April 18, 2022

Ms. Leigh Barr
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division, Environmental Bureau
Leigh.Barr@state.nm.us

Re: 2021 Annual Facility-Wide Groundwater Monitoring Report, HollyFrontier Navajo Refining LLC, Lovington, New Mexico, AP-110.

Dear Ms. Barr:

Please find attached the 2021 Annual Facility-Wide Groundwater Monitoring Report (Report) for the HollyFrontier Navajo Refining LLC (HFNR) refinery located in Lovington, New Mexico. The Report summarizes the results of groundwater monitoring and remediation activities conducted at the refinery under AP-110 during calendar year 2021.

If you should have any questions or comments regarding this Report, please feel free to contact me at (575) 746-5487 or Jason Leik at (214) 970-8902.

Sincerely,

Kawika Tupou
Environmental Manager
HollyFrontier Navajo Refining LLC

cc: HF Sinclair: J. Leik
TRC: J. Speer, A. Eljuri, C. Smith

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2021 Annual Facility-Wide Groundwater Monitoring Report

April 2022

HollyFrontier Navajo Refining LLC

AP-110
Lovington, New Mexico

Prepared For:

HollyFrontier Navajo Refining LLC

Prepared By:

TRC Environmental Corporation
Austin, Texas



HOLLYFRONTIER®

2021 Annual Facility-Wide Groundwater Monitoring Report

HollyFrontier Navajo Refining LLC
AP-110
Lovington, New Mexico

Prepared for:

HollyFrontier Navajo Refining LLC
Artesia, New Mexico

Prepared by:

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TRC Project No. 475791

April 2022

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EXECUTIVE SUMMARY

This *2021 Annual Facility-Wide Groundwater Monitoring Report* documents groundwater monitoring activities conducted at the HollyFrontier Navajo Refining LLC (HFNR) facility (refinery) located in Lovington, New Mexico, during calendar year 2021. The refinery is currently regulated by New Mexico Oil Conservation Division (OCD) under Abatement Plan AP-110.

The groundwater monitoring program consists of semi-annual groundwater gauging of monitoring wells, semi-annual groundwater sampling of monitoring wells, quarterly sampling of refinery water supply wells, and annual reporting. The monitoring objectives are to (1) determine groundwater elevations, flow direction, and gradient; (2) determine the presence, extent, and apparent thickness of light non-aqueous phase liquid (LNAPL); and (3) obtain dissolved-phase concentration data. Monitoring activities were conducted in general accordance with the November 2017 *Revised Facility-Wide Groundwater Monitoring Work Plan* (Revised FWGMWP) that was approved by OCD on February 1, 2018.

The 2021 groundwater monitoring results indicate physical and chemical groundwater conditions are consistent with historical data. Groundwater flows radially (southeast, south, and north/northwest) towards a cone of depression near the three refinery water supply wells located within the central portion of the refinery. This cone of depression is induced by groundwater pumping from the three on-site water supply wells for refinery process use and non-potable restroom and safety shower use. The presence of select anions (chloride and fluoride), total dissolved solids (TDS), and metals in select wells at concentrations above the New Mexico Water Quality Control Commission (WQCC) Standards is due to off-site sources, background concentrations, and/or non-HFNR sources at the refinery.

Five monitoring wells were replaced with deeper monitoring wells in 2021 because they were screened at depths too shallow for monitoring of the current groundwater elevation. Wells MW-15, MW-18, MW-19, MW-20, and MW-24 were replaced with deeper monitoring wells MW-15R, MW-18R, MW-19R, MW-20R, and MW-24R, respectively. Monitoring well MW-25 was also plugged and abandoned due to minimal groundwater present in the well, but not replaced in 2021 due to field delays and access issues. Groundwater elevations across the refinery have been decreasing since 2010 and continue to decrease over time.

LNAPL is present in monitoring well MW-31, which was installed in December 2016 to investigate the historical release at the asphalt loading rack. LNAPL recovery was continuously conducted at MW-31 throughout 2021 using a pneumatic skimmer recovery system. Approximately 306 gallons of LNAPL were recovered using the skimmer system in 2021.

One reportable release, an apparent leak from the firewater pond liner, occurred at the refinery in 2021. Repair of the pond liner was completed in April 2022.

HFNR will implement groundwater monitoring activities at the refinery in 2022 under the November 2017 Revised FWGMWP, pending OCD issuance of a Groundwater Discharge Permit and subsequent submittal and approval of a new FWGMWP. HFNR will also continue

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LNAPL recovery activities at well MW-31 in accordance with the November 17, 2017, letter report that was approved with comments by the OCD on December 22, 2017.

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LIST OF ACRONYMS AND ABBREVIATIONS

DO	Dissolved Oxygen
DRO	Diesel Range Organics
FWGMWP	Facility-Wide Groundwater Monitoring Work Plan
GRO	Gasoline Range Organics
HEP	Holly Energy Partners – Operating, L.P.
HFNR	HollyFrontier Navajo Refining LLC
HMI	Hydrologic Monitoring
LCS/LCSD	Laboratory control sample and laboratory control sample duplicate
LNAPL	Light Non-Aqueous Phase Liquid
mg/L	Milligrams per liter
NMOSE	New Mexico Office of the State Engineer
MQL	Method Quantitation Limit
MS/MSD	Matrix spike and matrix spike duplicate
O&M	Operation and Maintenance
OCD	New Mexico Oil Conservation Division
ORC®	Oxygen-Releasing Compound
ORP	Oxidation-Reduction Potential
Pace National	Pace Analytical National Center for Testing & Innovation
QA/QC	Quality Assurance/Quality Control
RPD	Relative Percent Difference
SM	Standard Method
SVOCs	Semi-Volatile Organic Compounds
TRC	TRC Environmental Corporation
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
VOCs	Volatile Organic Compounds
WQCC	New Mexico Water Quality Control Commission

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1.0 INTRODUCTION

On behalf of HollyFrontier Navajo Refining LLC (HFNR), TRC Environmental Corporation (TRC) prepared this *2021 Annual Facility-Wide Groundwater Monitoring Report* to summarize the results of groundwater monitoring activities conducted at the facility (refinery) located in Lovington, New Mexico, during calendar year 2021. Groundwater monitoring reports prior to 2012 were submitted in accordance with a Groundwater Discharge Permit (GW-014) issued by the New Mexico Oil Conservation Division (OCD). The Groundwater Discharge Permit was due to expire on October 30, 2011, and a renewal draft permit was issued in August 2011 that was to go into effect by November 1, 2011. However, the OCD rescinded the Groundwater Discharge Permit on February 9, 2012. The refinery is currently regulated by the OCD under Abatement Plan AP-110. This report is prepared in accordance with HFNR's February 22, 2013, Memorandum to the OCD and OCD's response on February 28, 2013.

1.1 Refinery Description

The refinery is located approximately five miles south of Lovington in Lea County, New Mexico. The facility is operated by HFNR and consists of refining operations, as well as Holly Energy Partners – Operating, L.P. (HEP) pipeline and receiving stations. A refinery vicinity map is provided as Figure 1 and a refinery site plan is provided as Figure 2.

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2.0 MONITORING WELL ABANDONMENT AND INSTALLATION

Monitoring wells MW-15, MW-18, MW-19, MW-20, MW-24, and MW-25 were abandoned in 2021 because these wells were screened at depths too shallow for optimal monitoring of the current groundwater elevation, which has been decreasing since their respective installations. These wells were replaced with new deeper wells, except for well MW-25, which was not replaced in 2021 due to field delays and lack of access to a suitable replacement location. The locations of the former and replacement monitoring wells are shown on Figure 2. Well abandonment and installation activities are described below.

2.1 Well Abandonment

Monitoring wells MW-15, MW-18, MW-19, MW-20, MW-24, and MW-25 were plugged and abandoned on June 9, 2021, under a *Well Plugging Plan of Operations* approved by the New Mexico Office of the State Engineer (NMOSE) on April 7, 2021. Groundwater elevations had steadily declined in these wells since they were installed in 2010. Starting in the October 2020 semi-annual monitoring event, wells MW-18 and MW-19 would not produce sufficient water volume for sample collection of all required analytes. The rate of groundwater elevation decline in wells MW-15, MW-20, MW-24, and MW-25 indicated these wells would not produce sufficient water volume for sample collection of all required analytes by the second 2021 semi-annual event. Well MW-19 was dry during the October 2020 and April 2021 monitoring events and the groundwater elevation decreased over 14 feet since 2010. Well MW-18 was dry during the April 2021 monitoring event and the groundwater elevation decreased over 15 feet since 2010. Groundwater elevations in wells MW-15, MW-20, MW-24, and MW-25 decreased over 13 feet from August 2010 to April 2021. Replacement wells MW-15R, MW-18R, MW-19R, MW-20R, and MW-24R were installed as detailed below.

Monitoring wells MW-15, MW-18, MW-19, MW-20, MW-24, and MW-25 were plugged in accordance with the approved plugging plan by pressure filling the casing with cement grout from total depth to land surface. The grout was allowed to settle, and any remaining void was filled with additional cement grout. The upper portion of the casing was cut below ground surface and removed. The ground surface was restored to surrounding conditions.

2.2 Well Installation

Monitoring well MW-20 was installed on June 10, 2021, and monitoring wells MW-15R, MW-18R, MW-19R, and MW-24R were installed on September 8 and 9, 2021, using air-rotary drilling methods under NMOSE permit L-12562. The monitoring wells were constructed using 2-inch diameter Schedule 40 polyvinyl chloride (PVC) casing and 20 linear feet of 0.010-inch machine-slot PVC screen to approximate total depths of 138 feet below ground surface (bgs) at MW-15R, 133 feet bgs at MW-18R, 132 feet bgs at MW-19R, 126 feet bgs at MW-20R, and 136 feet bgs at MW-24R. The well screens were installed across the saturated zone-vadose zone interface. The annular space was filled with 8/16-grade silica sand to at least 2 feet above the screen. The annular space above the sand pack was sealed using hydrated 3/8-inch bentonite

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chips to approximately 3 feet above the sand pack, and Portland cement from above the bentonite chips to the ground surface.

Wells MW-15R, MW-18R, MW-19R, MW-20R, and MW-24R were completed with a flush mount steel cover and concrete pad. Upon completion, the monitoring wells were developed by surging and purging using a submersible pump. Soil boring/well construction logs for MW-15R, MW-18R, MW-19R, MW-20R, and MW-24R are provided in Appendix A.

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3.0 SEMI-ANNUAL GROUNDWATER MONITORING ACTIVITIES

Semi-annual groundwater monitoring activities were conducted at the refinery in April and September 2021 in accordance with the November 2017 *Revised Facility-Wide Groundwater Monitoring Work Plan* (Revised FWGMWP) that was approved by the OCD on February 1, 2018. Hydrologic Monitoring (HMI) conducted the first semi-annual groundwater monitoring event on April 15, 2021, and the second semi-annual event on September 16, 2021. Groundwater monitoring activities consisted of (1) gauging existing refinery monitoring wells (MW-1 through MW-33) and one recovery well (RW-1) and (2) collecting groundwater samples for laboratory analysis from select refinery monitoring wells and three refinery water supply wells (WW-North, WW-South, and WW-East). The locations of the monitoring wells, recovery well, and refinery water supply wells are presented on Figure 2.

The following deviations to the November 2017 Revised FWGMWP occurred during the April 2021 monitoring event:

- Well MW-31 was not sampled due to the presence of light non-aqueous phase liquid (LNAPL). This is consistent with previous sampling events conducted since 2017.
- Well MW-19 was dry and could not be sampled.
- Well MW-18 could not be sampled for total mercury due to poor recharge resulting in insufficient sample volume.
- Wells MW-17R and MW-28 were sampled using bailing techniques rather than low-flow procedures with a submersible pump due to poor recharge and insufficient water column in the well. These wells were purged dry with a new disposable bailer and a grab sample was collected for laboratory analysis after the wells recharged.

The following deviations to the November 2017 Revised FWGMWP occurred during the September 2021 monitoring event:

- The sampling event occurred in September 2021 instead of October 2021 due to refinery turnaround activities.
- Well MW-31 was not sampled due to the presence of LNAPL. This is consistent with previous sampling events conducted since 2017.
- MW-25 was plugged in June 2021 and not replaced due to field delays and lack of access to a suitable replacement location; therefore, no sample was collected.
- MW-17R could not be sampled for water quality parameters (chloride, fluoride, nitrate-nitrite, sulfate, and total dissolved solids [TDS]) due to poor recharge resulting in insufficient sample volume.
- Wells MW-17R, MW-21, MW-22, MW-27, MW-28, and MW-29 were sampled using bailing techniques rather than low-flow procedures with a submersible pump due to poor recharge and insufficient water column in the well. These wells were purged dry with a

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new disposable bailer and a grab sample was collected for laboratory analysis after the wells recharged.

3.1 Fluid Level Gauging

Existing refinery monitoring and recovery wells were gauged during the April 2021 and September 2021 semi-annual monitoring events to determine the groundwater elevation, flow direction and gradient, the presence or absence of LNAPL, and apparent LNAPL thickness. A decontaminated oil-water interface probe was used to measure depths to water and LNAPL, if present. Depths to water and LNAPL were measured to the nearest 0.01-foot from the top of the well casing.

3.2 Groundwater Sample Collection

Groundwater samples were collected for laboratory analysis from the following wells during each semi-annual monitoring event:

- April 2021: 17 refinery monitoring wells (MW-1 through MW-3, MW-6, MW-8, MW-11R, MW-12R2, MW-13R, MW-15, MW-17R, MW-25, MW-27 through MW-30, MW-32, MW-33) and three refinery water supply wells (WW-North, WW-East, and WW-South).
- September 2021: 30 refinery monitoring wells (MW-1 through MW-33, except MW-7, MW-25, and MW-31) and three refinery water supply wells (WW-North, WW-East, and WW-South).

Except as identified as deviations in Section 3.0, each monitoring and recovery well was purged and sampled using low-flow sampling procedures. Dedicated bladder pumps installed in each monitoring well were used to purge and sample monitoring wells during the April and September 2021 events. The pump intake was placed at the middle of the water column because the water elevations were within the screened well intervals. A water-quality meter and turbidity meter were used to measure pH, temperature, specific conductivity, oxidation-reduction potential (ORP), dissolved oxygen (DO), and turbidity at regular intervals during the purging process to obtain geochemical data and to monitor for stabilization of the groundwater. The purging process was considered complete when three of the six water quality parameters achieved stabilization.

The refinery water supply wells were sampled from a sampling point (i.e., tap or spigot) located at or near the well head or pump house and before the water supply is introduced into any storage tank or treatment unit. The wells were purged to remove any standing water from the well casing and surface piping. Grab readings of geochemical parameters including pH, temperature, conductivity, ORP, DO, and turbidity were also collected during the purging process.

After the purging process was complete, groundwater samples were collected directly from the dedicated or disposable tubing (for the monitoring wells) or from the refinery water supply well sampling point into method-specific containers provided by the laboratory. All groundwater samples were submitted to Pace Analytical National Center for Testing & Innovation (Pace

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National) in Mount Juliet, Tennessee, under appropriate chain-of-custody documentation for one or more of the following analyses in accordance with the November 2017 Revised FWGMWP:

- Volatile organic compounds (VOCs) by SW-846 Method 8260B;
- Semi-volatile organic compounds (SVOCs) by SW-846 Method 8270C;
- Total petroleum hydrocarbons (TPH) gasoline range organics (GRO) by SW-846 Method 8015D
- TPH diesel range organics (DRO) by SW-846 Method 3511/8015;
- Dissolved metals (aluminum, arsenic, barium, boron, cadmium, chromium, cobalt, copper, iron, lead, magnesium, molybdenum, nickel, selenium, silver, uranium, zinc) by SW-846 Method 6010B or 6020;
- Total mercury by SW-846 Method 7470A;
- Anions (chloride, fluoride, nitrate-nitrite, and sulfate) by EPA Method 353.2 or SW-846 Method 9056A;
- Alkalinity by Standard Method (SM) 2320B-2011; and/or
- TDS by SM M2540C-2011.

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4.0 SEMI-ANNUAL GROUNDWATER MONITORING RESULTS

The results of the semi-annual groundwater monitoring activities conducted in April 2021 and September 2021 are discussed below.

4.1 Fluid Gauging Results

Fluid level gauging was performed on April 15, 2021, and on September 16, 2021, and the results are presented in Table 1. Potentiometric groundwater surface maps for the April 2021 and September 2021 gauging events are presented as Figures 3 and 4, respectively.

4.1.1 Light Non-Aqueous Phase Liquid (LNAPL)

LNAPL was detected in one well (MW-31) during both semi-annual gauging events. The presence of LNAPL in MW-31 is associated with the historical release discovered at the asphalt loading rack during construction activities in November 2015. Measured apparent LNAPL thicknesses in MW-31 during the April and September 2021 gauging events were 4.19 and 5.79 feet, respectively. HFNR conducted routine LNAPL recovery using a pneumatic skimmer system at MW-31 throughout 2021, as discussed in Section 7.0. Additional fluid gauging results obtained at MW-31 during recovery activities are provided in Appendix F.

4.1.2 Groundwater

Groundwater elevations measured during both semi-annual gauging events indicate groundwater elevations are decreasing and groundwater flows radially (southeast, south, and north/northwest) towards a cone of depression near the three refinery water supply wells located within the central portion of the refinery. This cone of depression is consistent with previous events and is induced by groundwater pumping from the three on-site refinery water supply wells for refinery process use and non-potable restroom and safety shower use. The natural groundwater flow direction at the refinery (i.e., not influenced by pumping) is to the southeast, as observed in the northern portion of the refinery.

Groundwater elevations measured during the April 2021 event decreased an average 0.55 feet from those measured in June 2020 (first semi-annual event of 2020). The April 2021 groundwater elevation data indicates groundwater northwest of the cone of depression flows southeast at a hydraulic gradient ranging from 0.004 to 0.007 feet per foot. South/southeast of the cone of depression, groundwater flows north/northwest at a hydraulic gradient ranging from 0.0005 to 0.002 feet per foot.

Groundwater elevations measured during the September 2021 event decreased an average 0.40 feet from those measured in October 2020 (second semi-annual event of 2020). The September 2021 groundwater elevation data indicates groundwater northwest of the cone of depression flows southeast at a hydraulic gradient ranging from of 0.004 to 0.011 feet per foot. South/southeast of the cone of depression, groundwater flows north/northwest at a hydraulic gradient ranging from 0.001 to 0.006 feet per foot.

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A graph of groundwater elevations versus time for representative wells MW-4 and MW-6 is provided in Appendix B. As shown on the graph, groundwater elevations in wells MW-4 and MW-6 have decreased 14.74 feet and 14.93 feet, respectively, from June 2009 to September 2021. These reductions in groundwater levels are consistent across the refinery and are likely caused by (1) limited recharge due to low rainfall levels and (2) regional groundwater pumping including active pumping from three on-site refinery water supply wells and City of Lovington water supply wells located northwest and west (i.e., upgradient) of the refinery.

4.2 Groundwater Sampling Results

Analytical results of organic and inorganic constituents in groundwater samples collected during the 2021 sampling events are summarized in Tables 2 and 3, respectively. Analytical results are compared to the New Mexico Water Quality Control Commission (WQCC) Standards for groundwater and any results that exceeded these standards are shaded gray. Groundwater concentration maps are provided as Figures 5 through 10 for constituents that exceeded WQCC Standards. Laboratory analytical reports are provided in Appendix C. Plots of groundwater concentrations over time for constituents detected above the method quantitation limit (MQL) more than once in each well are provided in Appendix D. Constituents that were never detected above the MQL, including those only detected at estimated J-flagged concentrations (i.e., detected above the sample detection limit but below the MQL), are not included on the concentration plots in Appendix D.

4.2.1 Organic Constituent Results

Analytical results for VOCs, SVOCs, and TPH (i.e., organic constituents) that have historically been detected in groundwater are presented in Table 2. Naphthalene results are included in both the VOC (Method 8260B) and SVOC (Method 8270C) sections of Table 2 as it is reported by both analytical methods.

4.2.1.1 Volatile Organic Compounds

VOCs were not detected above their respective WQCC Standards in any of the wells sampled in April 2021 and September 2021. Reported concentrations of VOCs during the 2021 sampling events were generally consistent with or less than previous sampling results, with notable increases in the following well:

- MW-4: Chloroform concentrations increased from an estimated J-flagged concentration of 0.000574 J milligrams per liter (mg/L) in October 2019 to 0.00140 J mg/L in October 2020 to a historical maximum of 0.00664 mg/L in September 2021. Chloroform concentrations in this well will be reviewed again in 2022.

- MW-15R: Benzene was detected in September 2021 at an estimated concentration of 0.000105 JB mg/L, with the “B” qualifier (or B-flagged) indicating it was detected within five times the associated equipment blank detection and therefore the reported concentration may include field contributions as described in Appendix E. The benzene detection in this well in September 2021 is likely attributed to field contributions as

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benzene has not previously been detected in well MW-15. Chloroform concentrations increased from 0.000889 J mg/L in October 2020 in MW-15 to 0.0120 mg/L in September 2021 in MW-15R, which is similar to concentrations reported in 2014 from MW-15. The current chloroform concentration in this well remain below the historical maximum reported in MW-15 (0.030 mg/L in February 2013) and an order of magnitude below the WQCC Standard (0.1 mg/L).

- MW-24R: Benzene, toluene, and total xylenes were detected in September 2021 at estimated concentrations of 0.000725 JB mg/L, 0.000828 J mg/L, and 0.000194 J mg/L, respectively, which are all at least an order of magnitude below their respective WQCC Standard. Monitoring well MW-24R was installed in September 2021 to replace MW-24 and these VOCs had not previously been detected in MW-24. The reported benzene detection in this well is likely attributed to field contributions as described in Appendix E. Benzene, toluene, and total xylenes concentrations in this well will be reviewed again in 2022.
- MW-30: Chloroform concentrations exhibited an overall increasing trend from February 2015 (0.00072 J mg/L) to a historical maximum in September 2021 (0.0282 mg/L), but remained one order of magnitude below the WQCC Standard of 0.1 mg/L. Chloroform concentrations in this well will be reviewed again in 2022.

Concentration maps of VOCs in groundwater for the April 2021 and September 2021 monitoring events are not provided because none of the reported concentrations exceeded the WQCC Standards.

Benzene historically fluctuated above and below the WQCC Standard in well MW-11 but remained below the WQCC Standard from March 2016 until the well went dry in August 2016. From March 2015 to August 2016, HFNR installed and maintained oxygen-releasing compound (ORC®) socks in MW-11 to promote enhanced aerobic biodegradation of benzene historically detected in this well. In December 2016, monitoring well MW-11 was plugged and abandoned and a deeper replacement well (MW-11R) was installed at a location adjacent to the former well. In 2021, benzene was detected in MW-11R for the first time since its installation in 2016, at estimated J-flagged concentrations of 0.000660 J mg/L in April 2021 and 0.000157 JB mg/L in September 2021. The reported benzene detection in MW-11R in September 2021 may be attributed to field contributions as described in Appendix E. HFNR will continue to monitor benzene concentrations in MW-11R during subsequent groundwater monitoring events.

4.2.1.2 Semi-Volatile Organic Compounds

SVOCs were not detected above their respective WQCC Standards in any of the wells sampled in April 2021 and September 2021. Analytical results for SVOCs during the 2021 semi-annual monitoring events were generally consistent with previous sampling results, except for naphthalene, 1-methylnapthalene, and 2-methylnaphthalene in water supply well WW-East during the September 2021 monitoring event.

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Naphthalene, 1-methylnapthalene, and 2-methylnaphthalene were detected in WW-East for the first time during the September 2021 event at estimated J-flagged concentrations of 0.000187 J mg/L, 0.000117 J mg/L, and 0.000171 J mg/L, respectively. The calculated total naphthalene value (0.00475 mg/L) during the September 2021 monitoring event was an order of magnitude below the WQCC Standard (0.03 mg/L). Water well WW-East was resampled on November 10, 2021, to confirm the September 2021 results. Naphthalene, 1-methylnapthalene, and 2-methylnaphthalene were not detected in either the original or duplicate samples collected on November 10, 2021.

Concentration maps of SVOCs in groundwater for the April 2021 and September 2021 sampling events are not provided because none of the reported concentrations exceeded the WQCC Standards.

4.2.1.3 Total Petroleum Hydrocarbons

During the April 2021 sampling event, TPH GRO was detected at an estimated J-flagged concentration below the MQL in well MW-33 (0.0501 J mg/L). TPH GRO was not detected in the other four wells sampled and analyzed for TPH GRO in April 2021 (MW-32, WW-South, WW-North, and WW-East). TPH DRO was detected at concentrations above the MQL in wells MW-32 (0.380 mg/L, duplicate sample) and MW-33 (0.188 B mg/L, duplicate sample). The reported concentration of TPH DRO in MW-33 may include field contributions as discussed in Appendix E. Of the three other wells sampled and analyzed for TPH DRO in April 2021, TPH DRO was detected at estimated J-flagged concentrations below the MQL in wells WW-South, WW-North, and WW-East.

During the September 2021 monitoring event, TPH GRO was detected at an estimated J-flagged concentration below the MQL in well MW-33 of (0.0707 J mg/L, duplicate sample). TPH GRO was not detected in the other seven wells sampled and analyzed for TPH GRO in September 2021: MW-5, MW-21, MW-22, MW-32, WW-South, WW-North, and WW-East. TPH DRO was detected at concentrations above the MQL in wells MW-21 (0.312 mg/L) and MW-32 (0.178 mg/L). Of the six other wells sampled and analyzed for TPH DRO in September 2021, TPH DRO was detected at estimated J-flagged concentrations below the MQL in wells MW-22 and MW-33.

There is no WQCC Standard for TPH DRO or TPH GRO. No indicator VOCs or SVOCs associated with TPH mixtures were detected above their respective WQCC Standard in samples collected from any of these wells.

Reported TPH concentrations for the 2021 monitoring events were consistent with historical monitoring results (i.e., stable trends).

4.2.2 Inorganic Constituent Results

Analytical results for anions, TDS, and metals (i.e., inorganic constituents) in groundwater are presented in Table 3. A discussion of the inorganic constituent results is provided below.

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4.2.2.1 Anions

The April 2021 analytical results indicate that chloride and fluoride are present in groundwater at concentrations above their respective WQCC Standards. Chloride was detected at concentrations above the WQCC Standard of 250 mg/L in three of the 16 wells sampled for anions (MW-13R, MW-25, and WW-South) with a maximum concentration of 361 mg/L in MW-25. Fluoride was detected at a concentration above the WQCC Standard of 1.6 mg/L in one of the 16 wells sampled for anions at a concentration of 1.91 mg/L in MW-28.

The September 2021 analytical results indicate that chloride, fluoride, and nitrate-nitrite are present at concentrations above their respective WQCC Standards. Chloride was detected at concentrations above the WQCC Standard of 250 mg/L in seven of the 30 wells sampled for anions (MW-11R, MW-13R, MW-14R, MW-15R, MW-19R, MW-26R, and WW-South) with a maximum detected concentration of 394 mg/L in MW-14R. Fluoride was detected at concentrations above the WQCC Standard of 1.6 mg/L in two of the 30 wells sampled for anions at concentrations of 2.79 mg/L in MW-24R and 1.86 mg/L in MW-28. Nitrate-nitrite was detected at concentrations above the WQCC Standard of 10.0 mg/L in two of the 30 wells sampled for anions at concentrations of 11.7 mg/L in MW-20R and 11.6 mg/L in MW-26R.

Concentration maps of anions that exceeded WQCC Standards in groundwater for the April 2021 and September 2021 sampling events are provided as Figures 5 and 6, respectively.

Reported anion concentrations for the 2021 sampling events were generally consistent with previous sampling results. Notable increases of anion concentrations in the following wells were observed that may be associated with continually reducing groundwater elevations and will be reviewed again in 2022:

- Chloride concentrations in wells MW-4 and MW-12/MW-12R2 exhibited an increasing trend over the at least four most recent samplings events to historical maximums of 138 mg/L (MW-4) and 92.3 mg/L (MW-12R2) in September 2021. Chloride concentrations in these wells remained below the WQCC Standard of 250 mg/L.
- Chloride concentrations in well MW-26R increased from 238 mg/L in October 2020 to a historical maximum of 329 mg/L in September 2021, which is the first exceedance of the WQCC Standard since August 2017 (in former well MW-26).
- Nitrate-nitrate concentrations in wells MW-4, MW-6, MW-13/MW-13R, MW-20/MW-20R, and MW-26/MW-26R exhibited an overall increasing trend since approximately 2015 to historical maximums of 3.84 mg/L (MW-4), 4.05 mg/L (MW-6), 6.15 mg/L (MW-13R), 11.7 mg/L (MW-20R), and 11.6 mg/L (MW-26R) in 2021. Nitrate-nitrite concentrations in MW-13R decreased slightly from its April 2021 maximum of 6.15 mg/L to 5.76 mg/L (duplicate) in September 2021. Nitrate-nitrite concentrations remained below the WQCC Standard of 10.0 mg/L in these wells except in MW-20/MW-20R and MW-26R.

As discussed in the *2020 Annual Facility-Wide Groundwater Monitoring Report*, chloride concentrations in MW-28 previously exhibited an increasing trend over the five sampling events prior to 2021. Chloride concentrations in this well decreased during the 2021 events. Nitrate-

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nitrite concentrations in wells MW-24R and MW-29 also decreased from their historical maximums observed in October 2020 (4.94 mg/L and 6.90 mg/L, respectively) in September 2021 (2.51 mg/L and 6.40 mg/L, respectively). Lastly, fluoride concentrations decreased in MW-23R from the historical maximum of 1.26 mg/L from October 2020 to 1.01 mg/L in September 2021.

As discussed in the December 2013 *Refinery Investigation Report*, the presence of anions at concentrations above WQCC Standards at select well locations, including chloride (wells MW-11R, MW-13R, MW-14R, MW-15, MW-19R, MW-25, MW-26R, and WW-South) and fluoride (wells MW-24R and MW-28) is due to off-site sources, background concentrations, and/or non-HFNR sources at the refinery.

4.2.2.2 Total Dissolved Solids

During the April 2021 sampling event, TDS was detected at concentrations above the WQCC Standard of 1,000 mg/L in four of the 13 wells sampled for TDS (MW-11R, MW-13R, MW-25, and MW-33) with a maximum detected concentration of 1,320 mg/L in MW-25. During the September 2021 sampling event, TDS was detected at concentrations above the WQCC Standard of 1,000 mg/L in seven of the 26 wells sampled for TDS (MW-11R, MW-13R, MW-14R, MW-15R, MW-19R, MW-33, and WW-South) with a maximum detected concentration of 1,440 mg/L in MW-14R. Concentration maps of TDS in groundwater for the April 2021 and September 2021 sampling events are provided as Figures 7 and 8, respectively. Reported TDS concentrations for both 2021 sampling events were generally consistent with previous sampling results.

As discussed in the *2020 Annual Facility-Wide Groundwater Monitoring Report*, increasing TDS concentration trends in wells MW-8 and MW-18 were observed during 2020. In 2021, TDS concentrations in MW-8 and MW-18R decreased below the WQCC Standard of 1,000 mg/L from the observed exceedances reported in 2020 and are more consistent with historical results.

As discussed in the December 2013 *Refinery Investigation Report*, the presence of TDS at concentrations above WQCC Standards at select well locations (including wells MW-11R, MW-13R, MW-14R, MW-15R, MW-19R, MW-25, MW-33, and WW-South) is due to off-site sources, background concentrations, and/or non-HFNR sources at the refinery.

4.2.2.3 Metals

Manganese and uranium were detected at concentrations above the WQCC Standards of 0.20 mg/L and 0.03 mg/L, respectively, in one (MW-33) of the 15 wells sampled in April 2021 and in one (MW-33) of the 26 wells sampled in September 2021. Manganese was detected at concentrations of 0.701 mg/L and 0.645 mg/L (duplicate sample) in MW-33 during April 2021 and September 2021, respectively. Uranium was detected at concentrations of 0.0322 mg/L and 0.0328 mg/L in MW-33 during April and September 2021, respectively. During the April 2021 sampling event, nickel was detected at a concentration above the WQCC Standard of 0.2 mg/L in one (MW-15) of the 15 wells sampled at a concentration of 1.29 mg/L.

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Concentration maps of metals that exceeded WQCC Standards in groundwater for the April 2021 and September 2021 sampling events are provided as Figures 9 and 10, respectively. Metal concentrations in groundwater across the refinery were generally consistent with or less than previous sampling events. The presence of manganese and uranium above WQCC Standards in well MW-33, located along the southern refinery boundary, is potentially attributed to nearby produced-water injection wells LPU-38 and LSAU-23 and oil production wells LA-9 and LPU-96 (Figure 2) based on the distribution of manganese in groundwater and the lack of potential sources for metals identified in this portion of the refinery as discussed in the December 2013 *Refinery Investigation Report*.

Reported metal concentrations for the 2021 sampling events were generally consistent with or less than previous sampling results, with notable increases in the following wells:

- MW-15/MW-15R: Concentrations of molybdenum, nickel, and zinc in MW-15 exhibited an overall increasing trend from October 2018 to April 2021 and copper from October 2019 to April 2021. Historical maximum concentrations were reported in April 2021 for molybdenum (0.0102 mg/L), nickel (1.29 mg/L), zinc (3.68 mg/L), and copper (0.0219 mg/L), but concentrations of these metals remained below their respective WQCC Standards except for nickel. In replacement well MW-15R during September 2021, concentrations decreased for molybdenum (0.00864 mg/L), nickel (0.00497 mg/L), zinc (0.0312 mg/L), and copper (0.00425 JB mg/L). The September 2021 concentrations were at least an order of magnitude below their respective WQCC Standards for molybdenum (1.0 mg/L), nickel (0.2 mg/L), zinc (10.0 mg/L), and copper (1.0 mg/L). Molybdenum, nickel, zinc, and copper concentrations in MW-15R will continue to be monitored in 2022.

- Zinc concentrations in wells MW-4, MW-5, and MW-6 exhibited an overall increasing trend over at least the four most recent sampling events to historical maximums of 0.0334 mg/L (MW-4), 0.559 mg/L (MW-5) and 0.0732 mg/L (MW-6) in September 2021. However, zinc concentrations in all these wells remained at least two orders of magnitude below the WQCC Standard of 10.0 mg/L. Zinc concentrations have historically fluctuated across the refinery.

- Chromium concentrations in wells MW-22, MW-24/MW-24R, and MW-30 exhibited an overall increasing trend over at least the last three sampling events, to 0.00865 mg/L (MW-22), 0.0224 mg/L (MW-24R), and 0.0166 mg/L (MW-30) in September 2021. However, chromium concentrations in all these wells remained below historical maximums and the WQCC Standard of 0.05 mg/L.

- MW-33: Uranium concentrations exhibited an increasing trend from April 2018 (0.00269 J mg/L) to September 2021 (0.0328 mg/L [duplicate sample]), which is the historical maximum in this well. Uranium concentrations in MW-33 first exceeded the WQCC Standard of 0.03 mg/L in this well in April 2021. Iron concentrations increased from not detected above the MQL of 0.0489 mg/L in October 2020 to a historical maximum of 0.526 mg/L in April 2021 and decreased to 0.263 B mg/L (duplicate sample) in

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September 2021. However, iron was not detected above the MQL of 0.0281 mg/L in the duplicate sample collected in April 2021 and the parent sample in September 2021. Iron concentrations in this well remain an order of magnitude below the WQCC Standard of 1.0 mg/L. Uranium and iron concentrations in MW-33 will continue to be monitored in 2022.

Notable increases of the following metals were discussed in the *2020 Annual Facility-Wide Groundwater Monitoring Report*, but the 2021 results decreased or were consistent with historical results: total mercury in MW-5, MW-6, MW-8, MW-11R, MW-12R2, MW-13R, MW-14R, MW-15R, MW-22, MW-24R, MW-25, MW-30, MW-32, MW-33, and WW-South, and zinc in MW-18/MW-18R.

As discussed in the December 2013 *Refinery Investigation Report*, the presence of metals at concentrations above WQCC Standards at select well locations is due to off-site sources, background concentrations, and/or non-HFNR sources at the refinery.

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5.0 QUARTERLY REFINERY WATER SUPPLY WELL MONITORING

Groundwater samples were collected from refinery water supply wells WW-North, WW-East, and WW-South on a quarterly basis in 2021. The objective of the quarterly sampling is to evaluate the potential risk associated with use of the water in refinery restrooms and safety showers (the water is not used for drinking or cooking). The following deviations to the November 2017 Revised FWGMWP occurred during the quarterly water well sampling events in 2021:

- The fourth quarterly event was completed in September 2021 instead of October 2021 due to refinery turnaround activities.
- WW-East was resampled in November 2021 to confirm SVOC naphthalene detections observed during the fourth quarterly (September 2021) event.

Groundwater samples were collected from refinery water supply wells WW-North, WW-South, and WW-East on January 28, 2021; April 15, 2021; July 15, 2021; and September 16, 2021. Additional samples were collected from WW-East on November 10, 2021. Groundwater samples collected from the refinery water supply wells were submitted to Pace National in Mount Juliet, Tennessee, under appropriate chain-of-custody documentation for the same analyses as the semi-annual monitoring events. Organic and inorganic analytical results of the quarterly refinery water supply well samples are summarized and compared to WQCC Standards in Tables 2 and 3, respectively.

