.32$ ;  $4.75" = 0.34$ ;  $5" = 0.36$ ;  $5.25" = 0.38$ ;  $5.5" = 0.40$ ;  $5.75" = 0.42$ ;  $6" = 0.44$ ;  $6.25" = 0.46$ ;  $6.5" = 0.48$ ;  $6.75" = 0.50$ ;  $7" = 0.52$ ;  $7.25" = 0.54$ ;  $7.5" = 0.56$ ;  $7.75" = 0.58$ ;  $8" = 0.60$ ;  $8.25" = 0.62$ ;  $8.5" = 0.64$ ;  $8.75" = 0.66$ ;  $9" = 0.68$ ;  $9.25" = 0.70$ ;  $9.5" = 0.72$ ;  $9.75" = 0.74$ ;  $10" = 0.76$ ;  $10.25" = 0.78$ ;  $10.5" = 0.80$ ;  $10.75" = 0.82$ ;  $11" = 0.84$ ;  $11.25" = 0.86$ ;  $11.5" = 0.88$ ;  $11.75" = 0.90$ ;  $12" = 0.92$ ;  $12.25" = 0.94$ ;  $12.5" = 0.96$ ;  $12.75" = 0.98$ ;  $13" = 1.00$ ;  $13.25" = 1.02$ ;  $13.5" = 1.04$ ;  $13.75" = 1.06$ ;  $14" = 1.08$ ;  $14.25" = 1.10$ ;  $14.5" = 1.12$ ;  $14.75" = 1.14$ ;  $15" = 1.16$ ;  $15.25" = 1.18$ ;  $15.5" = 1.20$ ;  $15.75" = 1.22$ ;  $16" = 1.24$ ;  $16.25" = 1.26$ ;  $16.5" = 1.28$ ;  $16.75" = 1.30$ ;  $17" = 1.32$ ;  $17.25" = 1.34$ ;  $17.5" = 1.36$ ;  $17.75" = 1.38$ ;  $18" = 1.40$ ;  $18.25" = 1.42$ ;  $18.5" = 1.44$ ;  $18.75" = 1.46$ ;  $19" = 1.48$ ;  $19.25" = 1.50$ ;  $19.5" = 1.52$ ;  $19.75" = 1.54$ ;  $20" = 1.56$ ;  $20.25" = 1.58$ ;  $20.5" = 1.60$ ;  $20.75" = 1.62$ ;  $21" = 1.64$ ;  $21.25" = 1.66$ ;  $21.5" = 1.68$ ;  $21.75" = 1.70$ ;  $22" = 1.72$ ;  $22.25" = 1.74$ ;  $22.5" = 1.76$ ;  $22.75" = 1.78$ ;  $23" = 1.80$ ;  $23.25" = 1.82$ ;  $23.5" = 1.84$ ;  $23.75" = 1.86$ ;  $24" = 1.88$ ;  $24.25" = 1.90$ ;  $24.5" = 1.92$ ;  $24.75" = 1.94$ ;  $25" = 1.96$ ;  $25.25" = 1.98$ ;  $25.5" = 2.00$ ;  $25.75" = 2.02$ ;  $26" = 2.04$ ;  $26.25" = 2.06$ ;  $26.5" = 2.08$ ;  $26.75" = 2.10$ ;  $27" = 2.12$ ;  $27.25" = 2.14$ ;  $27.5" = 2.16$ ;  $27.75" = 2.18$ ;  $28" = 2.20$ ;  $28.25" = 2.22$ ;  $28.5" = 2.24$ ;  $28.75" = 2.26$ ;  $29" = 2.28$ ;  $29.25" = 2.30$ ;  $29.5" = 2.32$ ;  $29.75" = 2.34$ ;  $30" = 2.36$ ;  $30.25" = 2.38$ ;  $30.5" = 2.40$ ;  $30.75" = 2.42$ ;  $31" = 2.44$ ;  $31.25" = 2.46$ ;  $31.5" = 2.48$ ;  $31.75" = 2.50$ ;  $32" = 2.52$ ;  $32.25" = 2.54$ ;  $32.5" = 2.56$ ;  $32.75" = 2.58$ ;  $33" = 2.60$ ;  $33.25" = 2.62$ ;  $33.5" = 2.64$ ;  $33.75" = 2.66$ ;  $34" = 2.68$ ;  $34.25" = 2.70$ ;  $34.5" = 2.72$ ;  $34.75" = 2.74$ ;  $35" = 2.76$ ;  $35.25" = 2.78$ ;  $35.5" = 2.80$ ;  $35.75" = 2.82$ ;  $36" = 2.84$ ;  $36.25" = 2.86$ ;  $36.5" = 2.88$ ;  $36.75" = 2.90$ ;  $37" = 2.92$ ;  $37.25" = 2.94$ ;  $37.5" = 2.96$ ;  $37.75" = 2.98$ ;  $38" = 3.00$ ;  $38.25" = 3.02$ ;  $38.5" = 3.04$ ;  $38.75" = 3.06$ ;  $39" = 3.08$ ;  $39.25" = 3.10$ ;  $39.5" = 3.12$ ;  $39.75" = 3.14$ ;  $40" = 3.16$ ;  $40.25" = 3.18$ ;  $40.5" = 3.20$ ;  $40.75" = 3.22$ ;  $41" = 3.24$ ;  $41.25" = 3.26$ ;  $41.5" = 3.28$ ;  $41.75" = 3.30$ ;  $42" = 3.32$ ;  $42.25" = 3.34$ ;  $42.5" = 3.36$ ;  $42.75" = 3.38$ ;  $43" = 3.40$ ;  $43.25" = 3.42$ ;  $43.5" = 3.44$ ;  $43.75" = 3.46$ ;  $44" = 3.48$ ;  $44.25" = 3.50$ ;  $44.5" = 3.52$ ;  $44.75" = 3.54$ ;  $45" = 3.56$ ;  $45.25" = 3.58$ ;  $45.5" = 3.60$ ;  $45.75" = 3.62$ ;  $46" = 3.64$ ;  $46.25" = 3.66$ ;  $46.5" = 3.68$ ;  $46.75" = 3.70$ ;  $47" = 3.72$ ;  $47.25" = 3.74$ ;  $47.5" = 3.76$ ;  $47.75" = 3.78$ ;  $48" = 3.80$ ;  $48.25" = 3.82$ ;  $48.5" = 3.84$ ;  $48.75" = 3.86$ ;  $49" = 3.88$ ;  $49.25" = 3.90$ ;  $49.5" = 3.92$ ;  $49.75" = 3.94$ ;  $50" = 3.96$ ;  $50.25" = 3.98$ ;  $50.5" = 4.00$ ;  $50.75" = 4.02$ ;  $51" = 4.04$ ;  $51.25" = 4.06$ ;  $51.5" = 4.08$ ;  $51.75" = 4.10$ ;  $52" = 4.12$ ;  $52.25" = 4.14$ ;  $52.5" = 4.16$ ;  $52.75" = 4.18$ ;  $53" = 4.20$ ;  $53.25" = 4.22$ ;  $53.5" = 4.24$ ;  $53.75" = 4.26$ ;  $54" = 4.28$ ;  $54.25" = 4.30$ ;  $54.5" = 4.32$ ;  $54.75" = 4.34$ ;  $55" = 4.36$ ;  $55.25" = 4.38$ ;  $55.5" = 4.40$ ;  $55.75" = 4.42$ ;  $56" = 4.44$ ;  $56.25" = 4.46$ ;  $56.5" = 4.48$ ;  $56.75" = 4.50$ ;  $57" = 4.52$ ;  $57.25" = 4.54$ ;  $57.5" = 4.56$ ;  $57.75" = 4.58$ ;  $58" = 4.60$ ;  $58.25" = 4.62$ ;  $58.5" = 4.64$ ;  $58.75" = 4.66$ ;  $59" = 4.68$ ;  $59.25" = 4.70$ ;  $59.5" = 4.72$ ;  $59.75" = 4.74$ ;  $60" = 4.76$ ;  $60.25" = 4.78$ ;  $60.5" = 4.80$ ;  $60.75" = 4.82$ ;  $61" = 4.84$ ;  $61.25" = 4.86$ ;  $61.5" = 4.88$ ;  $61.75" = 4.90$ ;  $62" = 4.92$ ;  $62.25" = 4.94$ ;  $62.5" = 4.96$ ;  $62.75" = 4.98$ ;  $63" = 5.00$ ;  $63.25" = 5.02$ ;  $63.5" = 5.04$ ;  $63.75" = 5.06$ ;  $64" = 5.08$ ;  $64.25" = 5.10$ ;  $64.5" = 5.12$ ;  $64.75" = 5.14$ ;  $65" = 5.16$ ;  $65.25" = 5.18$ ;  $65.5" = 5.20$ ;  $65.75" = 5.22$ ;  $66" = 5.24$ ;  $66.25" = 5.26$ ;  $66.5" = 5.28$ ;  $66.75" = 5.30$ ;  $67" = 5.32$ ;  $67.25" = 5.34$ ;  $67.5" = 5.36$ ;  $67.75" = 5.38$ ;  $68" = 5.40$ ;  $68.25" = 5.42$ ;  $68.5" = 5.44$ ;  $68.75" = 5.46$ ;  $69" = 5.48$ ;  $69.25" = 5.50$ ;  $69.5" = 5.52$ ;  $69.75" = 5.54$ ;  $70" = 5.56$ ;  $70.25" = 5.58$ ;  $70.5" = 5.60$ ;  $70.75" = 5.62$ ;  $71" = 5.64$ ;  $71.25" = 5.66$ ;  $71.5" = 5.68$ ;  $71.75" = 5.70$ ;  $72" = 5.72$ ;  $72.25" = 5.74$ ;  $72.5" = 5.76$ ;  $72.75" = 5.78$ ;  $73" = 5.80$ ;  $73.25" = 5.82$ ;  $73.5" = 5.84$ ;  $73.75" = 5.86$ ;  $74" = 5.88$ ;  $74.25" = 5.90$ ;  $74.5" = 5.92$ ;  $74.75" = 5.94$ ;  $75" = 5.96$ ;  $75.25" = 5.98$ ;  $75.5" = 6.00$ ;  $75.75" = 6.02$ ;  $76" = 6.04$ ;  $76.25" = 6.06$ ;  $76.5" = 6.08$ ;  $76.75" = 6.10$ ;  $77" = 6.12$ ;  $77.25" = 6.14$ ;  $77.5" = 6.16$ ;  $77.75" = 6.18$ ;  $78" = 6.20$ ;  $78.25" = 6.22$ ;  $78.5" = 6.24$ ;  $78.75" = 6.26$ ;  $79" = 6.28$ ;  $79.25" = 6.30$ ;  $79.5" = 6.32$ ;  $79.75" = 6.34$ ;  $80" = 6.36$ ;  $80.25" = 6.38$ ;  $80.5" = 6.40$ ;  $80.75" = 6.42$ ;  $81" = 6.44$ ;  $81.25" = 6.46$ ;  $81.5" = 6.48$ ;  $81.75" = 6.50$ ;  $82" = 6.52$ ;  $82.25" = 6.54$ ;  $82.5" = 6.56$ ;  $82.75" = 6.58$ ;  $83" = 6.60$ ;  $83.25" = 6.62$ ;  $83.5" = 6.64$ ;  $83.75" = 