Consistent with historical results, chloride was detected in WW-South at concentrations above the WQCC Standard of 250 mg/L in each of the quarterly sampling events with results ranging from 266 mg/L (duplicate sample) in July 2021 to 349 mg/L (duplicate sample) in January 2021. Similar to historical results, TDS was detected in WW-South at concentrations above the WQCC Standard of 1,000 mg/L in three of the four quarterly sampling events ranging from 948 mg/L in April 2021 to 1,050 mg/L in September 2021. None of the remaining inorganic analytes were detected at concentrations above their respective WQCC Standards in any of the samples.

Benzene and chloroform were also detected at J-flagged estimated concentrations in WW-South during all quarterly sampling events in 2021. The reported benzene and chloroform concentrations were consistent with historical results and at least one order of magnitude below the WQCC Standards of 0.005 mg/L and 0.1 mg/L, respectively.

Naphthalene was detected at an estimated J-flagged concentration of 0.000169 J mg/L in WW-North during the third quarterly sampling (July 2021), but it was not detected during the fourth quarterly event.

TPH GRO was detected at an estimated J-flagged and B-flagged concentration during January 2021 in refinery water supply well WW-North (0.0420 JB mg/L), with the “B” qualifier indicating it was detected within five times the associated laboratory method blank detection. Therefore, the detected TPH GRO concentration in WW-North is likely attributed to laboratory contamination. TPH DRO was detected at estimated J-flagged concentrations in WW-South and WW-North

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during the January, April, and July 2021 events; and in WW-East during the January and April 2021 events. Estimated TPH DRO concentrations in the water supply wells during 2021 ranged from 0.0368 J mg/L in WW-North in July 2021 to 0.0943 JB mg/L in WW-East (which likely included laboratory contributions). There is no WQCC Standard for TPH GRO or TPH DRO. No indicator VOCs or SVOCs associated with TPH mixtures were detected above their respective WQCC Standard in samples collected from any of the refinery water supply wells.

Water from the refinery water supply wells poses no risk associated with continued use in refinery restrooms and safety showers based on these results.

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6.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

Three water samples, one field duplicate, and one trip blank were collected on January 28, 2021. Twenty water samples, three field duplicates, two equipment blanks, and two trip blanks were collected on April 15, 2021. Three water samples, one field duplicate, and one trip blank were collected on July 15, 2021. Thirty-three water samples, four field duplicates, two equipment blanks, and two trip blanks were collected on September 16, 2021. One water sample, and one field duplicate were collected on November 10, 2021. These samples were submitted to Pace National in Mount Juliet, Tennessee, for analysis.

TRC Quality Assurance (QA) staff reviewed resultant data. Five data packages identified as L1311938, L1340101, L1379618, L1404888, and L1430167 were reviewed. Data were reviewed for compliance with the analytical protocols used for sample analysis and laboratory-defined quality control (QC) limits. Items reviewed during the data validation process included the following:

- Sample integrity, preservation, and holding times
- Blank analyses
- Surrogate recoveries
- Matrix spike and matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs)
- Laboratory control sample and laboratory control sample duplicate (LCS/LCSD) recoveries and RPDs
- Field duplicate and laboratory duplicate RPDs
- Sample documentation

QC data indicate that measurement data are sufficient to meet method quality objectives, reported data are defensible, and QC mechanisms were generally effective in ensuring measurement data reliability within the expected limits of sampling and analytical error except for nitrate-nitrite results in samples for MW-33 and its duplicate, and both equipment blanks during April 2021. The QA reviewer determined these nitrate-nitrite results, which were below detection limits, are not usable for project objectives based on a lack of preservation due to a laboratory error and qualified the results with a [R] in Table 2. Nitrate-nitrite has not been detected in MW-33 previously. There were also sample results for analytes that were within five times the equipment blank concentrations and therefore may include measurement contributions from inadequate decontamination of field equipment. Field decontamination procedures will be reviewed and modified as appropriate during future events. Complete QA/QC data review results are provided in Appendix E.

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7.0 2021 RELEASES AND REMEDIATION ACTIVITIES

One reportable release occurred at the refinery in 2021 from the firewater pond. Throughout 2021, HFNR continued to recover LNAPL associated with the historical release discovered at the asphalt loading rack in November 2015.

7.1 Firewater Pond Release

An apparent leak from the firewater pond liner was discovered in 2020 based on the observation of moist to wet soil near the base of the pond. The pond contains groundwater pumped from the three on-site water supply wells (WW-North, WW-East, and WW-South) that are sampled on a quarterly basis. Moist soil was first observed at the southeast corner of the pond in June 2020 and the moisture content increased to a shallow puddle (< 2 inches deep) in December 2020. HFNR determined the total volume of water leaking from the firewater pond did not potentially exceed the reportable 5-barrel threshold until April 2021. HFNR then submitted an initial Form C-141 (Release Notification) to the OCD on May 19, 2021, for the apparent leak from the firewater pond liner.

The pond and apparently affected soil (moist to wet soil) are contained within the secured facility and only authorized personnel are allowed entry. The pond liner was repaired in April of 2022. Historical analytical results for the water supply wells that source the pond indicate no WQCC constituents are present at concentrations above WQCC standards except TDS and chloride in the WW-South. Future groundwater monitoring events will be used to determine if there are any impacts to groundwater from this apparent release, including quarterly sampling of the East Well located immediately downgradient of the pond. The extent of the release is still under evaluation and final reports will be provided to OCD under separate cover.

7.2 Asphalt Loading Rack (LNAPL Recovery at MW-31)

HNFR has conducted routine LNAPL recovery at monitoring well MW-31 since LNAPL was discovered in this well in February 2017. A passive skimmer (Petro-Bailer™) was installed and maintained in MW-31 through March 2019 and the skimmer was emptied on a daily to weekly basis. In addition to the passive skimmer, LNAPL was manually bailed from MW-31 on a primarily weekly basis from February 2018 through March 2019. In April 2019, HFNR installed a pneumatic skimmer pump system (Geotech SpOILer System) in MW-31 that was programmed to operate at regular intervals to continuously recover LNAPL and reduce in-well apparent LNAPL thickness.

Throughout 2021, HFNR conducted operation and maintenance (O&M) of the recovery system on at least a weekly basis, but gauging of the well was only conducted when the skimmer pump was removed for more intensive O&M and optimization events on a quarterly basis. Fluid gauging and LNAPL recovery results to date are summarized in Appendix F. Approximately 306 gallons of LNAPL were recovered by the pneumatic skimmer pump system from MW-31 during 2021. An approximate total of 1,443 gallons of LNAPL have been recovered manually or by the pneumatic skimmer pump system from MW-31 since February 2017. Apparent LNAPL thickness in MW-31 decreased over time with operation of the skimmer system from 5.65 feet in

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April 2019 to 4.19 feet in April 2021. The apparent LNAPL thickness in MW-31 increased between April 2021 (4.19 feet), July 2021 (4.50 feet) and September 2021 (5.79 feet). The increased apparent LNAPL thickness in MW-31 during 2021 is attributed to (1) declining groundwater elevations and (2) a failing compressor which was replaced on October 8, 2021. The skimmer system has operated with no issues since then.

HFNR will continue to monitor and evaluate recovery system data and adjust system operation parameters as necessary in order to optimize recovery. Recovery data collected thus far indicates the skimmer system has increased LNAPL recovery rates and reduced the in-well apparent LNAPL thickness. However, apparent in-well LNAPL thickness fluctuates with the water table because it relates to the hydrogeologic conditions and characteristics of the LNAPL and soil and is therefore a poor indicator of LNAPL mobility and recoverability. O&M activities will be conducted on at least a weekly basis with more intensive maintenance activities (including optimization) conducted on at least a quarterly basis.

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8.0 CONCLUSIONS

Conclusions based on data collected during groundwater monitoring activities conducted during calendar year 2021 are discussed below.

Groundwater flow directions were consistent with previous groundwater monitoring events. Groundwater elevations decreased an average of 0.55 feet from June 2020 to April 2021 and an average of 0.40 feet from October 2020 to September 2021. Groundwater elevations have continually decreased from June 2009 to September 2021 and groundwater elevations in a few wells are approaching their current total depth. These reductions in groundwater elevation are likely caused by limited recharge and active regional pumping. Groundwater elevations in the refinery's monitoring well network will be closely monitored during future events and evaluated for potential well replacement. Consistent with previous results, LNAPL was detected in monitoring well MW-31. The apparent LNAPL thickness in MW-31 ranged from 4.19 feet to 5.79 feet throughout 2021.

Analytical results of groundwater samples collected during semi-annual groundwater monitoring events conducted in April 2021 and September 2021 indicated the following:

- No VOCs were reported at concentrations above WQCC Standards in any well during the reporting period.
- No SVOCs were reported at concentrations above WQCC Standards in any well during the reporting period.
- TPH GRO was not detected above the MQL during the reporting period. TPH DRO was detected above the MQL in wells MW-32 and MW-33 in April 2021, and wells MW-21 and MW-32 in September 2021. There is no WQCC Standard for TPH GRO and TPH DRO; no indicator VOCs or SVOCs associated with TPH mixtures were detected above their respective WQCC Standard in samples collected from any of these wells.
- Anions were reported at concentrations above the WQCC Standard for chloride (wells MW-13R, MW-25, and WW-South) and fluoride (well MW-28) in April 2021; and chloride (wells MW-11R, MW-13R, MW-14R, MW-15R, MW-19R, MW-26R, and WW-South), fluoride (wells MW-24R and MW-28), and nitrate-nitrite (MW-20R and MW-26R) in September 2021.
- TDS was reported at concentrations above its WQCC Standard in wells MW-11R, MW-13R, MW-25, and MW-33 in April 2021; and in wells MW-11R, MW-13R, MW-14R, MW-15R, MW-19R, MW-33, and WW-South in September 2021.
- Metals were reported at concentrations above the WQCC Standard for manganese (MW-33), nickel (MW-15), and uranium (MW-33) in April 2021; and manganese and uranium (both in MW-33) in September 2021.

The presence of select anions, TDS, and select metals at concentrations above WQCC Standards at select well locations is due to off-site sources, background concentrations, and/or

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non-HFNR sources at the refinery. No constituents attributable to refinery sources or operations, as discussed in the December 2013 *Refinery Investigation Report*, exceeded WQCC Standards in wells located along the southeastern refinery boundary (wells MW-5, MW-12R2, MW-14R, MW-22, MW-32, and MW-33), which is the natural downgradient portion of the facility (i.e., if active pumping from the refinery water supply wells ceased). Groundwater pumping from refinery water supply wells WW-East, WW-North, and WW-South for industrial use causes radial groundwater flow towards a cone of depression at the central portion of the refinery preventing migration of constituents off-site, but also enables on-site migration of constituents from potential off-site sources (e.g., active oil production and injection wells).

WQCC Standards were not exceeded in any of the quarterly samples collected from refinery water supply wells WW-North, WW-South, and WW-East except for chloride and TDS in WW-South. Based on these results, the water poses no risk associated with continued use in refinery restrooms and safety showers.

LNAPL was continually recovered from MW-31 throughout 2021 using the pneumatic skimmer pump system. A total of 306 gallons of LNAPL was recovered from MW-31 during 2021.

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9.0 WORK PLANNED FOR 2022

The following summarizes the scope of work planned for 2022 at the refinery:

- Implement semi-annual groundwater monitoring and annual reporting activities in accordance with the sampling and analysis plan presented in the November 2017 Revised FWGMWP that was submitted to the OCD on November 17, 2017, and approved by OCD on February 1, 2018. HFNR will continue to evaluate the sampling plan and recommend revisions based on historical analytical trends in groundwater.
- Continue to implement quarterly refinery water supply well monitoring in accordance with OCD's May 16, 2014, letter, HFNR's response letter on June 20, 2014, and the November 2017 Revised FWGMWP.
- Conduct routine LNAPL recovery at well MW-31 using the pneumatic skimmer pump system. O&M activities will continue to be conducted on at least a weekly basis with more intensive maintenance activities (including optimization) to be conducted on at least a quarterly basis.
- Evaluate and replace monitor wells that are screened at depths too shallow for optimal monitoring of the current groundwater elevation, which has continually decreased since June 2009.
- Submit a Groundwater Discharge Permit application per OCD's request. Upon issuance of the Groundwater Discharge Permit, a new FWGMWP will be submitted in accordance with the permit.

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FIGURES

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Map Rotation: 0

TRC - GIS



LEGEND

- LW - CITY OF LOVINGTON WATER WELL
- RAIL
- FENCE

SOURCE: BASEMAP: WORLD IMAGERY - ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA FSA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY, 1/24/2020.

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505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
REFINERY VICINITY MAP

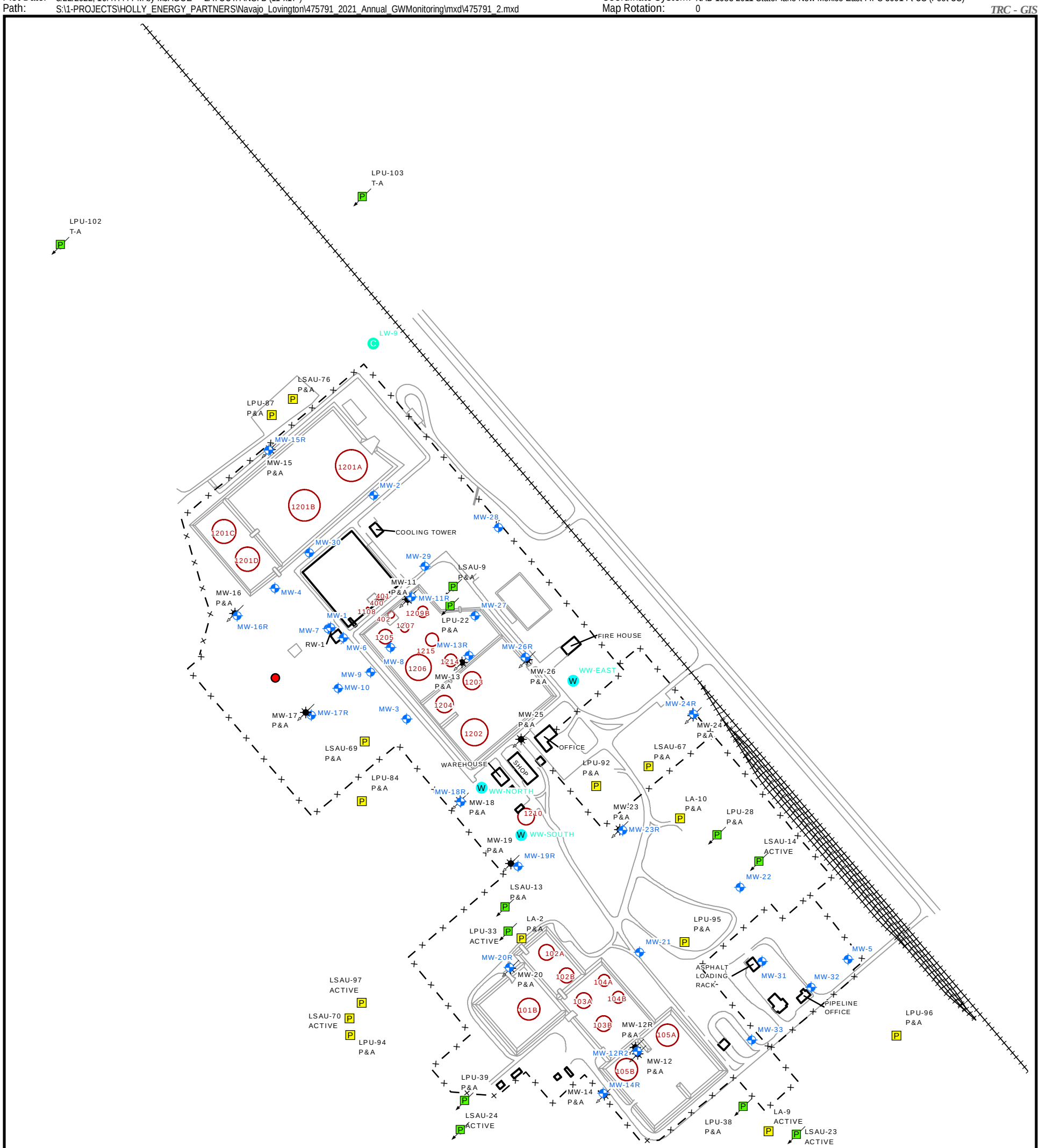
DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_1.mxd

FIGURE 1

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Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



LEGEND

- MONITORING WELL
- MONITORING WELL - PLUGGED AND ABANDONED (P&A)
- OIL PRODUCTION WELL
- OIL PRODUCTION - CONVERTED TO INJECTION WELL
- RECOVERY WELL
- WATER WELL
- CITY OF LOVINGTON WATER WELL
- FLARE
- RAIL
- FENCE
- BUILDINGS
- TANKS

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505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
REFINERY SITE PLAN

DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_2.mxd

FIGURE 2

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Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



NOTE:
1. WATER WELL NOT ACCESSIBLE FOR GAUGING.
2. WELLS GAUGED ON APRIL 15, 2021.

LEGEND

- GROUNDWATER CONTOURS (DASHED WHERE INFERRED)
- MONITORING WELL
- RECOVERY WELL
- WATER WELL
- FENCE
- RAIL
- GROUNDWATER FLOW DIRECTION
- 3715.17 GROUNDWATER ELEVATION (FEET)
- BUILDINGS

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PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
GROUNDWATER POTENTIOMETRIC SURFACE MAP - APRIL 2021

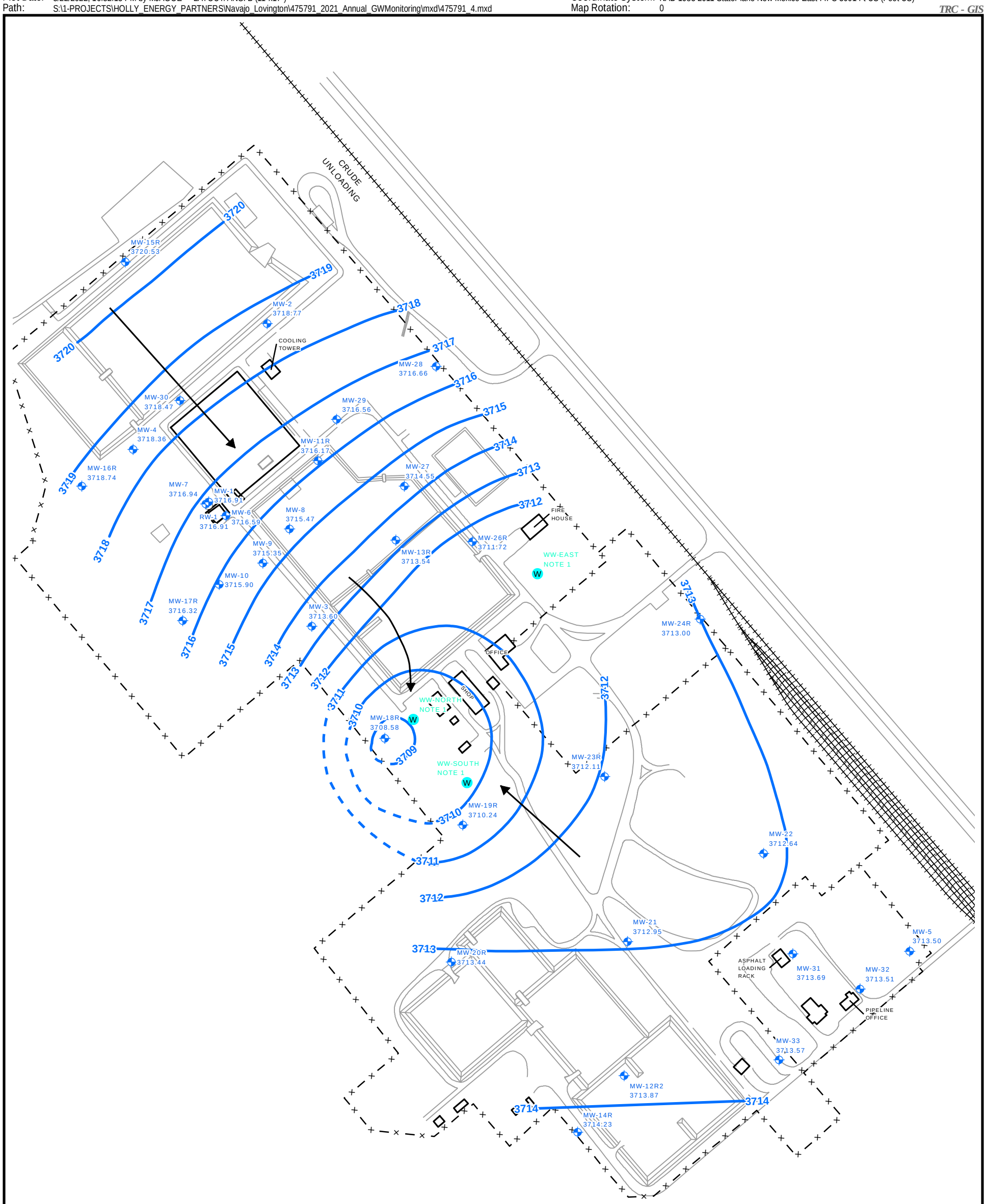
DRAWN BY:	M. JAGOE
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
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FIGURE 3

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Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



NOTE:
1. WATER WELL NOT ACCESSIBLE FOR GAUGING.
2. WELLS GAUGED ON SEPTEMBER 16, 2021.

LEGEND

- GROUNDWATER CONTOURS (DASHED WHERE INFERRED)
- MONITORING WELL
- RECOVERY WELL
- WATER WELL
- FENCE
- RAIL
- GROUNDWATER FLOW DIRECTION
- 3713.57 GROUNDWATER ELEVATION (FEET)
- BUILDINGS

0 175 350 FEET
1 " = 350 '
1:4,200

N

505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
GROUNDWATER POTENTIOMETRIC SURFACE MAP - SEPTEMBER 2021

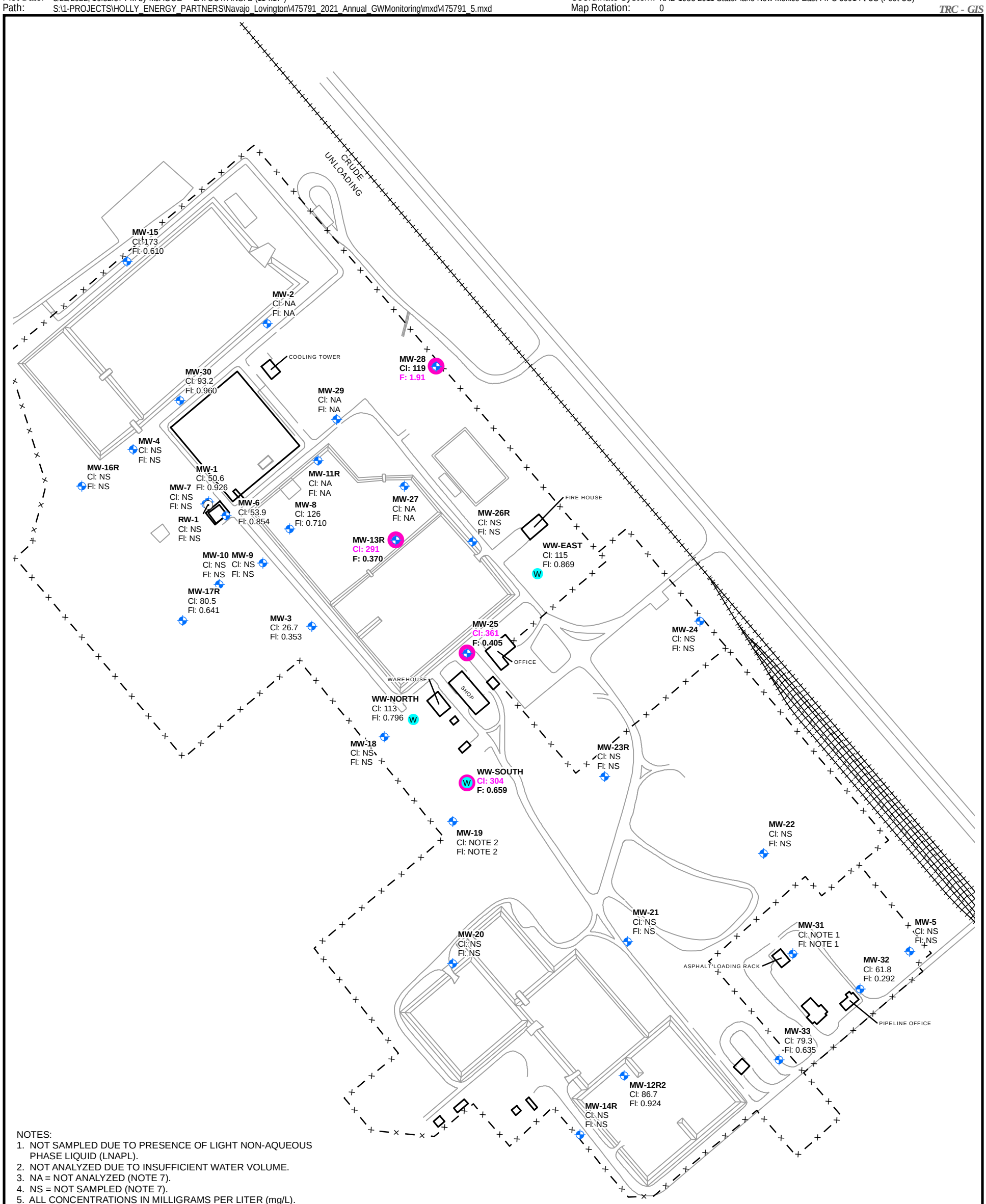
DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_4.mxd

FIGURE 4

Plot Date: 3/22/2022, 16.52.57 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\HOLLY_ENERGY_PARTNERS\Navajo_Lovington\475791_2021_Annual_GWMonitoring\mxd\475791_5.mxd

Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



NOTES:
1. NOT SAMPLED DUE TO PRESENCE OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL).
2. NOT ANALYZED DUE TO INSUFFICIENT WATER VOLUME.
3. NA = NOT ANALYZED (NOTE 7).
4. NS = NOT SAMPLED (NOTE 7).
5. ALL CONCENTRATIONS IN MILLIGRAMS PER LITER (mg/L).
6. CHLORIDE AND FLUORIDE CONCENTRATIONS SHOWN FOR ALL WELLS BECAUSE THEY ARE THE ONLY ANIONS THAT EXCEEDED THEIR RESPECTIVE WQCC STANDARDS.
7. IN ACCORDANCE WITH DECEMBER 2017 REVISED FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN.

LABEL KEY:
Cl: 361 - CHLORIDE CONCENTRATION (WQCC STANDARD = 250 mg/L)
F: 1.91 - FLUORIDE CONCENTRATION (WQCC STANDARD = 1.6 mg/L)

PINK HIGHLIGHTED VALUES IN EXCEEDANCE OF WATER QUALITY CONTROL COMMISSION (WQCC) STANDARD.

LEGEND

- MONITORING WELL
- RECOVERY WELL
- WATER WELL
- WQCC STANDARD EXCEEDED AT THIS LOCATION
- RAIL
- FENCE
- BUILDINGS

0 175 350 FEET
1 " = 350 '
1:4,200

N

TRC
505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
ANIONS CONCENTRATION MAP - APRIL 2021

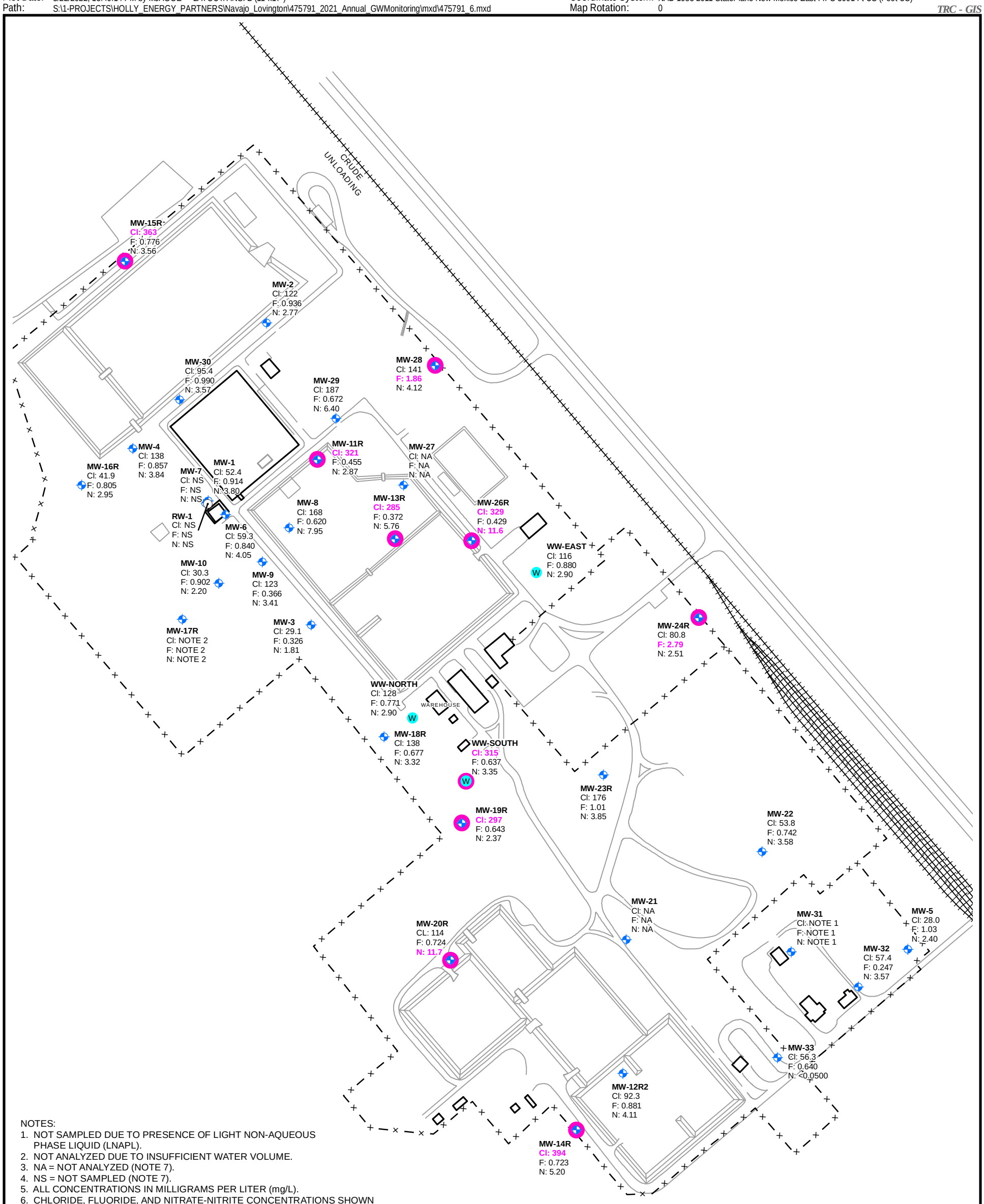
DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_5.mxd

FIGURE 5

Plot Date: 3/22/2022, 15:49:14 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\HOLLY_ENERGY_PARTNERS\Navajo_Lovington\475791_2021_Annual_GWMonitoring\mxd\475791_6.mxd

Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



NOTES:
1. NOT SAMPLED DUE TO PRESENCE OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL).
2. NOT ANALYZED DUE TO INSUFFICIENT WATER VOLUME.
3. NA = NOT ANALYZED (NOTE 7).
4. NS = NOT SAMPLED (NOTE 7).
5. ALL CONCENTRATIONS IN MILLIGRAMS PER LITER (mg/L).
6. CHLORIDE, FLUORIDE, AND NITRATE-NITRITE CONCENTRATIONS SHOWN FOR ALL WELLS BECAUSE THEY ARE THE ONLY ANIONS THAT EXCEEDED THEIR RESPECTIVE WQCC STANDARDS.
7. IN ACCORDANCE WITH DECEMBER 2017 REVISED FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN.

LABEL KEY:
CI: 92.3 - CHLORIDE CONCENTRATION (WQCC STANDARD = 250 mg/L)
F: 0.881 - FLUORIDE CONCENTRATION (WQCC STANDARD = 1.6 mg/L)
N: 5.20 - NITRATE-NITRITE CONCENTRATION (WQCC STANDARD = 10.0 mg/L)

PINK HIGHLIGHTED VALUES IN EXCEEDANCE OF WATER QUALITY CONTROL COMMISSION (WQCC) STANDARD.

LEGEND

MONITORING WELL
RECOVERY WELL
WATER WELL
WQCC STANDARD EXCEEDED AT THIS LOCATION
RAIL
FENCE
BUILDINGS

0 175 350 FEET
1 " = 350 '
1:4,200

TRC
505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
ANIONS CONCENTRATION MAP - SEPTEMBER 2021

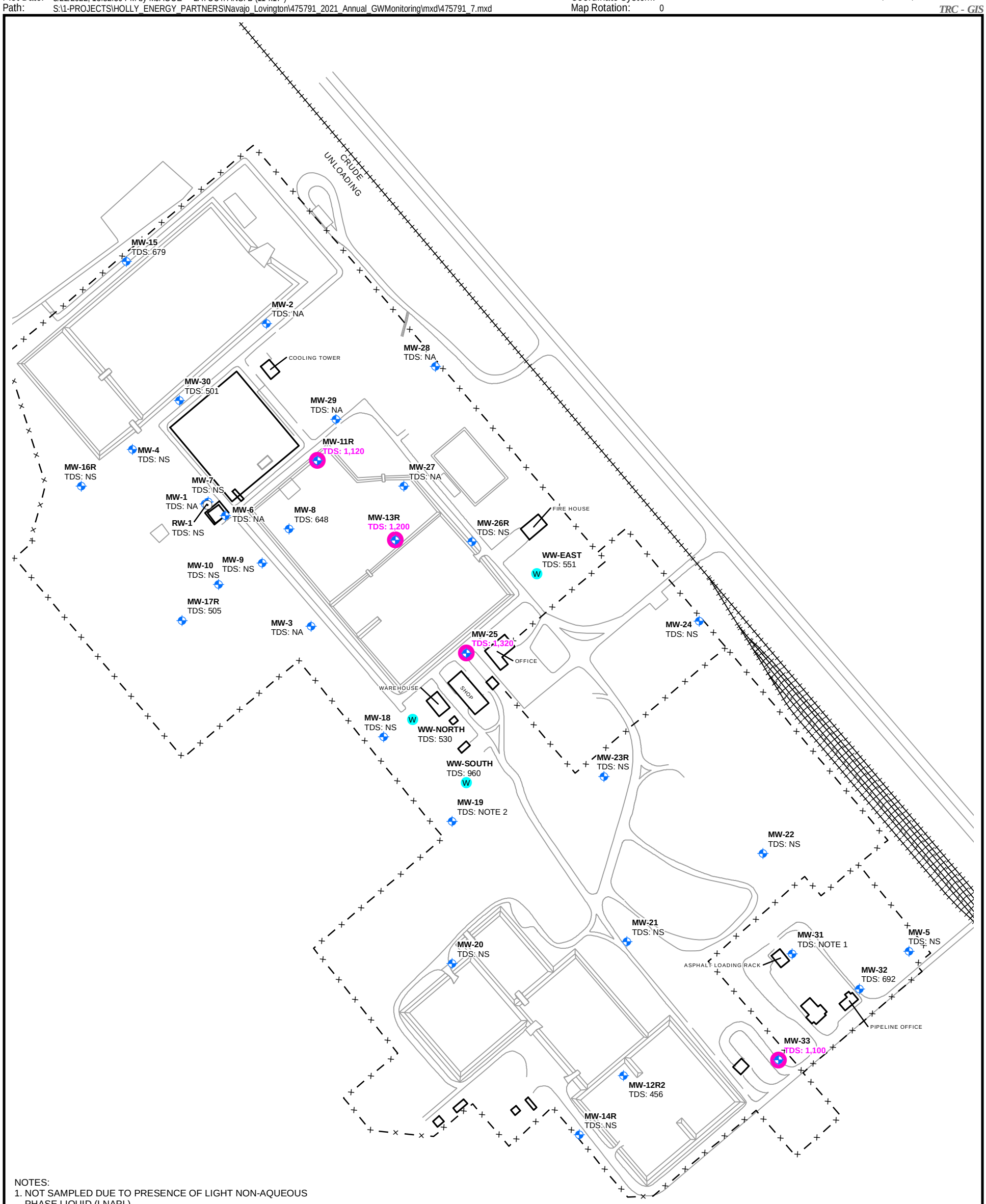
DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_6.mxd

FIGURE 6

Plot Date: 3/22/2022, 15:52:30 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



NOTES:
1. NOT SAMPLED DUE TO PRESENCE OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL).
2. NOT ANALYZED DUE TO INSUFFICIENT WATER VOLUME.
3. NA = NOT ANALYZED (NOTE 6).
4. NS = NOT SAMPLED (NOTE 6).
5. ALL CONENTRATIONS IN MILLIGRAM PER LITER (mg/L).
6. IN ACCORDANCE WITH DECEMBER 2017 REVISED FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN.

LABEL KEY:
TDS: 1320 - TOTAL DISSOLVED SOLIDS CONCENTRATION (WQCC STANDARD = 1,000 mg/L)

PINK HIGHLIGHTED VALUES IN EXCEEDANCE OF WATER QUALITY CONTROL COMMISSION (WQCC) STANDARD.

LEGEND

- MONITORING WELL
- RECOVERY WELL
- WATER WELL
- WQCC STANDARD EXCEEDED AT THIS LOCATION
- RAIL
- FENCE
- BUILDINGS

0 175 350 FEET
1 " = 350 '
1:4,200

N

TRC
505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
TOTAL DISSOLVED SOLIDS CONCENTRATION MAP - APRIL 2021

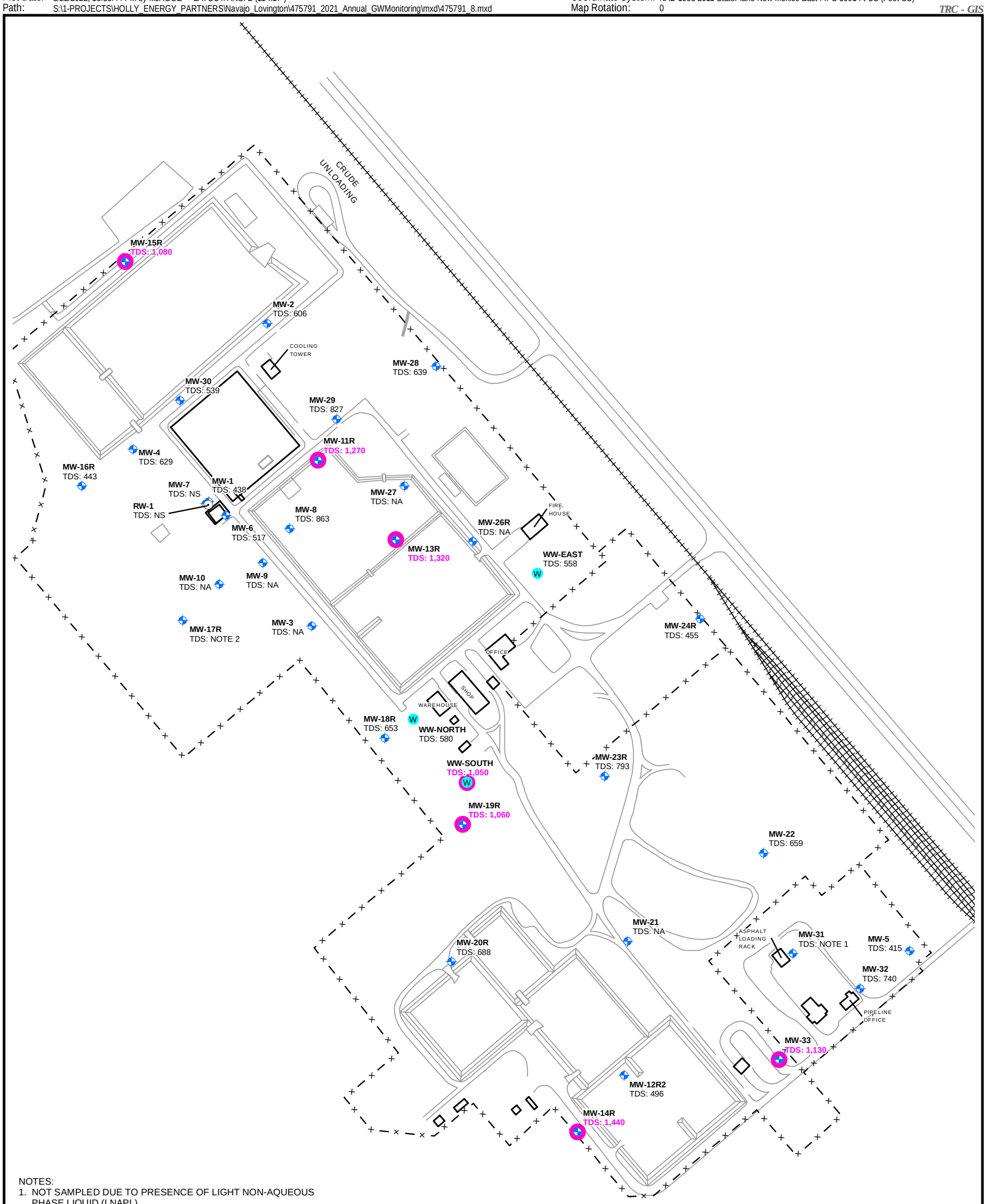
DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_7.mxd

FIGURE 7

Plot Date: 3/22/2022, 15:53:44 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\HOLLY_ENERGY_PARTNERS\Navajo_Lovington\475791_2021_Annual_GWMonitoring\mxd\475791_8.mxd

Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



NOTES:
1. NOT SAMPLED DUE TO PRESENCE OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL).
2. NOT ANALYZED DUE TO INSUFFICIENT WATER VOLUME.
3. NA = NOT ANALYZED (NOTE 6).
4. NS = NOT SAMPLED (NOTE 6).
5. ALL CONCENTRATIONS IN MILLIGRAMS PER LITER (mg/L).
6. IN ACCORDANCE WITH DECEMBER 2017 REVISED FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN.

LABEL KEY:
TDS: 415 - TOTAL DISSOLVED SOLIDS CONCENTRATION (WQCC STANDARD = 1,000 mg/L)

PINK HIGHLIGHTED VALUES IN EXCEEDANCE OF WATER QUALITY CONTROL COMMISSION (WQCC) STANDARD.

LEGEND

- MONITORING WELL
- RECOVERY WELL
- WATER WELL
- WQCC STANDARD EXCEEDED AT THIS LOCATION
- RAIL
- FENCE
- BUILDINGS

0 175 350 FEET
1 " = 350 '
1:4,200

N

TRC
505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
TOTAL DISSOLVED SOILDS CONCENTRATION MAP - SEPTEMBER 2021

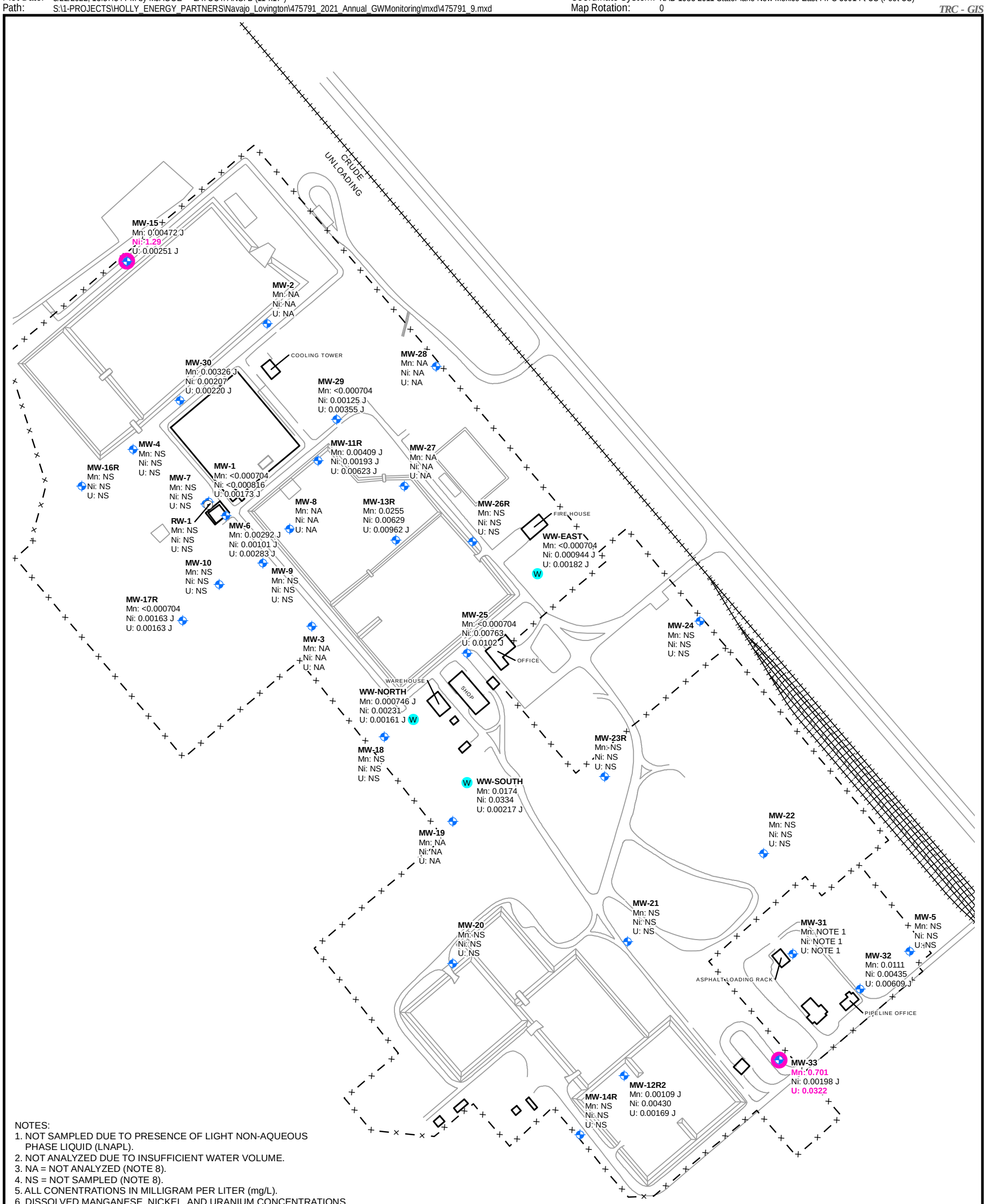
DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_8.mxd

FIGURE 8

Plot Date: 3/22/2022, 15:57:34 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\HOLLY_ENERGY_PARTNERS\Navajo_Lovington\475791_2021_Annual_GWMonitoring\mxd\475791_9.mxd

Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



NOTES:
1. NOT SAMPLED DUE TO PRESENCE OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL).
2. NOT ANALYZED DUE TO INSUFFICIENT WATER VOLUME.
3. NA = NOT ANALYZED (NOTE 8).
4. NS = NOT SAMPLED (NOTE 8).
5. ALL CONENTRATIONS IN MILLIGRAM PER LITER (mg/L).
6. DISSOLVED MANGANESE, NICKEL, AND URANIUM CONCENTRATIONS SHOWN FOR ALL WELLS BECAUSE THEY ARE THE ONLY METALS THAT EXCEEDED THEIR RESPECTIVE WQCC STANDARD.
7. J = ANALYTE DETECTED BELOW REPORTING LIMIT, ESTIMATED VALUE.
8. IN ACCORDANCE WITH DECEMBER 2017 REVISED FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN.

LABEL KEY:
Mn: 0.701 - MANGANESE CONCENTRATION (WQCC STANDARD = 0.2 mg/L)
Ni: 1.29 - MANGANESE CONCENTRATION (WQCC STANDARD = 0.2 mg/L)
U: 0.0322 - URANIUM 238 CONCENTRATION (WQCC STANDARD = 0.03 mg/L)
PINK HIGHLIGHTED VALUES IN EXCEEDANCE OF WATER QUALITY CONTROL COMMISSION (WQCC) STANDARD.

LEGEND

- MONITORING WELL
- RECOVERY WELL
- WATER WELL
- WQCC STANDARD EXCEEDED AT THIS LOCATION
- RAIL
- FENCE
- BUILDINGS

0 175 350 FEET
1 " = 350 '
1:4,200

N

TRC
505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
METALS CONCENTRATION MAP - APRIL 2021

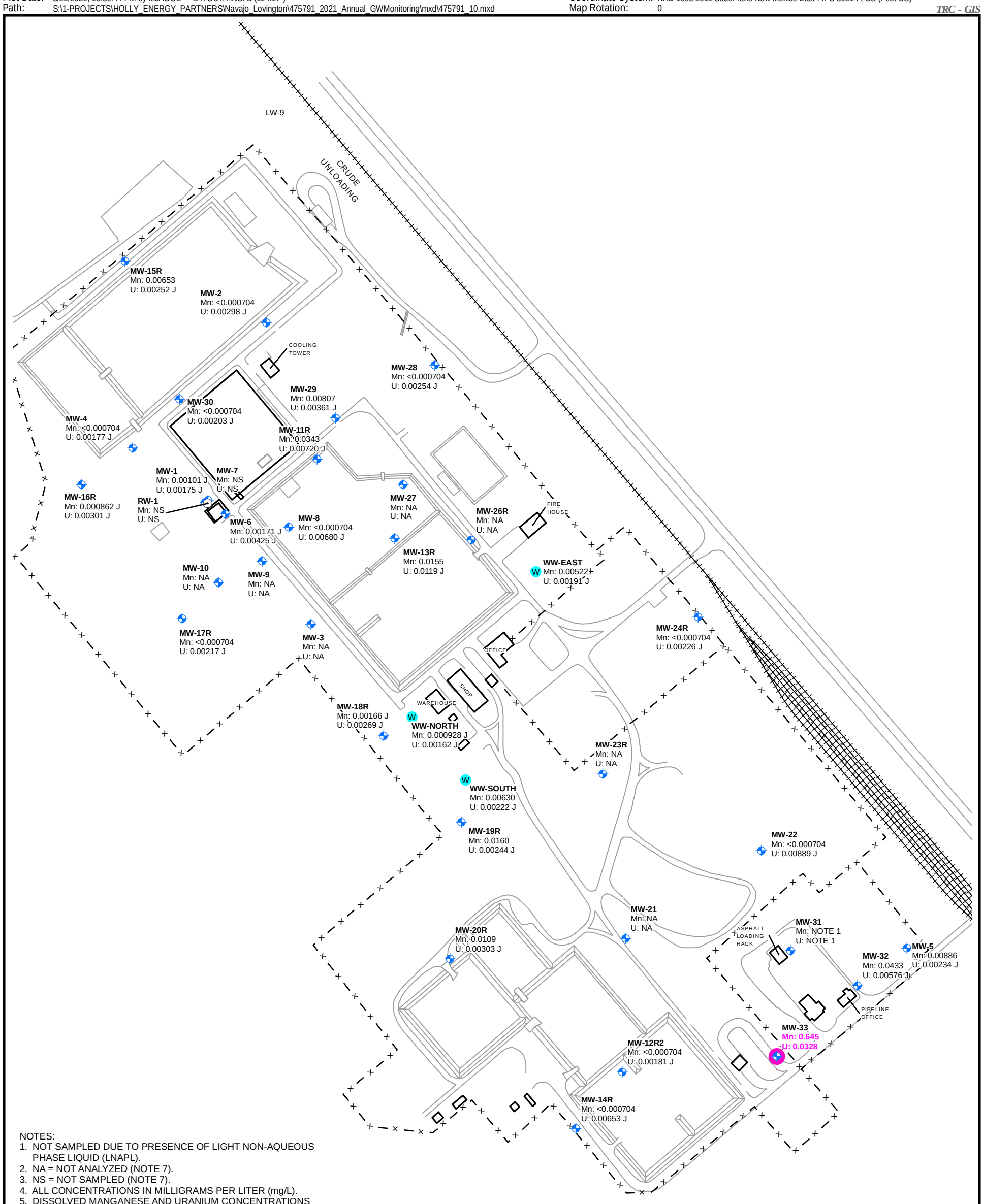
DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_9.mxd

FIGURE 9

Plot Date: 3/22/2022, 15:59:44 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\HOLLY_ENERGY_PARTNERS\Navajo_Lovington\475791_2021_Annual_GWMonitoring\mxd\475791_10.mxd

Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



NOTES:
1. NOT SAMPLED DUE TO PRESENCE OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL).
2. NA = NOT ANALYZED (NOTE 7).
3. NS = NOT SAMPLED (NOTE 7).
4. ALL CONCENTRATIONS IN MILLIGRAMS PER LITER (mg/L).
5. DISSOLVED MANGANESE AND URANIUM CONCENTRATIONS SHOWN FOR ALL WELLS BECAUSE THEY ARE THE ONLY METALS THAT EXCEEDED THEIR RESPECTIVE WQCC STANDARDS.
6. J = ANALYTE DETECTED BELOW REPORTING LIMIT, ESTIMATED VALUE.
7. IN ACCORDANCE WITH DECEMBER 2017 REVISED FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN.

LABEL KEY:
Mn: 0.0155 - MANGANESE CONCENTRATION (WQCC STANDARD = 0.2 mg/L)
U: 0.00181 J - URANIUM 238 CONCENTRATION (WQCC STANDARD = 0.03 mg/L)

PINK HIGHLIGHTED VALUES IN EXCEEDANCE OF WATER QUALITY CONTROL COMMISSION (WQCC) STANDARD.

LEGEND

- MONITORING WELL
- RECOVERY WELL
- WATER WELL
- WQCC STANDARD EXCEEDED AT THIS LOCATION
- RAIL
- FENCE
- BUILDINGS

0 175 350 FEET
1 " = 350 '
1:4,200

505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
HOLLYFRONTIER NAVAJO REFINING LLC
AP-110, LOVINGTON REFINERY, LOVINGTON, NM

TITLE:
METALS CONCENTRATION MAP - SEPTEMBER 2021

DRAWN BY:	S. RAY
CHECKED BY:	A. ELJURI
APPROVED BY:	J. SPEER
DATE:	MARCH 2022
PROJ. NO.:	475791
FILE:	475791_10.mxd

FIGURE 10

TABLES

Released to Imaging: 7/20/2022 10:39:48 AM

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-1 [2,6]	3,838.40	3,838.19	3,739.19 to 3,709.19	04/30/09	- -	106.35	136.10	0.00	106.35	3,732.05	NA
				06/10/09	- -	106.49	NM	0.00	106.49	3,731.91	-0.14
				06/19/09	- -	106.57	129.12	0.00	106.57	3,731.83	-0.08
				07/02/09	- -	106.74	129.13	0.00	106.74	3,731.66	-0.17
				07/24/09	- -	106.83	129.11	0.00	106.83	3,731.57	-0.09
				09/24/09	- -	107.31	129.12	0.00	107.31	3,731.09	-0.48
				10/27/09	- -	107.44	129.10	0.00	107.44	3,730.96	-0.13
				01/13/10	- -	107.57	129.11	0.00	107.57	3,730.83	-0.13
				04/01/10	- -	107.51	NM	0.00	107.51	3,730.89	0.06
				08/11/10	- -	108.09	129.16	0.00	108.09	3,730.31	-0.58
				02/23/11	- -	108.12	129.14	0.00	108.12	3,730.28	-0.03
				07/12/11	- -	109.00	129.11	0.00	109.00	3,729.40	-0.88
				02/02/12	- -	109.68	129.12	0.00	109.68	3,728.72	-0.68
				07/23/12	- -	110.88	128.87	0.00	110.88	3,727.52	-1.20
				02/18/13	- -	110.51	129.22	0.00	110.51	3,727.89	0.37
				08/19/13	- -	111.55	130.60	0.00	111.55	3,726.85	-1.04
				02/24/14	- -	112.49	129.35	0.00	112.49	3,725.91	-0.94
				08/18/14	- -	113.37	129.09	0.00	113.37	3,725.03	-0.88
				02/23/15	- -	113.82	129.20	0.00	113.82	3,724.58	-0.45
				08/24/15	- -	114.56	129.19	0.00	114.56	3,723.84	-0.74
				03/07/16	- -	114.81	129.19	0.00	114.81	3,723.59	-0.25
				08/15/16	- -	115.42	129.19	0.00	115.42	3,722.98	-0.61
				02/06/17	- -	115.81	129.19	0.00	115.81	3,722.59	-0.39
				06/22/17	- -	115.88	129.22	0.00	115.88	3,722.52	-0.07
				08/17/17	- -	116.34	129.22	0.00	116.34	3,722.06	-0.46
				04/05/18	- -	116.63	129.22	0.00	116.63	3,721.77	-0.29
				10/01/18	- -	116.67	129.22	0.00	116.67	3,721.73	-0.04
				04/04/19	- -	118.06	129.22	0.00	118.06	3,720.34	-1.39
				10/24/19	- -	119.35	129.22	0.00	119.35	3,719.05	-1.29
				06/18/20	- -	120.01	129.22	0.00	120.01	3,718.39	-0.66
				10/08/20	- -	120.91	129.22	0.00	120.91	3,717.49	-0.90
				04/15/21	- -	120.94	129.22	0.00	120.94	3,717.46	-0.03
				09/16/21	- -	121.49	129.22	0.00	121.49	3,716.91	-0.55
MW-2 [2,6]	3,837.35	3,837.27	3,740.94 to 3,710.94	06/22/09	- -	104.32	126.41	0.00	104.32	3,733.03	NA
				01/13/10	- -	105.44	126.68	0.00	105.44	3,731.91	-1.12
				08/11/10	- -	105.97	126.42	0.00	105.97	3,731.38	-0.53
				02/23/11	- -	105.92	126.46	0.00	105.92	3,731.43	0.05
				07/12/11	- -	107.22	126.47	0.00	107.22	3,730.13	-1.30
				01/30/12	- -	107.55	126.47	0.00	107.55	3,729.80	-0.33
				07/23/12	- -	108.72	126.48	0.00	108.72	3,728.63	-1.17
				02/18/13	- -	108.15	126.69	0.00	108.15	3,729.20	0.57
				08/19/13	- -	109.43	126.75	0.00	109.43	3,727.92	-1.28
				02/24/14	- -	110.59	127.70	0.00	110.59	3,726.76	-1.16
				08/18/14	- -	111.25	126.58	0.00	111.25	3,726.10	-0.66
				02/23/15	- -	111.45	126.77	0.00	111.45	3,725.90	-0.20
				08/24/15	- -	112.13	126.75	0.00	112.13	3,725.22	-0.68
				03/07/16	- -	112.02	126.71	0.00	112.02	3,725.33	0.11
				08/15/16	- -	113.01	126.70	0.00	113.01	3,724.34	-0.99
				02/06/17	- -	112.96	126.70	0.00	112.96	3,724.39	0.05
				06/22/17	- -	113.44	126.69	0.00	113.44	3,723.91	-0.48
				08/16/17	- -	113.73	126.69	0.00	113.73	3,723.62	-0.29
				04/05/18	- -	114.15	126.69	0.00	114.15	3,723.20	-0.42
				10/01/18	- -	114.93	126.69	0.00	114.93	3,722.42	-0.78
				04/04/19	- -	115.40	126.69	0.00	115.40	3,721.95	-0.47
				10/24/19	- -	116.99	126.69	0.00	116.99	3,720.36	-1.59
				06/18/20	- -	117.90	126.69	0.00	117.90	3,719.45	-0.91
				10/08/20	- -	118.80	126.69	0.00	118.80	3,718.55	-0.90
				04/15/21	- -	118.37	126.69	0.00	118.37	3,718.98	0.43
				09/16/21	- -	118.58	126.69	0.00	118.58	3,718.77	-0.21

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-3 [2,6]	3,831.65	3,831.73	3,731.20 to 3,701.20	06/16/09	- -	102.65	130.45	0.00	102.65	3,729.00	NA
				01/13/10	- -	103.29	130.69	0.00	103.29	3,728.36	-0.64
				08/11/10	- -	104.82	130.42	0.00	104.82	3,726.83	-1.53
				09/28/10	- -	104.70	NM	0.00	104.70	3,726.95	0.12
				02/23/11	- -	104.11	130.47	0.00	104.11	3,727.54	0.59
				07/12/11	- -	104.89	130.50	0.00	104.89	3,726.76	-0.78
				01/30/12	- -	105.22	130.45	0.00	105.22	3,726.43	-0.33
				07/23/12	- -	107.59	130.46	0.00	107.59	3,724.06	-2.37
				02/18/13	- -	106.21	130.63	0.00	106.21	3,725.44	1.38
				08/19/13	- -	108.11	130.88	0.00	108.11	3,723.54	-1.90
				02/24/14	- -	108.45	130.75	0.00	108.45	3,723.20	-0.34
				08/18/14	- -	110.33	130.71	0.00	110.33	3,721.32	-1.88
				02/23/15	- -	110.35	130.60	0.00	110.35	3,721.30	-0.02
				08/24/15	- -	111.14	130.57	0.00	111.14	3,720.51	-0.79
				03/07/16	- -	112.20	130.51	0.00	112.20	3,719.45	-1.06
				08/15/16	- -	112.68	130.68	0.00	112.68	3,718.97	-0.48
				02/06/17	- -	112.74	130.61	0.00	112.74	3,718.91	-0.06
				06/22/17	- -	112.76	130.59	0.00	112.76	3,718.89	-0.02
				08/16/17	- -	112.94	130.59	0.00	112.94	3,718.71	-0.18
				04/05/18	- -	113.40	130.59	0.00	113.40	3,718.25	-0.46
				10/01/18	- -	114.50	130.59	0.00	114.50	3,717.15	-1.10
				04/04/19	- -	114.37	130.59	0.00	114.37	3,717.28	0.13
				10/24/19	- -	115.28	130.59	0.00	115.28	3,716.37	-0.91
				06/18/20	- -	116.31	130.59	0.00	116.31	3,715.34	-1.03
				10/08/20	- -	117.27	130.59	0.00	117.27	3,714.38	-0.96
				04/15/21	- -	117.53	130.59	0.00	117.53	3,714.12	-0.26
				09/16/21	- -	118.05	130.59	0.00	118.05	3,713.60	-0.52
MW-4 [2,6]	3,839.89	3,839.76	3,741.76 to 3,711.76	06/16/09	- -	106.79	128.02	0.00	106.79	3,733.10	NA
				01/13/10	- -	107.72	127.94	0.00	107.72	3,732.17	-0.93
				08/11/10	- -	108.19	128.03	0.00	108.19	3,731.70	-0.47
				09/28/10	- -	108.47	NM	0.00	108.47	3,731.42	-0.28
				02/23/11	- -	108.31	127.82	0.00	108.31	3,731.58	0.16
				07/12/11	- -	109.27	128.02	0.00	109.27	3,730.62	-0.96
				01/30/12	- -	109.91	128.02	0.00	109.91	3,729.98	-0.64
				07/23/12	- -	111.00	127.82	0.00	111.00	3,728.89	-1.09
				02/18/13	- -	110.70	127.95	0.00	110.70	3,729.19	0.30
				08/19/13	- -	111.60	128.01	0.00	111.60	3,728.29	-0.90
				02/24/14	- -	112.78	127.80	0.00	112.78	3,727.11	-1.18
				08/18/14	- -	113.42	127.63	0.00	113.42	3,726.47	-0.64
				02/23/15	- -	113.89	127.68	0.00	113.89	3,726.00	-0.47
				08/24/15	- -	114.47	127.99	0.00	114.47	3,725.42	-0.58
				03/07/16	- -	114.66	127.78	0.00	114.66	3,725.23	-0.19
				08/15/16	- -	115.38	128.10	0.00	115.38	3,724.51	-0.72
				02/06/17	- -	115.71	128.04	0.00	115.71	3,724.18	-0.33
				06/22/17	- -	115.88	127.73	0.00	115.88	3,724.01	-0.17
				08/17/17	- -	116.12	127.73	0.00	116.12	3,723.77	-0.24
				04/05/18	- -	116.73	127.73	0.00	116.73	3,723.16	-0.61
				10/01/18	- -	117.74	127.73	0.00	117.74	3,722.15	-1.01
				04/04/19	- -	118.25	127.73	0.00	118.25	3,721.64	-0.51
				10/24/19	- -	119.54	127.73	0.00	119.54	3,720.35	-1.29
				06/18/20	- -	120.32	127.73	0.00	120.32	3,719.57	-0.78
				10/08/20	- -	121.18	127.73	0.00	121.18	3,718.71	-0.86
				04/15/21	- -	121.06	127.73	0.00	121.06	3,718.83	0.12
				09/16/21	- -	121.53	127.73	0.00	121.53	3,718.36	-0.47

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-5 [2,6]	3,819.15	3,816.13	3,730.85 to 3,700.85	06/16/09	- -	90.84	NM	0.00	90.84	3,728.31	NA
				01/13/10	- -	92.02	118.30	0.00	92.02	3,727.13	-1.18
				08/11/10	- -	92.67	117.93	0.00	92.67	3,726.48	-0.65
				02/23/11	- -	92.68	118.00	0.00	92.68	3,726.47	-0.01
				07/12/11	- -	93.38	117.97	0.00	93.38	3,725.77	-0.70
				01/31/12	- -	94.75	117.75	0.00	94.75	3,724.40	-1.37
				07/23/12	- -	95.22	117.92	0.00	95.22	3,723.93	-0.47
				02/18/13	- -	95.95	118.85	0.00	95.95	3,723.20	-0.73
				08/19/13	- -	96.65	117.90	0.00	96.65	3,722.50	-0.70
				02/24/14	- -	97.06	117.45	0.00	97.06	3,722.09	-0.41
				08/18/14	- -	97.57	117.22	0.00	97.57	3,721.58	-0.51
				02/23/15	- -	98.01	117.19	0.00	98.01	3,721.14	-0.44
				08/24/15	- -	98.46	117.22	0.00	98.46	3,720.69	-0.45
				03/07/16	- -	98.62	117.12	0.00	98.62	3,720.53	-0.16
				08/15/16	- -	99.40	117.70	0.00	99.40	3,719.75	-0.78
				02/06/17	- -	100.00	117.29	0.00	100.00	3,719.15	-0.60
				06/22/17	- -	100.11	117.82	0.00	100.11	3,719.04	-0.11
				08/16/17	- -	100.51	117.82	0.00	100.51	3,718.64	-0.40
				04/05/18	- -	100.85	117.82	0.00	100.85	3,718.30	-0.34
				10/01/18	- -	102.01	117.82	0.00	102.01	3,717.14	-1.16
				04/04/19	- -	102.23	117.82	0.00	102.23	3,716.92	-0.22
				10/24/19	- -	103.42	117.82	0.00	103.42	3,715.73	-1.19
				06/18/20	- -	103.91	117.82	0.00	103.91	3,715.24	-0.49
				10/08/20	- -	104.49	117.82	0.00	104.49	3,714.66	-0.58
				04/15/21	- -	104.99	117.82	0.00	104.99	3,714.16	-0.50
				09/16/21	- -	105.65	117.82	0.00	105.65	3,713.50	-0.66
MW-6 [2,6]	3,838.16	3,838.17	3,738.17 to 3,708.17	06/18/09	- -	106.64	129.48	0.00	106.64	3,731.52	NA
				07/24/09	- -	106.92	129.71	0.00	106.92	3,731.24	-0.28
				09/24/09	- -	107.44	129.74	0.00	107.44	3,730.72	-0.52
				10/27/09	- -	107.55	129.73	0.00	107.55	3,730.61	-0.11
				01/13/10	- -	107.64	129.71	0.00	107.64	3,730.52	-0.09
				02/02/10	- -	107.69	NM	0.00	107.69	3,730.47	-0.05
				04/01/10	- -	107.65	NM	0.00	107.65	3,730.51	0.04
				08/11/10	- -	108.00	129.71	0.00	108.00	3,730.16	-0.35
				02/23/11	- -	108.22	129.72	0.00	108.22	3,729.94	-0.22
				07/12/11	- -	109.09	129.74	0.00	109.09	3,729.07	-0.87
				02/02/12	- -	109.78	129.74	0.00	109.78	3,728.38	-0.69
				07/23/12	- -	111.00	129.47	0.00	111.00	3,727.16	-1.22
				02/18/13	- -	110.60	133.32	0.00	110.60	3,727.56	0.40
				08/19/13	- -	111.70	130.84	0.00	111.70	3,726.46	-1.10
				02/24/14	- -	112.57	130.00	0.00	112.57	3,725.59	-0.87
				08/18/14	- -	113.50	129.71	0.00	113.50	3,724.66	-0.93
				02/23/15	- -	114.00	129.90	0.00	114.00	3,724.16	-0.50
				08/24/15	- -	114.63	129.69	0.00	114.63	3,723.53	-0.63
				03/07/16	- -	115.02	129.69	0.00	115.02	3,723.14	-0.39
				08/15/16	- -	115.62	129.69	0.00	115.62	3,722.54	-0.60
				02/06/17	- -	115.99	129.69	0.00	115.99	3,722.17	-0.37
				06/22/17	- -	116.05	129.76	0.00	116.05	3,722.11	-0.06
				08/17/17	- -	116.31	129.76	0.00	116.31	3,721.85	-0.26
				04/05/18	- -	116.78	129.76	0.00	116.78	3,721.38	-0.47
				10/01/18	- -	117.81	129.76	0.00	117.81	3,720.35	-1.03
				04/04/19	- -	118.19	129.76	0.00	118.19	3,719.97	-0.38
				10/24/19	- -	119.38	129.76	0.00	119.38	3,718.78	-1.19
				06/18/20	- -	120.11	129.76	0.00	120.11	3,718.05	-0.73
				10/08/20	- -	121.02	129.76	0.00	121.02	3,717.14	-0.91
				04/15/21	- -	121.11	129.76	0.00	121.11	3,717.05	-0.09
				09/16/21	- -	121.57	129.76	0.00	121.57	3,716.59	-0.46

Table 1. Water Elevation Measurements
HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-7 [2,6]	3,838.42	3,838.19	3,738.19 to 3,708.19	04/30/09	- -	106.37	135.54	0.00	106.37	3,732.05	NA
				06/10/09	- -	106.48	NM	0.00	106.48	3,731.94	-0.11
				06/19/09	- -	106.68	129.34	0.00	106.68	3,731.74	-0.20
				07/02/09	- -	106.75	129.51	0.00	106.75	3,731.67	-0.07
				07/24/09	- -	106.84	129.52	0.00	106.84	3,731.58	-0.09
				09/24/09	- -	107.33	129.29	0.00	107.33	3,731.09	-0.49
				10/27/09	- -	107.46	129.53	0.00	107.46	3,730.96	-0.13
				01/13/10	- -	107.60	129.55	0.00	107.60	3,730.82	-0.14
				02/02/10	- -	107.61	NM	0.00	107.61	3,730.81	-0.01
				04/01/10	- -	107.52	NM	0.00	107.52	3,730.90	0.09
				08/11/10	- -	108.10	129.57	0.00	108.10	3,730.32	-0.58
				02/23/11	- -	108.13	129.52	0.00	108.13	3,730.29	-0.03
				07/12/11	- -	109.01	129.50	0.00	109.01	3,729.41	-0.88
				02/02/12	- -	109.71	129.26	0.00	109.71	3,728.71	-0.70
				07/23/12	- -	109.88	129.30	0.00	109.88	3,728.54	-0.17
				02/18/13	- -	110.52	129.55	0.00	110.52	3,727.90	-0.64
				08/19/13	- -	111.57	129.17	0.00	111.57	3,726.85	-1.05
				02/24/14	- -	112.50	129.90	0.00	112.50	3,725.92	-0.93
				08/18/14	- -	113.40	129.58	0.00	113.40	3,725.02	-0.90
				02/23/15	- -	113.86	129.62	0.00	113.86	3,724.56	-0.46
				08/24/15	- -	114.47	129.64	0.00	114.47	3,723.95	-0.61
				03/07/16	- -	114.84	129.64	0.00	114.84	3,723.58	-0.37
				08/15/16	- -	115.43	129.64	0.00	115.43	3,722.99	-0.59
				02/06/17	- -	115.80	129.64	0.00	115.80	3,722.62	-0.37
				06/22/17	- -	115.89	129.64	0.00	115.89	3,722.53	-0.09
				08/17/17	- -	116.32	129.64	0.00	116.32	3,722.10	-0.43
				04/05/18	- -	116.71	129.64	0.00	116.71	3,721.71	-0.39
				10/01/18	- -	117.67	129.64	0.00	117.67	3,720.75	-0.96
				04/04/19	- -	118.14	129.64	0.00	118.14	3,720.28	-0.47
				10/24/19	- -	119.37	129.64	0.00	119.37	3,719.05	-1.23
				06/18/20	- -	120.04	129.64	0.00	120.04	3,718.38	-0.67
				10/08/20	- -	120.92	129.64	0.00	120.92	3,717.50	-0.88
				04/15/21	- -	120.94	129.64	0.00	120.94	3,717.48	-0.02
				09/16/21	- -	121.48	129.64	0.00	121.48	3,716.94	-0.54
MW-8 [3,6]	3,839.98	3,836.44	3,737.68 to 3,707.68	06/18/09	- -	109.37	132.30	0.00	109.37	3,730.61	NA
				01/13/10	- -	110.47	132.56	0.00	110.47	3,729.51	-1.10
				08/11/10	- -	111.05	132.34	0.00	111.05	3,728.93	-0.58
				02/23/11	- -	111.07	132.34	0.00	111.07	3,728.91	-0.02
				07/12/11	- -	111.98	132.36	0.00	111.98	3,728.00	-0.91
				02/01/12	- -	112.91	132.32	0.00	112.91	3,727.07	-0.93
				07/23/12	- -	113.94	132.33	0.00	113.94	3,726.04	-1.03
				02/18/13	- -	113.27	132.32	0.00	113.27	3,726.71	0.67
				08/19/13	- -	114.69	132.39	0.00	114.69	3,725.29	-1.42
				02/24/14	- -	115.44	132.60	0.00	115.44	3,724.54	-0.75
				08/19/13	- -	116.56	132.16	0.00	116.56	3,723.42	-1.12
				02/23/15	- -	116.91	132.10	0.00	116.91	3,723.07	-0.35
				08/24/15	- -	117.61	132.20	0.00	117.61	3,722.37	-0.70
				03/07/16	- -	118.05	132.04	0.00	118.05	3,721.93	-0.44
				08/15/16	- -	118.73	132.15	0.00	118.73	3,721.25	-0.68
				02/06/17	- -	119.02	132.15	0.00	119.02	3,720.96	-0.29
				06/22/17	- -	119.05	132.15	0.00	119.05	3,720.93	-0.03
				08/17/17	- -	119.40	132.15	0.00	119.40	3,720.58	-0.35
				04/05/18	- -	119.81	132.15	0.00	119.81	3,720.17	-0.41
				10/01/18	- -	120.82	132.15	0.00	120.82	3,719.16	-1.01
				04/04/19	- -	121.05	132.15	0.00	121.05	3,718.93	-0.23
				10/24/19	- -	122.17	132.15	0.00	122.17	3,717.81	-1.12
				06/18/20	- -	122.93	132.15	0.00	122.93	3,717.05	-0.76
				10/08/20	- -	123.87	132.15	0.00	123.87	3,716.11	-0.94
				04/15/21	- -	123.90	132.15	0.00	123.90	3,716.08	-0.03
				09/16/21	- -	124.51	132.15	0.00	124.51	3,715.47	-0.61