6.66$ ;  $84" = 6.68$ ;  $84.25" = 6.70$ ;  $84.5" = 6.72$ ;  $84.75" = 6.74$ ;  $85" = 6.76$ ;  $85.25" = 6.78$ ;  $85.5" = 6.80$ ;  $85.75" = 6.82$ ;  $86" = 6.84$ ;  $86.25" = 6.86$ ;  $86.5" = 6.88$ ;  $86.75" = 6.90$ ;  $87" = 6.92$ ;  $87.25" = 6.94$ ;  $87.5" = 6.96$ ;  $87.75" = 6.98$ ;  $88" = 7.00$ ;  $88.25" = 7.02$ ;  $88.5" = 7.04$ ;  $88.75" = 7.06$ ;  $89" = 7.08$ ;  $89.25" = 7.10$ ;  $89.5" = 7.12$ ;  $89.75" = 7.14$ ;  $90" = 7.16$ ;  $90.25" = 7.18$ ;  $90.5" = 7.20$ ;  $90.75" = 7.22$ ;  $91" = 7.24$ ;  $91.25" = 7.26$ ;  $91.5" = 7.28$ ;  $91.75" = 7.30$ ;  $92" = 7.32$ ;  $92.25" = 7.34$ ;  $92.5" = 7.36$ ;  $92.75" = 7.38$ ;  $93" = 7.40$ ;  $93.25" = 7.42$ ;  $93.5" = 7.44$ ;  $93.75" = 7.46$ ;  $94" = 7.48$ ;  $94.25" = 7.50$ ;  $94.5" = 7.52$ ;  $94.75" = 7.54$ ;  $95" = 7.56$ ;  $95.25" = 7.58$ ;  $95.5" = 7.60$ ;  $95.75" = 7.62$ ;  $96" = 7.64$ ;  $96.25" = 7.66$ ;  $96.5" = 7.68$ ;  $96.75" = 7.70$ ;  $97" = 7.72$ ;  $97.25" = 7.74$ ;  $97.5" = 7.76$ ;  $97.75" = 7.78$ ;  $98" = 7.80$ ;  $98.25" = 7.82$ ;  $98.5" = 7.84$ ;  $98.75" = 7.86$ ;  $99" = 7.88$ ;  $99.25" = 7.90$ ;  $99.5" = 7.92$ ;  $99.75" = 7.94$ ;  $100" = 7.96$ ;  $100.25" = 7.98$ ;  $100.5" = 8.00$ ;  $100.75" = 8.02$ ;  $101" = 8.04$ ;  $101.25" = 8.06$ ;  $101.5" = 8.08$ ;  $101.75" = 8.10$ ;  $102" = 8.12$ ;  $102.25" = 8.14$ ;  $102.5" = 8.16$ ;  $102.75" = 8.18$ ;  $103" = 8.20$ ;  $103.25" = 8.22$ ;  $103.5" = 8.24$ ;  $103.75" = 8.26$ ;  $104" = 8.28$ ;  $104.25" = 8.30$ ;  $104.5" = 8.32$ ;  $104.75" = 8.34$ ;  $105" = 8.36$ ;  $105.25" = 8.38$ ;  $105.5" = 8.40$ ;  $105.75" = 8.42$ ;  $106" = 8.44$ ;  $106.25" = 8.46$ ;  $106.5" = 8.48$ ;  $106.75" = 8.50$ ;  $107" = 8.52$ ;  $107.25" = 8.54$ ;  $107.5" = 8.56$ ;  $107.75" = 8.58$ ;  $108" = 8.60$ ;  $108.25" = 8.62$ ;  $108.5" = 8.64$ ;  $108.75" = 8.66$ ;  $109" = 8.68$ ;  $109.25" = 8.70$ ;  $109.5" = 8.72$ ;  $109.75" = 8.74$ ;  $110" = 8.76$ ;  $110.25" = 8.78$ ;  $110.5" = 8.80$ ;  $110.75" = 8.82$ ;  $111" = 8.84$ ;  $111.25" = 8.86$ ;  $111.5" = 8.88$ ;  $111.75" = 8.90$ ;  $112" = 8.92$ ;  $112.25" = 8.94$ ;  $112.5" = 8.96$ ;  $112.75" = 8.98$ ;  $113" = 9.00$ ;  $113.25" = 9.02$ ;  $113.5" = 9.04$ ;  $113.75" = 9.06$ ;  $114" = 9.08$ ;  $114.25" = 9.10$ ;  $114.5" = 9.12$ ;  $114.75" = 9.14$ ;  $115" = 9.16$ ;  $115.25" = 9.18$ ;  $115.5" = 9.20$ ;  $115.75" = 9.22$ ;  $116" = 9.24$ ;  $116.25" = 9.26$ ;  $116.5" = 9.28$ ;  $116.75" = 9.30$ ;  $117" = 9.32$ ;  $117.25" = 9.34$ ;  $117.5" = 9.36$ ;  $117.75" = 9.38$ ;  $118" = 9.40$ ;  $118.25" = 9.42$ ;  $118.5" = 9.44$ ;  $118.75" = 9.46$ ;  $119" = 9.48$ ;  $119.25" = 9.50$ ;  $119.5" = 9.52$ ;  $119.75" = 9.54$ ;  $120" = 9.56$ ;  $120.25" = 9.58$ ;  $120.5" = 9.60$ ;  $120.75" = 9.62$ ;  $121" = 9.64$ ;  $121.25" = 9.66$ ;  $121.5" = 9.68$ ;  $121.75" = 9.70$ ;  $122" = 9.72$ ;  $122.25" = 9.74$ ;  $122.5" = 9.76$ ;  $122.75" = 9.78$ ;  $123" = 9.80$ ;  $123.25" = 9.82$ ;  $123.5" = 9.84$ ;  $123.75" = 9.86$ ;  $124" = 9.88$ ;  $124.25" = 9.90$ ;  $124.5" = 9.92$ ;  $124.75" = 9.94$ ;  $125" = 9.96$ ;  $125.25" = 9.98$ ;  $125.5" = 10.00$ ;  $125.75" = 10.02$ ;  $126" = 10.04$ ;  $126.25" = 10.06$ ;  $126.5" = 10.08$ ;  $126.75" = 10.10$ ;  $127" = 10.12$ ;  $127.25" = 10.14$ ;  $127.5" = 10.16$ ;  $127.75" = 10.18$ ;  $128" = 10.20$ ;  $128.25" = 10.22$ ;  $128.5" = 10.24$ ;  $128.75" = 10.26$ ;  $129" = 10.28$ ;  $129.25" = 10.30$ ;  $129.5" = 10.32$ ;  $129.75" = 10.34$ ;  $130" = 10.36$ ;  $130.25" = 10.38$ ;  $130.5" = 10.40$ ;  $130.75" = 10.42$ ;  $131" = 10.44$ ;  $131.25" = 10.46$ ;  $131.5" = 10.48$ ;  $131.75" = 10.50$ ;  $132" = 10.52$ ;  $132.25" = 10.54$ ;  $132.5" = 10.56$ ;  $132.75" = 10.58$ ;  $133" = 10.60$ ;  $133.25" = 10.62$ ;  $133.5" = 10.64$ ;  $133.75" = 10.66$ ;  $134" = 10.68$ ;  $134.25" = 10.70$ ;  $134.5" = 10.72$ ;  $134.75" = 10.74$ ;  $135" = 10.76$ ;  $135.25" = 10.78$ ;  $135.5" = 10.80$ ;  $135.75" = 10.82$ ;  $136" = 10.84$ ;  $136.25" = 10.86$ ;  $136.5" = 10.88$ ;  $136.75" = 10.90$ ;  $137" = 10.92$ ;  $137.25" = 10.94$ ;  $137.5" = 10.96$ ;  $137.75" = 10.98$ ;  $138" = 11.00$ ;  $138.25" = 11.02$ ;  $138.5" = 11.04$ ;  $138.75" = 11.06$ ;  $139" = 11.08$ ;  $139.25" = 11.10$ ;  $139.5" = 11.12$ ;  $139.75" = 11.14$ ;  $140" = 11.16$ ;  $140.25" = 11.18$ ;  $140.5" = 11.20$ ;  $140.75" = 11.22$ ;  $141" = 11.24$ ;  $141.25" = 11.26$ ;  $141.5" = 11.28$ ;  $141.75" = 11.30$ ;  $142" = 11.32$ ;  $142.25" = 11.34$ ;  $142.5" = 11.36$ ;  $142.75" = 11.38$ ;  $143" = 11.40$ ;  $143.25" = 11.42$ ;  $143.5" = 11.44$ ;  $143.75" = 11.46$ ;  $144" = 11.48$ ;  $144.25" = 11.50$ ;  $144.5" = 11.52$ ;  $144.75" = 11.54$ ;  $145" = 11.56$ ;  $145.25" = 11.58$ ;  $145.5" = 11.60$ ;  $145.75" = 11.62$ ;  $146" = 11.64$ ;  $146.25" = 11.66$ ;  $146.5" = 11.68$ ;  $146.75" = 11.70$ ;  $147" = 11.72$ ;  $147.25" = 11.74$ ;  $147.5" = 11.76$ ;  $147.75" = 11.78$ ;  $148" = 11.80$ ;  $148.25" = 11.82$ ;  $148.5" = 11.84$ ;  $148.75" = 11.86$ ;  $149" = 11.88$ ;  $149.25" = 11.90$ ;  $149.5" = 11.92$ ;  $149.75" = 11.94$ ;  $150" = 11.96$ ;  $150.25" = 11.98$ ;  $150.5" = 12.00$ ;  $150.75" = 12.02$ ;  $151" = 12.04$ ;  $151.25" = 12.06$ ;  $151.5" = 12.08$ ;  $151.75" = 12.10$ ;  $152" = 12.12$ ;  $152.25" = 12.14$ ;  $152.5" = 12.16$ ;  $152.75" = 12.18$ ;  $153" = 12.20$ ;  $153.25" = 12.22$ ;  $153.5" = 12.24$ ;  $153.75" = 12.26$ ;  $154" = 12.28$ ;  $154.25" = 12.30$ ;  $154.5" = 12.32$ ;  $154.75" = 12.34$ ;  $155" = 12.36$ ;  $155.25" = 12.38$ ;  $155.5" = 12.40$ ;  $155.75" = 12.42$ ;  $156" = 12.44$ ;  $156.25" = 12.46$ ;  $156.5" = 12.48$ ;  $156.75" = 12.50$ ;  $157" = 12.52$ ;  $157.25" = 12.54$ ;  $157.5" = 12.56$ ;  $157.75$