Table 1. Water Elevation Measurements
HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-9 [3,6]	3,835.22	3,835.13	3,736.13 to 3,706.13	06/16/09	- -	104.58	129.18	0.00	104.58	3,730.64	NA
				01/13/10	- -	105.61	129.48	0.00	105.61	3,729.61	-1.03
				08/11/10	- -	106.37	129.21	0.00	106.37	3,728.85	-0.76
				02/23/11	- -	106.28	129.24	0.00	106.28	3,728.94	0.09
				07/12/11	- -	107.17	129.26	0.00	107.17	3,728.05	-0.89
				01/31/12	- -	107.38	129.30	0.00	107.38	3,727.84	-0.21
				07/23/12	- -	109.20	128.90	0.00	109.20	3,726.02	-1.82
				02/18/13	- -	108.47	129.41	0.00	108.47	3,726.75	0.73
				08/19/13	- -	109.91	129.38	0.00	109.91	3,725.31	-1.44
				02/24/14	- -	110.63	129.35	0.00	110.63	3,724.59	-0.72
				08/18/14	- -	111.81	129.01	0.00	111.81	3,723.41	-1.18
				02/23/15	- -	112.20	124.08	0.00	112.20	3,723.02	-0.39
				08/24/15	- -	112.89	129.06	0.00	112.89	3,722.33	-0.69
				03/07/16	- -	113.47	129.07	0.00	113.47	3,721.75	-0.58
				08/15/16	- -	114.02	129.15	0.00	114.02	3,721.20	-0.55
				02/06/17	- -	114.37	129.24	0.00	114.37	3,720.85	-0.35
				06/22/17	- -	114.38	129.18	0.00	114.38	3,720.84	-0.01
				08/16/17	- -	114.67	129.18	0.00	114.67	3,720.55	-0.29
				04/05/18	- -	115.12	129.18	0.00	115.12	3,720.10	-0.45
				10/01/18	- -	116.18	129.18	0.00	116.18	3,719.04	-1.06
				04/04/19	- -	116.40	129.18	0.00	116.40	3,718.82	-0.22
				10/24/19	- -	117.44	129.18	0.00	117.44	3,717.78	-1.04
				06/18/20	- -	118.21	129.18	0.00	118.21	3,717.01	-0.77
				10/08/20	- -	119.09	129.18	0.00	119.09	3,716.13	-0.88
				04/15/21	- -	119.21	129.18	0.00	119.21	3,716.01	-0.12
				09/16/21	- -	119.87	129.18	0.00	119.87	3,715.35	-0.66
MW-10 [3,6]	3,833.66	3,833.49	3,734.52 to 3,704.52	06/16/09	- -	102.57	129.14	0.00	102.57	3,731.09	NA
				01/13/10	- -	103.51	127.42	0.00	103.51	3,730.15	-0.94
				08/11/10	- -	104.31	128.47	0.00	104.31	3,729.35	-0.80
				02/23/11	- -	104.26	128.54	0.00	104.26	3,729.40	0.05
				07/12/11	- -	105.08	128.46	0.00	105.08	3,728.58	-0.82
				01/31/12	- -	105.73	128.40	0.00	105.73	3,727.93	-0.65
				07/23/12	- -	107.05	128.50	0.00	107.05	3,726.61	-1.32
				02/18/13	- -	106.63	128.59	0.00	106.63	3,727.03	0.42
				08/19/13	- -	107.78	128.56	0.00	107.78	3,725.88	-1.15
				02/24/14	- -	108.53	128.40	0.00	108.53	3,725.13	-0.75
				08/18/14	- -	109.62	128.15	0.00	109.62	3,724.04	-1.09
				02/23/15	- -	110.08	128.35	0.00	110.08	3,723.58	-0.46
				08/24/15	- -	110.73	128.42	0.00	110.73	3,722.93	-0.65
				03/07/16	- -	111.32	128.20	0.00	111.32	3,722.34	-0.59
				08/15/16	- -	111.87	128.20	0.00	111.87	3,721.79	-0.55
				02/06/17	- -	112.22	128.26	0.00	112.22	3,721.44	-0.35
				06/22/17	- -	112.27	128.45	0.00	112.27	3,721.39	-0.05
				08/16/17	- -	112.53	128.45	0.00	112.53	3,721.13	-0.26
				04/05/18	- -	113.03	128.45	0.00	113.03	3,720.63	-0.50
				10/01/18	- -	114.06	128.45	0.00	114.06	3,719.60	-1.03
				04/04/19	- -	114.39	128.45	0.00	114.39	3,719.27	-0.33
				10/24/19	- -	115.35	128.45	0.00	115.35	3,718.31	-0.96
				06/18/20	- -	116.09	128.45	0.00	116.09	3,717.57	-0.74
				10/08/20	- -	116.94	128.45	0.00	116.94	3,716.72	-0.85
				04/15/21	- -	117.11	128.45	0.00	117.11	3,716.55	-0.17
				09/16/21	- -	117.76	128.45	0.00	117.76	3,715.90	-0.65

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-11 [4,6,10]	3,839.56	3,836.14	3,741.13 to 3,721.13	06/20/02	- -	99.93	NM	0.00	99.93	3,739.63	NA
				09/17/02	- -	100.63	NM	0.00	100.63	3,738.93	-0.70
				12/19/02	- -	100.50	NM	0.00	100.50	3,739.06	0.13
				03/28/03	- -	99.74	NM	0.00	99.74	3,739.82	0.76
				06/20/03	- -	100.76	NM	0.00	100.76	3,738.80	-1.02
				09/15/03	- -	101.51	NM	0.00	101.51	3,738.05	-0.75
				04/30/04	- -	102.31	116.21	0.00	102.31	3,737.25	-0.80
				02/21/05	- -	103.80	NM	0.00	103.80	3,735.76	-1.49
				06/28/05	- -	104.33	NM	0.00	104.33	3,735.23	-0.53
				09/30/05	- -	104.60	NM	0.00	104.60	3,734.96	-0.27
				12/29/05	- -	104.81	NM	0.00	104.81	3,734.75	-0.21
				04/10/06	- -	105.12	NM	0.00	105.12	3,734.44	-0.31
				07/06/06	- -	105.61	NM	0.00	105.61	3,733.95	-0.49
				01/26/07	- -	106.63	NM	0.00	106.63	3,732.93	-1.02
				03/27/07	- -	106.80	NM	0.00	106.80	3,732.76	-0.17
				07/13/07	- -	106.94	NM	0.00	106.94	3,732.62	-0.14
				09/12/07	- -	107.22	NM	0.00	107.22	3,732.34	-0.28
				12/31/07	- -	106.74	NM	0.00	106.74	3,732.82	0.48
				03/26/08	- -	106.81	117.51	0.00	106.81	3,732.75	-0.07
				06/13/08	- -	107.40	NM	0.00	107.40	3,732.16	-0.59
				09/24/08	- -	108.76	NM	0.00	108.76	3,730.80	-1.36
				12/29/08	- -	108.57	NM	0.00	108.57	3,730.99	0.19
				03/17/09	- -	107.91	NM	0.00	107.91	3,731.65	0.66
				06/18/09	- -	108.65	117.49	0.00	108.65	3,730.91	-0.74
				01/13/10	- -	109.81	117.77	0.00	109.81	3,729.75	-1.16
				08/11/10	- -	110.16	117.50	0.00	110.16	3,729.40	-0.35
				02/23/11	- -	110.32	117.70	0.00	110.32	3,729.24	-0.16
				07/12/11	- -	110.31	117.41	0.00	110.31	3,729.25	0.01
				02/01/12	- -	112.02	117.37	0.00	112.02	3,727.54	-1.71
				07/23/12	- -	113.10	117.38	0.00	113.10	3,726.46	-1.08
				02/18/13	- -	112.53	117.75	0.00	112.53	3,727.03	0.57
				08/19/13	- -	113.89	117.64	0.00	113.89	3,725.67	-1.36
				02/24/14	- -	114.75	117.90	0.00	114.75	3,724.81	-0.86
				08/18/14	- -	115.71	117.60	0.00	115.71	3,723.85	-0.96
				02/23/15	- -	116.10	117.81	0.00	116.10	3,723.46	-0.39
				08/24/15	- -	116.75	117.86	0.00	116.75	3,722.81	-0.65
				03/07/16	- -	117.07	118.00	0.00	117.07	3,722.49	-0.32
				08/15/16	WELL DRY						
				12/07/16	WELL PLUGGED AND ABANDONED						
MW-11R [10]	3,838.51	3,835.78	3,724.72 to 3,704.72	02/06/17	- -	116.82	133.79	0.00	116.82	3,721.69	NA
				06/22/17	- -	116.93	133.84	0.00	116.93	3,721.58	-0.11
				08/17/17	- -	117.33	133.84	0.00	117.33	3,721.18	-0.40
				04/05/18	- -	117.73	133.84	0.00	117.73	3,720.78	-0.40
				10/01/18	- -	118.67	133.84	0.00	118.67	3,719.84	-0.94
				04/04/19	- -	118.94	133.84	0.00	118.94	3,719.57	-0.27
				10/24/19	- -	120.29	133.84	0.00	120.29	3,718.22	-1.35
				06/18/20	- -	122.19	133.84	0.00	122.19	3,716.32	-1.90
				10/08/20	- -	121.98	133.84	0.00	121.98	3,716.53	0.21
				04/15/21	- -	121.91	133.84	0.00	121.91	3,716.60	0.07
				09/16/21	- -	122.34	133.84	0.00	122.34	3,716.17	-0.43

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-12 [4,6,9]	3,822.73	3,820.29	3,742.29 to 3,722.29	06/20/02	- -	84.20	NM	0.00	84.20	3,738.53	NA
				12/21/02	- -	85.21	NM	0.00	85.21	3,737.52	-1.01
				03/28/03	- -	85.35	NM	0.00	85.35	3,737.38	-0.14
				06/20/03	- -	85.51	NM	0.00	85.51	3,737.22	-0.16
				09/15/03	- -	86.13	NM	0.00	86.13	3,736.60	-0.62
				11/02/03	- -	86.57	NM	0.00	86.57	3,736.16	-0.44
				04/30/04	- -	87.40	100.55	0.00	87.40	3,735.33	-0.83
				02/21/05	- -	88.42	NM	0.00	88.42	3,734.31	-1.02
				06/28/05	- -	88.76	NM	0.00	88.76	3,733.97	-0.34
				09/30/05	- -	89.12	NM	0.00	89.12	3,733.61	-0.36
				12/29/05	- -	89.31	NM	0.00	89.31	3,733.42	-0.19
				04/10/06	- -	89.55	NM	0.00	89.55	3,733.18	-0.24
				07/06/06	- -	90.03	NM	0.00	90.03	3,732.70	-0.48
				01/26/07	- -	90.06	NM	0.00	90.06	3,732.67	-0.03
				03/27/07	- -	90.10	NM	0.00	90.10	3,732.63	-0.04
				07/13/07	- -	91.66	NM	0.00	91.66	3,731.07	-1.56
				09/12/07	- -	92.01	NM	0.00	92.01	3,730.72	-0.35
				12/31/07	- -	92.17	NM	0.00	92.17	3,730.56	-0.16
				03/26/08	- -	92.39	100.57	0.00	92.39	3,730.34	-0.22
				06/13/08	- -	92.59	NM	0.00	92.59	3,730.14	-0.20
				09/24/08	- -	93.21	NM	0.00	93.21	3,729.52	-0.62
				12/29/08	- -	93.59	NM	0.00	93.59	3,729.14	-0.38
				03/17/09	- -	93.75	NM	0.00	93.75	3,728.98	-0.16
				06/16/09	- -	93.83	100.51	0.00	93.83	3,728.90	-0.08
				01/13/10	- -	94.78	100.71	0.00	94.78	3,727.95	-0.95
				08/11/10	- -	95.67	100.56	0.00	95.67	3,727.06	-0.89
				02/23/11	- -	95.85	100.56	0.00	95.85	3,726.88	-0.18
				07/12/11	- -	96.58	100.55	0.00	96.58	3,726.15	-0.73
				02/01/12	- -	97.57	100.57	0.00	97.57	3,725.16	-0.99
				07/23/12	- -	98.10	100.50	0.00	98.10	3,724.63	-0.53
				02/18/13	- -	98.95	100.50	0.00	98.95	3,723.78	-0.85
				- -	DAMAGED WELL - PLUGGED AND ABANDONED JUNE 2013						
MW-12R [9,14]	3,823.29	3,820.77	3,734.95 to 3,714.95	08/19/13	- -	100.25	108.34	0.00	100.25	3,723.04	NA
				02/24/14	- -	100.92	108.50	0.00	100.92	3,722.37	-0.67
				08/18/14	- -	101.33	108.22	0.00	101.33	3,721.96	-0.41
				02/23/15	- -	101.73	107.50	0.00	101.73	3,721.56	-0.40
				08/24/15	- -	102.25	107.72	0.00	102.25	3,721.04	-0.52
				03/07/16	- -	102.52	107.61	0.00	102.52	3,720.77	-0.27
				08/15/16	- -	103.28	107.52	0.00	103.28	3,720.01	-0.76
				02/06/17	- -	103.79	107.50	0.00	103.79	3,719.50	-0.51
				06/22/17	- -	103.95	107.39	0.00	103.95	3,719.34	-0.16
				08/16/17	- -	104.31	107.39	0.00	104.31	3,718.98	-0.36
				04/05/18	- -	>103.63	NA	NA	NA	NA	NA
				10/01/18	- -	>103.60	NA	NA	NA	NA	NA
				04/04/19	- -	>103.60	NA	NA	NA	NA	NA
				10/24/19	- -	107.26	107.39	0.00	107.26	3,716.03	-2.95
				06/18/20	WELL DRY						
				08/13/20	DRY WELL - PLUGGED AND ABANDONED AUGUST 2020						
MW-12R2 [14]	3,824.00	3,820.87	3,716.64 to 3,696.64	10/08/20	- -	108.93	126.45	0.00	108.93	3,715.07	NA
				04/15/21	- -	109.46	126.45	0.00	109.46	3,714.54	-0.53
				09/16/21	- -	110.13	126.45	0.00	110.13	3,713.87	-0.67

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-13 [5,6,12]	3,837.06	3,834.75	3,738.75 to 3,718.75	04/30/04	- -	101.41	119.82	0.00	101.41	3,735.65	NA
				02/21/05	- -	103.09	NM	0.00	103.09	3,733.97	-1.68
				06/28/05	- -	103.48	NM	0.00	103.48	3,733.58	-0.39
				09/30/05	- -	103.80	NM	0.00	103.80	3,733.26	-0.32
				12/29/05	- -	104.41	NM	0.00	104.41	3,732.65	-0.61
				04/10/06	- -	104.59	NM	0.00	104.59	3,732.47	-0.18
				07/06/06	- -	104.94	NM	0.00	104.94	3,732.12	-0.35
				01/26/07	- -	106.41	NM	0.00	106.41	3,730.65	-1.47
				03/27/07	- -	106.47	NM	0.00	106.47	3,730.59	-0.06
				07/13/07	- -	106.93	NM	0.00	106.93	3,730.13	-0.46
				09/12/07	- -	107.19	NM	0.00	107.19	3,729.87	-0.26
				12/31/07	- -	106.71	NM	0.00	106.71	3,730.35	0.48
				03/26/08	- -	107.02	119.75	0.00	107.02	3,730.04	-0.31
				06/13/08	- -	107.19	NM	0.00	107.19	3,729.87	-0.17
				09/24/08	- -	108.56	NM	0.00	108.56	3,728.50	-1.37
				12/29/08	- -	108.71	NM	0.00	108.71	3,728.35	-0.15
				03/17/09	- -	108.36	NM	0.00	108.36	3,728.70	0.35
				06/16/09	- -	108.58	108.58	0.00	108.58	3,728.48	-0.22
				01/13/10	- -	109.68	119.95	0.00	109.68	3,727.38	-1.10
				08/11/10	- -	109.72	119.68	0.00	109.72	3,727.34	-0.04
				02/23/11	- -	110.14	119.69	0.00	110.14	3,726.92	-0.42
				07/12/11	- -	111.17	119.71	0.00	111.17	3,725.89	-1.03
				02/01/12	- -	111.81	119.66	0.00	111.81	3,725.25	-0.64
				07/23/12	- -	113.11	119.66	0.00	113.11	3,723.95	-1.30
				02/18/13	- -	111.84	119.87	0.00	111.84	3,725.22	1.27
				08/19/13	- -	113.81	119.95	0.00	113.81	3,723.25	-1.97
				02/24/14	- -	114.47	121.50	0.00	114.47	3,722.59	-0.66
				08/18/14	- -	115.89	119.89	0.00	115.89	3,721.17	-1.42
				02/23/15	- -	116.05	119.88	0.00	116.05	3,721.01	-0.16
				08/24/15	- -	116.79	119.83	0.00	116.79	3,720.27	-0.74
				03/07/16	- -	117.30	119.76	0.00	117.30	3,719.76	-0.51
				08/15/16	- -	117.98	119.70	0.00	117.98	3,719.08	-0.68
				02/06/17	- -	118.28	119.79	0.00	118.28	3,718.78	-0.30
				06/22/17	- -	118.23	119.81	0.00	118.23	3,718.83	0.05
				08/17/17	- -	118.72	119.81	0.00	118.72	3,718.34	-0.49
				04/05/18	- -	119.02	119.81	0.00	119.02	3,718.04	-0.30
				09/26/18	WELL PLUGGED AND ABANDONED SEPTEMBER 2018						
MW-13R [12]	3,838.12	3,835.02	3,718.64 to 3,698.64	10/01/18	- -	121.00	139.48	0.00	121.00	3717.12	NA
				04/04/19	- -	120.97	139.48	0.00	120.97	3717.15	0.03
				10/24/19	- -	122.25	139.48	0.00	122.25	3,715.87	-1.28
				06/18/20	- -	123.02	139.48	0.00	123.02	3,715.10	-0.77
				10/08/20	- -	124.05	139.48	0.00	124.05	3,714.07	-1.03
				04/15/21	- -	124.05	139.48	0.00	124.05	3,714.07	0.00
				09/16/21	- -	124.58	139.48	0.00	124.58	3,713.54	-0.53

Table 1. Water Elevation Measurements
HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-14 [5,6,12]	3,823.03	3,820.38	3,737.88 to 3,717.88	04/30/04	- -	87.46	NM	0.00	87.46	3,735.57	NA
				02/21/05	- -	88.48	NM	0.00	88.48	3,734.55	-1.02
				06/28/05	- -	88.80	NM	0.00	88.80	3,734.23	-0.32
				09/30/05	- -	89.14	NM	0.00	89.14	3,733.89	-0.34
				12/29/05	- -	89.34	NM	0.00	89.34	3,733.69	-0.20
				04/10/06	- -	89.63	NM	0.00	89.63	3,733.40	-0.29
				07/06/06	- -	90.08	NM	0.00	90.08	3,732.95	-0.45
				01/26/07	- -	91.02	NM	0.00	91.02	3,732.01	-0.94
				03/27/07	- -	91.18	NM	0.00	91.18	3,731.85	-0.16
				07/13/07	- -	91.68	NM	0.00	91.68	3,731.35	-0.50
				09/12/07	- -	92.02	NM	0.00	92.02	3,731.01	-0.34
				12/31/07	- -	92.25	NM	0.00	92.25	3,730.78	-0.23
				03/26/08	- -	92.43	105.08	0.00	92.43	3,730.60	-0.18
				06/13/08	- -	92.64	NM	0.00	92.64	3,730.39	-0.21
				12/29/08	- -	93.60	NM	0.00	93.60	3,729.43	-0.96
				03/17/09	- -	93.84	NM	0.00	93.84	3,729.19	-0.24
				06/16/09	- -	93.92	105.04	0.00	93.92	3,729.11	-0.08
				01/13/10	- -	94.80	105.30	0.00	94.80	3,728.23	-0.88
				08/11/10	- -	95.67	105.04	0.00	95.67	3,727.36	-0.87
				02/23/11	- -	95.99	105.05	0.00	95.99	3,727.04	-0.32
				07/12/11	- -	96.59	105.06	0.00	96.59	3,726.44	-0.60
				01/31/12	- -	97.54	105.05	0.00	97.54	3,725.49	-0.95
				07/23/12	- -	98.20	105.05	0.00	98.20	3,724.83	-0.66
				02/18/13	- -	99.07	105.38	0.00	99.07	3,723.96	-0.87
				08/19/13	- -	99.82	105.30	0.00	99.82	3,723.21	-0.75
				02/24/14	- -	100.55	105.60	0.00	100.55	3,722.48	-0.73
				08/18/14	- -	100.94	105.35	0.00	100.94	3,722.09	-0.39
				02/23/15	- -	101.42	105.35	0.00	101.42	3,721.61	-0.48
				08/24/15	- -	101.86	105.37	0.00	101.86	3,721.17	-0.44
				03/07/16	- -	102.21	105.27	0.00	102.21	3,720.82	-0.35
				08/15/16	- -	102.84	105.30	0.00	102.84	3,720.19	-0.63
				02/06/17	- -	103.44	105.29	0.00	103.44	3,719.59	-0.60
				06/22/17	- -	103.59	105.25	0.00	103.59	3,719.44	-0.15
				08/16/17	- -	103.97	105.25	0.00	103.97	3,719.06	-0.38
				04/05/18	- -	104.47	105.25	0.00	104.47	3,718.56	-0.50
				09/27/18	WELL PLUGGED AND ABANDONED SEPTEMBER 2018						
MW-14R [12]	3,823.88	3,821.05	3,714.60 to 3,694.60	10/01/18	- -	106.19	129.28	0.00	106.19	3717.69	NA
				04/04/19	- -	106.60	129.28	0.00	106.60	3717.28	-0.41
				10/24/19	- -	107.49	129.28	0.00	107.49	3,716.39	-0.89
				06/18/20	- -	107.59	129.28	0.00	107.59	3,716.29	-0.10
				10/08/20	- -	108.43	129.28	0.00	108.43	3,715.45	-0.84
				04/15/21	- -	108.71	129.28	0.00	108.71	3,715.17	-0.28
				09/16/21	- -	109.65	129.28	0.00	109.65	3,714.23	-0.94

Table 1. Water Elevation Measurements
HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-15 [7,8,15]	3,840.19	3,840.54	3,738.54 to 3,718.54	08/11/10	- -	106.94	121.68	0.00	106.94	3,733.25	NA
				02/23/11	- -	107.01	121.67	0.00	107.01	3,733.18	-0.07
				07/12/11	- -	108.32	121.62	0.00	108.32	3,731.87	-1.31
				01/30/12	- -	108.54	121.62	0.00	108.54	3,731.65	-0.22
				07/23/12	- -	109.77	121.58	0.00	109.77	3,730.42	-1.23
				02/18/13	- -	109.22	121.82	0.00	109.22	3,730.97	0.55
				08/19/13	- -	110.34	121.83	0.00	110.34	3,729.85	-1.12
				02/24/14	- -	111.72	122.05	0.00	111.72	3,728.47	-1.38
				08/18/14	- -	112.16	121.70	0.00	112.16	3,728.03	-0.44
				02/23/15	- -	112.42	121.80	0.00	112.42	3,727.77	-0.26
				08/24/15	- -	113.09	121.78	0.00	113.09	3,727.10	-0.67
				03/07/16	- -	112.85	121.67	0.00	112.85	3,727.34	0.24
				08/15/16	- -	113.92	121.70	0.00	113.92	3,726.27	-1.07
				02/06/17	- -	113.84	121.68	0.00	113.84	3,726.35	0.08
				06/22/17	- -	114.40	121.70	0.00	114.40	3,725.79	-0.56
				08/16/17	- -	114.57	121.70	0.00	114.57	3,725.62	-0.17
				04/05/18	- -	115.19	121.70	0.00	115.19	3,725.00	-0.62
				10/01/18	- -	115.93	121.70	0.00	115.93	3,724.26	-0.74
				04/04/19	- -	116.51	121.70	0.00	116.51	3,723.68	-0.58
				10/24/19	- -	118.22	121.70	0.00	118.22	3,721.97	-1.71
				06/18/20	- -	119.24	121.70	0.00	119.24	3,720.95	-1.02
				10/08/20	- -	120.11	121.70	0.00	120.11	3,720.08	-0.87
				04/15/21	- -	119.46	121.70	0.00	119.46	3,720.73	0.65
				06/09/21	WELL PLUGGED AND ABANDONED JUNE 2021						
MW-15R [15]	3,839.99	3,839.82	3,722.00 to 3,702.00	09/16/21	- -	119.46	138.49	0.00	119.46	3,720.53	NA
MW-16 [7,8,14]	3,838.20	3,838.50	3,738.59 to 3,718.59	08/11/10	- -	106.18	119.61	0.00	106.18	3,732.02	NA
				02/23/11	- -	106.34	119.67	0.00	106.34	3,731.86	-0.16
				07/12/11	- -	107.21	119.61	0.00	107.21	3,730.99	-0.87
				01/30/12	- -	107.93	119.47	0.00	107.93	3,730.27	-0.72
				07/23/12	- -	108.98	119.14	0.00	108.98	3,729.22	-1.05
				02/18/13	- -	108.69	119.63	0.00	108.69	3,729.51	0.29
				08/19/13	- -	109.51	119.50	0.00	109.51	3,728.69	-0.82
				02/24/14	- -	110.73	119.65	0.00	110.73	3,727.47	-1.22
				08/18/14	- -	111.35	119.25	0.00	111.35	3,726.85	-0.62
				02/23/15	- -	111.90	119.48	0.00	111.90	3,726.30	-0.55
				08/24/15	- -	112.42	119.22	0.00	112.42	3,725.78	-0.52
				03/07/16	- -	112.64	119.22	0.00	112.64	3,725.56	-0.22
				08/15/16	- -	113.31	119.20	0.00	113.31	3,724.89	-0.67
				02/06/17	- -	113.78	119.00	0.00	113.78	3,724.42	-0.47
				06/22/17	- -	113.93	119.07	0.00	113.93	3,724.27	-0.15
				08/17/17	- -	114.08	119.07	0.00	114.08	3,724.12	-0.15
				04/05/18	- -	114.79	119.07	0.00	114.79	3,723.41	-0.71
				10/01/18	- -	>115.87	NA	NA	NA	NA	NA
				04/04/19	- -	>115.05	NA	NA	NA	NA	NA
				10/24/19	- -	117.64	119.07	0.00	117.64	3,720.56	-2.85
				06/18/20	- -	118.35	119.07	0.00	118.35	3,719.85	-0.71
				08/13/20	DRY WELL - PLUGGED AND ABANDONED AUGUST 2020						
MW-16R [14]	3,837.87	3,837.85	3,720.47 to 3,700.47	10/08/20	- -	118.89	137.00	0.00	118.89	3,718.98	NA
				04/15/21	- -	118.79	137.00	0.00	118.79	3,719.08	0.10
				09/16/21	- -	119.13	137.00	0.00	119.13	3,718.74	-0.34

Table 1. Water Elevation Measurements
HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-17 [7,8,9]	3,831.43	3,831.79	3,735.79 to 3,715.79	08/11/10	- -	101.65	115.92	0.00	101.65	3,729.78	NA
				02/23/11	- -	101.71	115.69	0.00	101.71	3,729.72	-0.06
				07/12/11	- -	102.41	115.55	0.00	102.41	3,729.02	-0.70
				- -	DAMAGED WELL - PLUGGED AND ABANDONED JUNE 2013						
MW-17R [9]	3,831.14	3,831.48	3,731.19 to 3,711.19	08/19/13	- -	104.79	119.95	0.00	104.79	3,726.35	NA
				02/24/14	- -	105.59	119.00	0.00	105.59	3,725.55	-0.80
				08/18/14	- -	106.58	117.80	0.00	106.58	3,724.56	-0.99
				02/23/15	- -	107.11	117.30	0.00	107.11	3,724.03	-0.53
				08/24/15	- -	107.73	117.53	0.00	107.73	3,723.41	-0.62
				03/07/16	- -	108.35	117.30	0.00	108.35	3,722.79	-0.62
				08/15/16	- -	108.90	117.28	0.00	108.90	3,722.24	-0.55
				02/06/17	- -	109.28	117.12	0.00	109.28	3,721.86	-0.38
				06/22/17	- -	109.31	116.88	0.00	109.31	3,721.83	-0.03
				08/16/17	- -	109.61	116.88	0.00	109.61	3,721.53	-0.30
				04/05/18	- -	110.04	116.88	0.00	110.04	3,721.10	-0.43
				10/01/18	- -	111.15	116.88	0.00	111.15	3,719.99	-1.11
				04/04/19	- -	111.47	116.88	0.00	111.47	3,719.67	-0.32
				10/24/19	- -	112.45	116.88	0.00	112.45	3,718.69	-0.98
				06/18/20	- -	113.10	116.88	0.00	113.1	3,718.04	-0.65
				10/08/20	- -	113.92	116.88	0.00	113.92	3,717.22	-0.82
				04/15/21	- -	114.11	116.88	0.00	114.11	3,717.03	-0.19
				09/16/21	- -	114.82	116.88	0.00	114.82	3,716.32	-0.71
MW-18 [7,8,15]	3,825.05	3,825.52	3,725.52 to 3,705.52	08/11/10	- -	108.54	119.36	0.00	108.54	3,716.51	NA
				09/30/10	- -	104.47	NM	0.00	104.47	3,720.58	4.07
				02/23/11	- -	100.02	119.38	0.00	100.02	3,725.03	4.45
				07/12/11	- -	100.73	119.38	0.00	100.73	3,724.32	-0.71
				01/31/12	- -	100.49	119.38	0.00	100.49	3,724.56	0.24
				07/23/12	- -	110.18	119.37	0.00	110.18	3,714.87	-9.69
				02/18/13	- -	102.51	119.59	0.00	102.51	3,722.54	7.67
				08/19/13	- -	109.79	119.68	0.00	109.79	3,715.26	-7.28
				02/24/14	- -	105.20	119.85	0.00	105.20	3,719.85	4.59
				08/18/14	- -	115.51	119.67	0.00	115.51	3,709.54	-10.31
				02/23/15	- -	109.82	119.60	0.00	109.82	3,715.23	5.69
				08/24/15	- -	110.97	119.55	0.00	110.97	3,714.08	-1.15
				03/07/16	- -	117.00	119.61	0.00	117.00	3,708.05	-6.03
				08/15/16	- -	116.06	119.60	0.00	116.06	3,708.99	0.94
				02/06/17	- -	114.27	120.90	0.00	114.27	3,710.78	1.79
				06/22/17	- -	113.83	119.61	0.00	113.83	3,711.22	0.44
				08/16/17	- -	114.69	119.61	0.00	114.69	3,710.36	-0.86
				04/05/18	- -	114.58	119.61	0.00	114.58	3,710.47	0.11
				10/01/18	- -	115.61	119.61	0.00	115.61	3,709.44	-1.03
				04/04/19	- -	112.14	119.61	0.00	112.14	3,712.91	3.47
				10/24/19	- -	111.20	119.61	0.00	111.2	3,713.85	0.94
				06/18/20	- -	116.25	119.61	0.00	116.25	3,708.80	-5.05
				10/08/20	- -	117.21	119.61	0.00	117.21	3,707.84	-0.96
				04/15/21	DRY WELL						
				06/09/21	WELL PLUGGED AND ABANDONED JUNE 2021						
MW-18R [15]	3,825.33	3,825.32	3,712.78 to 3,692.78	09/16/21	- -	116.75	133.05	0.00	116.75	3,708.58	NA

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-19 [7,8,15]	3,823.97	3,824.48	3,730.37 to 3,710.37	08/11/10	- -	102.35	113.60	0.00	102.35	3,721.62	NA
				09/30/10	- -	98.70	NM	0.00	98.70	3,725.27	3.65
				02/23/11	- -	98.32	113.57	0.00	98.32	3,725.65	0.38
				07/12/11	- -	101.87	113.56	0.00	101.87	3,722.10	-3.55
				01/31/12	- -	100.92	113.54	0.00	100.92	3,723.05	0.95
				07/23/12	- -	100.98	113.56	0.00	100.98	3,722.99	-0.06
				02/18/13	- -	103.45	113.76	0.00	103.45	3,720.52	-2.47
				08/19/13	- -	104.87	113.81	0.00	104.87	3,719.10	-1.42
				02/24/14	- -	105.76	114.00	0.00	105.76	3,718.21	-0.89
				08/18/14	- -	104.60	113.79	0.00	104.60	3,719.37	1.16
				02/23/15	- -	105.22	113.72	0.00	105.22	3,718.75	-0.62
				08/24/15	- -	105.94	113.71	0.00	105.94	3,718.03	-0.72
				03/07/16	- -	106.75	113.64	0.00	106.75	3,717.22	-0.81
				08/15/16	- -	108.23	133.77	0.00	108.23	3,715.74	-1.48
				02/06/17	- -	108.27	113.72	0.00	108.27	3,715.70	-0.04
				06/22/17	- -	108.31	113.60	0.00	108.31	3,715.66	-0.04
				08/16/17	- -	107.88	113.60	0.00	107.88	3,716.09	0.43
				04/05/18	- -	109.32	113.60	0.00	109.32	3,714.65	-1.44
				10/01/18	- -	>111.40	NA	NA	NA	NA	NA
				04/04/19	- -	>111.40	NA	NA	NA	NA	NA
				10/24/19	- -	110.89	113.60	0.00	110.89	3,713.08	-1.57
				06/18/20	- -	112.75	113.60	0.00	112.75	3,711.22	-1.86
				10/08/20	WELL DRY						
				04/15/21	WELL DRY						
				06/09/21	WELL PLUGGED AND ABANDONED JUNE 2021						
MW-19R [15]	3,824.24	3,824.33	3,712.61 to 3,692.61	09/16/21	- -	114.00	132.13	0.00	114.00	3,710.24	NA
MW-20 [7,8,15]	3,824.58	3,825.03	3,733.03 to 3,713.03	08/11/10	- -	97.75	111.82	0.00	97.75	3,726.83	NA
				02/23/11	- -	97.42	111.82	0.00	97.42	3,727.16	0.33
				07/12/11	- -	98.50	111.74	0.00	98.50	3,726.08	-1.08
				01/31/12	- -	99.07	111.74	0.00	99.07	3,725.51	-0.57
				07/23/12	- -	99.75	111.75	0.00	99.75	3,724.83	-0.68
				02/18/13	- -	100.50	111.78	0.00	100.50	3,724.08	-0.75
				08/19/13	- -	101.60	111.98	0.00	101.60	3,722.98	-1.10
				02/24/14	- -	102.37	112.15	0.00	102.37	3,722.21	-0.77
				08/18/14	- -	102.81	111.87	0.00	102.81	3,721.77	-0.44
				02/23/15	- -	103.25	111.82	0.00	103.25	3,721.33	-0.44
				08/24/15	- -	103.80	112.89	0.00	103.80	3,720.78	-0.55
				03/07/16	- -	104.28	111.78	0.00	104.28	3,720.30	-0.48
				08/15/16	- -	105.18	111.88	0.00	105.18	3,719.40	-0.90
				02/06/17	- -	105.57	111.70	0.00	105.57	3,719.01	-0.39
				06/22/17	- -	105.63	111.70	0.00	105.63	3,718.95	-0.06
				08/17/17	- -	105.89	111.70	0.00	105.89	3,718.69	-0.26
				04/05/18	- -	106.49	111.70	0.00	106.49	3,718.09	-0.60
				10/01/18	- -	107.45	111.70	0.00	107.45	3,717.13	-0.96
				04/04/19	- -	107.75	111.70	0.00	107.75	3,716.83	-0.30
				10/24/19	- -	108.68	111.70	0.00	108.68	3,715.90	-0.93
				06/18/20	- -	109.38	111.70	0.00	109.38	3,715.20	-0.70
				10/08/20	- -	109.95	111.70	0.00	109.95	3,714.63	-0.57
				04/15/21	- -	110.70	111.70	0.00	110.7	3,713.88	-0.75
				06/09/21	WELL PLUGGED AND ABANDONED JUNE 2021						
MW-20R [15]	3,824.63	3,824.86	3,719.04 to 3,699.04	09/16/21	- -	111.19	126.09	0.00	111.19	3,713.44	NA