Form FD 9000-24  
GROUNDWATER SAMPLING LOG

[illegible]

| SAMPLED BY (PRINT) / AFFILIATION:                                                                                                                                                                                           |            |               |        | SAMPLING DATA            |                               |                             |                                 |                                            |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|--------|--------------------------|-------------------------------|-----------------------------|---------------------------------|--------------------------------------------|-------------------------|
| DAN ARMOUR / PRO-TECH                                                                                                                                                                                                       |            |               |        | SAMPLER(S) SIGNATURE(S): |                               | SAMPLING INITIATED AT: 0815 |                                 |                                            |                         |
| PUMP OR TUBING DEPTH IN WELL (feet): 67.35                                                                                                                                                                                  |            |               |        | TUBING MATERIAL CODE: T  |                               | SAMPLING ENDED AT: NA       |                                 |                                            |                         |
| FIELD DECONTAMINATION: PUMP Y (N)                                                                                                                                                                                           |            |               |        | TUBING Y (N) (replaced)  |                               | FIELD-FILTERED: Y (N)       |                                 |                                            |                         |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                              |            |               |        | TUBING MATERIAL CODE: T  |                               | FILTER SIZE:                |                                 |                                            |                         |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                              |            |               |        | TUBING MATERIAL CODE: T  |                               | FILTRATION EQUIPMENT TYPE:  |                                 |                                            |                         |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                              |            |               |        | TUBING MATERIAL CODE: T  |                               | DUPLICATE: Y (N)            |                                 |                                            |                         |
| SAMPLE ID CODE                                                                                                                                                                                                              | CONTAINERS | MATERIAL CODE | VOLUME | SAMPLE PRESERVATION      |                               |                             | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (gal/min per minute) | SAMPLING EQUIPMENT CODE |
|                                                                                                                                                                                                                             |            |               |        | PRESERVATIVE USED        | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH                    |                                 |                                            |                         |
|                                                                                                                                                                                                                             | 3          | G             | 40ml   | HCl                      | -                             | NM                          | VDA                             | 0.22                                       | BP                      |
|                                                                                                                                                                                                                             | 3          | G             | 40ml   | Nathio                   | -                             |                             | EDB/DAGP                        |                                            |                         |
|                                                                                                                                                                                                                             | 1          | P             | 1000ml | -                        | -                             |                             | G-CHEM                          |                                            |                         |
|                                                                                                                                                                                                                             | 1          | P             | 500ml  | HNO3                     | -                             |                             | METALS                          |                                            |                         |
|                                                                                                                                                                                                                             | 1          | AG            | 500ml  | H2SO4                    | -                             |                             | NH3                             |                                            |                         |
|                                                                                                                                                                                                                             | 1          | P             | 1000ml | HNO3                     | -                             |                             | GROSS ALPHA                     |                                            |                         |
| REMARKS:                                                                                                                                                                                                                    |            |               |        |                          |                               |                             |                                 |                                            |                         |
| Shoen Present YES (NO)                                                                                                                                                                                                      |            |               |        |                          |                               |                             |                                 |                                            |                         |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other                                                                                              |            |               |        |                          |                               |                             |                                 |                                            |                         |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |            |               |        |                          |                               |                             |                                 |                                            |                         |
| NOTES: 1. The above do not constitute all of the information required by Chapter 83, 400, 5.1.2. 2. Stabilization Control                                                                                                   |            |               |        |                          |                               |                             |                                 |                                            |                         |

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION J)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2),  
optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009



|                  |  |                           |  |
|------------------|--|---------------------------|--|
| SITE NAME: VISTA |  | SITE LOCATION: APOPKA, FL |  |
| WELL NO: MW-8R   |  | SAMPLE ID:                |  |

|                               |  |                                                   |  |              |  |              |
|-------------------------------|--|---------------------------------------------------|--|--------------|--|--------------|
| WELL<br>DIAMETER (Inches): 2  |  | TUBING<br>DIAMETER (Inches): 1/4                  |  | PURGING DATA |  | DATE: 6-2-20 |
| WELL ELEVATION TOC (ft NGVD): |  | WELL SCREEN INTERVAL<br>DEPTH: 61 feet to 31 feet |  | STATIC DEPTH |  |              |

|                                                                                                         |                                                |                                        |                               |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------|-------------------------------|
| WELL ELEVATION TOC (ft NGVD):                                                                           | WELL SCREEN INTERVAL DEPTH: 61 feet to 31 feet | STATIC DEPTH TO WATER (feet): 45.85    | PURGE PUMP TYPE OR BAILER: BP |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH) x WELL DIAMETER (Inches) x 0.00087 | 99.60                                          | GROUNDWATER ELEVATION (ft NGVD): 52.15 |                               |
| (only fill out if applicable)                                                                           |                                                |                                        |                               |

EQUIPMENT VOLUME PURGE: (only fill out if applicable)

EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) X TUBING CAPACITY

gallons/foot =

gallons

|                                                    |  |                                                  |  |                           |  |         |  |
|----------------------------------------------------|--|--------------------------------------------------|--|---------------------------|--|---------|--|
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 66.00 |  | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 66.00 |  | PURGING INITIATED AT 0.00 |  | PURGING |  |
|                                                    |  |                                                  |  |                           |  |         |  |

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.05; 2" = 0.10; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.65  
TUBING INSIDE DIA. CAPACITY (Gal/FL): 1/8" = 0.0009; 3/16" = 0.0016; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018  
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
(PRINT) / (REVISION)

|                                                                   |  |                                                                                                                 |  |                                     |                              |
|-------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------|--|-------------------------------------|------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION:<br><b>DAN ARMOUR / PRO-TECH</b> |  | SAMPLER(S) SIGNATURE(S):<br> |  | SAMPLING DATA                       |                              |
| PUMP OR TUBING DEPTH IN WELL (feet):<br><b>66.00</b>              |  | TUBING MATERIAL CODE: <b>T</b>                                                                                  |  | SAMPLING INITIATED AT: <b>0658</b>  | SAMPLING ENDED AT: <b>NR</b> |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <b>(N)</b>                   |  | TUBING <b>Y</b> <b>(N)</b>                                                                                      |  | FIELD-FILTERED: <b>Y</b> <b>(N)</b> | FILTER SIZE:                 |

| SAMPLE CONTAINER SPECIFICATION |            |               |         | SAMPLE PRESERVATION            |                               |          | INTENDED ANALYSIS AND/OR METHOD |  |                                       | SAMPLING EQUIPMENT      |  |
|--------------------------------|------------|---------------|---------|--------------------------------|-------------------------------|----------|---------------------------------|--|---------------------------------------|-------------------------|--|
| SAMPLE ID CODE                 | CONTAINERS | MATERIAL CODE | VOLUME  | PRESERVATIVE USED              | TOTAL VOL ADDED IN FIELD (ml) | FINAL pH |                                 |  | SAMPLE PUMP FLOW RATE (ml per minute) | SAMPLING EQUIPMENT CODE |  |
|                                | 3          | G             | 40ml    | H <sub>2</sub> Li              | -                             | Nm       |                                 |  |                                       |                         |  |
|                                | 3          | G             | 40ml    | Nothid                         | -                             |          |                                 |  |                                       |                         |  |
|                                | 1          | P             | 1000 ml | -                              | -                             |          |                                 |  |                                       |                         |  |
|                                | 1          | P             | 500ml   | HNO <sub>3</sub>               | -                             |          |                                 |  |                                       |                         |  |
|                                | 1          | AG            | 500ml   | H <sub>2</sub> SO <sub>4</sub> | -                             |          |                                 |  |                                       |                         |  |
|                                | 1          | P             | 1000ml  | HNO <sub>3</sub>               | -                             |          |                                 |  |                                       |                         |  |
| REMARKS:                       |            |               |         |                                |                               |          |                                 |  |                                       |                         |  |
| Shoen Present: YES NO          |            |               |         |                                |                               |          |                                 |  |                                       |                         |  |

Shoen Present YES NO

AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;  
 RFPF = Reverse Flow Peristaltic Pump; SM = Sump Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2),  
optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24;  
**GROUNDWATER SAMPLING LOG**

[illegible]

| SAMPLED BY (PRINT) / AFFILIATION:                                                                                                                                                                                          |              |               |        | SAMPLER(S) SIGNATURE(S):                         |                               |          |           | SAMPLING DATA                                                         |    |                         |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|--------|--------------------------------------------------|-------------------------------|----------|-----------|-----------------------------------------------------------------------|----|-------------------------|--|
| DAN ARMSTRONG / PRD-TECH                                                                                                                                                                                                   |              |               |        | <i>[Signature]</i>                               |                               |          |           | SAMPLING INITIATED AT: 0840                                           |    |                         |  |
| PUMP OR TUBING DEPTH IN WELL (feet): NA                                                                                                                                                                                    |              |               |        | TUBING MATERIAL CODE: NA                         |                               |          |           | FIELD FILTERED: Y <input checked="" type="checkbox"/> FILTER SIZE: NA |    |                         |  |
| FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)                                                                                                                                                                   |              |               |        | DUPLICATE: Y <input checked="" type="checkbox"/> |                               |          |           |                                                                       |    |                         |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |              |               |        | SAMPLE PRESERVATION                              |                               |          |           | INTENDED ANALYSIS AND/OR METHOD                                       |    | SAMPLING EQUIPMENT CODE |  |
| SAMPLE ID CODE                                                                                                                                                                                                             | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |           |                                                                       |    |                         |  |
| 1                                                                                                                                                                                                                          | 1            | P             | 1 L    | -                                                | -                             | NA       | G - Gases |                                                                       | NA |                         |  |
| 1                                                                                                                                                                                                                          | 1            | P             | 500 mL | HA03                                             | -                             | NA       | METALS    |                                                                       | NA |                         |  |
| 1                                                                                                                                                                                                                          | 1            | P             | 500 mL | HES04                                            | -                             | NA       | HA03      |                                                                       | 1  |                         |  |
| 3                                                                                                                                                                                                                          | 3            | CG            | 40 mL  | Artisid                                          | -                             | NA       | EDR/DBIP  |                                                                       | 1  |                         |  |
| REMARKS:                                                                                                                                                                                                                   |              |               |        |                                                  |                               |          |           |                                                                       |    |                         |  |
| SHEEN: NO                                                                                                                                                                                                                  |              |               |        |                                                  |                               |          |           |                                                                       |    |                         |  |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; B = Silicone; T = Teflon; O = Other                                                                                             |              |               |        |                                                  |                               |          |           |                                                                       |    |                         |  |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Balor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |              |               |        |                                                  |                               |          |           |                                                                       |    |                         |  |
| NOTES: 1. The above do not constitute all of the information required by Chapter 62.100, BAC 2. STABILIZATION CODE: NA                                                                                                     |              |               |        |                                                  |                               |          |           |                                                                       |    |                         |  |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-166, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 22-12, SECTION 3)  
pH:  $\pm 0.2$  units Temperature:  $\pm 0.2^\circ\text{C}$  Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2);  
optionally,  $\pm 0.2\text{ mg/L}$  or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20\text{ NTU}$ ; optionally  $\pm 5\text{ NTU}$  or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009





Revision Date: February 12, 2009

|                  |            |                          |  |
|------------------|------------|--------------------------|--|
| SITE NAME: VISTA |            | SITE LOCATION: APOKA, FL |  |
| WELL NO: MW-11A  | SAMPLE ID: | DATE: 7-6-20             |  |

### PURGING DATA

| PURGING DATA                                                                                                                                                                                                                      |                                                  |                                                  |                                     |                                     |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|-------------------------------------|-------------------------------------|--|
| WELL DIAMETER (inches): 2                                                                                                                                                                                                         | TUBING DIAMETER (inches): 1.75                   | WELL SCREEN INTERVAL DEPTH: 33.5 feet to 25 feet | STATIC DEPTH TO WATER (feet): 43.02 | PURGE PUMP TYPE OR BAILER: BP       |  |
| WELL ELEVATION TOG (ft NGVD): NA                                                                                                                                                                                                  |                                                  | GROUNDWATER ELEVATION (ft NGVD): NA              |                                     |                                     |  |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (52.50 feet - 43.02 feet) X 0.163 gallons/foot = 2.36 gallons                                 |                                                  |                                                  |                                     |                                     |  |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= 0.2 gallons + (0.0024 gallons/foot X 52.50 feet) + 0.05 gallons = 0.40 gallons |                                                  |                                                  |                                     |                                     |  |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 42.50                                                                                                                                                                                | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 42.50 | PURGING INITIATED AT: 0741                       | PURGING ENDED AT: 0803              | TOTAL VOLUME PURGED (gallons): 4.40 |  |

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

| SAMPLED BY (PRINT) / AFFILIATION:                                                                                                                                                                                           |              |               |         | SAMPLER(S) SIGNATURE(S): |                               |          | SAMPLING DATA                   |  | SAMPLING INITIATED AT: 0803                |  | SAMPLING ENDED AT: NR   |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|---------|--------------------------|-------------------------------|----------|---------------------------------|--|--------------------------------------------|--|-------------------------|--|
| PUMP OR TUBING DEPTH IN WELL (feet): 42.50                                                                                                                                                                                  |              |               |         | TUBING MATERIAL CODE: T  |                               |          | FIELD-FILTERED: Y (N)           |  | FILTER SIZE:                               |  |                         |  |
| FIELD DECONTAMINATION: PUMP Y (N)                                                                                                                                                                                           |              |               |         | TUBING Y (N) (replaced)  |                               |          | DUPLICATE: Y (N)                |  |                                            |  |                         |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                              |              |               |         | SAMPLE PRESERVATION      |                               |          | INTENDED ANALYSIS AND/OR METHOD |  | SAMPLE PUMP FLOW RATE gal (min per minute) |  | SAMPLING EQUIPMENT CODE |  |
| SAMPLE ID CODE                                                                                                                                                                                                              | # CONTAINERS | MATERIAL CODE | VOLUME  | PRESERVATIVE USED        | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |  |                                            |  |                         |  |
| 2                                                                                                                                                                                                                           | 6            | G             | 40 ml   | HCl                      | -                             | NM       | VOA                             |  |                                            |  | BP                      |  |
| 3                                                                                                                                                                                                                           | 6            | G             | 40 ml   | NaOH                     | -                             | -        | 8011                            |  |                                            |  |                         |  |
| 1                                                                                                                                                                                                                           | P            | P             | 400 ml  | -                        | -                             | -        | G-CHEM                          |  | 0.20                                       |  |                         |  |
| 1                                                                                                                                                                                                                           | P            | P             | 500 ml  | HNO3                     | -                             | -        | METALS                          |  |                                            |  |                         |  |
| 1                                                                                                                                                                                                                           | AG           | AG            | 500 ml  | H2SO4                    | -                             | -        | NH3                             |  |                                            |  |                         |  |
| 1                                                                                                                                                                                                                           | P            | P             | 1000 ml | HNO3                     | -                             | -        | GROSS ALPHA                     |  |                                            |  |                         |  |
| REMARKS:                                                                                                                                                                                                                    |              |               |         |                          |                               |          |                                 |  |                                            |  |                         |  |
| GREEN: NO                                                                                                                                                                                                                   |              |               |         |                          |                               |          |                                 |  |                                            |  |                         |  |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other                                                                                              |              |               |         |                          |                               |          |                                 |  |                                            |  |                         |  |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |              |               |         |                          |                               |          |                                 |  |                                            |  |                         |  |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009

# ANALYTICAL REPORT

July 30, 2020

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## Vista

Sample Delivery Group: L1242951  
Samples Received: 07/07/2020  
Project Number: 200  
Description: Vista-Semiannual GW Parameters June Dec  
Site: FL26  
Report To: Eric Parker  
5110 US Hwy 301 South  
Baldwin, FL 32234

Entire Report Reviewed By:



Stacy Kennedy  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



|                                                    |    |                 |
|----------------------------------------------------|----|-----------------|
| Cp: Cover Page                                     | 1  | <sup>1</sup> Cp |
| Tc: Table of Contents                              | 2  |                 |
| Ss: Sample Summary                                 | 3  | <sup>2</sup> Tc |
| Cn: Case Narrative                                 | 4  |                 |
| Sr: Sample Results                                 | 5  | <sup>3</sup> Ss |
| MW-2AR L1242951-01                                 | 5  |                 |
| MW-11A L1242951-02                                 | 7  | <sup>4</sup> Cn |
| TRIP BLANK L1242951-03                             | 8  | <sup>5</sup> Sr |
| Qc: Quality Control Summary                        | 9  |                 |
| Wet Chemistry by Method 300.0                      | 9  | <sup>6</sup> Qc |
| Volatile Organic Compounds (GC/MS) by Method 8260B | 11 |                 |
| EDB / DBCP by Method 8011                          | 14 | <sup>7</sup> Gl |
| Gl: Glossary of Terms                              | 15 | <sup>8</sup> Al |
| Al: Accreditations & Locations                     | 16 |                 |
| Sc: Sample Chain of Custody                        | 17 | <sup>9</sup> Sc |





## MW-2AR L1242951-01 GW

Collected by  
Danny ArmourCollected date/time  
07/06/20 08:40Received date/time  
07/07/20 08:30

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1508595 | 1        | 07/14/20 12:26        | 07/14/20 12:26     | GLN     | Mt. Juliet, TN |
| EDB / DBCP by Method 8011                          | WG1505027 | 1        | 07/07/20 13:15        | 07/07/20 22:19     | ADF     | Mt. Juliet, TN |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss

## MW-11A L1242951-02 WW

Collected by  
Danny ArmourCollected date/time  
07/06/20 08:03Received date/time  
07/07/20 08:30

| Method                        | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Wet Chemistry by Method 300.0 | WG1504839 | 5        | 07/07/20 19:01        | 07/07/20 19:01     | MCG     | Mt. Juliet, TN |

<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc

## TRIP BLANK L1242951-03 GW

Collected by  
Danny ArmourCollected date/time  
07/06/20 00:00Received date/time  
07/07/20 08:30

| Method                                             | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1508595 | 1        | 07/14/20 09:44        | 07/14/20 09:44     | GLN     | Mt. Juliet, TN |

<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



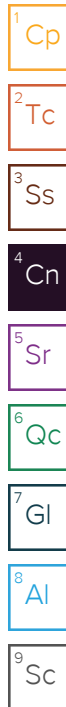
Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Stacy Kennedy  
Project Manager

### Volatile Organic Compounds (GC/MS) by Method 8260B

The value is outside laboratory established criteria.

| Batch     | Lab Sample ID                     | Analytes            |
|-----------|-----------------------------------|---------------------|
| WG1508595 | (LCS) R3549257-1, L1242951-01, 03 | 1,2-Dichlorobenzene |





## Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| <b>Analyte</b>                 |        |        |
| Sampling Method                | BP     |        |
| Groundwater Elevation          | 53.62  | ft     |
| pH (On Site)                   | 4.79   | su     |
| Temperature (on-site)          | 25.8   | Deg. C |
| Specific Conductance (on site) | 52     | uS/cm  |
| Dissolved Oxygen (on-site)     | .4     | mg/l   |
| Turbidity                      | 4.2    | NTU    |
| ORP                            | 135    | mV     |

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | C         | 0.120       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,1,1-Trichloroethane       | 0.0940         | C         | 0.0940      | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | C         | 0.130       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,1,2-Trichloroethane       | 0.0940         | C         | 0.0940      | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,1-Dichloroethane          | 0.114          | C         | 0.114       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,1-Dichloroethene          | 0.188          | C         | 0.188       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,2,3-Trichloropropane      | 0.247          | C         | 0.247       | 2.50        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,2-Dichlorobenzene         | 0.101          | C         | 0.101       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,2-Dichloroethane          | 0.108          | C         | 0.108       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,2-Dichloropropane         | 0.190          | C         | 0.190       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 1,4-Dichlorobenzene         | 0.121          | C         | 0.121       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 2-Butanone (MEK)            | 1.28           | C         | 1.28        | 5.00        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 2-Hexanone                  | 0.757          | C         | 0.757       | 5.00        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | C         | 0.823       | 5.00        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Acetone                     | 1.92           | C         | 1.05        | 25.0        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Acrylonitrile               | 0.873          | C         | 0.873       | 5.00        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Benzene                     | 0.0896         | C         | 0.0896      | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Bromochloromethane          | 0.145          | C         | 0.145       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Bromodichloromethane        | 0.0800         | C         | 0.0800      | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Bromoform                   | 0.186          | C         | 0.186       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Bromomethane                | 0.157          | C         | 0.157       | 2.50        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Carbon disulfide            | 0.101          | C         | 0.101       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Carbon tetrachloride        | 0.159          | C         | 0.159       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Chlorobenzene               | 0.140          | C         | 0.140       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Chloroethane                | 0.141          | C         | 0.141       | 2.50        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Chloroform                  | 0.0860         | C         | 0.0860      | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Chloromethane               | 0.153          | C         | 0.153       | 1.25        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Dibromochloromethane        | 0.128          | C         | 0.128       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Dibromomethane              | 0.117          | C         | 0.117       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Ethylbenzene                | 0.158          | C         | 0.158       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Iodomethane                 | 0.377          | C         | 0.377       | 10.0        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Methylene Chloride          | 1.07           | C         | 1.07        | 2.50        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Styrene                     | 0.117          | C         | 0.117       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Tetrachloroethene           | 0.199          | C         | 0.199       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Toluene                     | 0.412          | C         | 0.412       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Trichloroethene             | 0.153          | C         | 0.153       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Trichlorofluoromethane      | 0.130          | C         | 0.130       | 2.50        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Vinyl acetate               | 0.645          | C         | 0.645       | 5.00        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Vinyl chloride              | 0.118          | C         | 0.118       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| Xylenes, Total              | 0.316          | C         | 0.316       | 1.50        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| cis-1,2-Dichloroethene      | 0.0933         | C         | 0.0933      | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| cis-1,3-Dichloropropene     | 0.0976         | C         | 0.0976      | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| trans-1,2-Dichloroethene    | 0.152          | C         | 0.152       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