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HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-21 [7,8]	3,820.26	3,820.59	3,731.59 to 3,711.59	08/11/10	- -	94.06	108.31	0.00	94.06	3,726.20	NA
				02/23/11	- -	93.84	108.27	0.00	93.84	3,726.42	0.22
				07/12/11	- -	94.85	108.23	0.00	94.85	3,725.41	-1.01
				01/31/12	- -	95.72	108.18	0.00	95.72	3,724.54	-0.87
				07/23/12	- -	96.22	108.24	0.00	96.22	3,724.04	-0.50
				02/18/13	- -	96.92	108.48	0.00	96.92	3,723.34	-0.70
				08/19/13	- -	98.04	108.52	0.00	98.04	3,722.22	-1.12
				02/24/14	- -	98.65	108.55	0.00	98.65	3,721.61	-0.61
				08/18/14	- -	99.07	108.32	0.00	99.07	3,721.19	-0.42
				02/23/15	- -	99.48	108.19	0.00	99.48	3,720.78	-0.41
				08/24/15	- -	100.05	108.32	0.00	100.05	3,720.21	-0.57
				03/07/16	- -	100.30	108.15	0.00	100.30	3,719.96	-0.25
				08/15/16	- -	101.18	108.15	0.00	101.18	3,719.08	-0.88
				02/06/17	- -	101.59	110.20	0.00	101.59	3,718.67	-0.41
				06/22/17	- -	101.72	108.10	0.00	101.72	3,718.54	-0.13
				08/17/17	- -	102.10	108.10	0.00	102.10	3,718.16	-0.38
				04/05/18	- -	102.54	108.10	0.00	102.54	3,717.72	-0.44
				10/01/18	- -	103.58	108.10	0.00	103.58	3,716.68	-1.04
				04/04/19	- -	103.90	108.10	0.00	103.90	3,716.36	-0.32
				10/24/19	- -	105.02	108.10	0.00	105.02	3,715.24	-1.12
				06/18/20	- -	105.57	108.10	0.00	105.57	3,714.69	-0.55
				10/08/20	- -	106.31	108.10	0.00	106.31	3,713.95	-0.74
				04/15/21	- -	106.72	108.10	0.00	106.72	3,713.54	-0.41
				09/16/21	- -	107.31	108.10	0.00	107.31	3,712.95	-0.59
MW-22 [7,8]	3,821.82	3,819.27	3,731.2 to 3,711.27	08/11/10	- -	95.62	110.80	0.00	95.62	3,726.20	NA
				02/23/11	- -	95.36	110.78	0.00	95.36	3,726.46	0.26
				07/12/11	- -	96.26	110.74	0.00	96.26	3,725.56	-0.90
				01/31/12	- -	97.56	110.72	0.00	97.56	3,724.26	-1.30
				07/23/12	- -	97.90	110.70	0.00	97.90	3,723.92	-0.34
				02/18/13	- -	98.45	110.92	0.00	98.45	3,723.37	-0.55
				08/19/13	- -	99.54	110.85	0.00	99.54	3,722.28	-1.09
				02/24/14	- -	99.97	111.00	0.00	99.97	3,721.85	-0.43
				08/18/14	- -	100.52	110.26	0.00	100.52	3,721.30	-0.55
				02/23/15	- -	100.85	109.10	0.00	100.85	3,720.97	-0.33
				08/24/15	- -	101.42	109.05	0.00	101.42	3,720.40	-0.57
				03/07/16	- -	101.56	109.19	0.00	101.56	3,720.26	-0.14
				08/15/16	- -	102.45	109.50	0.00	102.45	3,719.37	-0.89
				02/06/17	- -	102.99	109.58	0.00	102.99	3,718.83	-0.54
				06/22/17	- -	103.04	109.60	0.00	103.04	3,718.78	-0.05
				08/17/17	- -	103.51	109.60	0.00	103.51	3,718.31	-0.47
				04/05/18	- -	103.85	109.60	0.00	103.85	3,717.97	-0.34
				10/01/18	- -	104.96	109.60	0.00	104.96	3,716.86	-1.11
				04/04/19	- -	105.12	109.60	0.00	105.12	3,716.70	-0.16
				10/24/19	- -	106.45	109.60	0.00	106.45	3,715.37	-1.33
				06/18/20	- -	106.97	109.60	0.00	106.97	3,714.85	-0.52
				10/08/20	- -	107.70	109.60	0.00	107.7	3,714.12	-0.73
				04/15/21	- -	107.97	109.60	0.00	107.97	3,713.85	-0.27
				09/16/21	- -	109.18	110.30	0.00	109.18	3,712.64	-1.21

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-23 [7,8,14]	3,825.58	3,822.91	3,730.91 to 3,710.91	08/11/10	- -	100.49	115.10	0.00	100.49	3,725.09	NA
				02/23/11	- -	99.80	115.12	0.00	99.80	3,725.78	0.69
				07/12/11	- -	101.29	115.10	0.00	101.29	3,724.29	-1.49
				02/01/12	- -	102.04	115.07	0.00	102.04	3,723.54	-0.75
				07/23/12	- -	102.39	114.98	0.00	102.39	3,723.19	-0.35
				02/18/13	- -	102.69	115.25	0.00	102.69	3,722.89	-0.30
				08/19/13	- -	104.23	115.00	0.00	104.23	3,721.35	-1.54
				02/24/14	- -	104.93	115.35	0.00	104.93	3,720.65	-0.70
				08/18/14	- -	105.36	119.14	0.00	105.36	3,720.22	-0.43
				02/23/15	- -	105.74	114.85	0.00	105.74	3,719.84	-0.38
				08/24/15	- -	106.33	114.84	0.00	106.33	3,719.25	-0.59
				03/07/16	- -	106.72	114.66	0.00	106.72	3,718.86	-0.39
				08/15/16	- -	107.69	114.80	0.00	107.69	3,717.89	-0.97
				02/06/17	- -	108.05	114.70	0.00	108.05	3,717.53	-0.36
				06/22/17	- -	108.04	114.60	0.00	108.04	3,717.54	0.01
				08/17/17	- -	108.41	114.60	0.00	108.41	3,717.17	-0.37
				04/05/18	- -	108.86	114.60	0.00	108.86	3,716.72	-0.45
				10/01/18	- -	109.90	114.60	0.00	109.90	3,715.68	-1.04
				04/04/19	- -	109.89	114.60	0.00	109.89	3,715.69	0.01
				10/24/19	- -	112.87	114.60	0.00	112.87	3,712.71	-2.98
				06/18/20	- -	112.11	114.60	0.00	112.11	3,713.47	0.76
				08/13/20	DRY WELL - PLUGGED AND ABANDONED AUGUST 2020						
MW-23R [14]	3,825.64	3,822.75	3,715.96 to 3,695.96	10/08/20	- -	112.81	129.63	0.00	112.81	3,712.83	NA
				04/15/21	- -	113.17	129.63	0.00	113.17	3,712.47	-0.36
				09/16/21	- -	113.53	129.63	0.00	113.53	3,712.11	-0.36
MW-24 [7,8,15]	3,830.50	3,830.81	3,732.36 to 3,712.36	08/11/10	- -	104.04	118.14	0.00	104.04	3,726.46	NA
				02/23/11	- -	104.26	118.09	0.00	104.26	3,726.24	-0.22
				07/12/11	- -	105.29	118.04	0.00	105.29	3,725.21	-1.03
				02/01/12	- -	106.65	119.10	0.00	106.65	3,723.85	-1.36
				07/23/12	- -	106.96	118.04	0.00	106.96	3,723.54	-0.31
				02/18/13	- -	106.77	118.35	0.00	106.77	3,723.73	0.19
				08/19/13	- -	108.30	118.21	0.00	108.30	3,722.20	-1.53
				02/24/14	- -	108.66	118.45	0.00	108.66	3,721.84	-0.36
				08/18/14	- -	109.61	118.91	0.00	109.61	3,720.89	-0.95
				02/23/15	- -	109.92	118.12	0.00	109.92	3,720.58	-0.31
				08/24/15	- -	110.47	118.11	0.00	110.47	3,720.03	-0.55
				03/07/16	- -	110.59	118.15	0.00	110.59	3,719.91	-0.12
				08/15/16	- -	111.52	118.05	0.00	111.52	3,718.98	-0.93
				02/06/17	- -	112.01	118.08	0.00	112.01	3,718.49	-0.49
				06/22/17	- -	111.96	117.90	0.00	111.96	3,718.54	0.05
				08/17/17	- -	112.55	117.90	0.00	112.55	3,717.95	-0.59
				04/05/18	- -	112.85	117.90	0.00	112.85	3,717.65	-0.30
				10/01/18	- -	113.89	117.90	0.00	113.89	3,716.61	-1.04
				04/04/19	- -	113.84	117.90	0.00	113.84	3,716.66	0.05
				10/24/19	- -	115.72	117.90	0.00	115.72	3,714.78	-1.88
				06/18/20	- -	116.14	117.90	0.00	116.14	3,714.36	-0.42
				10/08/20	- -	116.91	117.90	0.00	116.91	3,713.59	-0.77
				04/15/21	- -	117.02	117.90	0.00	117.02	3,713.48	-0.11
				06/09/21	WELL PLUGGED AND ABANDONED JUNE 2021						
MW-24R [15]	3,830.38	3,830.82	3,715.11 to 3,695.11	09/16/21	- -	117.38	135.77	0.00	117.38	3,713.00	NA

Table 1. Water Elevation Measurements
HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[1] (feet)	Corrected Water Level Elev.[1] (feet)	Change from previous measurement (feet)
MW-25 [7,8,15]	3,830.77	3,831.00	3,729.00 to 3,709.00	08/11/10	- -	106.46	121.66	0.00	106.46	3,724.31	NA
				02/23/11	- -	105.72	121.60	0.00	105.72	3,725.05	0.74
				07/12/11	- -	107.24	121.49	0.00	107.24	3,723.53	-1.52
				02/01/12	- -	108.53	121.42	0.00	108.53	3,722.24	-1.29
				07/23/12	- -	109.13	121.47	0.00	109.13	3,721.64	-0.60
				02/18/13	- -	107.65	121.45	0.00	107.65	3,723.12	1.48
				08/19/13	- -	110.15	121.49	0.00	110.15	3,720.62	-2.50
				02/24/14	- -	110.62	121.60	0.00	110.62	3,720.15	-0.47
				08/18/14	- -	112.14	121.46	0.00	112.14	3,718.63	-1.52
				02/23/15	- -	112.11	121.71	0.00	112.11	3,718.66	0.03
				08/24/15	- -	112.89	121.23	0.00	112.89	3,717.88	-0.78
				03/07/16	- -	113.76	121.10	0.00	113.76	3,717.01	-0.87
				08/15/16	- -	114.52	121.10	0.00	114.52	3,716.25	-0.76
				02/06/17	- -	114.68	121.03	0.00	114.68	3,716.09	-0.16
				06/22/17	- -	114.64	120.99	0.00	114.64	3,716.13	0.04
				08/16/17	- -	114.91	120.99	0.00	114.91	3,715.86	-0.27
				04/05/18	- -	115.38	120.99	0.00	115.38	3,715.39	-0.47
				10/01/18	- -	116.42	120.99	0.00	116.42	3,714.35	-1.04
				04/04/19	- -	116.12	120.99	0.00	116.12	3,714.65	0.30
				10/24/19	- -	117.22	120.99	0.00	117.22	3,713.55	-1.10
				06/18/20	- -	118.44	120.99	0.00	118.44	3,712.33	-1.22
				10/08/20	- -	119.59	120.99	0.00	119.59	3,711.18	-1.15
				04/15/21	- -	119.65	120.99	0.00	119.65	3,711.12	-0.06
				06/09/21	WELL PLUGGED AND ABANDONED JUNE 2021						
MW-26 [7,8,14]	3,833.18	3,833.39	3,731.85 to 3,711.85	08/11/10	- -	106.22	121.33	0.00	106.22	3,726.96	NA
				02/23/11	- -	108.44	121.31	0.00	108.44	3,724.74	-2.22
				07/12/11	- -	109.58	121.26	0.00	109.58	3,723.60	-1.14
				02/01/12	- -	110.38	121.21	0.00	110.38	3,722.80	-0.80
				07/23/12	- -	111.28	121.24	0.00	111.28	3,721.90	-0.90
				02/18/13	- -	109.00	121.43	0.00	109.00	3,724.18	2.28
				08/19/13	- -	111.46	121.43	0.00	111.46	3,721.72	-2.46
				02/24/14	- -	112.28	122.30	0.00	112.28	3,720.90	-0.82
				08/18/14	- -	113.98	121.31	0.00	113.98	3,719.20	-1.70
				02/23/15	- -	114.20	121.20	0.00	114.20	3,718.98	-0.22
				08/24/15	- -	114.86	121.15	0.00	114.86	3,718.32	-0.66
				03/07/16	- -	115.22	121.12	0.00	115.22	3,717.96	-0.36
				08/15/16	- -	115.98	121.18	0.00	115.98	3,717.20	-0.76
				02/06/17	- -	116.38	121.07	0.00	116.38	3,716.80	-0.40
				06/22/17	- -	116.24	121.21	0.00	116.24	3,716.94	0.14
				08/17/17	- -	116.79	121.21	0.00	116.79	3,716.39	-0.55
				04/05/18	- -	>118.00	NA	NA	NA	NA	NA
				10/01/18	- -	>118.86	NA	NA	NA	NA	NA
				04/04/19	- -	>117.09	NA	NA	NA	NA	NA
				10/24/19	- -	119.52	121.21	0.00	119.52	3,713.66	-2.73
				06/18/20	- -	120.20	121.21	0.00	120.2	3,712.98	-0.68
				08/13/20	DRY WELL - PLUGGED AND ABANDONED AUGUST 2020						
MW-26R [14]	3,833.65	3,833.37	3,716.15 to 3,696.15	10/08/20	- -	121.48	137.08	0.00	121.48	3,712.17	NA
				04/15/21	- -	121.24	137.08	0.00	121.24	3,712.41	0.24
				09/16/21	- -	121.93	137.08	0.00	121.93	3,711.72	-0.69

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MW-27 [7,8]	3,837.27	3,834.53	3,733.20 to 3,713.20	08/11/10	- -	109.00	124.07	0.00	109.00	3,728.27	NA
				02/23/11	- -	109.58	123.96	0.00	109.58	3,727.69	-0.58
				07/12/11	- -	110.59	124.00	0.00	110.59	3,726.68	-1.01
				02/01/12	- -	111.37	123.97	0.00	111.37	3,725.90	-0.78
				07/23/12	- -	112.32	123.78	0.00	112.32	3,724.95	-0.95
				02/18/13	- -	111.19	123.89	0.00	111.19	3,726.08	1.13
				08/19/13	- -	113.06	123.60	0.00	113.06	3,724.21	-1.87
				02/24/14	- -	113.81	122.60	0.00	113.81	3,723.46	-0.75
				08/18/14	- -	114.96	123.68	0.00	114.96	3,722.31	-1.15
				02/23/15	- -	115.32	120.95	0.00	115.32	3,721.95	-0.36
				08/24/15	- -	115.99	122.37	0.00	115.99	3,721.28	-0.67
				03/07/16	- -	116.26	122.87	0.00	116.26	3,721.01	-0.27
				08/15/16	- -	116.94	123.78	0.00	116.94	3,720.33	-0.68
				02/06/17	- -	117.32	123.25	0.00	117.32	3,719.95	-0.38
				06/22/17	- -	117.30	123.56	0.00	117.30	3,719.97	0.02
				08/17/17	- -	117.78	123.56	0.00	117.78	3,719.49	-0.48
				04/05/18	- -	118.11	123.56	0.00	118.11	3,719.16	-0.33
				10/01/18	- -	>119.15	NA	NA	NA	NA	NA
				04/04/19	- -	>119.15	NA	NA	NA	NA	NA
				10/24/19	- -	120.54	123.56	0.00	120.54	3,716.73	-2.43
				06/18/20	- -	121.25	123.56	0.00	121.25	3,716.02	-0.71
				10/08/20	- -	122.21	123.56	0.00	122.21	3,715.06	-0.96
				04/15/21	- -	122.14	123.56	0.00	122.14	3,715.13	0.07
				09/16/21	- -	122.72	123.56	0.00	122.72	3,714.55	-0.58
MW-28 [7,8]	3,833.44	3,833.73	3,735.02 to 3,715.02	08/11/10	- -	103.72	118.42	0.00	103.72	3,729.72	NA
				02/23/11	- -	104.03	118.42	0.00	104.03	3,729.41	-0.31
				07/12/11	- -	105.07	118.35	0.00	105.07	3,728.37	-1.04
				01/30/12	- -	105.84	118.38	0.00	105.84	3,727.60	-0.77
				07/23/12	- -	106.65	118.31	0.00	106.65	3,726.79	-0.81
				02/18/13	- -	106.17	118.47	0.00	106.17	3,727.27	0.48
				08/19/13	- -	107.53	118.50	0.00	107.53	3,725.91	-1.36
				02/24/14	- -	108.39	118.70	0.00	108.39	3,725.05	-0.86
				08/18/14	- -	109.29	118.30	0.00	109.29	3,724.15	-0.90
				02/23/15	- -	109.60	118.47	0.00	109.60	3,723.84	-0.31
				08/24/15	- -	110.16	118.44	0.00	110.16	3,723.28	-0.56
				03/07/16	- -	110.25	118.40	0.00	110.25	3,723.19	-0.09
				08/15/16	- -	111.03	118.31	0.00	111.03	3,722.41	-0.78
				02/06/17	- -	111.33	118.20	0.00	111.33	3,722.11	-0.30
				06/22/17	- -	111.49	118.26	0.00	111.49	3,721.95	-0.16
				08/17/17	- -	112.14	118.26	0.00	112.14	3,721.30	-0.65
				04/05/18	- -	112.17	118.26	0.00	112.17	3,721.27	-0.03
				10/01/18	- -	113.16	118.26	0.00	113.16	3,720.28	-0.99
				04/04/19	- -	113.32	118.26	0.00	113.32	3,720.12	-0.16
				10/24/19	- -	115.05	118.26	0.00	115.05	3,718.39	-1.73
				06/18/20	- -	115.64	118.26	0.00	115.64	3,717.80	-0.59
				10/08/20	- -	116.26	118.26	0.00	116.26	3,717.18	-0.62
				04/15/21	- -	116.41	118.26	0.00	116.41	3,717.03	-0.15
				09/16/21	- -	116.78	118.26	0.00	116.78	3,716.66	-0.37

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HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

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MW-29 [7,8]	3,835.55	3,836.02	3,734.52 to 3,714.52	08/11/10	- -	105.80	120.42	0.00	105.80	3,729.75	NA
				02/23/11	- -	105.97	120.35	0.00	105.97	3,729.58	-0.17
				07/12/11	- -	107.08	120.33	0.00	107.08	3,728.47	-1.11
				01/30/12	- -	107.69	120.33	0.00	107.69	3,727.86	-0.61
				07/23/12	- -	108.74	120.27	0.00	108.74	3,726.81	-1.05
				02/18/13	- -	108.12	120.47	0.00	108.12	3,727.43	0.62
				08/19/13	- -	109.49	120.68	0.00	109.49	3,726.06	-1.37
				02/24/14	- -	110.43	120.70	0.00	110.43	3,725.12	-0.94
				08/18/14	- -	111.35	120.30	0.00	111.35	3,724.20	-0.92
				02/23/15	- -	111.65	120.30	0.00	111.65	3,723.90	-0.30
				08/24/15	- -	112.29	120.35	0.00	112.29	3,723.26	-0.64
				03/07/16	- -	112.47	120.48	0.00	112.47	3,723.08	-0.18
				08/15/16	- -	113.21	120.30	0.00	113.21	3,722.34	-0.74
				02/06/17	- -	113.46	120.19	0.00	113.46	3,722.09	-0.25
				06/22/17	- -	113.62	120.30	0.00	113.62	3,721.93	-0.16
				08/17/17	- -	114.05	120.30	0.00	114.05	3,721.50	-0.43
				04/05/18	- -	114.39	120.30	0.00	114.39	3,721.16	-0.34
				10/01/18	- -	115.35	120.30	0.00	115.35	3,720.20	-0.96
				04/04/19	- -	115.55	120.30	0.00	115.55	3,720.00	-0.20
				10/24/19	- -	117.03	120.30	0.00	117.03	3,718.52	-1.48
				06/18/20	- -	117.80	120.30	0.00	117.8	3,717.75	-0.77
				10/08/20	- -	118.70	120.30	0.00	118.7	3,716.85	-0.90
				04/15/21	- -	118.55	120.30	0.00	118.55	3,717.00	0.15
				09/16/21	- -	118.99	120.30	0.00	118.99	3,716.56	-0.44
MW-30 [9]	3,839.25	3,836.02	3,732.28 to 3,712.28	08/19/13	- -	110.94	126.97	0.00	110.94	3,728.31	NA
				02/24/14	- -	112.14	126.60	0.00	112.14	3,727.11	-1.20
				08/18/14	- -	112.79	126.36	0.00	112.79	3,726.46	-0.65
				02/23/15	- -	113.18	126.68	0.00	113.18	3,726.07	-0.39
				08/24/15	- -	113.75	125.03	0.00	113.75	3,725.50	-0.57
				03/07/16	- -	113.90	124.75	0.00	113.90	3,725.35	-0.15
				08/15/16	- -	114.65	124.40	0.00	114.65	3,724.60	-0.75
				02/06/17	- -	114.91	123.95	0.00	114.91	3,724.34	-0.26
				06/22/17	- -	115.12	123.64	0.00	115.12	3,724.13	-0.21
				08/16/17	- -	115.37	123.64	0.00	115.37	3,723.88	-0.25
				04/05/18	- -	115.94	123.64	0.00	115.94	3,723.31	-0.57
				10/01/18	- -	116.93	123.64	0.00	116.93	3,722.32	-0.99
				04/04/19	- -	117.36	123.64	0.00	117.36	3,721.89	-0.43
				10/24/19	- -	118.81	123.64	0.00	118.81	3,720.44	-1.45
				06/18/20	- -	119.59	123.64	0.00	119.59	3,719.66	-0.78
				10/08/20	- -	120.45	123.64	0.00	120.45	3,718.80	-0.86
				04/15/21	- -	120.39	123.64	0.00	120.39	3,718.86	0.06
				09/16/21	- -	120.78	123.64	0.00	120.78	3,718.47	-0.39
MW-31 [10,13]	3,819.17	3,818.90	3,718.90 to 3,698.90	02/06/17	98.95	105.11	NM	6.16	99.75	3,719.42	NA
				06/22/17	- -	99.84	NM	0.00	99.84	3,719.33	-0.09
				08/17/17	100.24	101.22	NM	0.98	100.37	3,718.80	-0.53
				04/05/18	100.05	105.55	NM	5.50	100.77	3,718.41	-0.40
				10/01/18	101.07	106.82	NM	5.75	101.82	3,717.35	-1.05
	3,820.17			04/01/19	102.33	107.98	NM	5.65	103.06	3,717.11	-0.25
				10/24/19	104.32	104.97	NM	0.65	104.40	3,715.77	-1.34
				06/18/20	104.41	107.28	NM	2.87	104.78	3,715.39	-0.38
				10/08/20	105.09	108.59	NM	3.50	105.55	3,714.63	-0.76
				04/15/21	105.34	109.53	NM	4.19	105.88	3,714.29	-0.34
				09/16/21	105.73	111.52	NM	5.79	106.48	3,713.69	-0.60
MW-32 [11]	3,817.69	3,818.07	3,721.96 to 3,701.96	06/22/17	- -	98.62	115.73	0.00	98.62	3,719.07	NA
				08/17/17	- -	98.91	115.73	0.00	98.91	3,718.78	-0.29
				04/05/18	- -	99.34	115.73	0.00	99.34	3,718.35	-0.43
				10/01/18	- -	100.44	115.73	0.00	100.44	3,717.25	-1.10
				04/04/19	- -	100.74	115.73	0.00	100.74	3,716.95	-0.30
				10/24/19	- -	101.92	115.73	0.00	101.92	3,715.77	-1.18
				06/18/20	- -	102.40	115.73	0.00	102.40	3,715.29	-0.48
				10/08/20	- -	103.08	115.73	0.00	103.08	3,714.61	-0.68
				04/15/21	- -	103.51	115.73	0.00	103.51	3,714.18	-0.43
				09/16/21	- -	104.18	115.73	0.00	104.18	3,713.51	-0.67

Table 1. Water Elevation Measurements

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Top of Casing Elevation (feet)	Ground Level Elevation (feet)	Well Screen Interval (feet)	Date	Depth to Product (feet, btoc)	Depth to Water (feet, btoc)	Total Depth (feet, btoc)	Product Thickness (feet)	Corrected Depth to Water[(1)] (feet)	Corrected Water Level Elev.[(1)] (feet)	Change from previous measurement (feet)
MW-33 [(11)]	3,819.68	3,817.09	3,719.78 to 3,699.78	06/22/17	- -	100.55	119.90	0.00	100.55	3,719.13	NA
				08/17/17	- -	100.99	119.90	0.00	100.99	3,718.69	-0.44
				04/05/18	- -	101.26	119.90	0.00	101.26	3,718.42	-0.27
				10/01/18	- -	102.37	119.90	0.00	102.37	3,717.31	-1.11
				04/04/19	- -	102.77	119.90	0.00	102.77	3,716.91	-0.40
				10/24/19	- -	103.83	119.90	0.00	103.83	3,715.85	-1.06
				06/18/20	- -	104.29	119.90	0.00	104.29	3,715.39	-0.46
				10/08/20	- -	104.96	119.90	0.00	104.96	3,714.72	-0.67
				04/15/21	- -	105.44	119.90	0.00	105.44	3,714.24	-0.48
				09/16/21	- -	106.11	119.90	0.00	106.11	3,713.57	-0.67
RW-1	3,838.48	3,838.19	3,738.19 to 3,708.19	04/30/09	- -	106.45	136.09	0.00	106.45	3,732.03	NA
				06/10/09	- -	106.59	NM	0.00	106.59	3,731.89	-0.14
				06/19/09	- -	106.61	129.62	0.00	106.61	3,731.87	-0.02
				07/02/09	- -	106.82	129.25	0.00	106.82	3,731.66	-0.21
				07/24/09	- -	106.92	129.31	0.00	106.92	3,731.56	-0.10
				09/24/09	- -	107.42	129.73	0.00	107.42	3,731.06	-0.50
				10/27/09	- -	107.53	129.25	0.00	107.53	3,730.95	-0.11
				01/13/10	- -	107.67	129.29	0.00	107.67	3,730.81	-0.14
				02/02/10	- -	107.69	NM	0.00	107.69	3,730.79	-0.02
				04/01/10	- -	107.60	NM	0.00	107.60	3,730.88	0.09
				08/11/10	- -	108.18	129.29	0.00	108.18	3,730.30	-0.58
				02/23/11	- -	108.22	129.31	0.00	108.22	3,730.26	-0.04
				07/12/11	- -	109.09	129.27	0.00	109.09	3,729.39	-0.87
				02/02/12	- -	109.81	129.34	0.00	109.81	3,728.67	-0.72
				07/23/12	- -	110.98	129.07	0.00	110.98	3,727.50	-1.17
				02/18/13	- -	110.61	135.79	0.00	110.61	3,727.87	0.37
				08/19/13	- -	111.67	129.64	0.00	111.67	3,726.81	-1.06
				02/24/14	- -	112.59	129.60	0.00	112.59	3,725.89	-0.92
				08/18/14	- -	113.50	129.28	0.00	113.50	3,724.98	-0.91
				02/23/15	- -	113.95	129.26	0.00	113.95	3,724.53	-0.45
				08/24/15	- -	114.56	129.25	0.00	114.56	3,723.92	-0.61
				03/07/16	- -	114.92	129.25	0.00	114.92	3,723.56	-0.36
				08/15/16	- -	115.52	129.25	0.00	115.52	3,722.96	-0.60
				02/06/17	- -	115.92	129.25	0.00	115.92	3,722.56	-0.40
				06/22/17	- -	116.00	129.42	0.00	116.00	3,722.48	-0.08
				08/17/17	- -	116.44	129.42	0.00	116.44	3,722.04	-0.44
				04/05/18	- -	116.82	129.42	0.00	116.82	3,721.66	-0.38
				10/01/18	- -	117.77	129.42	0.00	117.77	3,720.71	-0.95
				04/04/19	- -	118.23	129.42	0.00	118.23	3,720.25	-0.46
				10/24/19	- -	119.43	129.42	0.00	119.43	3,719.05	-1.20
				06/18/20	- -	120.13	129.42	0.00	120.13	3,718.35	-0.70
				10/08/20	- -	121.01	129.42	0.00	121.01	3,717.47	-0.88
				04/15/21	- -	121.01	129.42	0.00	121.01	3,717.47	0.00
				09/16/21	- -	121.57	129.42	0.00	121.57	3,716.91	-0.56

Notes:

1. Depth to water corrected for presence of product using a specific gravity of 0.87.
2. Monitoring wells MW-1 through MW-7 installed September 1995; plugged and redrilled April 2009.
3. Monitoring wells MW-8 through MW-10 installed March and April 1996; plugged and redrilled April 2009.
4. Monitoring wells MW-11 and MW-12 installed April and May 2002.
5. Monitoring wells MW-13 and MW-14 installed January 2004.
6. Elevation survey of new and existing wells August 7, 2009. Earlier water level information corrected to current survey.
7. Monitoring wells MW-15 through MW-29 installed May-June 2010.
8. Elevation survey of wells MW-15 through MW-29 July 13, 2010.
9. Monitoring wells MW-12R, MW-17R, and MW-30 installed and elevations surveyed June 2013; MW-12 and MW-17 plugged and abandoned June 2013.
10. Monitoring wells MW-11R and MW-31 installed December 2016 and elevations surveyed February 2017; MW-11 plugged and abaondoned June 2013
11. Monitoring wells MW-32 and MW-33 installed and elevations surveyed June 2017.
12. Monitoring wells MW-13R and MW-14R installed and elevations surveyed September 2018; MW-13 and MW-14 plugged and abandoned September 2018.

13. Top of casing elevation was calculated by adding 1 foot to the original surveyed top of casing elevation because a 1 foot additional piece of PVC was added due to the skimmer system.
14. Monitoring wells MW-12R2, MW-16R, MW-23R, and MW-26R installed and elevations surveyed August 2020; MW-12R, MW-16, MW-23, and MW-26 plugged and abandoned August 2020.
15. Monitoring well MW-20R installed in June 2021 and MW-15R, MW-18R, MW-19R, and MW-24R installed in September 2021 (all surveyed in September 2021); MW-15, MW-18, MW-19, MW-20, MW-24, and MW-25 plugged and abandoned June 2021.

btoc = below top of casing
-- = Not Detected
NM = Not Measured
NA = Not Applicable
>Value = Water level could not be measured due to interference from dedicated pump.