Collected date/time: 07/06/20 08:40

L1242951

## Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| trans-1,3-Dichloropropene   | 0.222          | <u>U</u>  | 0.222       | 0.500       | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | <u>U</u>  | 0.257       | 5.00        | 1        | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| (S) 4-Bromofluorobenzene    | 97.6           |           |             | 77.0-126    |          | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| (S) Toluene-d8              | 102            |           |             | 80.0-120    |          | 07/14/2020 12:26        | <a href="#">WG1508595</a> |
| (S) 1,2-Dichloroethane-d4   | 97.8           |           |             | 70.0-130    |          | 07/14/2020 12:26        | <a href="#">WG1508595</a> |

## EDB / DBCP by Method 8011

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,2-Dibromo-3-Chloropropane | 0.00430        | <u>U</u>  | 0.00430     | 0.0200      | 1        | 07/07/2020 22:19        | <a href="#">WG1505027</a> |
| Ethylene Dibromide          | 0.00240        | <u>U</u>  | 0.00240     | 0.0100      | 1        | 07/07/2020 22:19        | <a href="#">WG1505027</a> |

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr6  
Qc7  
Gl8  
Al9  
Sc



Additional Information

|                                | Result | Units  |
|--------------------------------|--------|--------|
| Analyte                        |        |        |
| Sampling Method                | BP     |        |
| pH (On Site)                   | 7.65   | su     |
| Temperature (on-site)          | 24.2   | Deg. C |
| Specific Conductance (on site) | 325    | uS/cm  |
| Dissolved Oxygen (on-site)     | 2.2    | mg/l   |
| Turbidity                      | 4.63   | NTU    |
| ORP                            | 57     | mV     |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

Wet Chemistry by Method 300.0

| Analyte        | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------|--------|-----------|-------|-------|----------|----------------------|---------------------------|
|                | mg/l   |           | mg/l  | mg/l  |          |                      |                           |
| Nitrate as (N) | 9.67   |           | 0.114 | 0.500 | 5        | 07/07/2020 19:01     | <a href="#">WG1504839</a> |

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Additional Information

|                 | Result | Units |
|-----------------|--------|-------|
| Analyte         |        |       |
| Sampling Method | Z      |       |

Volatile Organic Compounds (GC/MS) by Method 8260B

| Analyte                     | Result<br>ug/l | Qualifier | MDL<br>ug/l | RDL<br>ug/l | Dilution | Analysis<br>date / time | Batch                     |
|-----------------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| 1,1,1,2-Tetrachloroethane   | 0.120          | U         | 0.120       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,1,1-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,1,2,2-Tetrachloroethane   | 0.130          | U         | 0.130       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,1,2-Trichloroethane       | 0.0940         | U         | 0.0940      | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,1-Dichloroethane          | 0.114          | U         | 0.114       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,1-Dichloroethene          | 0.188          | U         | 0.188       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,2,3-Trichloropropane      | 0.247          | U         | 0.247       | 2.50        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,2-Dichlorobenzene         | 0.101          | U         | 0.101       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,2-Dichloroethane          | 0.108          | U         | 0.108       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,2-Dichloropropane         | 0.190          | U         | 0.190       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 1,4-Dichlorobenzene         | 0.121          | U         | 0.121       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 2-Butanone (MEK)            | 1.28           | U         | 1.28        | 5.00        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 2-Hexanone                  | 0.757          | U         | 0.757       | 5.00        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| 4-Methyl-2-pentanone (MIBK) | 0.823          | U         | 0.823       | 5.00        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Acetone                     | 2.11           | U         | 1.05        | 25.0        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Acrylonitrile               | 0.873          | U         | 0.873       | 5.00        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Benzene                     | 0.0896         | U         | 0.0896      | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Bromochloromethane          | 0.145          | U         | 0.145       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Bromodichloromethane        | 0.0800         | U         | 0.0800      | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Bromoform                   | 0.186          | U         | 0.186       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Bromomethane                | 0.157          | U         | 0.157       | 2.50        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Carbon disulfide            | 0.142          | U         | 0.101       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Carbon tetrachloride        | 0.159          | U         | 0.159       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Chlorobenzene               | 0.140          | U         | 0.140       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Chloroethane                | 0.141          | U         | 0.141       | 2.50        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Chloroform                  | 0.0860         | U         | 0.0860      | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Chloromethane               | 0.153          | U         | 0.153       | 1.25        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Dibromochloromethane        | 0.128          | U         | 0.128       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Dibromomethane              | 0.117          | U         | 0.117       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Ethylbenzene                | 0.158          | U         | 0.158       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Iodomethane                 | 0.377          | U         | 0.377       | 10.0        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Methylene Chloride          | 1.07           | U         | 1.07        | 2.50        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Styrene                     | 0.117          | U         | 0.117       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Tetrachloroethene           | 0.199          | U         | 0.199       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Toluene                     | 0.412          | U         | 0.412       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Trichloroethene             | 0.153          | U         | 0.153       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Trichlorofluoromethane      | 0.130          | U         | 0.130       | 2.50        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Vinyl acetate               | 0.645          | U         | 0.645       | 5.00        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Vinyl chloride              | 0.118          | U         | 0.118       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| Xylenes, Total              | 0.316          | U         | 0.316       | 1.50        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| cis-1,2-Dichloroethene      | 0.0933         | U         | 0.0933      | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| cis-1,3-Dichloropropene     | 0.0976         | U         | 0.0976      | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| trans-1,2-Dichloroethene    | 0.152          | U         | 0.152       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| trans-1,3-Dichloropropene   | 0.222          | U         | 0.222       | 0.500       | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| trans-1,4-Dichloro-2-butene | 0.257          | U         | 0.257       | 5.00        | 1        | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| (S) 4-Bromofluorobenzene    | 97.6           |           |             | 77.0-126    |          | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| (S) Toluene-d8              | 100            |           |             | 80.0-120    |          | 07/14/2020 09:44        | <a href="#">WG1508595</a> |
| (S) 1,2-Dichloroethane-d4   | 102            |           |             | 70.0-130    |          | 07/14/2020 09:44        | <a href="#">WG1508595</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3547182-1 07/07/20 09:21

|         | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|--------|--------|
| Analyte | mg/l      |              | mg/l   | mg/l   |
| Nitrate | 0.0227    | U            | 0.0227 | 0.100  |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1236648-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1236648-02 07/07/20 12:35 • (DUP) R3547182-3 07/07/20 12:46

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | mg/l            | mg/l       |          | %       |               | %              |
| Nitrate | 1.15            | 1.17       | 1        | 1.93    |               | 20             |

L1236668-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1236668-01 07/07/20 15:13 • (DUP) R3547182-6 07/07/20 15:23

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | mg/l            | mg/l       |          | %       |               | %              |
| Nitrate | 0.0227          | 0.0227     | 1        | 0.000   | U             | 20             |

Laboratory Control Sample (LCS)

(LCS) R3547182-2 07/07/20 09:32

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l         | mg/l       | %        | %           |               |
| Nitrate | 8.00         | 7.57       | 94.6     | 90.0-110    |               |

L1236648-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1236648-03 07/07/20 12:57 • (MS) R3547182-4 07/07/20 13:08 • (MSD) R3547182-5 07/07/20 13:40

|         | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD   | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| Analyte | mg/l         | mg/l            | mg/l      | mg/l       | %       | %        |          | %           |              |               | %     | %          |
| Nitrate | 5.00         | 1.35            | 6.42      | 6.41       | 101     | 101      | 1        | 80.0-120    |              |               | 0.279 | 20         |

L1236670-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1236670-02 07/07/20 15:56 • (MS) R3547182-7 07/07/20 16:07

|         | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte | mg/l         | mg/l            | mg/l      | %       |          | %           |              |
| Nitrate | 5.00         | 10.8            | 16.1      | 105     | 1        | 80.0-120    | L            |





L1242951-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1242951-02 07/07/20 15:56 • (MS) R3547182-9 07/07/20 16:07

| Analyte | Spike Amount<br>mg/l | Original Result<br>mg/l | MS Result<br>mg/l | MS Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier |
|---------|----------------------|-------------------------|-------------------|--------------|----------|------------------|--------------|
| Nitrate | 5.00                 | 10.8                    | 16.1              | 105          | 1        | 80.0-120         | L            |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3549257-4 07/14/20 08:25

| Analyte                     | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------------------------|-------------------|--------------|----------------|----------------|
| 1,1,1,2-Tetrachloroethane   | 0.120             | IC           | 0.120          | 0.500          |
| 1,1,1-Trichloroethane       | 0.0940            | IC           | 0.0940         | 0.500          |
| 1,1,2,2-Tetrachloroethane   | 0.130             | IC           | 0.130          | 0.500          |
| 1,1,2-Trichloroethane       | 0.0940            | IC           | 0.0940         | 0.500          |
| 1,1-Dichloroethane          | 0.114             | IC           | 0.114          | 0.500          |
| 1,1-Dichloroethene          | 0.188             | IC           | 0.188          | 0.500          |
| 1,2,3-Trichloropropane      | 0.247             | IC           | 0.247          | 2.50           |
| 1,2-Dichlorobenzene         | 0.101             | IC           | 0.101          | 0.500          |
| 1,2-Dichloroethane          | 0.108             | IC           | 0.108          | 0.500          |
| 1,2-Dichloropropane         | 0.190             | IC           | 0.190          | 0.500          |
| 1,4-Dichlorobenzene         | 0.121             | IC           | 0.121          | 0.500          |
| 2-Butanone (MEK)            | 1.28              | IC           | 1.28           | 5.00           |
| 2-Hexanone                  | 0.757             | IC           | 0.757          | 5.00           |
| 4-Methyl-2-pentanone (MIBK) | 0.823             | IC           | 0.823          | 5.00           |
| Acetone                     | 1.05              | IC           | 1.05           | 25.0           |
| Acrylonitrile               | 0.873             | IC           | 0.873          | 5.00           |
| Benzene                     | 0.0896            | IC           | 0.0896         | 0.500          |
| Bromochloromethane          | 0.145             | IC           | 0.145          | 0.500          |
| Bromodichloromethane        | 0.0800            | IC           | 0.0800         | 0.500          |
| Bromoform                   | 0.186             | IC           | 0.186          | 0.500          |
| Bromomethane                | 0.157             | IC           | 0.157          | 2.50           |
| Carbon disulfide            | 0.101             | IC           | 0.101          | 0.500          |
| Carbon tetrachloride        | 0.159             | IC           | 0.159          | 0.500          |
| Chlorobenzene               | 0.140             | IC           | 0.140          | 0.500          |
| Chlorodibromomethane        | 0.128             | IC           | 0.128          | 0.500          |
| Chloroethane                | 0.141             | IC           | 0.141          | 2.50           |
| Chloroform                  | 0.0860            | IC           | 0.0860         | 0.500          |
| Chloromethane               | 0.153             | IC           | 0.153          | 1.25           |
| cis-1,2-Dichloroethene      | 0.0933            | IC           | 0.0933         | 0.500          |
| cis-1,3-Dichloropropene     | 0.0976            | IC           | 0.0976         | 0.500          |
| Dibromomethane              | 0.117             | IC           | 0.117          | 0.500          |
| Ethylbenzene                | 0.158             | IC           | 0.158          | 0.500          |
| Iodomethane                 | 0.377             | IC           | 0.377          | 10.0           |
| Methylene Chloride          | 1.07              | IC           | 1.07           | 2.50           |
| Styrene                     | 0.117             | IC           | 0.117          | 0.500          |
| Tetrachloroethene           | 0.199             | IC           | 0.199          | 0.500          |
| Toluene                     | 0.412             | IC           | 0.412          | 0.500          |
| trans-1,2-Dichloroethene    | 0.152             | IC           | 0.152          | 0.500          |
| trans-1,3-Dichloropropene   | 0.222             | IC           | 0.222          | 0.500          |
| trans-1,4-Dichloro-2-butene | 0.257             | IC           | 0.257          | 5.00           |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3549257-4 07/14/20 08:25

| Analyte                   | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|---------------------------|-------------------|--------------|----------------|----------------|
| Trichloroethene           | 0.153             | U            | 0.153          | 0.500          |
| Trichlorofluoromethane    | 0.130             | U            | 0.130          | 2.50           |
| Vinyl acetate             | 0.645             | U            | 0.645          | 5.00           |
| Vinyl chloride            | 0.118             | U            | 0.118          | 0.500          |
| Xylenes, Total            | 0.316             | U            | 0.316          | 1.50           |
| (S) 1,2-Dichloroethane-d4 | 99.2              |              |                | 70.0-130       |
| (S) Toluene-d8            | 103               |              |                | 80.0-120       |
| (S) 4-Bromofluorobenzene  | 98.4              |              |                | 77.0-126       |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3549257-1 07/14/20 07:04 • (LCSD) R3549257-2 07/14/20 07:24

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| 1,1,1,2-Tetrachloroethane   | 5.00                 | 5.37               | 5.24                | 107           | 105            | 75.0-125         |               |                | 2.45     | 20              |
| 1,1,1-Trichloroethane       | 5.00                 | 5.06               | 5.08                | 101           | 102            | 73.0-124         |               |                | 0.394    | 20              |
| 1,1,2,2-Tetrachloroethane   | 5.00                 | 4.56               | 4.41                | 91.2          | 88.2           | 65.0-130         |               |                | 3.34     | 20              |
| 1,1,2-Trichloroethane       | 5.00                 | 5.38               | 5.11                | 108           | 102            | 80.0-120         |               |                | 5.15     | 20              |
| 1,1-Dichloroethane          | 5.00                 | 5.36               | 5.21                | 107           | 104            | 70.0-126         |               |                | 2.84     | 20              |
| 1,1-Dichloroethene          | 5.00                 | 5.35               | 5.15                | 107           | 103            | 71.0-124         |               |                | 3.81     | 20              |
| 1,2,3-Trichloropropane      | 5.00                 | 4.94               | 4.68                | 98.8          | 93.6           | 73.0-130         |               |                | 5.41     | 20              |
| 1,2-Dichlorobenzene         | 5.00                 | 6.08               | 5.91                | 122           | 118            | 79.0-121         | U             |                | 2.84     | 20              |
| 1,2-Dichloroethane          | 5.00                 | 4.96               | 4.82                | 99.2          | 96.4           | 70.0-128         |               |                | 2.86     | 20              |
| 1,2-Dichloropropane         | 5.00                 | 5.35               | 5.29                | 107           | 106            | 77.0-125         |               |                | 1.13     | 20              |
| 1,4-Dichlorobenzene         | 5.00                 | 5.27               | 5.15                | 105           | 103            | 79.0-120         |               |                | 2.30     | 20              |
| 2-Butanone (MEK)            | 25.0                 | 26.1               | 25.9                | 104           | 104            | 44.0-160         |               |                | 0.769    | 20              |
| 2-Hexanone                  | 25.0                 | 27.5               | 25.9                | 110           | 104            | 67.0-149         |               |                | 5.99     | 20              |
| 4-Methyl-2-pentanone (MIBK) | 25.0                 | 26.9               | 25.5                | 108           | 102            | 68.0-142         |               |                | 5.34     | 20              |
| Acetone                     | 25.0                 | 30.0               | 29.5                | 120           | 118            | 19.0-160         |               |                | 1.68     | 27              |
| Acrylonitrile               | 25.0                 | 27.2               | 26.8                | 109           | 107            | 55.0-149         |               |                | 1.48     | 20              |
| Benzene                     | 5.00                 | 5.06               | 4.95                | 101           | 99.0           | 70.0-123         |               |                | 2.20     | 20              |
| Bromochloromethane          | 5.00                 | 5.39               | 5.15                | 108           | 103            | 76.0-122         |               |                | 4.55     | 20              |
| Bromodichloromethane        | 5.00                 | 4.63               | 4.64                | 92.6          | 92.8           | 75.0-120         |               |                | 0.216    | 20              |
| Bromoform                   | 5.00                 | 4.79               | 4.71                | 95.8          | 94.2           | 68.0-132         |               |                | 1.68     | 20              |
| Bromomethane                | 5.00                 | 5.79               | 5.57                | 116           | 111            | 10.0-160         |               |                | 3.87     | 25              |
| Carbon disulfide            | 5.00                 | 5.10               | 4.99                | 102           | 99.8           | 61.0-128         |               |                | 2.18     | 20              |
| Carbon tetrachloride        | 5.00                 | 5.46               | 5.42                | 109           | 108            | 68.0-126         |               |                | 0.735    | 20              |
| Chlorobenzene               | 5.00                 | 5.25               | 5.04                | 105           | 101            | 80.0-121         |               |                | 4.08     | 20              |
| Chlorodibromomethane        | 5.00                 | 5.07               | 5.02                | 101           | 100            | 77.0-125         |               |                | 0.991    | 20              |



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3549257-1 07/14/20 07:04 • (LCSD) R3549257-2 07/14/20 07:24

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Chloroethane                | 5.00                 | 5.54               | 5.57                | 111           | 111            | 47.0-150         |                      |                       | 0.540    | 20              |
| Chloroform                  | 5.00                 | 4.82               | 4.68                | 96.4          | 93.6           | 73.0-120         |                      |                       | 2.95     | 20              |
| Chloromethane               | 5.00                 | 5.69               | 5.39                | 114           | 108            | 41.0-142         |                      |                       | 5.42     | 20              |
| cis-1,2-Dichloroethene      | 5.00                 | 5.06               | 5.00                | 101           | 100            | 73.0-120         |                      |                       | 1.19     | 20              |
| cis-1,3-Dichloropropene     | 5.00                 | 4.97               | 4.86                | 99.4          | 97.2           | 80.0-123         |                      |                       | 2.24     | 20              |
| Dibromomethane              | 5.00                 | 5.34               | 5.16                | 107           | 103            | 80.0-120         |                      |                       | 3.43     | 20              |
| Ethylbenzene                | 5.00                 | 5.11               | 4.94                | 102           | 98.8           | 79.0-123         |                      |                       | 3.38     | 20              |
| Iodomethane                 | 25.0                 | 25.4               | 24.8                | 102           | 99.2           | 33.0-147         |                      |                       | 2.39     | 26              |
| Methylene Chloride          | 5.00                 | 5.04               | 4.75                | 101           | 95.0           | 67.0-120         |                      |                       | 5.92     | 20              |
| Styrene                     | 5.00                 | 5.31               | 5.03                | 106           | 101            | 73.0-130         |                      |                       | 5.42     | 20              |
| Tetrachloroethene           | 5.00                 | 6.01               | 5.52                | 120           | 110            | 72.0-132         |                      |                       | 8.50     | 20              |
| Toluene                     | 5.00                 | 5.01               | 4.90                | 100           | 98.0           | 79.0-120         |                      |                       | 2.22     | 20              |
| trans-1,2-Dichloroethene    | 5.00                 | 5.44               | 5.17                | 109           | 103            | 73.0-120         |                      |                       | 5.09     | 20              |
| trans-1,3-Dichloropropene   | 5.00                 | 4.97               | 4.89                | 99.4          | 97.8           | 78.0-124         |                      |                       | 1.62     | 20              |
| trans-1,4-Dichloro-2-butene | 5.00                 | 4.91               | 4.71                | 98.2          | 94.2           | 33.0-144         |                      |                       | 4.16     | 20              |
| Trichloroethene             | 5.00                 | 5.48               | 5.30                | 110           | 106            | 78.0-124         |                      |                       | 3.34     | 20              |
| Trichlorofluoromethane      | 5.00                 | 5.01               | 4.89                | 100           | 97.8           | 59.0-147         |                      |                       | 2.42     | 20              |
| Vinyl acetate               | 25.0                 | 17.0               | 17.4                | 68.0          | 69.6           | 11.0-160         |                      |                       | 2.33     | 20              |
| Vinyl chloride              | 5.00                 | 5.98               | 5.91                | 120           | 118            | 67.0-131         |                      |                       | 1.18     | 20              |
| Xylenes, Total              | 15.0                 | 15.5               | 15.0                | 103           | 100            | 79.0-123         |                      |                       | 3.28     | 20              |
| (S) 1,2-Dichloroethane-d4   |                      |                    |                     | 98.6          | 98.4           | 70.0-130         |                      |                       |          |                 |
| (S) Toluene-d8              |                      |                    |                     | 104           | 102            | 80.0-120         |                      |                       |          |                 |
| (S) 4-Bromofluorobenzene    |                      |                    |                     | 98.3          | 99.1           | 77.0-126         |                      |                       |          |                 |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3547191-1 07/07/20 18:10

| Analyte                     | MB Result<br>ug/l | MB Qualifier | MB MDL<br>ug/l | MB RDL<br>ug/l |
|-----------------------------|-------------------|--------------|----------------|----------------|
| Ethylene Dibromide          | 0.00240           | U            | 0.00240        | 0.0100         |
| 1,2-Dibromo-3-Chloropropane | 0.00430           | U            | 0.00430        | 0.0200         |

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1235941-26 Original Sample (OS) • Duplicate (DUP)

(OS) L1235941-26 07/07/20 18:58 • (DUP) R3547191-3 07/07/20 18:46

| Analyte                     | Original Result<br>ug/l | DUP Result<br>ug/l | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|-----------------------------|-------------------------|--------------------|----------|--------------|---------------|------------------------|
| Ethylene Dibromide          | 0.00240                 | 0.00240            | 1        | 0.000        | U             | 20                     |
| 1,2-Dibromo-3-Chloropropane | 0.00430                 | 0.00430            | 1        | 0.000        | U             | 20                     |

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3547191-4 07/07/20 20:56 • (LCSD) R3547191-5 07/07/20 22:42

| Analyte                     | Spike Amount<br>ug/l | LCS Result<br>ug/l | LCSD Result<br>ug/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|-----------------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Ethylene Dibromide          | 0.250                | 0.239              | 0.243               | 95.6          | 97.2           | 60.0-140         |               |                | 1.66     | 20              |
| 1,2-Dibromo-3-Chloropropane | 0.250                | 0.221              | 0.230               | 88.4          | 92.0           | 60.0-140         |               |                | 3.99     | 20              |

L1235941-27 Original Sample (OS) • Matrix Spike (MS)