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-1	06/19/2009		<0.0050	0.012	<0.0050	0.031	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/19/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	- -	<0.00020	<0.00020	<0.00020	- -	- -
	08/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	03/01/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/20/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/02/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/27/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/09/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/17/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	02/07/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000293 J	- -	- -	- -	- -	- -	- -	- -
	06/18/2020	FD	<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000296 J	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000275 J	- -	- -	- -	- -	- -	- -	- -
	04/15/2021		<0.0000941	0.000266 J	<0.000278	<0.000174	<0.00100	0.000439 J	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		0.000102 JB	<0.000137	<0.000278	<0.000174	<0.00100	0.000560 J	- -	- -	- -	- -	- -	- -	- -
MW-2	06/22/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/19/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	03/03/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/14/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/24/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/19/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	0.00022	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	0.00084 J	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/28/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.000696 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/07/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.000942 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/18/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00293 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/07/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00719	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00812	<0.000372	<0.000372	<0.000332	<0.000311	0.00403 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00385 J	0.00228	0.00228	<0.000332	<0.000311	0.00721 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00214 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000912 JB	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00260 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00260 J	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000728 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000475 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000370 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000448 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000706 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-3	06/16/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/14/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/14/2010	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/19/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/24/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/15/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/25/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/26/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	02/26/2015	FD	<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/26/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/08/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/18/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	02/07/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	04/05/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	04/04/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	06/18/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	04/15/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-4	06/16/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/13/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/19/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/15/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00044	0.00044	- -	<0.00020	<0.00020	- -	- -
	01/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/24/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.005	<0.0050	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	- -	- -
	02/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/28/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/15/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00267 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00302 JB	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000574 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000493 J	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.00140 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.00664	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-5	06/16/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/20/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/19/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/25/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/19/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/24/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000382 J	- -	- -
	08/17/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.366
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00154 JB	0.0899 JB	0.0397 J
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00240 JB	<0.0314	<0.0247
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000880 J	0.0494 JB	0.0620 J
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0586 J
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
MW-6	06/18/2009		<0.0050	<0.0050	<0.0050	<0.015	0.0075	- -	- -	- -	- -	- -	- -	- -	- -
	06/18/2009	FD	<0.0050	<0.0050	<0.0050	<0.015	0.0074	- -	- -	- -	- -	- -	- -	- -	- -
	02/02/2010		<0.0050	0.013	<0.0050	<0.015	0.0099	- -	- -	- -	- -	- -	- -	- -	- -
	08/19/2010		<0.0050	0.015	<0.0050	<0.015	<0.0050	- -	0.0034	0.0017	- -	0.0017	<0.0010	- -	- -
	03/01/2011		<0.0050	0.018	<0.0050	<0.015	0.013	- -	0.0094	0.0062	<0.00020	0.0032	0.0255	- -	- -
	07/20/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.0008	0.0008	- -	<0.00020	<0.00020	- -	- -
	02/02/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/24/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2013	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00116	0.00052	0.00064	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00292	0.00092	0.0020	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/10/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/17/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/07/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00123 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000859 JB	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	- -	- -	- -	- -	- -	- -	- -
	06/18/2020	FD	<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000149 J	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000274 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-7	06/19/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/02/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	03/01/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/20/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/02/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/27/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000507 J	- -	- -

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-8	06/18/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/25/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/19/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/01/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0020	<0.0020	- -	<0.0020	<0.0020	- -	- -
	07/27/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/26/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000990 J	- -	- -
	03/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/18/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	02/08/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000307 J	- -	- -	- -	- -	- -	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000573 J	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000183 J	- -	- -	- -	- -	- -	- -	- -
MW-9	06/16/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/14/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/19/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	03/01/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/15/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/25/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/26/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-10	06/16/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/13/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/19/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	- -	- -	<0.00020	<0.00020	- -	- -
	03/03/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	0.00028	0.00028	<0.00020	<0.00020	<0.00020	- -	- -
	07/15/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/25/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	0.00032	- -	- -
	02/26/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/26/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/26/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-11	06/18/2009		0.10	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/18/2010		0.20 E	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/18/2010		0.078	0.021	<0.0050	<0.015	<0.0050	- -	0.00036	0.00036	- -	- -	0.00122	- -	- -
	02/25/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/19/2011		1.2	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00036	0.00036	- -	<0.00020	0.00089	- -	- -
	02/01/2012		7.8	0.051	<0.0050	0.20	0.096	<0.0050	0.0435	0.039	- -	0.0045	0.0035	- -	- -
	07/27/2012		0.049	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00022	0.00022	<0.00020	<0.00020	0.00023	- -	- -
	02/27/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2013	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/28/2014		0.96	0.25	<0.0050	0.20	0.0064	<0.0050	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	08/20/2014		0.11	0.011	<0.0050	0.030	<0.0050	<0.0050	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	02/27/2015		0.0026	0.00099 J	<0.00078	0.0036	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	0.0010 J	- -	- -
	08/28/2015		0.00856	0.00194	0.00283 J	0.0158	<0.00100	0.000420 J	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	08/28/2015	FD	0.00922	0.00216	0.00305 J	0.0180	<0.00100	0.000467 J	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	03/09/2016		0.000627 J	0.000778 J	<0.000780	<0.00106	<0.00100	<0.000324	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	03/09/2016	FD	0.000772 J	0.000908 J	<0.000780	<0.00106	<0.00100	<0.000324	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	08/15/2016		DRY WELL - PLUGGED AND ABANDONED DECEMBER 2016												
MW-11R	02/08/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/08/2017	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000392 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00167 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000350 J	<0.000413	<0.000413	<0.000368	<0.000345	0.000744 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000971 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00284 J	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000614 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000390 J	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000844 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000927 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		0.000660 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000900 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021		0.000157 JB	<0.000137	<0.000278	<0.000174	<0.00100	0.000916 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-12	06/16/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/20/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/19/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	--		DAMAGED WELL - PLUGGED AND ABANDONED JUNE 2013												
MW-12R	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000362 J	- -	- -
	03/09/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/18/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000439	<0.000439	<0.000392	<0.000367	<0.000394	- -	- -
	02/08/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00273 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00237 JB	- -	- -
	04/05/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00230 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00262 JB	- -	- -
	10/01/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00441 JB	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00257 J	- -	- -
	04/04/2019	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000708 J	- -	- -
	10/24/2019		--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	06/18/2020		--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	08/13/2020		DRY WELL - PLUGGED AND ABANDONED AUGUST 2020												
MW-12R2	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-13	06/16/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/18/2010		0.016	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/25/2011		0.0057	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	0.00091	- -	- -
	07/19/2011		0.0063	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/01/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/26/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/19/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/27/2015		0.00034 J	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/26/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000379 J	- -	- -
	03/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/08/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		0.000397 J	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00270 JB	- -	- -
	04/05/2018		--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	09/26/2018		DRY WELL - PLUGGED AND ABANDONED SEPTEMBER 2018												
MW-13R	10/01/2018		<0.000331	<0.000384	0.000506 J	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00134 JB	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00164 J	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	- -	- -	- -	- -	- -	- -	- -
	06/18/2020	FD	<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000113 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	10/08/2020	FD	<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000195 J	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000239 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021	FD	<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000114 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-14	06/16/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/20/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/18/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/25/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	- -	- -	- -	- -	- -	- -	- -
	02/22/2013		- -	- -	- -	- -	- -	- -	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	- -	- -
	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	02/28/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	08/20/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	--[1]	--[1]	--[1]	--[1]	--[1]	- -	- -
	02/27/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000530 J	- -	- -
	08/19/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000413	<0.000413	<0.000368	<0.000345	0.000642 J	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00318 JB	- -	- -
	09/27/2018		DRY WELL - PLUGGED AND ABANDONED SEPTEMBER 2018												
MW-14R	10/01/2018		<0.000331	<0.000384	0.00186	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00278 JB	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-15	08/20/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/24/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/14/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.017	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.0095	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/24/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.017	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/19/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.030	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.0060	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.0056	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/24/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.013	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/24/2014	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.011	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	08/21/2014	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	0.0081	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00447 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000997 J	- -	- -
	08/27/2015	FD	<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00574	<0.000372	<0.000372	<0.000332	<0.000311	0.000595 J	- -	- -
	03/07/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/15/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00570	<0.000372	<0.000372	<0.000332	<0.000311	0.000534 J	- -	- -
	08/15/2016	FD	<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00539	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/06/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00474 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00209 JB	- -	- -
	04/05/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00217 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000915 JB	- -	- -
	04/04/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00226 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000561 J	- -	- -
	06/18/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000889 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021												
MW-15R	09/16/2021		0.000105 JB	<0.000137	<0.000278	<0.000174	<0.00100	0.0120	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-16	08/20/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/24/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/15/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00030	0.00030	- -	<0.00020	<0.00020	- -	- -
	07/15/2011	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/24/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/19/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000397 J	- -	- -
	08/15/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00429 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000817 JB	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000913 J	- -	- -
	08/13/2020		DRY WELL - PLUGGED AND ABANDONED AUGUST 2020												
MW-16R	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-17	08/20/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/24/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/18/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	--		DAMAGED WELL - PLUGGED AND ABANDONED JUNE 2013												
MW-17R	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/26/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000465 J	- -	- -
	03/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/09/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00208 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	0.00133	0.00133	<0.000332	<0.000311	0.00488 JB	- -	- -
	04/05/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00290 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00259 JB	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00242 J	- -	- -
	04/04/2019	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000493 J	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000373 J	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-18	08/23/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/24/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/18/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00021	0.00021	- -	<0.00020	<0.00020	- -	- -
	07/25/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	0.00056	- -	- -
	08/20/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/26/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000507 J	- -	- -
	08/17/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000439	<0.000439	<0.000392	<0.000367	0.000507 J	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00205 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00283 JB	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000389 J	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021												
MW-18R	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-19	08/23/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/24/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/18/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/25/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2014	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	0.00034	- -	- -
	08/19/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	08/19/2014	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/26/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	02/26/2015	FD	<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/26/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000610 J	- -	- -
	03/08/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/17/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.00186	<0.00186	<0.00166	<0.00156	0.00818 J	- -	- -
	02/08/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00310 JB	- -	- -
	08/16/2017	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00320 JB	- -	- -
	04/05/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00216 JB	- -	- -
	04/04/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	06/18/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	- -	- -
	04/15/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021												
MW-19R	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-20	08/23/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/25/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/18/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/25/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/19/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000508 J	- -	- -
	08/16/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00262 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00309 JB	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00161 J	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021												
MW-20R	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-21	08/23/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/28/2011	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/19/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/26/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00131	0.0010	<0.00020	0.00031	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/19/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000497 J	- -	- -
	08/16/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.624
	08/17/2017		- -	- -	- -	- -	- -	- -	<0.000372	<0.000372	<0.000332	<0.000311	0.00375 JB	0.0889 JB	0.124
	10/01/2018		- -	- -	- -	- -	- -	- -	<0.000372	<0.000372	<0.000332	<0.000311	0.000383 JB	<0.0314	0.120
	10/24/2019		- -	- -	- -	- -	- -	- -	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	0.0524 JB	0.196
	10/08/2020		- -	- -	- -	- -	- -	- -	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.175
	09/16/2021		- -	- -	- -	- -	- -	- -	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.312
MW-22	08/23/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/19/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/31/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/26/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/24/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.819
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00363 JB	0.0786 JB	0.113
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00119 JB	<0.0314	0.104 J
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000635 J	0.0606 JB	0.0674 J
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.122 J
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.179 J

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-23	08/23/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/19/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/01/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/26/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/25/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/13/2020		DRY WELL - PLUGGED AND ABANDONED AUGUST 2020												
MW-23R	10/08/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-24	08/24/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/14/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/01/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/30/2012	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000405 J	- -	- -
	08/16/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00301 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00178 JB	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021												
MW-24R	09/16/2021		0.000725 JB	<0.000137	0.000828 J	0.000194 J	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-25	08/23/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/18/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/01/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/26/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2014	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/19/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	08/19/2014	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	02/25/2015	FD	<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000728 J	- -	- -
	08/25/2015	FD	<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000581 J	- -	- -
	03/09/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2016	FD	<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/07/2017		0.000424 J	<0.000384	<0.000412	0.00207 J	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00347 JB	- -	- -
	08/16/2017	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00233 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	0.00159	0.00159	<0.000349	<0.000326	0.000731 JB	- -	- -
	04/05/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00118 JB	- -	- -
	10/01/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00274 JB	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00201 J	- -	- -
	04/04/2019	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000526 J	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00240 J	- -	- -
	10/24/2019	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000637 J	- -	- -
	06/18/2020		0.000201 J	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	10/08/2020		0.000137 J	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		0.000809 J	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021												
MW-26	08/24/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/14/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/01/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/26/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	0.00061	- -	- -
	02/26/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/25/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/17/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/13/2020		DRY WELL - PLUGGED AND ABANDONED AUGUST 2020												
MW-26R	10/08/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-27	08/18/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/25/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	0.00099	- -	- -
	07/20/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	0.00034	- -	- -
	02/01/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/26/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/21/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/27/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/26/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/18/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/08/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00241 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000380	<0.000380	<0.000339	<0.000317	0.00451 JB	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000917 J	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-28	08/24/2010		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/28/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/23/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/14/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/24/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/19/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	0.00086	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	0.00022	- -	- -
	02/24/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/19/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/23/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	0.00033 J	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000774 J	- -	- -
	03/07/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/15/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000391	<0.000391	<0.000349	<0.000326	0.000459 J	- -	- -
	02/06/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00236 JB	- -	- -
	04/05/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00119 JB	- -	- -
	04/04/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	06/18/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-29	08/24/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/24/2010	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	02/28/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/14/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	01/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	0.00050	0.00050	- -	<0.00020	<0.00020	- -	- -
	07/24/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/26/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	0.00039 J	- -	- -
	08/27/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.000329 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00224 J	- -	- -	- -	- -	- -	- -	- -
	08/17/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00197 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/09/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00246 J	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00175 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00419 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00142 J	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000903 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00164 JB	- -	- -
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00133 J	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000578 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	10/24/2019	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000686 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.000719 J	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.00146 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.00156 J	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.00276 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
MW-30	06/21/2013		<0.0050	<0.0050	<0.0050	<0.015	- -	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/20/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/27/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	02/25/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	0.00072 J	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	08/28/2015		<0.000331	<0.000384	<0.000780	0.00142 J	<0.00100	0.000887 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.000964 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/08/2016	FD	<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.000911 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00107 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2016	FD	<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00111 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	02/09/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00190 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/16/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00376 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00799 JB	0.0792 J	0.0551 J
	08/16/2017	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00336 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00141 JB	- -	- -
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00468 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00900 JB	- -	- -
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00549	<0.000372	<0.000372	<0.000332	<0.000311	0.00181 JB	- -	- -
	10/01/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00846	<0.000372	<0.000372	<0.000332	<0.000311	0.00484 JB	<0.0314	0.0391 J
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.0148	<0.000372	<0.000372	<0.000332	<0.000311	0.00110 J	- -	<0.0247
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00916	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	10/24/2019	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.0110	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.0139	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.0159	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.0266	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	0.0282	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	- -	- -

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

			WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
Monitor Well	Sample Date	Duplicate	Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
MW-32	06/15/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.507
	06/15/2017	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.427
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00126 JB	0.0740 JB	0.167
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000662 JB	<0.0314	0.204
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00459 JB	<0.0314	0.360
	10/01/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00380 JB	<0.0314	0.350
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000633 J	0.0332 JB	0.209
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00114 J	0.0510 JB	0.272
	10/24/2019	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000413	<0.000413	<0.000369	<0.000345	<0.000371	0.0316 JB	0.228
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.146
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.0320 JB	0.507
	10/08/2020	FD	<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.438
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.366
	04/15/2021	FD	<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.380
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.178
	09/16/2021	FD	<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.182 J
MW-33	06/15/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	0.105 B	3.14
	08/17/2017		0.000884 J	0.000627 J	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00306 JB	0.335 B	0.250
	04/05/2018		0.000363 J	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	0.00107	0.00107	<0.000332	<0.000311	0.00596 JB	0.205	0.175
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00271 JB	0.215	0.133
	04/04/2019		0.000401 J	<0.000384	<0.000412	<0.00106	<0.00100	0.000545 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00221 J	0.144	0.0707 J
	10/24/2019		0.000352 J	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00315 J	0.244	0.167
	06/18/2020		0.000244 J	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.229	0.0490 J
	10/08/2020		0.000342 J	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.107 B	0.0941 J
	10/08/2020	FD	0.000342 J	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0989 J
	04/15/2021		0.000296 J	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.0501 J	0.161 B
	04/15/2021	FD	0.000282 J	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.0474 J	0.188 B
	09/16/2021		0.000313 JB	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.0464 J	0.0765 J
	09/16/2021	FD	0.000284 JB	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.0707 J	0.0786 J
North Well	06/18/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/14/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/24/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	03/03/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/20/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/02/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/19/2013		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	12/17/2014		<0.0010	<0.0010	<0.0010	<0.0015	<0.0020	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	- -	- -
	03/09/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	05/19/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00033	<0.00031	<0.00033	- -	- -
	08/28/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	12/17/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/10/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	05/25/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/18/2016		0.000425 J	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	<0.0247
	12/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0621 J
	02/07/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0531 J
	05/31/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000543 J	0.0448 JB	0.0359 J
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00295 JB	0.0888 JB	0.189
	12/14/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	0.0375 J	0.0391 J
	02/23/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00187 JB	<0.0314	0.0821 JB
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	0.000455	0.000455 J	<0.000332	<0.000311	0.00110 JB	<0.0314	0.0385 J
	07/31/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00138 JB	<0.0314	0.0303 J
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00357 JB	<0.0314	0.0354 J
	01/23/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	<0.0247
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00136 J	<0.0314	<0.0247
	07/11/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	<0.0247
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	0.0381 JB	<0.0247
	01/15/2020		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00108 J	0.0611 JB	<0.0247
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	08/19/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.0342 JB	0.0415 J
	01/28/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	0.0420 JB	0.0450 JB
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0644 J
	07/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	0.000169	0.000169 J	<0.0000790	<0.000117	<0.00433	<0.0314	0.0368 J
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247

Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
South Well	06/22/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/14/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/24/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	03/03/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/20/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/02/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/19/2013		0.0052	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	02/28/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	08/22/2014	FD	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	12/17/2014		0.0023	<0.0010	<0.0010	<0.0015	<0.0020	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	- -	- -
	12/17/2014	FD	0.0023	<0.0010	<0.0010	<0.0015	<0.0020	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	- -	- -
	03/09/2015		0.0014	<0.00038	<0.00078	<0.0011	<0.0010	0.00039 J	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	03/09/2015	FD	0.0016	<0.00038	<0.00078	<0.0011	<0.0010	0.00037 J	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	05/19/2015		0.0010 J	<0.00038	<0.00078	<0.0011	<0.0010	0.00052 J	<0.00037	<0.00037	<0.00033	<0.00031	<0.00033	- -	- -
	05/19/2015	FD	0.00091 J	<0.00038	<0.00078	<0.0011	<0.0010	0.00054 J	<0.00037	<0.00037	<0.00033	<0.00031	<0.00033	- -	- -
	08/28/2015		0.00113	<0.000384	<0.000780	<0.00106	<0.00100	0.000518 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/28/2015	FD	0.000921 J	<0.000384	<0.000780	<0.00106	<0.00100	0.000527 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	12/17/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.000815 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	12/17/2015	FD	0.00119	<0.000384	<0.000780	<0.00106	<0.00100	0.000861 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/10/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	05/25/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00114 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	05/25/2016	FD	<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00118 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/18/2016		0.000451 J	<0.000384	<0.000780	<0.00106	<0.00100	0.00135 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	0.0343 J	0.0303 J
	08/18/2016	FD	0.000509 J	<0.000384	<0.000780	<0.00106	<0.00100	0.00138 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0482 J
	12/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00228 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0961 J
	12/08/2016	FD	<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	0.00190 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.118
	02/07/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00199 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.101
	02/07/2017	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00190 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.178 B
	05/31/2017		0.000503 J	<0.000384	<0.000412	<0.00106	<0.00100	0.00169 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	0.0600 JB	0.0554 J
	05/31/2017	FD	0.000557 J	<0.000384	<0.000412	<0.00106	<0.00100	0.00168 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00329 J	0.0591 JB	0.0509 J
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00102 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00301 JB	0.0968 JB	0.0568 J
	08/17/2017	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00112 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00550 JB	0.0891 JB	0.0536 J
	12/14/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00105 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0641 J
	12/14/2017	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00105 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00153 J	<0.0314	0.0629 J
	02/23/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00113 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00267 J	<0.0314	0.107 B
	02/23/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00118 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000428 J	<0.0314	0.117 B
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000874 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00579 JB	<0.0314	0.0740 J
	07/31/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00124 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00269 J	<0.0314	0.0969 J
	07/31/2018	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00126 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00207 J	<0.0314	0.0662 J
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000929 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000598 JB	<0.0314	0.0534 J
	01/23/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000966 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	0.0485 J	<0.0247
	01/23/2019	FD	<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00110 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	<0.0247
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000943 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00188 J	<0.0314	0.0593 J
	07/11/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00104 J	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0258 JB
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.000903 J	<0.000372	<0.000372	<0.000332	<0.000311	0.000746 J	0.0381 JB	<0.0247
	01/15/2020		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	0.00111 J	<0.000372	<0.000372	<0.000332	<0.000311	0.00102 J	0.0405 JB	<0.0247
	06/18/2020		0.000210 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000757 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	08/19/2020		0.000168 J	<0.000137	<0.000278	<0.000174	<0.00100	0.00108 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	08/19/2020	FD	0.000187 J	<0.000137	<0.000278	<0.000174	<0.00100	0.00102 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	10/08/2020		0.000205 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000912 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0461 J
	10/08/2020	FD	0.000224 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000877 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0406 J
	01/28/2021		0.000323 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000936 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0582 JB
	01/28/2021	FD	0.000194 J	<0.000137	<0.000278	<0.000174	<0.00100	0.00127 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0575 JB
	04/15/2021		0.000397 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000898 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0865 J
	04/15/2021	FD	0.000447 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000949 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0812 J
	07/15/2021		0.000491 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000805 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0625 J
	07/15/2021	FD	0.000437 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000883 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0510 J
	09/16/2021		0.000345 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000827 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	09/16/2021	FD	0.000304 J	<0.000137	<0.000278	<0.000174	<0.00100	0.000767 J	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247

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Table 2. Organic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	WQCC Volatiles (Method 8260, mg/L)						WQCC Semi-Volatiles (Method 8270, mg/L)					TPH (Method 8015, mg/L)	
			Benzene	Ethylbenzene	Toluene	Total Xylenes	Naphthalene	Chloroform	Total Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Phenols	TPH GRO (Low Fraction)	TPH DRO (High Fraction)
New Mexico WQCC Groundwater Standards			0.005	0.7	1	0.62	0.03	0.1	0.03	N/A	N/A	N/A	0.005	N/A	N/A
East Well	06/18/2009		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	01/14/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	08/25/2010		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	- -	- -	- -	- -	- -	- -	- -
	03/03/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	- -	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	07/20/2011		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	02/02/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	- -	<0.00020	<0.00020	- -	- -
	07/30/2012		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/27/2012		<0.0050	<0.0050	<0.0050	<0.015	- -	<0.0050	<0.00020	<0.00020	<0.00020	- -	<0.00020	- -	- -
	09/26/2012		<0.0050	<0.0050	<0.0050	<0.015	- -	<0.0050	<0.00020	<0.00020	<0.00020	- -	<0.00020	- -	- -
	10/22/2012		<0.0050	<0.0050	<0.0050	<0.015	- -	<0.0050	<0.00020	<0.00020	<0.00020	- -	<0.00020	- -	- -
	12/27/2012		<0.0050	<0.0050	<0.0050	<0.015	- -	<0.0050	<0.00020	<0.00020	<0.00020	- -	<0.00020	- -	- -
	02/28/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	- -	- -
	08/22/2014		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	- -	- -
	12/17/2014		<0.0010	<0.0010	<0.0010	<0.0015	<0.0020	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	- -	- -
	03/09/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00031	<0.00031	<0.00033	- -	- -
	05/19/2015		<0.00033	<0.00038	<0.00078	<0.0011	<0.0010	<0.00032	<0.00037	<0.00037	<0.00033	<0.00031	<0.00033	- -	- -
	08/28/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	12/17/2015		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	03/10/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	05/25/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	- -	- -
	08/18/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0357 J
	12/08/2016		<0.000331	<0.000384	<0.000780	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0673 J
	02/07/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	0.0552 J
	05/31/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000544 J	0.0590 JB	<0.0247
	08/17/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00403 JB	0.0847 JB	0.0335 J
	12/14/2017		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00192 J	0.0394 J	<0.0247
	02/23/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00330 J	<0.0314	0.0849 JB
	04/05/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00418 JB	<0.0314	<0.0282
	07/31/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00193 J	0.0327 JB	<0.0247
	10/01/2018		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00502 JB	<0.0314	<0.0247
	01/23/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00218 J	<0.0314	<0.0247
	04/04/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000431 J	<0.0314	<0.0247
	07/11/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	<0.000334	<0.0314	<0.0247
	10/24/2019		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.000657 J	0.0386 JB	<0.0247
	01/15/2020		<0.000331	<0.000384	<0.000412	<0.00106	<0.00100	<0.000324	<0.000372	<0.000372	<0.000332	<0.000311	0.00417 J	0.0353 JB	<0.0247
	06/18/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	08/19/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	10/08/2020		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0366 J
	01/28/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0943 JB
	04/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	0.0703 J
	07/15/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	<0.000159	<0.000159	<0.0000790	<0.000117	<0.00433	<0.0314	<0.0247
	09/16/2021		<0.0000941	<0.000137	<0.000278	<0.000174	<0.00100	<0.000111	0.000475	0.000187 J	0.000117 J	0.000171 J	<0.00433	<0.0314	<0.0247
	11/10/2021		- -	- -	- -	- -	- -	- -	<0.000159	<0.000159	<0.0000790	<0.000117	- -	- -	- -
	11/10/2021	FD	- -	- -	- -	- -	- -	- -	<0.000159	<0.000159	<0.0000790	<0.000117	- -	- -	- -

Notes:

Shading indicates detected result exceeded the New Mexico Water Quality Control Commission (WQCC) Groundwater Standard

N/A = Not Applicable, no New Mexico WQCC Groundwater Standard established for constituent

mg/L = milligrams per liter

FD = Field Duplicate

< = Not reported above laboratory reporting limit

-- = Not Analyzed

(1)= Not analyzed due to insufficient water volume

J = analyte was detected below the laboratory reporting limit (June 2009 to December 2014) or the method quantitation limit (February 2015 to November 2021), reported value is estimated

B = same analyte was detected in the associated laboratory blank or equipment blank; sample concentration is within 5 times the blank concentration

[R] analyte not usable for project objectives according to the United States Environmental Protection Agency (USEPA) *National Functional Guidelines for Organic Superfund Methods Data Review* or the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, January 2017)

Samples collected for metals analysis (except for Total Mercury) were field- or lab-filtered with 0.45 micron filter

June 2009 to August 2014 analyses completed by ALS Laboratory Group, Houston, Texas

December 2014 analyses completed by Hall Environmental Analysis Laboratory in Albuquerque, New Mexico

February 2015 to present analyses completed by Pace Analytical National Center for Testing & Innovation (formerly ESC Lab Sciences) in Mount Juliet, Tennessee

Analytical data from 2009 to 2011 were provided by a previous consultant and could not be confirmed against the original data packages

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Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			250	1.6	10.0	600.0	1,000	5.0	0.01	2	0.75	0.005	0.05	0.05	1.0	1.0	0.015	0.2	0.002	1.0	0.2	0.05	0.05	0.03	10.0
MW-1	06/19/2009		131	0.827	3.75	123	694	<0.0100	0.00914	0.147	0.175	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.974	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.0124
	01/19/2010		266	0.249	5.84	145	1,240	0.0202	0.00634	0.164	0.236	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	2.72	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00615	0.00989
	08/18/2010		126	0.623	2.59	111	694	<0.0100	0.00841	0.117	0.182	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	1.62	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00538
	03/01/2011		100	0.502	1.84	83.4	580	<0.0100	0.00821	0.0984	0.189	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	1.62	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00689
	07/20/2011		34.7	0.623	1.14	73.9	492	<0.0100	0.00808	0.0903	0.168	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.485	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00832
	02/02/2012		29.9	0.773	<1.00	65.4	392	<0.0100	0.00782	0.0843	0.164	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.780	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00766
	07/27/2012		27.3	0.944	<2.00	59.5	358	0.0249	0.00870	0.0917	0.193	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	1.05	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00759
	02/27/2013		30.0	0.872	<2.00	67.2	400	<0.0100	0.00857	0.0974	0.184	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.662	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0107
	08/21/2013		33.2	1.03	<1.00	70.5	406	0.0158	0.00589	0.102	0.187	<0.00200	0.0160	<0.00500	<0.00500	<0.200	<0.00500	1.32	<0.000200	<0.00500	0.0164	<0.00500	<0.00500	<0.00500	0.00641
	02/27/2014		30.0	0.758	0.710	63.2	418	<0.0100	0.00775	0.111	0.169	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.690	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00874
	08/21/2014		26.6	1.10	1.23	68.0	395	0.0135	0.0102	0.138	0.109	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0172	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0242
	02/25/2015		26	1.1	1.5	66	390	<0.035	0.012	0.13	0.18 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	0.00048 J	<0.0012	<0.000049	0.0025 J	<0.0049	<0.0074	<0.0028	0.0022 J	0.0067 J
	08/27/2015		27.3	0.961	1.70	72.2	441	<0.0350	0.0120	0.122	0.170	<0.000160	<0.000540	<0.000260	<0.000520	<0.0141	<0.000240	0.00191 J	<0.0000490	0.00236 J	<0.000350	0.00268	<0.000310	0.00187 J	<0.00256
	03/09/2016		28.9	1.09	1.76	68.1	- -	0.00841 JB	0.00292	0.121	0.155	<0.000160	0.0276	<0.000260	0.00141 JB	<0.0150	<0.000240	0.00102 JB	<0.0000490	0.00170 JB	0.000910 JB	0.00150 J	<0.000310	0.00246 J	0.00436 JB
	08/17/2016		38.4	1.04	1.93	69.3	436	0.00284 JB	0.0117	0.138	0.189	<0.000160	0.00112 JB	<0.000260	0.000802 JB	0.0529 JB	<0.000240	0.00295 JB	<0.0000490	0.00260 J	<0.000350	0.00278	<0.000310	0.00261 J	0.00377 J
	02/07/2017		54.6	0.978	2.91	78.9	- -	<0.0258	0.00618 J	0.163	0.190	<0.000800	<0.00270	<0.00130	<0.00260	<0.0750	<0.00120	0.0124 J	<0.0000490	0.00549 J	0.0137	0.00237	<0.00155	0.00276 J	0.0160 J
	08/17/2017		61.5	1.07	2.58	68.1	453	0.0110 JB	0.00809	0.146	0.157	<0.000160	<0.000540	<0.000260	<0.000520	<0.0150	<0.000240	0.00371 J	0.000258	0.00229 J	0.0237	0.00228	<0.000310	0.00230 J	0.00494 J
	04/05/2018		48.3	1.04	2.14	63.4	- -	<0.00515	0.00762	0.152	0.176 J	<0.000160	<0.000540	<0.000260	0.000883 JB	<0.0150	<0.000240	0.00128 JB	<0.0000490	0.00252 JB	<0.000350	0.00250 B	<0.000310	0.00179 JB	0.0110 J
	10/01/2018		42.0	1.03	2.59	65.7	402	0.0143 JB	0.00687	0.141	0.143 J	<0.000160	<0.000540	<0.000260	<0.000520	<0.0150	<0.000240	0.000642 JB	<0.0000490	0.00242 J	<0.000350	0.00255	<0.000310	0.00163 J	0.00331 JB
	04/04/2019		42.0	1.06	2.80	59.8	- -	<0.00515	0.00585	0.155	0.160 J	<0.000160	<0.000540	<0.000260	0.000902 J	<0.0150	<0.000240	<0.000250	<0.0000490	0.00282 J	<0.000350	0.00246	<0.000310	0.00159 J	0.00554 J
	10/24/2019		50.2	1.10	2.72	61.2	389	<0.00515	0.00605	0.137	0.152 J	<0.000160	<0.000540	<0.000260	<0.000520	<0.0150	<0.000240	<0.000250	0.0000684 JB	0.00331 J	<0.000350	0.00291	<0.000310	0.00163 J	0.00451 J
	06/18/2020		51.8	1.11	3.48	68.2	- -	<0.0554	0.00564	0.152	0.168 J	<0.000478	<0.00149	<0.000477	0.00362 J	<0.0489	<0.00249	<0.00132	<0.000100	0.00285 J	<0.000952	0.00255	<0.000513	<0.00754	<0.00996
	06/18/2020	FD	51.4	1.11	3.37	68.0	- -	<0.0554	0.00543	0.153	0.156 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00262 J	<0.000952	0.00204	<0.000513	<0.00754	<0.00996
	10/08/2020		49.9	1.04	3.48	64.4	403	<0.0554	0.00570	0.165	0.161 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.00241 J	<0.000100	0.00322 J	0.00120 J	0.00232	<0.000513	<0.00754	<0.00996
	04/15/2021		50.6	0.926	4.04	68.6	- -	<0.0185	0.00542	0.151	0.166 J	<0.000150	0.00157 J	<0.0000596	0.00216 J	<0.0281	<0.000849	<0.000704	<0.000100	0.00318 J	<0.000816	0.00213	<0.0000700	0.00173 J	0.00613 JB
	09/16/2021		52.4	0.914	3.80	73.6	438	<0.0185	0.00520	0.151	0.168 J	<0.000150	<0.00124	0.0000677 J	<0.00151	<0.0281	<0.000849	0.00101 J	<0.000100	0.00272 J	<0.000816	0.00210	<0.0000700	0.00175 J	0.00603 J
MW-2	06/22/2009		252	0.765	2.69	66.8	988	0.0657	0.0386	0.0803	0.190	<0.00200	<0.00500	<0.00500	0.00621	<0.200	<0.00500	0.00583	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.110
	01/19/2010		246	0.672	3.39	55.1	966	<0.0100	<0.00500	0.00500	0.191	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00538	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0166
	08/16/2010		276	0.824	3.23	55.9	1,180	0.1367	<0.00500	0.193	0.155	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0204
	03/03/2011		221	0.763	3.49	57.6	1,010	<0.0100	<0.00500	0.176	0.171	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0117
	07/14/2011		190	0.647	2.98	58.4	966	<0.0100	<0.00500	0.160	0.192	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0230
	01/30/2012		214	0.784	3.43	75.1	1,230	<0.0100	<0.00500	0.130	0.164	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0255
	07/24/2012		201	0.898	3.24	76.3	908	<0.0100	<0.00500	0.140	0.233	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0191
	02/19/2013		213	0.810	3.90	86.6	834	0.0102	<0.00500	0.141	0.197	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0436
	08/20/2013		178	0.920	5.33	88.9	682	0.0346	<0.00500	0.118	0.216	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00721
	02/25/2014		139	0.693	5.25	79.4	616	0.0133	<0.00500	0.125	0.203	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0130
	08/21/2014		122	0.812	6.17	82.3	588	0.0143	<0.00500	0.112	0.147	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0214
	02/24/2015		130	0.92	7.9	94	710	<0.035	0.0037	0.090	0.21	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0034 J	<0.0049	<0.0074	<0.0028	0.0026 J	<0.0059
	08/28/2015		343	1.41	8.33	152	1,000	<0.0350	0.00355	0.111	0.213	<0.000160	0.000625 J	<0.000260	0.000548 J	<0.0141	<0.000240	0.000533 J	<0.0000490	0.00254 J	0.00115 J	0.00147 J	<0.000310	0.00340 J	0.00382 J
	03/07/2016		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/18/2016		123	0.864	6.84	71.8	640	0.00451 JB	0.00304	0.105	0.235	<0.000160	0.000981 JB	<0.000260	0.000952 JB	<0.0150	<0.000240	0.000769 JB	0.0000534 JB	0.00282 J	0.00129 JB	0.00166 J	<0.000310	0.00297 J	0.00316 JB
	02/07/2017		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		126	0.977	4.83	70.7	596	0.0175 JB	0.00351	0.100	0.180	<0.000160	0.00333	<0.000260	0.00159 J	<0.0150	<0.000240	0.000347 J	0.0000703 J	0.00288 J	0.00713	0.00161 J	<0.000310	0.00268 J	0.0179 J
	04/05/2018		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		142	0.839	4.46	83.4	693	0.0168 JB	0.00357	0.100	0.183 J	<0.000160	0.00201 B	<0.000260	0.00136 JB	<0.0150	<0.000240	0.000750 JB	<0.0000490	0.00278 J	0.00641	0.00116 J	<0.000310	0.00317 J	0.0316 B
	04/04/2019		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		159	0.914	3.46	75.0	602	<0.00515	0.00361	0.108	0.189 J	<0.000160	0.000871 JB	<0.000260	0.00277 JB	<0.0150	0.000263 J	<0.000250	0.0000719 JB	0.00268 J	0.00412	0.00172 JB	<0.000310	0.00346 J	0.0420
	06/18/2020		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		151	0.915	3.66	96.0	713	<0.0554	0.00362	0.0734	0.196 J	<0.000478	<0.00149	<0.000477	0.00407 J	<0.0489	<0.00249	<0.00132	<0.000100	0.00288 J	0.00433	0.00173 J	<0.000513	<0.00754	0.0439
	04/15/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		122	0.936	2.77	82.3	606	<0.0185	0.00410	0.0717	0.190 J	<0.000150	0.00131 J	0.0000770 J	0.00496 JB	<0.0281	<0.000849	<0.000704	<0.000100	0.00342 J	0.000979 J	0.00166 J	<0.0000700	0.00298 J	0.0391

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-3	06/16/2009		29.1	3.38	2.19	64.6	504	0.308	0.00815	0.115	0.160	<0.00200	0.00709	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	0.0151	<0.00500	<0.00500	<0.00500	- -	<0.0100
	01/14/2010		49.9	3.18	2.11	76.5	540	0.144	0.00703	0.119	0.148	<0.00200	0.00977	<0.00500	0.121	<0.200	<0.00500	0.00597	<0.000200	0.0200	0.00842	<0.00500	<0.00500	0.000625	0.0195
	01/14/2010	FD	49.8	3.18	2.11	75.0	552	0.142	0.00798	0.125	0.167	<0.00200	0.0105	<0.00500	0.148	<0.200	<0.00500	0.00699	<0.000200	0.0216	0.00960	<0.00500	<0.00500	0.000721	0.0230
	08/19/2010		72.7	2.99	1.52	77.7	518	0.0767	0.00935	0.127	0.151	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	0.00790	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/24/2011		88.2	2.58	3.02	80.5	566	<0.0100	0.00892	0.124	0.178	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0524
	07/15/2011		67.3	2.37	2.59	74.7	568	<0.0100	0.0125	0.113	0.202	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	0.00510	<0.00500	<0.00500	<0.00500	<0.00500	0.0156
	01/30/2012		65.6	2.94	2.37	86.3	472	<0.0100	0.0117	0.0831	0.168	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	0.00621	<0.00500	<0.00500	<0.00500	<0.00500	0.00886
	07/25/2012		35.0	2.70	<2.00	81.3	436	<0.0100	0.0152	0.0773	0.209	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00673
	02/27/2013		54.2	2.47	2.30	89.5	478	<0.0100	0.0156	0.101	0.186	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	0.00546	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/22/2013		46.1	2.40	2.06	81.9	456	0.0185	0.0169	0.0782	0.178	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/26/2014		36.9	1.84	2.08	79.1	430	<0.0100	0.0179	0.0655	0.164	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00560	<0.00500	<0.00500	<0.00500	0.00527
	08/21/2014		30.0	1.84	1.53	78.0	420	0.0128	0.0183	0.0545	0.104	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/26/2015		31	1.5	1.9	74	420	<0.035	0.019	0.061	0.16 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.00094 J	<0.0049	<0.0074	<0.0028	0.00057 J	<0.0059
	02/26/2015	FD	32	1.6	2.0	74	420	<0.035	0.020	0.062	0.16 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0011 J	<0.0049	0.0085 J	<0.0028	0.00056 J	0.0088 J
	08/26/2015		27.3	1.55	1.88	77.6	520	<0.0350	0.0195	0.0529	0.166 J	<0.000160	0.000912 J	<0.000260	0.00101 J	<0.0141	<0.000240	0.000572 J	<0.0000490	<0.00160	0.000483 J	0.00269	<0.000310	0.000567 J	0.00296 J
	03/08/2016		23.9	1.32	1.84	65.4	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/18/2016		24.4	1.16	1.81	66.3	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	02/07/2017		25.4	1.25	1.83	77.3	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		29.9	1.15	1.88	71.6	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	04/05/2018		26.9	0.896	1.75	73.1	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		30.9	0.783	1.79	74.5	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	04/04/2019		37.9	0.628	1.73	73.4	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		29.8	0.648	1.49	75.4	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	06/18/2020		30.9	0.442	1.84	76.5	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		28.8	0.369	1.75	72.5	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	04/15/2021		26.7	0.353	1.85	76.1	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		29.1	0.326	1.81	80.1	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-4	06/16/2009		28.9	0.841	1.84	61.5	422	0.180	<0.00500	0.174	0.160	<0.00200	0.00534	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.0120
	01/13/2010		29.3	1.10	1.67	66.7	416	0.0345	<0.00500	0.0932	0.177	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00102	<0.00500
	08/19/2010		26.1	1.10	1.10	65.8	324	0.0607	<0.00500	0.0862	0.136	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/28/2011		27.1	1.02	1.91	64.4	378	0.0131	<0.00500	0.0951	0.163	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00533
	07/15/2011		25.8	1.12	1.57	63.6	422	0.144	<0.00500	0.141	0.172	<0.00200	0.00619	<0.00500	<0.00500	<0.200	<0.00500	0.0114	<0.000200	<0.00500	0.0103	<0.00500	<0.00500	<0.00500	0.0211
	01/30/2012		30.0	1.08	1.71	73.4	388	0.0119	<0.00500	0.0796	0.150	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0147
	07/24/2012		28.9	1.18	<2.00	69.4	414	<0.0100	<0.00500	0.0883	0.199	<0.00200	<0.00500	<0.00500	<0.00500	<0.20	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.0050	0.0102
	02/21/2013		26.6	1.05	<2.00	75.5	360	<0.0100	0.00525	0.0841	0.157	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0116
	08/20/2013		26.4	1.20	1.72	71.6	382	<0.0100	0.00500	0.0902	0.156	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00506
	02/25/2014		26.9	0.877	2.02	75.5	390	<0.0100	<0.00500	0.0897	0.148	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00801
	08/20/2014		24.1	1.15	1.64	70.2	372	0.603	0.00501	0.213	0.111	<0.00200	<0.00500	<0.00500	<0.00500	0.241	<0.00500	0.00595	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0221
	02/24/2015		24	1.1	2.1	66	390	<0.035	0.0046	0.090	0.15 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	0.00025 J	<0.0012	0.00011 J	0.0034 J	<0.0049	<0.0074	<0.0028	0.0016 J	<0.0059
	08/28/2015		28.8	1.26	2.32	63.8	479	<0.0350	0.00526	0.0930	0.157	<0.000160	<0.000540	<0.000260	<0.000520	<0.0141	<0.000240	0.00114 J	<0.0000490	0.00319 J	0.000482 J	0.00228	<0.000310	0.00168 J	0.00269 J
	08/15/2016		25.1	1.02	2.24	60.3	411	0.00568 JB	0.00564	0.0894	0.155	<0.000160	0.00117 JB	<0.000260	0.000614 JB	0.0640 JB	<0.000240	0.000588 JB	<0.0000490	0.00358 J	0.000488 JB	0.00272	<0.000310	0.00170 J	0.00298 J
	08/17/2017		34.0	1.17	2.39	57.5	384	0.0196 JB	0.00480	0.0871	0.139	<0.000160	0.000569 J	<0.000260	0.000818 J	<0.0150	<0.000240	<0.000250	<0.0000490	0.00313 J	0.00317 B	0.00220	<0.000310	0.00141 J	0.00637 J
	10/01/2018		62.6	1.04	2.60	53.6	574	0.0149 JB	0.00482	0.0965	0.135 J	<0.000160	<0.000540	<0.000260	<0.000520	<0.0150	<0.000240	0.000539 J	<0.0000490	0.00271 J	0.00139 J	0.00231	<0.000310	0.00139 J	0.00473 J
	10/24/2019		75.6	1.10	2.62	55.0	403	<0.00515	0.00478	0.107	0.145 J	<0.000160	0.00301	<0.000260	0.00323 JB	<0.0150	0.000333 J	<0.000250	0.0000637 JB	0.00302 J	0.00172 J	0.00272	<0.000310	0.00167 J	0.00736 J
	10/08/2020		98.7	1.04	3.34	53.2	507	<0.0554	0.00456	0.111	0.155 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100 [R	0.00296 J	0.00226	0.00201	<0.000513	<0.00754	0.0309
	09/16/2021		138	0.857	3.84	55.8	629	0.163	0.00427	0.118	0.170 J	<0.000150	0.00167 J	<0.0000596	0.00195 JB	<0.0281	<0.000849	<0.000704	<0.000100	0.00255 J	<0.000816	0.00171 J	<0.0000700	0.00177 J	0.0334