(OS) L1235941-27 07/07/20 18:34 • (MS) R3547191-2 07/07/20 18:22

| Analyte                     | Spike Amount<br>ug/l | Original Result<br>ug/l | MS Result<br>ug/l | MS Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier |
|-----------------------------|----------------------|-------------------------|-------------------|--------------|----------|------------------|--------------|
| Ethylene Dibromide          | 0.100                | 0.00240                 | 0.101             | 101          | 1        | 64.0-159         |              |
| 1,2-Dibromo-3-Chloropropane | 0.100                | 0.00430                 | 0.102             | 102          | 1        | 72.0-148         |              |



## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MDL                          | Method Detection Limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| RDL                          | Reported Detection Limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Rec.                         | Recovery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| RPD                          | Relative Percent Difference.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| SDG                          | Sample Delivery Group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (S)                          | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.                                                                                                                                                                                                                                               |
| Analyte                      | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.                                                                                                                                                                                                                                                                                                                                                                                                 |
| Dilution                     | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.                                                                                    |
| Limits                       | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.                                                                                                                                                                                                                                                      |
| Original Sample              | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.                                                                                                                                                                                                                                                                                                                            |
| Qualifier                    | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.                                                                                                                                                                  |
| Result                       | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Case Narrative (Cn)          | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.                                                                                                                                                                          |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.                                                                                                                                                                                              |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.                                                              |
| Sample Results (Sr)          | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.                                                                                                                                                                                             |
| Sample Summary (Ss)          | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.                                                                                                                                                                                                                                                                                                                                                            |

| Qualifier | Description                                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------------|
| I         | The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. |
| J         | The value is outside laboratory established criteria.                                                                |
| L         | Off-scale high. Actual value is known to be greater than value given.                                                |
| U         | Indicates the compound was analyzed for but not detected above the method detection limit.                           |

|   |    |
|---|----|
| 1 | Cp |
| 2 | Tc |
| 3 | Ss |
| 4 | Cn |
| 5 | Sr |
| 6 | Qc |
| 7 | Gl |
| 8 | Al |
| 9 | Sc |



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

## State Accreditations

|                         |             |                             |                  |
|-------------------------|-------------|-----------------------------|------------------|
| Alabama                 | 40660       | Nebraska                    | NE-OS-15-05      |
| Alaska                  | 17-026      | Nevada                      | TN-03-2002-34    |
| Arizona                 | AZ0612      | New Hampshire               | 2975             |
| Arkansas                | 88-0469     | New Jersey–NELAP            | TN002            |
| California              | 2932        | New Mexico <sup>1</sup>     | n/a              |
| Colorado                | TN00003     | New York                    | 11742            |
| Connecticut             | PH-0197     | North Carolina              | Env375           |
| Florida                 | E87487      | North Carolina <sup>1</sup> | DW21704          |
| Georgia                 | NELAP       | North Carolina <sup>3</sup> | 41               |
| Georgia <sup>1</sup>    | 923         | North Dakota                | R-140            |
| Idaho                   | TN00003     | Ohio–VAP                    | CL0069           |
| Illinois                | 200008      | Oklahoma                    | 9915             |
| Indiana                 | C-TN-01     | Oregon                      | TN200002         |
| Iowa                    | 364         | Pennsylvania                | 68-02979         |
| Kansas                  | E-10277     | Rhode Island                | LA000356         |
| Kentucky <sup>1 6</sup> | 90010       | South Carolina              | 84004            |
| Kentucky <sup>2</sup>   | 16          | South Dakota                | n/a              |
| Louisiana               | AI30792     | Tennessee <sup>1 4</sup>    | 2006             |
| Louisiana <sup>1</sup>  | LA180010    | Texas                       | T104704245-18-15 |
| Maine                   | TN0002      | Texas <sup>5</sup>          | LAB0152          |
| Maryland                | 324         | Utah                        | TN00003          |
| Massachusetts           | M-TN003     | Vermont                     | VT2006           |
| Michigan                | 9958        | Virginia                    | 460132           |
| Minnesota               | 047-999-395 | Washington                  | C847             |
| Mississippi             | TN00003     | West Virginia               | 233              |
| Missouri                | 340         | Wisconsin                   | 9980939910       |
| Montana                 | CERT0086    | Wyoming                     | A2LA             |

## Third Party Federal Accreditations

|                               |         |                     |               |
|-------------------------------|---------|---------------------|---------------|
| A2LA – ISO 17025              | 1461.01 | AIHA-LAP, LLC EMLAP | 100789        |
| A2LA – ISO 17025 <sup>5</sup> | 1461.02 | DOD                 | 1461.01       |
| Canada                        | 1461.01 | USDA                | P330-15-00234 |
| EPA–Crypto                    | TN00003 |                     |               |

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.







Revision Date: February 12, 2009

|                  |            |                          |  |
|------------------|------------|--------------------------|--|
| SITE NAME: VISTA |            | SITE LOCATION: APOKA, FL |  |
| WELL NO: MW-11A  | SAMPLE ID: | DATE: 7-6-20             |  |

### PURGING DATA

| PURGING DATA                                                                                                                                                                                                                      |                                                  |                                                  |                                     |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|-------------------------------------|-------------------------------------|
| WELL DIAMETER (inches): 2                                                                                                                                                                                                         | TUBING DIAMETER (inches): 1.4                    | WELL SCREEN INTERVAL DEPTH: 33.5 feet to 25 feet | STATIC DEPTH TO WATER (feet): 43.02 | PURGE PUMP TYPE OR BAILER: BP       |
| WELL ELEVATION TOG (ft NGVD): NA                                                                                                                                                                                                  |                                                  | GROUNDWATER ELEVATION (ft NGVD): NA              |                                     |                                     |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (52.50 feet - 43.02 feet) X 0.163 gallons/foot = 2.36 gallons                                 |                                                  |                                                  |                                     |                                     |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= 0.2 gallons + (0.0024 gallons/foot X 52.50 feet) + 0.05 gallons = 0.40 gallons |                                                  |                                                  |                                     |                                     |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 42.50                                                                                                                                                                                | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 42.50 | PURGING INITIATED AT: 0741                       | PURGING ENDED AT: 0803              | TOTAL VOLUME PURGED (gallons): 4.40 |

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

| SAMPLED BY (PRINT) / AFFILIATION:                                                                                                                                                                                           |              |               |          | SAMPLER(S) SIGNATURE(S): |                               |          | SAMPLING DATA                   |  | SAMPLING INITIATED AT: 0803                |  | SAMPLING ENDED AT: NR   |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|----------|--------------------------|-------------------------------|----------|---------------------------------|--|--------------------------------------------|--|-------------------------|--|
| PUMP OR TUBING DEPTH IN WELL (feet): 42.50                                                                                                                                                                                  |              |               |          | TUBING MATERIAL CODE: T  |                               |          | FIELD-FILTERED: Y (N)           |  | FILTER SIZE:                               |  |                         |  |
| FIELD DECONTAMINATION: PUMP Y (N)                                                                                                                                                                                           |              |               |          | TUBING Y (N) (replaced)  |                               |          | DUPLICATE: Y (N)                |  |                                            |  |                         |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                              |              |               |          | SAMPLE PRESERVATION      |                               |          | INTENDED ANALYSIS AND/OR METHOD |  | SAMPLE PUMP FLOW RATE gal (min per minute) |  | SAMPLING EQUIPMENT CODE |  |
| SAMPLE ID CODE                                                                                                                                                                                                              | # CONTAINERS | MATERIAL CODE | VOLUME   | PRESERVATIVE USED        | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |  |                                            |  |                         |  |
| 2                                                                                                                                                                                                                           | 6            | G             | 40 ml    | HCl                      | -                             | NM       | VOA                             |  |                                            |  | BP                      |  |
| 3                                                                                                                                                                                                                           | 6            | G             | 40 ml    | NaOH                     | -                             | -        | 8011                            |  |                                            |  |                         |  |
| 1                                                                                                                                                                                                                           | P            | P             | 42.50 ml | -                        | -                             | -        | G-CHEM                          |  | 0.20                                       |  |                         |  |
| 1                                                                                                                                                                                                                           | P            | P             | 500 ml   | HNO3                     | -                             | -        | METALS                          |  |                                            |  |                         |  |
| 1                                                                                                                                                                                                                           | AG           | AG            | 500 ml   | H2SO4                    | -                             | -        | NH3                             |  |                                            |  |                         |  |
| 1                                                                                                                                                                                                                           | P            | P             | 1000 ml  | HNO3                     | -                             | -        | GROSS ALPHA                     |  |                                            |  |                         |  |
| REMARKS:                                                                                                                                                                                                                    |              |               |          |                          |                               |          |                                 |  |                                            |  |                         |  |
| GREEN: NO                                                                                                                                                                                                                   |              |               |          |                          |                               |          |                                 |  |                                            |  |                         |  |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other                                                                                              |              |               |          |                          |                               |          |                                 |  |                                            |  |                         |  |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |              |               |          |                          |                               |          |                                 |  |                                            |  |                         |  |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009

**Matt Shacklock**

**From:** Stacy Kennedy  
**Sent:** Thursday, July 23, 2020 9:07 PM  
**To:** Project Service  
**Subject:** L1224093 \*WMVISFL\* Moving Samples

L1224093 \*WMVISFL\* requires some data to be moved due to an EDD error.

-16, -17, and -18 need to be logged to a new SDG and placed in same WG:

|      |                   |                                                                                                                       |
|------|-------------------|-----------------------------------------------------------------------------------------------------------------------|
| -16: | V8260LL<br>SV8011 | LG:DONE: VOL:DONE:WG1508595 RPT:DONE: INV:NEED:<br>LG:DONE: OP:DONE:WG1505027 SEMI:DONE:WG1505027 RPT:DONE: INV:NEED: |
| -17: | NITRATE           | LG:DONE: WET:DONE:WG1504839 RPT:DONE: INV:NEED:                                                                       |
| -18: | V8260LL           | LG:DONE: VOL:DONE:WG1508595 RPT:DONE: INV:NEED:                                                                       |

After that is done, please delete -16, -17, and -18 from L1224093.

Let me know if there are any questions.

Thank you,

**Stacy Kennedy**  
*Project Manager*

Pace Analytical National Center for Testing & Innovation  
12065 Lebanon Road | Mt. Juliet, TN 37122  
(office)615.773.7453 (cell)615-517-1334  
[skennedy@pacenational.com](mailto:skennedy@pacenational.com) | [www.pacenational.com](http://www.pacenational.com)

124295-1

Atlanta (770) 729-0210  
Baton Rouge (504) 293-0236  
Tulsa (918) 693-3177  
Houston (281) 441-7600  
Memphis (901) 746-8523

VISTA

DATE: 6-1-20

[illegible]



22-11-2010 14:57:03 725.9219

Station Range: 16045-293-01-0

Downloaded At: 11:53 11 September 2009

1905年-1914年-2000年

ETC000076-2019-0003

FACILITY NAME:

VISTA

DATE: 6-2-20

[illegible]



# WELL CONDITION INSPECTION FORM

Site: Vista

Personnel: Danny Armour

Date: 6-1-20

Page 1 of 2

| Well ID | Protective Casing                                                       | Well Casing                                                             | Label                                                                      | Look                                                                | Sample Equipment Type      | General Turbidity                                                         | Well Yield                                                                 | Comments/Observations * |
|---------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------|
| WV-01A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Dedicated Bladder Pump     | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-02AR | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                          | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-03A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                          | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-04A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                          | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-05A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                          | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-06AR | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                          | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-07A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                          | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-08R  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Non-Dedicated Bladder Pump | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-09A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Dedicated Bladder Pump     | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| WV-11A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                          | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |

\* Note pointing water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items. Return this form to Site Manager - FOR INTERNAL USE ONLY.