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			250	1.6	10.0	600.0	1,000	5.0	0.01	2	0.75	0.005	0.05	0.05	1.0	1.0	0.015	0.2	0.002	1.0	0.2	0.05	0.05	0.03	10.0
MW-5	06/16/2009		186	1.39	3.31	131	952	0.796	0.0233	0.0639	0.116	<0.00200	<0.00500	<0.00500	<0.00500	0.399	<0.00500	0.00670	<0.000200	0.0103	<0.00500	<0.00500	<0.00500	- -	<0.0100
	01/18/2010		26.4	0.781	4.91	80.6	508	<0.0100	<0.00500	0.0966	0.135	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/20/2010		18.5	1.13	3.43	77.7	440	0.0814	<0.00500	0.0967	0.0986	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/28/2011		29.8	1.03	2.91	70.5	570	0.123	<0.00500	0.100	0.0854	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0142	<0.000200	<0.00500	0.0112	<0.00500	<0.00500	<0.00500	0.0368
	07/19/2011		20.9	0.858	2.72	59.0	524	<0.0100	<0.00500	0.0968	0.0871	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0309
	01/31/2012		26.9	1.04	2.49	61.2	504	<0.0100	<0.00500	0.0972	0.0557	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00948
	01/31/2012	FD	27.1	1.05	2.54	62.0	436	<0.0100	<0.00500	0.0947	0.0728	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0119
	07/25/2012		15.9	1.10	2.22	50.1	434	0.0205	<0.00500	0.0931	0.134	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0562
	02/21/2013		10.9	1.04	2.01	40.8	412	0.0487	<0.00500	0.104	0.0997	<0.00200	<0.00500	<0.00500	0.0434	<0.200	<0.00500	0.0158	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00582	0.0289
	08/20/2013		13.9	1.16	2.05	44.2	448	<0.0100	<0.00500	0.105	0.100	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00507	0.0208
	02/25/2014		11.8	0.877	2.52	48.4	436	<0.0100	<0.00500	0.116	0.0893	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0114
	08/19/2014		8.71	1.16	1.68	44.6	478	0.148	<0.00500	0.123	<0.0200	<0.00200	0.00744	<0.00500	<0.00500	<0.200	<0.00500	0.00532	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00535	0.00626
	02/24/2015		21	1.4	2.2	43	520	0.038 J	0.0029	0.12	0.091 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0045 J	<0.0049	<0.0074	<0.0028	0.0040 J	0.0089 J
	08/24/2015		19.9	1.52	1.97	39.9	586	<0.0350	0.00410	0.121	0.0899 J	<0.000160	0.00111 J	<0.000260	0.00102 J	<0.0141	<0.000240	<0.000250	<0.0000490	0.00476 J	0.000814 J	<0.000380	<0.000310	0.00410 J	0.00539 J
	08/17/2016		18.4	1.62	2.15	38.1	449	0.0155 JB	0.00425	0.119	0.108	<0.000160	0.00217 B	<0.000260	0.00122 JB	0.0974 JB	<0.000240	0.000764 JB	<0.0000490	0.00876	0.000540 JB	0.000502 J	<0.000310	0.00553 J	0.00590 J
	08/16/2017		16.0	1.85	2.26	34.2	479	0.0209 JB	0.00382	0.118	0.0893	<0.000160	0.00128 J	<0.000260	0.00261 J	<0.0150	<0.000240	0.000398 J	<0.0000490	0.00616	0.000700 JB	0.000574 J	<0.000310	0.00432 J	0.00391 J
	10/01/2018		23.8	1.31	2.57	26.8	440	<0.00515	0.00412	0.125	0.0529 J	<0.000160	<0.000540	<0.000260	0.00128 JB	<0.0150	<0.000240	<0.000250	<0.0000490	0.00259 J	0.000937 J	0.000695 J	<0.000310	0.00262 J	<0.00256
	10/24/2019		12.9	1.30	2.04	25.6	335	<0.00515	0.00370	0.110	0.0517 J	<0.000160	<0.000540	<0.000260	0.00242 JB	<0.0150	<0.000240	<0.000250	0.0000584 JB	0.00260 J	0.00131 J	0.000554 JB	<0.000310	0.00152 J	0.00812 J
	10/08/2020		15.1	1.22	2.11	22.2	374	<0.0554	0.00325	0.118	0.0725 J	<0.000478	<0.00149	<0.000477	0.00460 J	<0.0489	<0.00249	<0.00132	0.000103 J	0.00254 J	0.00147 J	<0.000657	<0.000513	<0.00754	0.0166 J
	09/16/2021		28.0	1.03	2.40	22.2	415	<0.0185	0.00120 J	0.118	0.0740 J	<0.000150	<0.00124	0.000325 J	0.00311 JB	<0.0281	<0.000849	0.00886	<0.000100	0.00201 J	0.00154 J	0.000738 J	<0.0000700	0.00234 J	0.559
MW-6	06/18/2009		188	0.113	0.678	101	844	<0.0100	0.0201	0.186	0.175	<0.00200	<0.00500	<0.00500	<0.00500	0.418	<0.00500	2.86	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.00996
	06/18/2009	FD	168	<0.100	0.682	90.4	812	<0.0100	0.0221	0.200	0.192	<0.00200	<0.00500	<0.00500	<0.00500	0.219	<0.00500	2.76	<0.000200	<0.00500	0.00653	<0.00500	<0.00500	- -	0.0141
	02/02/2010		334	<0.100	0.822	90.2	1,400	<0.0200	0.0250	0.499	0.234	<0.00200	<0.00500	<0.00500	<0.00500	2.08	<0.00500	4.51	<0.000200	<0.00500	0.00634	<0.00500	<0.00500	0.0113	<0.00500
	08/19/2010		285	<0.100	<1.00	111	1,350	0.0152	0.0456	0.376	0.244	<0.00200	<0.00500	<0.00500	<0.00500	1.86	<0.00500	6.61	<0.000200	<0.00500	0.00766	<0.00500	<0.00500	0.00785	<0.00500
	03/01/2011		282	<0.100	0.750	80.7	1,340	<0.0100	0.0390	0.404	0.271	<0.00200	<0.00500	<0.00500	<0.00500	0.711	<0.00500	5.58	<0.000200	<0.00500	0.00896	<0.00500	<0.00500	0.00659	<0.00500
	07/20/2011		174	<0.500	<0.500	114	970	<0.0100	0.0336	0.220	0.223	<0.00200	0.00972	<0.00500	<0.00500	1.57	<0.00500	4.51	<0.000200	<0.00500	0.00576	<0.00500	<0.00500	<0.00500	0.0176
	02/02/2012		58.4	0.313	<1.00	88.0	398	<0.0100	<0.00500	0.0827	0.190	<0.00200	<0.00500	<0.00500	<0.00500	0.488	<0.00500	1.25	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00599	0.00858
	07/24/2012		77.7	0.217	<2.00	80.1	690	<0.0100	0.0128	0.143	0.265	<0.00200	<0.00500	<0.00500	<0.00500	1.28	<0.00500	2.53	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.0102	0.0194
	02/27/2013		65.4	0.368	<2.00	77.1	542	<0.0100	0.0126	0.154	0.214	<0.00200	<0.00500	<0.00500	<0.00500	1.31	<0.00500	1.97	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00789	0.0123
	02/27/2013	FD	65.7	0.370	<2.00	77.6	556	<0.0100	0.0124	0.158	0.216	<0.00200	<0.00500	<0.00500	<0.00500	1.33	<0.00500	2.02	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00833	0.0106
	08/21/2013		43.3	0.441	<0.200	76.6	502	0.0244	<0.00500	0.129	0.198	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	1.68	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00606	<0.00500
	02/27/2014		124	0.309	<0.500	51.0	814	<0.0100	0.0458	0.263	0.220	<0.00200	<0.00500	<0.00500	<0.00500	3.42	<0.00500	2.71	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00882	0.00622
	08/21/2014		132	0.230	<1.00	34.4	832	0.0330	0.0185	0.363	0.167	<0.00200	<0.00500	<0.00500	<0.00500	0.268	<0.00500	3.06	<0.000200	<0.00500	0.00651	<0.00500	<0.00500	0.00744	0.0151
	02/25/2015		42	0.58	0.17	67	500	0.092 J	0.0061	0.19	0.19 J	<0.00070	<0.0014	<0.0023	<0.0053	0.015 J	0.00072 J	1.0	<0.000049	0.0026 J	<0.0049	<0.0074	<0.0028	0.0066 J	0.020 J
	08/27/2015		32.4	0.505	0.835	66.5	473	<0.0350	0.00539	0.152	0.181	<0.000160	<0.000540	<0.000260	0.000540 J	<0.0141	<0.000240	0.411	<0.0000490	0.00192 J	0.00134 J	0.00242	<0.000310	0.00463 J	0.00347 J
	03/10/2016		34.5	0.621	0.688	71.8	- -	0.00858 JB	0.00529	0.149	0.174	<0.000160	<0.000540	<0.000260	0.000554 J	<0.0150	<0.000240	0.138 B	<0.0000490	0.00202 JB	0.000974 JB	0.00298	<0.000310	0.00573 J	0.00327 JB
	08/17/2016		27.0	0.642	1.06	68.5	1,000	0.00297 JB	0.00654	0.131	0.196	<0.000160	0.000782 JB	<0.000260	0.00132 JB	<0.0150	<0.000240	0.0144	<0.0000490	0.00215 J	0.00121 JB	0.00316	<0.000310	0.00726 J	0.00362 JB
	02/07/2017		31.3	0.665	1.20	79.9	- -	<0.0258	0.00762 J	0.168	0.181	<0.000800	<0.00270	<0.00130	<0.00260	<0.0750	<0.00120	0.0323	<0.0000490	0.00260 J	0.00285 J	0.00409	<0.00155	0.00537 J	<0.0128
	08/16/2017		46.8	0.761	1.52	73.8	463	0.0121 JB	0.00653	0.179	0.156	<0.000160	<0.000540	<0.000260	0.00294 J	<0.0150	<0.000240	0.737	<0.0000490	0.00380 J	0.0163	0.00417	<0.000310	0.00406 J	0.0262
	04/05/2018		55.8	0.719	2.04	76.7	- -	<0.00515	0.00668	0.161	0.173 J	<0.000160	<0.000540	<0.000260	0.00153 JB	<0.0150	<0.000240	0.0304	<0.0000490	0.00224 JB	0.00197 JB	0.00426	<0.000310	0.00345 J	0.0111 J
	10/01/2018		55.9	0.691	2.02	79.0	485	<0.00515	0.00716	0.148	0.154 J	<0.000160	0.000718 JB	<0.000260	0.000629 JB	<0.0150	<0.000240	0.0763	<0.0000490	0.00198 J	0.00116 J	0.00343	<0.000310	0.00340 J	0.0126 JB
	04/04/2019		47.4	0.717	2.04	72.9	- -	<0.00515	0.00793	0.150	0.173 J	<0.000160	0.000797 J	<0.000260	0.00112 J	<0.0150	<0.000240	0.106	<0.0000490	0.00266 J	0.000612 JB	0.00395	<0.000310	0.00358 J	0.0123 J
	10/24/2019		50.0	0.982	2.48	73.1	438	<0.00515	0.00739	0.143	0.156 J	<0.000160	<0.000540	<0.000260	<0.000520	<0.0150	<0.000240	0.00807	0.0000653 JB	0.00276 J	0.000391 J	0.00394	<0.000310	0.00335 J	0.00752 J
	06/18/2020		55.4	1.03	3.00	75.2	- -	<0.0554	0.00798	0.147	0.174 J	<0.000478	<0.00149	<0.000477	0.00258 J	<0.0489	<0.00249	0.0294	<0.000100	0.00272 J	0.00194 J	0.00310	<0.000513	<0.00754	0.0360
	06/18/2020	FD	55.3	1.03	2.97	74.9	- -	<0.0554	0.00819	0.156	0.168 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.0289	<0.000100	0.00274 J	0.00231	0.00364	<0.000513	<0.00754	0.0336
	10/08/2020		50.9	1.02	2.82	66.1	445	<0.0554	0.00792	0.140	0.163 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.0276	0.000139 J	0.00295 J	0.00221	0.00315	<0.000513	<0.00754	0.0498
	04/15/2021		53.9	0.854	3.66	69.6	- -	<0.0185	0.00780	0.151	0.173 J	<0.000150	<0.00124	<0.0000596	0.00261 J	<0.0281	<0.000849	0.00292 JB	<0.000100	0.00260 J	0.00101 J	0.00302	<0.0000700	0.00283 J	0.0402
	09/16/2021		59.3	0.840	4.05	78.3	517	<0.0185	0.00679	0.158	0.170 J	<0.000150	<0.00124	<0.0000596	0.00312 JB	<0.0281	<0.000849	0.00171 J	<0.000100	0.00240 J	0.00875	0.00295	<0.0000700	0.00425 J	0.0732

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-7	06/19/2009		30.6	1.12	1.66	67.2	384	<0.0100	0.00923	0.169	0.161	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.127	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.0137
	02/02/2010		28.0	0.854	1.72	62.2	350	<0.0200	0.00869	0.199	0.169	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.125	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/18/2010		27.2	0.570	1.12	60.2	370	0.0223	0.00532	0.252	0.161	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.343	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	03/01/2011		26.5	0.599	1.91	58.2	376	<0.0100	0.00525	0.237	0.161	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.441	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00593
	07/20/2011		23.3	0.626	1.35	56.8	396	<0.0100	0.00669	0.246	0.164	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.617	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/02/2012		25.5	0.633	1.66	61.5	356	<0.0100	<0.00500	0.229	0.166	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.550	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00746
	07/27/2012		23.6	0.796	2.01	55.2	342	0.0727	<0.00500	0.234	0.196	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.642	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0114
	02/27/2013		25.8	0.709	<2.00	67.3	286	<0.0100	<0.00500	0.227	0.178	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.300	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00844
	08/21/2013		26.9	0.748	1.62	60.8	290	<0.0100	<0.00500	0.220	0.178	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.365	<0.000200	<0.00500	<0.00500	0.00600	<0.00500	<0.00500	<0.00500
	02/27/2014		31.0	0.501	1.50	62.1	408	0.0159	<0.00500	0.208	0.168	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.781	<0.000200	<0.00500	<0.00500	0.00540	<0.00500	<0.00500	0.00818
	08/21/2014		30.8	0.642	1.72	62.2	380	<0.0100	<0.00500	0.207	0.110	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.470	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00566
	02/25/2015		35	0.71	2.0	60	420	<0.035	0.0055	0.24	0.18 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	0.00041 J	0.011	<0.000049	0.0011 J	<0.0049	<0.0074	<0.0028	0.0033 J	0.0083 J
	08/27/2015		38.4	0.866	2.28	66.9	471	<0.0350	0.00650	0.215	0.180	<0.000160	<0.000540	<0.000260	<0.000520	<0.0141	<0.000240	0.0184	<0.0000490	0.00175 J	<0.000350	0.00334	<0.000310	0.00236 J	<0.00256
MW-8	06/18/2009		219	0.730	3.46	73.3	798	<0.0100	0.00501	0.181	0.228	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00919	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.0458
	01/18/2010		151	0.493	3.80	67.6	742	<0.0100	0.00726	0.157	0.215	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00545
	08/18/2010		279	0.560	7.08	65.3	1,260	0.0377	0.00676	0.204	0.170	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00501	0.00760
	02/25/2011		144	0.820	<0.500	87.5	694	<0.0100	<0.00500	0.106	0.175	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.281	<0.000200	<0.00500	0.00620	<0.00500	<0.00500	<0.00500	0.0316
	07/19/2011		313	0.522	4.49	72.4	1,460	<0.0100	<0.00500	0.229	0.278	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00928	0.0213
	02/01/2012		376	0.498	8.21	102	1,530	<0.0100	<0.00500	0.221	0.210	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00636	<0.000200	<0.00500	0.0119	<0.00500	<0.00500	0.00745	0.0339
	07/27/2012		224	0.490	8.55	122	1,080	<0.0100	<0.00500	0.160	0.294	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00523	<0.00500	<0.00500	0.00714	0.00888
	02/26/2013		246	0.371	11.1	118	1,080	<0.0100	0.00627	0.170	0.380	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00592	<0.000200	<0.00500	0.00999	<0.00500	<0.00500	0.00690	0.0188
	08/21/2013		101	0.513	9.49	129	788	<0.0100	<0.00500	0.119	0.266	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0208	<0.000200	<0.00500	0.0135	<0.00500	<0.00500	<0.00500	0.0107
	02/27/2014		368	0.417	1.43	88.1	1,440	0.747	<0.00500	0.233	0.284	<0.00200	0.0417	<0.00500	<0.00500	0.541	<0.00500	0.0240	<0.000200	<0.00500	0.0339	<0.00500	<0.00500	0.00916	0.0102
	08/21/2014		360	0.268	4.42	76.6	1,310	0.314	<0.00500	0.212	0.230	<0.00200	0.0404	<0.00500	<0.00500	0.274	<0.00500	0.0128	<0.000200	<0.00500	0.0258	<0.00500	<0.00500	0.00639	0.0181
	02/26/2015		220	0.49	7.0	86	960	0.11	0.0055	0.20	0.23	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.00083 J	<0.0049	<0.0074	<0.0028	0.0073 J	0.0059 J
	08/27/2015		258	0.368 J	8.80	88.5	1,260	<0.0350	0.00537	0.232	0.245	<0.000160	0.000562 J	0.000346 J	0.000544 J	<0.0141	<0.000240	0.00141 J	<0.0000490	0.000854 J	0.00204	0.00224	<0.000310	0.00891 J	0.00316 J
	03/08/2016		291	0.357	7.84	78.2	1,290	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/18/2016		94.1	0.537	3.67	71.4	593	0.0111 JB	0.00686	0.121	0.187	<0.000160	0.000982 JB	<0.000260	0.00175 JB	0.0152 J	0.000247 J	0.00123 JB	0.0000537 JB	0.00137 J	0.00243 B	0.00254	<0.000310	0.00245 J	0.00318 JB
	02/08/2017		50.7	0.760	3.02	78.6	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/17/2017		29.4	0.798	4.02	76.1	699	0.0129 JB	0.00790	0.126	0.151	<0.000160	<0.000540	<0.000260	0.00265 J	<0.0150	<0.000240	<0.000250	<0.0000490	0.00207 J	0.00679	0.00278	<0.000310	0.00347 J	0.0133 J
	04/05/2018		170	0.599	5.61	77.1	877	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		159	0.653	6.49	85.8	807	0.00771 JB	0.00744	0.182	0.175 J	<0.000160	0.000757 JB	<0.000260	0.00160 JB	<0.0150	0.000279 JB	0.000389 JB	<0.0000490	0.00169 J	0.00867	0.00248	<0.000310	0.00486 J	0.0157 JB
	04/04/2019		148	0.552	6.29	76.0	819	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		169	0.669	5.98	87.2	765	<0.00515	0.00700	0.190	0.204	<0.000160	<0.000540	<0.000260	0.00143 JB	<0.0150	<0.000240	<0.000250	0.0000632 JB	0.00108 J	0.00560	0.00214 B	<0.000310	0.00473 J	0.0210 J
	06/18/2020		293	0.610	7.50	78.6	1,180	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		139	0.726	5.15	79.5	707	<0.0554	0.00715	0.167	0.228	<0.000478	0.00162 J	<0.000477	0.00397 J	<0.0489	<0.00249	0.00181 J	0.000110 J	0.00132 J	0.00400	0.00264	<0.000513	<0.00754	0.0383
	04/15/2021		126	0.710	5.80	78.2	648	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		168	0.620	7.95	76.1	863	<0.0185	0.00722	0.203	0.217	<0.000150	0.00130 J	0.000116 J	0.00588 B	<0.0281	<0.000849	<0.000704	<0.000100	0.00137 J	0.00366	0.00185 J	<0.0000700	0.00680 J	0.0235 J

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			250	1.6	10.0	600.0	1,000	5.0	0.01	2	0.75	0.005	0.05	0.05	1.0	1.0	0.015	0.2	0.002	1.0	0.2	0.05	0.05	0.03	10.0
MW-9	06/16/2009		23.0	1.69	0.748	73.2	380	0.0468	0.0373	0.0911	0.122	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	<0.0100
	01/14/2010		23.9	1.78	1.72	74.4	450	0.0164	0.0351	0.0676	0.139	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.000656	<0.00500
	08/19/2010		21.8	1.64	1.32	75.2	412	0.115	0.0358	0.0649	0.121	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00961	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	03/01/2011		24.1	1.63	2.01	74.6	414	0.0112	0.0382	0.0586	0.131	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00662
	07/15/2011		24.9	1.65	1.78	70.2	434	0.0371	0.0374	0.0647	0.166	<0.00200	0.00741	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00511	<0.00500	<0.00500	<0.00500	0.00932
	01/31/2012		31.5	2.22	1.43	80.5	484	<0.0100	0.0341	0.0653	0.108	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00529
	07/25/2012		30.4	1.99	<2.00	77.8	420	0.0306	0.0292	0.0721	0.182	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00708	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00716
	02/27/2013		31.3	1.11	2.82	79.1	440	<0.0100	0.0171	0.0766	0.154	<0.00200	<0.00500	<0.00500	<0.00500	0.702	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0167
	08/22/2013		35.7	1.80	3.01	74.0	466	0.0467	0.0246	0.0736	0.153	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/26/2014		54.0	1.48	3.17	71.5	452	0.0161	0.0224	0.0737	0.152	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00588	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/21/2014		197	0.655	2.35	111	932	2.47	<0.00500	0.174	0.124	<0.00200	0.205	<0.00500	0.00644	2.22	<0.00500	0.0903	<0.000200	0.00662	0.111	<0.00500	<0.00500	<0.00500	0.0334
	02/25/2015		49	0.69	3.5	69	440	<0.035	0.0087	0.10	0.18 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0014 J	<0.0049	<0.0074	<0.0028	0.0031 J	<0.0059
	08/26/2015		46.6	0.527	4.17	67.5	495	<0.0350	0.00744	0.108	0.163 J	<0.000160	<0.000540	<0.000260	0.000626 J	<0.0141	<0.000240	<0.000250	<0.0000490	<0.00160	0.000566 J	0.00297	<0.000310	0.00285 J	0.00258 J
	08/17/2016		81.8	0.544	3.11	73.8	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		100	0.441	3.73	73.9	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		232	0.489	9.00	110	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		220	0.291	5.70	108	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		126	0.300	3.60	93.3	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		123	0.366	3.41	78.6	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-10	06/16/2009		32.2	0.878	1.83	76.5	378	<0.0200	<0.00500	0.113	0.138	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.0127
	01/13/2010		33.4	1.05	1.84	77.9	436	<0.0100	<0.00500	0.0815	0.162	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.000911	0.0133
	08/19/2010		31.7	1.07	1.91	79.8	508	0.0556	<0.00500	0.0798	0.129	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00569
	03/03/2011		32.8	0.945	2.06	79.1	422	<0.0100	<0.00500	0.0772	0.159	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0133
	07/15/2011		30.7	1.06	1.68	75.7	470	0.0318	<0.00500	0.0855	0.177	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	01/31/2012		42.9	1.00	1.85	87.4	444	<0.0100	<0.00500	0.0865	0.109	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0252
	07/25/2012		42.7	1.10	<2.00	82.6	382	<0.0100	0.00516	0.0882	0.186	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00861
	02/27/2013		48.0	0.960	<2.00	83.5	416	<0.0100	0.00546	0.0972	0.164	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00633
	08/22/2013		95.0	0.994	2.12	72.2	516	<0.0100	<0.00500	0.104	0.168	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00671
	02/26/2014		112	0.674	2.43	70.9	568	<0.0100	<0.00500	0.106	0.147	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00979
	08/21/2014		156	0.856	2.08	68.5	750	<0.0100	<0.00500	0.134	0.0998	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00939	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0114
	02/26/2015		120	0.71	2.1	68	540	<0.035	0.0043	0.12	0.17 J	<0.00070	0.0016 J	<0.0023	<0.0053	<0.014	0.00030 J	<0.0012	<0.000049	0.0026 J	<0.0049	<0.0074	<0.0028	0.0019 J	0.0060 J
	08/26/2015		115	1.19	1.92	102	551	<0.0350	0.00466	0.0982	0.154	<0.000160	0.000709 J	<0.000260	0.000803 J	<0.0141	<0.000240	<0.000250	<0.0000490	0.00258 J	<0.000350	0.00283	<0.000310	0.00158 J	<0.00256
	08/17/2016		57.5	0.954	1.61	75.0	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	08/16/2017		94.0	0.966	2.15	74.5	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/01/2018		33.3	0.955	1.69	76.3	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/24/2019		27.4	1.07	1.55	67.6	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	10/08/2020		35.2	1.04	1.95	63.2	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	09/16/2021		30.3	0.902	2.20	65.8	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-11	06/18/2009		204	0.579	1.23	43.1	994	<0.0100	<0.00500	0.194	0.199	<0.00200	<0.00500	<0.00500	<0.00500	0.571	<0.00500	0.387	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.0212
	01/18/2010		164	0.527	1.37	71.4	842	<0.0100	<0.00500	0.147	0.238	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0559	<0.000200	<0.00500	0.0126	<0.00500	<0.00500	0.00635	<0.00500
	08/18/2010		146	0.616	2.38	50.6	802	0.0125	<0.00500	0.471	0.255	<0.00200	<0.00500	<0.00500	<0.00500	0.347	<0.00500	0.571	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00718	<0.00500
	02/25/2011		415	0.549	<0.500	82.3	1,510	<0.0100	<0.00500	0.241	0.244	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0101	<0.000200	<0.00500	0.00856	<0.00500	<0.00500	0.00878	0.0982
	07/19/2011		134	0.575	0.778	57.0	894	<0.0100	<0.00500	0.150	0.232	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0301	<0.000200	<0.00500	0.00846	<0.00500	<0.00500	0.00616	0.0265
	02/01/2012		175	0.749	<0.500	4.96	966	<0.0100	0.0176	1.40	0.288	<0.00200	<0.00500	<0.00500	<0.00500	1.77	<0.00500	1.05	<0.000200	<0.00500	0.0169	<0.00500	<0.00500	0.0138	0.0189
	07/27/2012		133	0.708	<2.00	59.7	784	<0.0100	0.0128	0.827	0.374	<0.00200	<0.00500	<0.00500	<0.00500	2.02	<0.00500	2.54	<0.000200	<0.00500	0.0351	<0.00500	<0.00500	0.0330	<0.00500
	02/27/2013		140	0.576	3.11	32.6	908	<0.0100	0.00802	0.561	0.349	<0.00200	<0.00500	0.00604	<0.00500	<0.200	<0.00500	5.24	<0.000200	0.00631	0.0861	<0.00500	<0.00500	0.0127	0.0226
	02/27/2013	FD	143	0.585	3.23	32.0	908	<0.0100	0.00787	0.574	0.349	<0.00200	<0.00500	0.00574	<0.00500	<0.200	<0.00500	5.47	<0.000200	0.00619	0.0811	<0.00500	<0.00500	0.0125	0.0199
	08/21/2013		182	0.668	4.04	75.3	854	<0.0100	<0.00500	0.195	0.283	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	2.62	<0.000200	<0.00500	0.00869	<0.00500	<0.00500	0.00723	0.00547
	08/21/2013	FD	172	0.673	4.19	76.2	868	<0.0100	<0.00500	0.198	0.290	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	2.92	<0.000200	<0.00500	0.00906	<0.00500	<0.00500	0.00714	0.00592
	02/28/2014		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	08/20/2014		--(1)	--(1)	<1.00	--(1)	--(1)	0.0129	<0.00500	0.820	0.361	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	1.10	<0.000200	<0.00500	0.0217	<0.00500	<0.00500	0.0269	0.0104
	02/27/2015		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	08/28/2015		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	08/28/2015	FD	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	03/09/2016		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	03/09/2016	FD	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	08/15/2016		DRY WELL - PLUGGED AND ABANDONED DECEMBER 2016																						
MW-11R	02/08/2017		- -	- -	- -	- -	972	<0.0258	0.00165 J	0.208	0.194	<0.000800	<0.00270	0.00157 J	0.0118 J	<0.0750	<0.00120	0.141	<0.0000490	0.00372 J	0.0115	0.00115 J	<0.00155	0.00580 J	<0.0128
	02/08/2017	FD	- -	- -	- -	- -	980	<0.0258	0.00181 J	0.198	0.186	<0.000800	<0.00270	0.00147 J	0.0105 J	<0.0750	<0.00120	0.133	<0.0000490	0.00316 J	0.00979 J	0.00135 J	<0.00155	0.00551 J	<0.0128
	08/17/2017		271	0.599	2.38	157	1,170	0.00988 JB	0.00225	0.156	0.162	<0.000160	<0.000540	<0.000260	0.00242 J	<0.0150	<0.000240	0.00888	<0.0000490	0.00115 J	0.0275	0.00123 J	<0.000310	0.00349 J	0.0152 J
	04/05/2018		- -	- -	- -	- -	1,080	<0.00515	0.00250	0.153	0.192 J	<0.000160	<0.000540	<0.000260	0.0151	0.0561 J	0.000668 JB	0.00304 J	<0.0000490	0.00146 JB	0.0849	0.00219 B	<0.000310	0.00298 J	0.168
	10/01/2018		293	0.587	3.94	116	1,220	0.00726 JB	0.00258	0.162	0.160 J	<0.000160	<0.000540	<0.000260	0.0248	<0.0150	0.000797 JB	0.00123 JB	<0.0000490	0.00119 J	0.00546	0.00206	<0.000310	0.00299 J	0.111
	04/04/2019		- -	- -	- -	- -	1,480	<0.00515	0.00284	0.180	0.203	<0.000160	<0.000540	<0.000260	0.0386	<0.0150	0.000793 J	0.000546 J	<0.0000490	0.00143 J	0.00305	0.00182 J	<0.000310	0.00396 J	0.132
	10/24/2019		344	0.574	6.23	130	1,330	<0.00515	0.00249	0.187	0.218	<0.000160	0.00179 JB	<0.000260	0.0435	<0.0150	0.00131 J	<0.000250	0.0000675 JB	0.000953 J	0.00148 J	0.00289	<0.000310	0.00537 J	0.126
	06/18/2020		- -	- -	- -	- -	1,280	<0.0554	0.00239	0.187	0.294	<0.000478	<0.00149	<0.000477	0.0351	<0.0489	<0.00249	<0.00132	<0.000100	<0.000953	0.00455	0.00181 J	<0.000513	<0.00754	0.108
	10/08/2020		303	0.495	4.80	90.2	1,200	<0.0554	0.00250	0.186	0.286	<0.000478	<0.00149	<0.000477	0.0309	<0.0489	<0.00249	<0.00132	0.000104 J	<0.000953	0.00143 J	0.00205	<0.000513	<0.00754	0.0912
	04/15/2021		- -	- -	- -	- -	1,120	<0.0185	0.00247	0.201	0.303	<0.000150	<0.00124	0.000102 J	0.00452 J	<0.0281	<0.000849	0.00409 JB	<0.000100	0.00106 J	0.00193 J	0.000975 J	<0.0000700	0.00623 J	0.00533 JB
	09/16/2021		321	0.455	2.87	93.8	1,270	<0.0185	0.00254	0.198	0.296	<0.000150	<0.00124	0.000246 J	0.0326	<0.0281	0.00151 J	0.0343	<0.000100	0.00138 J	0.00174 J	0.00141 J	<0.0000700	0.00720 J	0.0562
MW-12	06/16/2009		23.0	1.16	1.98	49.6	354	<0.0200	0.00516	0.0775	0.200	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	<0.0100
	01/18/2010		26.1	1.05	2.31	49.8	398	<0.0100	<0.00500	0.0755	0.235	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0219	<0.000200	<0.00500	0.0182	<0.00500	<0.00500	<0.00500	<0.00500
	08/20/2010		25.8	1.22	2.00	50.3	340	0.115	0.00550	0.0756	0.176	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/25/2011		28.5	1.14	<0.500	50.8	402	<0.0100	0.00504	0.0760	0.198	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0185
	07/19/2011		26.8	0.856	2.91	51.2	410	<0.0100	<0.00500	0.0828	0.215	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00976	<0.000200	0.00575	0.00684	<0.00500	<0.00500	<0.00500	<0.00500
	--		DAMAGED WELL - PLUGGED AND ABANDONED JUNE 2013																						
MW-12R	08/21/2013		31.2	1.40	8.14	71.1	404	<0.0100	<0.00500	0.0937	0.194	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0129	<0.000200	0.00647	0.0103	<0.00500	<0.00500	<0.00500	0.00956
	02/27/2014		28.3	0.886	7.38	63.4	432	<0.0100	<0.00500	0.0767	0.193	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00992	<0.00500	<0.00500	<0.00500	<0.00500
	08/20/2014		24.5	1.05	6.98	67.2	410	1.31	<0.00500	0.145	0.223	<0.00200	0.0516	<0.00500	<0.00500	0.867	<0.00500	0.0483	<0.000200	0.00554	0.0350	<0.00500	<0.00500	<0.00500	0.00962
	02/24/2015		29	1.1	7.0	63	500	0.037 J	0.0038	0.095	0.20	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0042 J	<0.0049	<0.0074	<0.0028	0.0019 J	0.0081 J
	08/25/2015		19.8	1.02	7.36	71.1	527	<0.0350	0.00413	0.102	0.233	<0.000160	<0.000540	<0.000260	<0.000520	<0.0141	<0.000240	0.00203 J	<0.0000490	0.00294 J	0.00191 J	0.000707 J	<0.000310	0.00270 J	0.00291 J
	03/09/2016		21.6	0.985	6.35	68.2	503	0.00398 J	0.0034	0.0972	0.214	<0.000160	0.000653 J	<0.000260	0.00331 J	<0.0150	<0.000240	0.00314 JB	<0.0000490	0.00348 J	0.00349 B	0.00121 J	<0.000310	0.00291 J	<0.00256
	08/18/2016		25.1	0.810	6.14	75.9	394	0.00468 JB	0.00294	0.111	0.274	<0.000160	0.00128 JB	<0.000260	0.00176 JB	<0.0150	0.000332 J	0.00250 J	0.0000689 JB	0.00267 J	0.00238 B	0.00151 J	<0.000310	0.00400 J	<0.00256
	02/08/2017		28.4	0.890	5.25	75.0	509	<0.0258	0.00348 J	0.133	0.273	<0.000800	<0.00270	<0.00130	<0.00260	<0.0750	<0.00120	0.0377	<0.0000490	0.00446 J	0.00769 J	0.00185 J	<0.00155	0.00430 J	0.0192 J
	08/16/2017		31.0	0.813	5.34	68.8	528	0.0102 JB	0.00270	0.118	0.229	<0.000160	0.000749 J	<0.000260	0.000969 J	<0.0150	<0.000240	<0.000250	<0.0000490	0.00285 J	0.00185 JB	0.00147 J	<0.000310	0.00422 J	0.00320 J
	04/05/2018		33.2	0.699	4.77	71.1	520	<0.00515	0.00275	0.128	0.281	<0.000160	<0.000540	<0.000260	0.00164 JB	<0.0150	<0.000240	0.000316 JB	<0.0000490	0.00206 JB	0.00187 JB	0.00169 JB	<0.000310	0.00464 J	0.00477 J
	04/05/2018	FD	31.3	0.730	4.78	71.7	535	<0.00515	0.00291	0.130	0.279	<0.000160	0.000595 JB	<0.000260	0.00170 JB	<0.0150	<0.000240	0.000435 JB	<0.0000490	0.00217 JB	0.00167 JB	0.00150 JB	<0.000310	0.00476 J	0.00779 J
	10/01/2018		32.9	0.685	4.88	82.9	503	<0.00515	0.00251	0.141	0.262	<0.000160	<0.000540	<0.000260	0.000867 JB	<0.0150	<0.000240	0.000932 JB	<0.0000490	0.00195 J	0.00181 J	0.00175 J	<0.000310	0.00458 J	0.00781 JB
	10/01/2018	FD	32.1	0.645	4.90	87.4	588	<0.00515	0.00292	0.154	0.249	<0.000160	0.000720 J	<0.000260	0.00150 J	<0.0150	0.000318 JB	0.000610 J	<0.0000490	0.00218 J	0.00205	0.00185 J	<0.000310	0.00502 J	0.00956 J
	04/04/2019		41.2	0.551	5.09	77.1	623	<0.00515	0.00250	0.167	0.295	<0.000160	0.000768 J	<0.000260	0.00330 J	<0.0150	<0.000240	0.000558 J	<0.0000490	0.00190 J	0.00530	0.00163 J	<0.000310	0.00582 J	0.0172 J
	04/04/2019	FD	41.8	0.534	5.61	76.1	624	<0.00515	0.00232	0.168	0.153 J	<0.000160	0.000775 JB	<0.000260	0.0100	<0.0150	<0.000240	0.000717 JB	<0.0000490	0.00168 J	0.00407	0.00206	<0.000310	0.00555 J	0.0148 J
	10/24/2019		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	06/18/2020		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	08/13/2020		DRY WELL - PLUGGED AND ABANDONED AUGUST 2020																						