# WELL CONDITION INSPECTION FORM

Site: Visco

Personnel: Danny Armour

Date: 6-1-20

Page 2 of 2

| Well ID | Protective Casing                                                       | Well Casing                                                             | Label                                                                      | Lock                                                                | Sample Equipment Type  | General Turbidity                                                         | Well Yield                                                                 | Comments/Observations * |
|---------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------|
| MW-14A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | DEDICATED BRADDER PUMP | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MW-15A  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |
|         | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Damaged            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes <input type="checkbox"/> No            |                        | <input type="checkbox"/> Clear <input type="checkbox"/> Turbid            | <input type="checkbox"/> OK <input type="checkbox"/> Inadequate            |                         |

\* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items. Return this form to Site Manager - FOR INTERNAL USE ONLY.

## Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HF SCIENTIFIC MICRO TPI INSTRUMENT # 200710329

PARAMETER: *[check only one]*

☐ TEMPERATURE    ☐ CONDUCTIVITY    ☐ SALINITY    ☐ pH    ☐ ORP  
☒ TURBIDITY    ☐ RESIDUAL Cl    ☐ DO    ☐ OTHER \_\_\_\_\_

**STANDARDS:** *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 1000 NTU HF SCIENTIFIC LOT# 90103 EXP: JAN 2021

Standard B 10.0 NTU HF SCIENTIFIC LOT# 90102 EXP: JAN 2021

Standard C 0.02 NTU HF SCIENTIFIC LOT # 90101 EXP: JAN 2021

[illegible]



## Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) YSI PRO SERIES INSTRUMENT # 15D100702

PARAMETER: *[check only one]*

☐ TEMPERATURE    ☐ CONDUCTIVITY    ☐ SALINITY    ☐ pH    ☐ ORP  
☐ TURBIDITY    ☐ RESIDUAL Cl    ☐ DO    ☐ OTHER \_\_\_\_\_

STANDARDS: (Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased) 2708A/4 Exp: 7/23/20

Standard A 2.00 (342) PINK ENV LOT# ~~9641010~~ 9641011

Standard B 9.00 (std) P. inc Env Lot<sup>9</sup> 9GA1010 Exp: 1/21

Standard C 10.00 (std) Pink Enlv Lot. # 2703951 Exp: 8/20/20

[illegible]

☐ TEMPERATURE    ☐ CONDUCTIVITY    ☐ SALINITY    ☐ pH    ☐ ORP  
☐ TURBIDITY    ☐ RESIDUAL CI    ☒ DO    ☐ OTHER \_\_\_\_\_

Standard A SATURATED AIR

Standard B

Standard C

Revision Date: February 1, 2004

DEP-SOP-001/01  
FS 2200 Groundwater Sampling

Table FS 2200-2  
Dissolved Oxygen Saturation

| TEMP  | D.O.   | mg/L  | TEMP  | D.O.  | mg/L  | TEMP  | D.O.  | mg/L  | TEMP  | D.O.  | mg/L  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| deg C | SAT.   | 20%   | deg C | SAT.  | 20%   | deg C | SAT.  | 20%   | deg C | SAT.  | 20%   |
| 15.0  | 10.084 | 2.017 | 18.0  | 9.276 | 1.855 | 23.0  | 8.579 | 1.716 | 27.0  | 7.968 | 1.594 |
| 15.1  | 10.082 | 2.012 | 18.1  | 9.258 | 1.852 | 23.1  | 8.562 | 1.712 | 27.1  | 7.954 | 1.591 |
| 15.2  | 10.040 | 2.008 | 18.2  | 9.239 | 1.848 | 23.2  | 8.546 | 1.709 | 27.2  | 7.940 | 1.588 |
| 15.3  | 10.019 | 2.004 | 18.3  | 9.220 | 1.844 | 23.3  | 8.530 | 1.706 | 27.3  | 7.926 | 1.585 |
| 15.4  | 9.997  | 1.999 | 18.4  | 9.202 | 1.840 | 23.4  | 8.514 | 1.703 | 27.4  | 7.912 | 1.582 |
| 15.5  | 9.976  | 1.995 | 18.5  | 9.184 | 1.837 | 23.5  | 8.498 | 1.700 | 27.5  | 7.898 | 1.580 |
| 15.6  | 9.955  | 1.991 | 18.6  | 9.165 | 1.833 | 23.6  | 8.482 | 1.696 | 27.6  | 7.884 | 1.577 |
| 15.7  | 9.934  | 1.987 | 18.7  | 9.147 | 1.829 | 23.7  | 8.466 | 1.693 | 27.7  | 7.870 | 1.574 |
| 15.8  | 9.912  | 1.982 | 18.8  | 9.129 | 1.826 | 23.8  | 8.450 | 1.690 | 27.8  | 7.856 | 1.571 |
| 15.9  | 9.891  | 1.978 | 18.9  | 9.111 | 1.822 | 23.9  | 8.434 | 1.687 | 27.9  | 7.842 | 1.568 |
| 16.0  | 9.870  | 1.974 | 20.0  | 9.092 | 1.818 | 24.0  | 8.418 | 1.684 | 28.0  | 7.828 | 1.566 |
| 16.1  | 9.849  | 1.970 | 20.1  | 9.074 | 1.815 | 24.1  | 8.403 | 1.681 | 28.1  | 7.814 | 1.563 |
| 16.2  | 9.829  | 1.966 | 20.2  | 9.056 | 1.811 | 24.2  | 8.387 | 1.677 | 28.2  | 7.800 | 1.560 |
| 16.3  | 9.808  | 1.962 | 20.3  | 9.039 | 1.808 | 24.3  | 8.371 | 1.674 | 28.3  | 7.786 | 1.557 |
| 16.4  | 9.787  | 1.957 | 20.4  | 9.021 | 1.804 | 24.4  | 8.356 | 1.671 | 28.4  | 7.773 | 1.555 |
| 16.5  | 9.767  | 1.953 | 20.5  | 9.003 | 1.801 | 24.5  | 8.340 | 1.668 | 28.5  | 7.759 | 1.552 |
| 16.6  | 9.746  | 1.949 | 20.6  | 8.985 | 1.797 | 24.6  | 8.325 | 1.665 | 28.6  | 7.745 | 1.549 |
| 16.7  | 9.726  | 1.945 | 20.7  | 8.968 | 1.794 | 24.7  | 8.309 | 1.662 | 28.7  | 7.732 | 1.546 |
| 16.8  | 9.705  | 1.941 | 20.8  | 8.950 | 1.790 | 24.8  | 8.294 | 1.659 | 28.8  | 7.718 | 1.544 |
| 16.9  | 9.685  | 1.937 | 20.9  | 8.932 | 1.786 | 24.9  | 8.279 | 1.656 | 28.9  | 7.705 | 1.541 |
| 17.0  | 9.665  | 1.933 | 21.0  | 8.915 | 1.783 | 25.0  | 8.263 | 1.653 | 29.0  | 7.691 | 1.538 |
| 17.1  | 9.645  | 1.929 | 21.1  | 8.898 | 1.780 | 25.1  | 8.248 | 1.650 | 29.1  | 7.678 | 1.536 |
| 17.2  | 9.625  | 1.925 | 21.2  | 8.880 | 1.776 | 25.2  | 8.233 | 1.647 | 29.2  | 7.664 | 1.533 |
| 17.3  | 9.605  | 1.921 | 21.3  | 8.863 | 1.773 | 25.3  | 8.218 | 1.644 | 29.3  | 7.651 | 1.530 |
| 17.4  | 9.585  | 1.917 | 21.4  | 8.846 | 1.769 | 25.4  | 8.203 | 1.641 | 29.4  | 7.638 | 1.528 |
| 17.5  | 9.565  | 1.913 | 21.5  | 8.829 | 1.766 | 25.5  | 8.188 | 1.638 | 29.5  | 7.625 | 1.525 |
| 17.6  | 9.545  | 1.909 | 21.6  | 8.812 | 1.762 | 25.6  | 8.173 | 1.635 | 29.6  | 7.611 | 1.522 |
| 17.7  | 9.526  | 1.905 | 21.7  | 8.794 | 1.759 | 25.7  | 8.158 | 1.632 | 29.7  | 7.598 | 1.520 |
| 17.8  | 9.506  | 1.901 | 21.8  | 8.777 | 1.755 | 25.8  | 8.143 | 1.629 | 29.8  | 7.585 | 1.517 |
| 17.9  | 9.486  | 1.897 | 21.9  | 8.761 | 1.752 | 25.9  | 8.128 | 1.626 | 29.9  | 7.572 | 1.514 |
| 18.0  | 9.467  | 1.893 | 22.0  | 8.744 | 1.749 | 26.0  | 8.114 | 1.623 | 30.0  | 7.559 | 1.512 |
| 18.1  | 9.448  | 1.890 | 22.1  | 8.727 | 1.745 | 26.1  | 8.099 | 1.620 | 30.1  | 7.546 | 1.509 |
| 18.2  | 9.428  | 1.886 | 22.2  | 8.710 | 1.742 | 26.2  | 8.084 | 1.617 | 30.2  | 7.533 | 1.507 |
| 18.3  | 9.409  | 1.882 | 22.3  | 8.693 | 1.739 | 26.3  | 8.070 | 1.614 | 30.3  | 7.520 | 1.504 |
| 18.4  | 9.390  | 1.878 | 22.4  | 8.677 | 1.735 | 26.4  | 8.055 | 1.611 | 30.4  | 7.507 | 1.501 |
| 18.5  | 9.371  | 1.874 | 22.5  | 8.660 | 1.732 | 26.5  | 8.040 | 1.608 | 30.5  | 7.494 | 1.499 |
| 18.6  | 9.352  | 1.870 | 22.6  | 8.644 | 1.729 | 26.6  | 8.026 | 1.605 | 30.6  | 7.481 | 1.496 |
| 18.7  | 9.333  | 1.867 | 22.7  | 8.627 | 1.725 | 26.7  | 8.012 | 1.602 | 30.7  | 7.468 | 1.494 |
| 18.8  | 9.314  | 1.863 | 22.8  | 8.611 | 1.722 | 26.8  | 7.997 | 1.599 | 30.8  | 7.456 | 1.491 |
| 18.9  | 9.295  | 1.859 | 22.9  | 8.595 | 1.719 | 26.9  | 7.983 | 1.597 | 30.9  | 7.443 | 1.489 |

Derived using the formula in Standard Methods for the Examination of Water and Wastewater, Page 4-101, 18th Edition, 1992.

APPENDIX B  
COMPACT DISK CONTAINING  
REPORT IN .PDF FORMAT  
AND  
ADaPT FILE