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			250	1.6	10.0	600.0	1,000	5.0	0.01	2	0.75	0.005	0.05	0.05	1.0	1.0	0.015	0.2	0.002	1.0	0.2	0.05	0.05	0.03	10.0
MW-12R2	10/08/2020		80.0	0.809	3.50	55.5	430	<0.0554	0.00455	0.101	0.187 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.0112	0.000103 J	0.00701	0.00393	0.00223	<0.000513	<0.00754	0.0128 J
	04/15/2021		86.7	0.924	4.32	59.1	456	<0.0185	0.00425	0.118	0.197 J	<0.000150	<0.00124	<0.0000596	0.00196 J	<0.0281	<0.000849	0.00109 JB	<0.000100	0.00454 J	0.00430	0.00202	<0.0000700	0.00169 J	0.00906 JB
	09/16/2021		92.3	0.881	4.11	62.6	496	<0.0185	0.00406	0.110	0.193 J	<0.000150	<0.00124	<0.0000596	<0.00151	<0.0281	<0.000849	<0.000704	<0.000100	0.00408 J	0.00409	0.00212	<0.0000700	0.00181 J	0.0171 J
MW-13	06/16/2009		425	0.220	2.65	138	1,790	<0.0200	<0.00500	0.0692	0.253	<0.00200	<0.00500	0.0285	<0.00500	<0.200	<0.00500	0.0176	<0.000200	<0.00500	0.0126	<0.00500	<0.00500	- -	0.0269
	01/18/2010		604	0.170	1.08	79.8	2,210	<0.0100	<0.00500	0.111	0.231	<0.00200	0.00728	0.00624	<0.00500	<0.200	<0.00500	0.0591	<0.000200	<0.00500	0.0110	<0.00500	<0.00500	0.0119	0.00769
	08/18/2010		390	0.278	<1.00	144	1,720	0.0196	<0.00500	0.106	0.221	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.256	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.0128	0.00618
	02/25/2011		340	0.281	<0.500	235	1,540	<0.0100	<0.00500	0.0692	0.242	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.225	<0.000200	<0.00500	0.0144	<0.00500	<0.00500	0.0170	0.0744
	07/19/2011		351	0.327	<0.500	244	1,960	<0.0100	<0.00500	0.0800	0.249	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.302	<0.000200	<0.00500	0.0121	<0.00500	<0.00500	0.0188	0.00785
	02/01/2012		418	0.322	<0.500	122	1,590	<0.0100	<0.00500	0.0752	0.228	<0.00200	<0.00500	0.00663	<0.00500	<0.200	<0.00500	0.341	<0.000200	<0.00500	0.0136	<0.00500	<0.00500	0.0128	0.0553
	07/26/2012		462	0.422	<2.00	123	2,150	<0.0100	<0.00500	0.112	0.284	<0.00200	<0.00500	0.00644	<0.00500	<0.200	<0.00500	0.459	<0.000200	<0.00500	0.0108	<0.00500	<0.00500	0.0158	0.0361
	02/26/2013		430	0.366	<2.00	135	1,610	0.0139	<0.00500	0.129	0.270	<0.00200	<0.00500	0.00657	<0.00500	<0.200	<0.00500	0.571	<0.000200	0.00568	0.0820	<0.00500	<0.00500	0.0123	0.0359
	08/21/2013		548	0.389	<1.00	108	2,000	<0.0100	0.00590	0.159	0.265	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.705	<0.000200	<0.00500	0.0209	<0.00500	<0.00500	0.0153	0.00931
	02/27/2014		588	0.282	<0.500	106	2,380	0.0110	<0.00500	0.191	0.258	<0.00200	0.0140	0.00541	<0.00500	0.321	<0.00500	1.01	<0.000200	<0.00500	0.0300	<0.00500	<0.00500	0.0173	0.0291
	08/19/2014		485	<1.00	<1.00	87.2	1,900	0.0737	<0.00500	0.207	0.287	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.940	<0.000200	<0.00500	0.00650	<0.00500	<0.00500	0.0151	0.0115
	02/27/2015		550	0.38	0.056 J	59	1,600	<0.035	0.0034	0.23	0.24	<0.00070	<0.0014	0.0047 J	<0.0053	<0.014	<0.00024	0.82	<0.000049	0.0010 J	<0.0049	<0.0074	<0.0028	0.014	0.019 J
	08/26/2015		396	0.505	0.956	107	1,890	<0.0350	0.00301	0.197	0.231	<0.000160	<0.000540	0.00163 J	0.00208 J	<0.0141	<0.000240	0.383	- -	0.00143 J	0.00276	0.000710 J	<0.000310	0.0112	0.00592 J
	03/08/2016		217	0.552	2.53	75.7	972	0.00530 JB	0.00365	0.0976	0.196	<0.000160	<0.000540	<0.000260	0.00100 JB	0.0238 JB	0.000241 JB	0.00062 J	<0.0000490	0.00288 J	0.000721 JB	0.00144 J	<0.000310	0.00303 J	0.00418 JB
	08/17/2016		336	0.396	1.81	97.5	1,340	0.00748 JB	0.00398	0.149	0.223	<0.000160	0.00130 JB	0.00218	0.00287 JB	0.0220 JB	<0.000240	0.241	<0.0000490	0.00111 J	0.00409 B	0.000998 J	<0.000310	0.0119	0.0159 J
	02/08/2017		307	0.428	1.28	102	1,140	<0.0258	0.00409 J	0.150	0.217	<0.000800	<0.00270	0.00296 J	<0.00260	<0.0750	<0.00120	0.157	<0.0000490	0.00132 J	0.00726 J	0.000432 J	<0.00155	0.0123 J	0.0382 J
	08/17/2017		--(1)	--(1)	--(1)	--(1)	--(1)	0.00785 JB	0.00687	0.142	0.187	<0.000160	0.00128 J	<0.000260	0.00517	<0.0150	<0.000240	0.0258	<0.0000490	0.00193 J	0.0231	0.000828 J	<0.000310	0.0141	0.240
	04/05/2018		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	09/26/2018		DRY WELL - PLUGGED AND ABANDONED SEPTEMBER 2018																						
MW-13R	10/01/2018		407	0.629	3.50	90.2	1,410	0.00533 JB	0.00260	0.194	0.169 J	<0.000160	0.00234 B	0.00460	0.0243	<0.0150	<0.000240	0.223	<0.0000490	0.0360	0.162	0.00161 J	<0.000310	0.00743 J	0.0775
	04/04/2019		464	0.326	3.66	94.8	1,980	<0.00515	0.00188 J	0.199	0.239	<0.000160	0.00802	0.00148 J	0.0162	<0.0150	<0.000240	0.0520	0.0000564 J	0.000861 J	0.0234	0.000961 J	<0.000310	0.0106	0.0335
	10/24/2019		354	0.410	4.02	74.5	1,360	<0.00515	0.00205	0.225	0.262	<0.000160	0.00255 B	0.000874 J	0.0104 B	<0.0150	<0.000240	0.0508	0.000152 JB	0.000608 J	0.0127	0.000645 JB	<0.000310	0.0102	0.0184 J
	06/18/2020		294	0.421	5.15	153	1,380	<0.0554	0.00238	0.127	0.274	<0.000478	<0.00149	0.000767 J	0.0110	<0.0489	<0.00249	0.0392	<0.000100	<0.000953	0.0103	0.00122 J	<0.000513	0.00887 J	0.0131 J
	06/18/2020	FD	297	0.413	5.28	153	1,310	<0.0554	0.00229	0.122	0.277	<0.000478	<0.00149	0.000716 J	0.00941	<0.0489	<0.00249	0.0374	<0.000100	<0.000953	0.00920	0.00104 J	<0.000513	0.00865 J	0.0128 J
	10/08/2020		272	0.375	5.50	136	1,420	<0.0554	0.00276	0.123	0.263	<0.000478	<0.00149	0.000901 J	0.0105	<0.0489	<0.00249	0.0349	0.000132 J	<0.000953	0.0101	0.00122 J	<0.000513	0.0106 J	0.0158 J
	10/08/2020	FD	276	0.337	5.40	156	1,250	<0.0554	0.00270	0.116	0.270	<0.000478	<0.00149	0.000872 J	0.00964	<0.0489	<0.00249	0.0327	0.000107 J	<0.000953	0.00888	0.000881 J	<0.000513	0.0101 J	0.0143 J
	04/15/2021		291	0.370	6.15	123	1,200	<0.0185	0.00258	0.121	0.253	<0.000150	<0.00124	0.000640 J	0.00821	<0.0281	<0.000849	0.0255	<0.000100	0.000796 J	0.00629	0.00102 J	<0.0000700	0.00962 J	0.0126 JB
	09/16/2021		285	0.368	5.72	160	1,320	<0.0185	0.00265	0.104	0.240	<0.000150	<0.00124	0.000438 J	0.00757 B	<0.0281	<0.000849	0.0155	<0.000100	0.000681 J	0.00401	0.000929 J	<0.0000700	0.0119 J	0.00987 J
	09/16/2021	FD	270	0.372	5.76	154	1,240	<0.0185	0.00271	0.109	0.244	<0.000150	<0.00124	0.000408 J	0.00795	<0.0281	<0.000849	0.0153	<0.000100	0.000737 JB	0.00429	0.00104 J	<0.0000700	0.0101 J	0.00984 J
MW-14	06/16/2009		93.0	0.851	5.16	60.9	540	<0.0200	<0.00500	0.0770	0.132	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0199	<0.000200	0.0215	<0.00501	<0.00500	<0.00500	- -	0.0255
	01/18/2010		103	0.810	6.03	59.0	598	<0.0100	<0.00500	<0.00500	<0.020	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/20/2010		74.1	0.986	2.76	61.3	340	0.103	<0.00500	0.0774	0.131	<0.00200	0.0119	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	0.00964	0.0480	<0.00500	<0.00500	0.00527	<0.00500
	02/25/2011		58.2	0.918	2.32	58.7	440	0.0101	<0.00500	0.0778	0.151	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0234	<0.000200	0.00903	0.0138	<0.00500	<0.00500	0.00541	0.0532
	07/18/2011		48.4	1.05	1.36	53.0	482	0.176	0.00615	0.110	0.156	<0.00200	12.5	0.122	0.218	54.9	<0.00500	1.45	<0.000200	0.0860	6.81	<0.00500	<0.00500	0.00544	0.0446
	01/31/2012		59.7	0.984	1.58	58.3	444	<0.0100	<0.00500	0.0802	0.129	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0276	<0.000200	0.00608	0.0186	<0.00500	<0.00500	<0.00500	0.0287
	07/25/2012		69.3	1.03	<2.00	54.8	446	0.0116	<0.00500	0.0905	0.216	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0321	<0.000200	<0.00500	0.0240	<0.00500	<0.00500	<0.00500	0.0448
	02/21/2013		- -	- -	<2.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	02/22/2013		71.9	0.795	- -	52.9	428	<0.0100	<0.00500	0.0900	0.174	<0.00200	<0.00500	<0.00500	0.0705	<0.200	<0.00500	0.0349	<0.000200	0.0121	0.0106	<0.00500	<0.00500	0.00591	0.148
	08/22/2013		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	02/28/2014		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	08/20/2014		--(1)	--(1)	1.10	--(1)	534	0.573	<0.00500	0.125	0.203	<0.00200	0.0247	<0.00500	<0.00500	0.314	<0.00500	0.00919	<0.000200	0.00533	0.0178	<0.00500	<0.00500	0.00502	0.0134
	02/27/2015		--(1)	--(1)	--(1)	--(1)	--(1)	<0.035	0.0023	0.10	0.20 J	<0.00070	0.0026 J	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	--(1)	0.0040 J	<0.0049	<0.0074	<0.0028	0.0047 J	0.0070 J
	08/27/2015		104	0.940	1.96	44.6	611	<0.0350	0.00271	0.0998	0.188	<0.000160	0.00261	0.000326 J	0.00122 J	<0.0141	<0.000240	<0.000250	--(1)	0.00429 J	0.00190 J	0.00123 J	<0.000310	0.00485 J	0.00334 J
	08/19/2016		118	0.796	4.13	39.3	674	0.00385 JB	0.00244	0.124	0.216	<0.000160	0.00335 B	0.000476 J	0.00230 JB	<0.0150	<0.000240	0.00431 J	<0.0000490	0.00412 J	0.00253 B	0.00165 J	<0.000310	0.00554 J	0.00497 JB
	08/16/2017		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	<0.0000490	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	09/27/2018		DRY WELL - PLUGGED AND ABANDONED SEPTEMBER 2018																						
MW-14R	10/01/2018		216	1.15	2.81	54.3	867	0.0120 JB	0.00317	0.159	0.160 J	<0.000160	<0.000540	<0.000260	0.00200 JB	<0.0150	<0.000240	0.0107	<0.0000490	0.00700	0.00515	0.00178 J	<0.000310	0.00339 J	0.00479 JB
	10/24/2019		518	0.873	4.96	61.1	1,840	<0.00515	0.00248	0.332	0.181 J	<0.000160	<0.000540	<0.000260	<0.000520	<0.0150	<0.000240	<0.000250	0.0000617 JB	0.00242 J	<0.000350	0.00219 B	<0.000310	0.00509 J	<0.00256
	10/08/2020		394	0.864	4.81	49.8	1,440	<0.0554	0.00257	0.275	0.202	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	0.000115 J	0.00241 J	<0.000952	0.00226	<0.000513	<0.00754	<0.00996
	09/16/2021		394	0.723	5.20	50.6	1,440	<0.0185	0.00250	0.250	0.208	<0.000150	<0.00124	<0.0000596	<0.00151	<0.0281	<0.000849	<0.000704	<0.000100	0.00221 J	<0.000816	0.00178 J	<0.0000700	0.00653 J	0.00738 J

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-15	08/20/2010		221	0.921	3.22	77.6	776	0.0790	<0.00500	0.145	0.175	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0198
	02/24/2011		190	0.885	4.28	67.0	738	<0.0100	<0.00500	0.127	0.165	<0.00200	0.0102	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0385
	07/14/2011		236	0.701	4.18	60.9	940	<0.0100	<0.00500	0.173	0.201	<0.00200	0.0132	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00657	<0.00500	<0.00500	<0.00500	0.0122
	01/30/2012		304	0.840	4.09	78.6	1,330	<0.0100	<0.00500	0.180	0.178	<0.00200	0.00644	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00967
	07/24/2012		291	0.965	8.22	80.3	1,060	<0.0100	<0.00500	0.178	0.227	<0.00200	0.0110	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00636
	02/19/2013		254	0.819	5.12	76.0	882	0.0682	<0.00500	0.178	0.191	<0.00200	0.129	<0.00500	<0.00500	0.610	<0.00500	0.0198	<0.000200	<0.00500	0.0704	<0.00500	<0.00500	<0.00500	0.0160
	08/20/2013		379	0.910	6.82	71.3	1,280	<0.0100	<0.00500	0.232	0.194	<0.00200	0.00594	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00854
	08/20/2013	FD	381	0.931	6.83	72.7	1,230	<0.0100	<0.00500	0.232	0.188	<0.00200	0.00582	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00619
	02/24/2014		256	0.715	7.86	83.0	858	<0.0100	<0.00500	0.178	0.175	<0.00200	0.00910	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/24/2014	FD	263	0.832	8.07	82.5	810	<0.0100	<0.00500	0.178	0.174	<0.00200	0.00961	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/21/2014		148	1.02	8.52	97.5	690	0.0102	<0.00500	0.146	0.117	<0.00200	0.00513	<0.00500	<0.00500	<0.200	<0.00500	0.00509	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0149
	08/21/2014	FD	150	1.01	8.53	95.6	706	0.0136	<0.00500	0.153	0.119	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0213
	02/24/2015		150	0.90	8.4	94	650	0.052 J	0.0040	0.15	0.17 J	<0.00070	0.0034 J	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0024 J	<0.0049	<0.0074	<0.0028	0.0021 J	0.012 J
	08/27/2015		181	1.13	8.48	123	728	<0.0350	0.00424	0.146	0.167	<0.000160	0.00285	<0.000260	0.00109 J	<0.0141	0.000373 J	0.000492 J	<0.0000490	0.00249 J	0.000825 J	0.00232	<0.000310	0.00220 J	<0.00256
	08/27/2015	FD	234	1.46	8.47	158	729	<0.0350	0.00443	0.146	0.174	<0.000160	0.00272	<0.000260	<0.000520	0.0144 J	<0.000240	0.000276 J	<0.0000490	0.00254 J	0.000688 J	0.00253	<0.000310	0.00200 J	<0.00256
	03/07/2016		160	0.877	6.53	85.9	727	0.00537 JB	0.0042	0.14	0.156	<0.000160	0.00281	<0.000260	0.000956 J	<0.0150	0.000309 JB	0.000837 JB	<0.0000490	0.00240 J	0.00173 JB	0.00234	<0.000310	0.00248 J	0.00275 JB
	08/15/2016		169	0.685	5.19	93.2	721	0.00418 JB	0.00353	0.140	0.176	<0.000160	0.00128 JB	0.000281 J	0.00193 JB	<0.0150	<0.000240	0.00394 J	<0.0000490	0.00326 J	0.00597 B	0.00245	<0.000310	0.00275 J	0.00409 J
	08/15/2016	FD	165	0.738	5.09	93.3	723	0.00531 JB	0.00353	0.145	0.183	<0.000160	0.00130 JB	0.000293 J	0.000569 JB	0.0441 JB	<0.000240	0.00413 J	<0.0000490	0.00340 J	0.00598 B	0.00259	<0.000310	0.00281 J	0.00403 J
	02/06/2017		177	0.781	5.80	105	800	<0.0258	0.00342 J	0.160	0.198	<0.000800	<0.00270	<0.00130	<0.00260	<0.0750	<0.00120	0.00764 J	<0.0000490	0.00419 J	0.0145	0.00213	<0.00155	0.00275 J	0.0140 J
	08/16/2017		219	0.772	5.02	90.2	808	0.00788 JB	0.00362	0.161	0.161	<0.000160	0.00242	<0.000260	0.00189 J	<0.0150	<0.000240	<0.000250	<0.0000490	0.00183 J	0.00373 B	0.00191 J	<0.000310	0.00257 J	0.0104 J
	04/05/2018		222	0.644	4.28	111	808	<0.00515	0.00339	0.148	0.189 J	<0.000160	0.00201 B	<0.000260	0.00420 J	0.0281 J	0.000269 JB	0.00172 JB	<0.0000490	0.00433 J	0.00561	0.00170 JB	<0.000310	0.00290 J	0.0250 J
	10/01/2018		348	0.549	4.26	105	2,230	<0.00515	0.00329	0.162	0.157 J	<0.000160	0.00118 JB	<0.000260	0.00144 JB	<0.0150	<0.000240	0.00189 JB	<0.0000490	0.00136 J	0.00277	0.00215	<0.000310	0.00288 J	0.0199 JB
	04/04/2019		537	0.478	3.85	100	1,880	0.00581 JB	0.00294	0.189	0.180 J	<0.000160	0.00181 J	<0.000260	0.00800	<0.0150	0.000487 J	0.000601 J	<0.0000490	0.00170 J	0.00656	0.00134 J	<0.000310	0.00265 J	0.0714
	10/24/2019		437	0.592	3.29	111	1,370	<0.00515	0.00246	0.160	0.172 J	<0.000160	0.00321	<0.000260	0.00177 JB	<0.0150	<0.000240	0.00280 J	0.0000657 JB	0.00567	0.0322	0.00252	<0.000310	0.00273 J	0.128
	06/18/2020		288	0.720	3.88	117	988	<0.0554	0.00285	0.137	0.183 J	<0.000478	0.00504	<0.000477	0.00313 J	<0.0489	<0.00249	0.00176 J	<0.000100	0.00697	0.0396	0.00184 J	<0.000513	<0.00754	0.168
	10/08/2020		327	0.583	3.85	99.4	1,150	<0.0554	0.00315	0.132	0.183 J	<0.000478	0.00433	<0.000477	0.00340 J	<0.0489	<0.00249	0.00368 J	0.000103 J	0.00521	0.0259	0.00165 J	<0.000513	<0.00754	0.175
	04/15/2021		173	0.610	4.00	98.3	679	<0.0185	0.00217	0.120	0.180 J	<0.000150	0.00670	0.000593 J	0.0219	<0.0281	<0.000849	0.00472 JB	<0.000100	0.0102	1.29	0.00206	<0.0000700	0.00251 J	3.68
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021																						
MW-15R	09/16/2021		363	0.776	3.56	102	1,080	<0.0185	0.00391	0.154	0.190 J	<0.000150	0.00864	0.000137 J	0.00425 JB	<0.0281	<0.000849	0.00653	<0.000100	0.00864	0.00497	0.00244	<0.0000700	0.00252 J	0.0312
MW-16	08/20/2010		25.3	0.930	1.13	73.7	406	0.0746	<0.00500	0.109	0.156	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00554	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0145
	02/24/2011		28.1	0.928	2.36	73.7	412	<0.0100	<0.00500	0.107	0.162	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00671	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0248
	07/15/2011		25.5	1.04	1.82	72.0	484	0.188	<0.00500	0.129	0.181	<0.00200	0.115	<0.00500	<0.00500	0.613	<0.00500	0.0164	<0.000200	<0.00500	0.0591	<0.00500	<0.00500	<0.00500	0.0176
	07/15/2011	FD	21.0	0.733	1.98	54.1	476	0.0374	<0.00500	0.118	0.185	<0.00200	0.0251	<0.00500	<0.00500	0.241	<0.00500	0.00820	<0.000200	<0.00500	0.0234	<0.00500	<0.00500	<0.00500	0.0166
	01/30/2012		27.9	0.994	1.79	77.6	398	<0.0100	<0.00500	0.0964	0.166	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00899
	07/24/2012		26.6	1.14	<2.00	72.6	404	0.0102	<0.00500	0.0966	0.202	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0162	<0.000200	<0.00500	0.0112	<0.00500	<0.00500	<0.00500	0.0167
	02/20/2013		24.0	0.966	<2.00	68.1	316	<0.0100	0.00547	0.0968	0.172	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00693
	08/20/2013		24.7	1.02	1.75	64.0	392	0.0260	<0.00500	0.105	0.192	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0219	<0.000200	<0.00500	0.0177	<0.00500	<0.00500	<0.00500	<0.00500
	02/25/2014		23.9	0.766	1.83	62.3	362	<0.0100	<0.00500	0.0938	0.172	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0225	<0.000200	0.00516	0.0295	<0.00500	<0.00500	<0.00500	0.00786
	08/19/2014		21.7	0.975	1.41	64.9	362	0.335	<0.00500	0.104	0.209	<0.00200	0.00751	<0.00500	<0.00500	<0.200	<0.00500	0.00544	<0.000200	<0.00500	0.00667	<0.00500	<0.00500	<0.00500	0.00897
	02/24/2015		20	1.0	1.9	61	360	0.042 J	0.0051	0.098	0.17 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	0.0042 J	<0.000049	0.0035 J	<0.0049	<0.0074	<0.0028	0.0016 J	0.014 J
	08/27/2015		21.3	1.07	2.34	66.0	408	<0.0350	0.00528	0.0936	0.176	<0.000160	<0.000540	<0.000260	0.000638 J	<0.0141	<0.000240	0.000312 J	<0.0000490	0.00293 J	<0.000350	0.00228	<0.000310	0.00156 J	0.00343 J
	08/15/2016		22.3	0.859	1.69	63.5	418	0.00512 JB	0.00434	0.0973	0.181	<0.000160	0.00122 JB	<0.000260	0.000659 JB	0.0571 JB	<0.000240	0.00916	<0.0000490	0.00631	0.0117	0.00246	<0.000310	0.00206 J	0.00454 J
	08/17/2017		25.5	0.940	1.94	66.4	392	0.0178 JB	0.00488	0.106	0.162	<0.000160	0.000796 J	<0.000260	0.00279 J	<0.0150	<0.000240	0.000295 J	<0.0000490	0.00256 J	0.00343 B	0.00257	<0.000310	0.00198 J	0.0285
	10/01/2018		28.1	0.900	2.16	67.8	386	<0.00515	0.00492	0.114	0.155 J	<0.000160	<0.000540	<0.000260	0.00200 JB	<0.0150	<0.000240	0.000783 JB	<0.0000490	0.00243 J	0.000934 J	0.00322	<0.000310	0.00228 J	0.00805 JB
	10/24/2019		32.0	1.01	2.10	69.8	432	<0.00515	0.00557	0.109	0.157 J	<0.000160	0.00107 JB	<0.000260	0.00290 JB	<0.0150	0.000400 J	0.00116 J	0.0000606 JB	0.00251 J	0.00120 J	0.00358	<0.000310	0.00226 J	0.0369
	08/13/2020		DRY WELL - PLUGGED AND ABANDONED AUGUST 2020																						
MW-16R	10/08/2020		28.8	1.19	2.11	61.5	372	<0.0554	0.00601	0.0895	0.162 J	<0.000478	<0.00149	<0.000477	0.00410 J	<0.0489	<0.00249	0.00805	<0.000100 [R	0.00398 J	<0.000952	0.00252	<0.000513	<0.00754	<0.00996
	09/16/2021		41.9	0.805	2.95	68.2	443	<0.0185	0.00459	0.105	0.167 J	<0.000150	<0.00124	<0.0000596	0.00299 JB	<0.0281	<0.000849	0.000862 J	<0.000100	0.00290 J	0.00190 J	0.00257	<0.0000700	0.00301 J	0.0297
MW-17	08/20/2010		426	0.517	4.27	72.6	1,650	0.146	<0.00500	0.180	0.157	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0142
	02/24/2011		412	0.435	5.33	80.0	1,634	<0.0100	<0.00500	0.152	0.162	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0478
	07/18/2011		336	0.753	4.07	82.7	1,850	<0.0100	<0.00500	0.141	0.165	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0126
	--		DAMAGED WELL - PLUGGED AND ABANDONED JUNE 2013																						

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-17R	08/22/2013		246	0.602	3.44	81.7	1,190	0.0302	<0.00500	0.154	0.188	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0819	<0.000200	0.00531	0.0189	<0.00500	<0.00500	<0.00500	<0.00500
	02/27/2014		184	0.425	0.629	92.5	904	0.254	<0.00500	0.121	0.193	<0.00200	0.0121	<0.00500	<0.00500	<0.200	<0.00500	0.0342	<0.000200	<0.00500	0.0273	<0.00500	<0.00500	<0.00500	<0.00500
	08/22/2014		170	0.602	2.70	94.8	860	0.0459	<0.00500	0.153	0.120	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0989	<0.000200	<0.00500	0.0378	<0.00500	<0.00500	<0.00500	0.0243
	02/26/2015		150	0.65	2.6	75	670	0.046 J	0.0028	0.12	- -	<0.00070	0.0022 J	<0.0023	<0.0053	<0.014	0.00030 J	<0.0012	<0.000049	0.0013 J	<0.0049	<0.0074	<0.0028	0.0030 J	0.023 J
	08/27/2015		110	0.859	2.86	87.4	658	<0.0350	0.00320	0.0972	0.171	<0.000160	0.000967 J	<0.000260	0.000632 J	0.0218 J	<0.000240	0.00123 J	<0.0000490	0.00163 J	0.000779 J	0.00203	<0.000310	0.00267 J	<0.00256
	03/08/2016		65.3	0.722	2.55	76	465	0.0150 JB	0.00259	0.0739	0.161	<0.000160	<0.000540	0.000315 J	0.000717 J	<0.0150	<0.000240	0.0544	<0.0000490	0.000749 J	0.00103 JB	0.00185 J	<0.000310	0.00666 J	0.00412 JB
	08/17/2016		219	0.578	4.37	79.8	526	0.00299 JB	0.00251	0.143	0.199	<0.000160	0.00110 JB	<0.000260	0.00145 JB	<0.0150	<0.000240	0.00281 J	<0.0000490	0.00140 J	0.00147 JB	0.00143 J	<0.000310	0.00285 J	<0.00256
	02/09/2017		150	0.654	3.01	86.3	715	<0.0258	0.00292 J	0.0993	0.183	<0.000800	<0.00270	<0.00130	0.00839 J	<0.0750	<0.00120	0.0450	<0.0000490	0.00415 J	0.0112	0.00227	<0.00155	0.00227 J	<0.0128
	08/16/2017		60.0	0.770	2.21	85.9	502	0.00847 JB	0.00367	0.0723	0.154	<0.000160	0.00244	<0.000260	0.00105 J	<0.0150	<0.000240	<0.000250	<0.0000490	0.00161 J	0.00196 JB	0.00274	<0.000310	0.00179 J	0.00448 J
	04/05/2018		124	0.664	2.46	68.2	587	<0.00515	0.00353	0.107	0.166 J	<0.000160	0.00143 JB	<0.000260	0.00180 JB	<0.0150	<0.000240	<0.000250	<0.0000490	0.00161 JB	0.00233 B	0.00261 B	<0.000310	0.00165 JB	0.00823 J
	04/05/2018	FD	124	0.679	2.48	69.7	589	<0.00515	0.00350	0.109	0.172 J	<0.000160	0.00118 JB	<0.000260	0.00166 JB	<0.0150	<0.000240	0.000388 JB	<0.0000490	0.00161 JB	0.00229 B	0.00227 B	<0.000310	0.00163 JB	0.0116 J
	10/01/2018		136	0.631	2.88	79.7	682	0.00927 JB	0.00327	0.120	0.145 J	<0.000160	0.000817 JB	<0.000260	0.00143 JB	<0.0150	<0.000240	0.000555 JB	<0.0000490	0.00157 J	0.00309	0.00290	<0.000310	0.00189 J	0.0203 JB
	04/04/2019		94.5	0.627	2.21	78.5	568	<0.00515	0.00384	0.0984	0.150 J	<0.000160	0.00167 J	<0.000260	0.00167 J	<0.0150	<0.000240	0.000643 J	<0.0000490	0.00180 J	0.0335	0.00294	<0.000310	0.00168 J	0.0260
	04/04/2019	FD	94.3	0.629	2.53	78.5	562	<0.00515	0.00346	0.0972	0.185 J	<0.000160	0.00138 JB	<0.000260	0.00105 J	<0.0150	<0.000240	0.000563 JB	<0.0000490	0.00147 J	0.00314	0.00305	<0.000310	0.00162 J	0.0192 J
	10/24/2019		67.7	0.771	1.94	89.9	467	<0.00515	0.00378	0.0915	0.116 J	<0.000160	0.00223 B	<0.000260	0.000686 JB	<0.0150	0.000244 J	<0.000250	0.0000572 JB	0.00167 J	0.00478	0.00218 B	<0.000310	0.00166 J	0.0365
	06/18/2020		80.6	0.786	2.13	85.9	503	<0.0554	0.00386	0.0956	0.148 J	<0.000478	0.00178 J	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00174 J	0.00270	0.00256	<0.000513	<0.00754	0.0203 J
	10/08/2020		57.6	0.805	2.11	84.7	465	<0.0554	0.00355	0.0888	0.151 J	<0.000478	0.00166 J	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100 [R	0.00189 J	<0.000952	0.00272	<0.000513	<0.00754	0.0302
	04/15/2021		80.5	0.641	2.64	82.0	505	<0.0185	0.00406	0.101	0.145 J	<0.000150	0.00244	<0.0000596	0.00308 J	<0.0281	<0.000849	<0.000704	<0.000100	0.00195 J	0.00163 J	0.00233	<0.0000700	0.00163 J	0.0107 JB
	09/16/2021		--[1]	--[1]	--[1]	--[1]	--[1]	<0.0185	0.00347	0.115	0.147 J	<0.000150	0.00165 J	<0.0000596	0.00159 JB	<0.0281	<0.000849	<0.000704	<0.000100	0.00169 J	0.000903 J	0.00185 J	<0.0000700	0.00217 J	0.00895 J
MW-18	08/23/2010		176	0.456	0.733	287	1,080	0.0787	<0.00500	0.0575	0.334	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.314	<0.000200	0.00561	0.0298	0.00548	<0.00500	0.0123	0.0772
	02/24/2011		286	0.514	4.14	298	1,240	0.0157	<0.00500	0.0766	0.330	<0.00200	0.0186	<0.00500	<0.00500	<0.200	<0.00500	0.00536	<0.000200	<0.00500	0.0144	0.00501	<0.00500	0.00883	0.0439
	07/18/2011		218	0.800	5.74	234	1,290	0.0244	<0.00500	0.05636	0.396	<0.00200	0.0111	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.0129	<0.00500	<0.00500	0.00666	0.0661
	01/31/2012		106	0.722	3.89	94.3	584	0.0113	<0.00500	0.0645	0.133	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0191
	07/25/2012		103	0.753	2.01	63.4	562	0.0110	<0.00500	0.0780	0.230	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00684
	02/22/2013		181	0.564	4.02	116	782	0.0742	<0.00500	0.105	0.249	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0129	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.0138	0.0187
	08/22/2013		197	0.531	5.59	130	1,100	<0.0100	<0.00500	0.110	0.243	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00509	<0.00500	<0.00500	<0.00500	<0.00500
	02/26/2014		145	0.514	4.36	89.1	680	0.0213	<0.00500	0.0766	0.244	<0.00200	<0.00500	<0.00500	0.0215	<0.200	<0.00500	0.0117	<0.000200	<0.00500	0.00681	<0.00500	<0.00500	0.00701	0.0465
	08/20/2014		143	0.590	1.97	123	678	1.31	<0.00500	0.145	0.242	<0.00200	0.00506	<0.00500	<0.00500	0.637	<0.00500	0.0378	<0.000200	<0.00500	0.00634	<0.00500	<0.00500	<0.00500	0.0363
	02/26/2015		130	0.68	3.5	97	670	0.069 J	0.0026	0.10	0.26	<0.00070	<0.0014	<0.0023	0.0061 J	0.022 J	0.00026 J	<0.0012	<0.000049	0.0020 J	<0.0049	<0.0074	<0.0028	0.0039 J	0.017 J
	08/25/2015		136	0.703	2.73	65.8	844	<0.0350	0.00288	0.116	0.188 J	<0.000160	0.00118 J	<0.000260	0.000646 J	<0.0141	<0.000240	0.00120 J	<0.0000490	0.00612	0.00151 J	0.00178 J	<0.000310	0.00434 J	0.00669 J
	08/17/2016		162	0.557	3.71	53.4	799	<0.00200	0.00194 J	0.108	0.223	<0.000160	0.00195 JB	<0.000260	0.00214 JB	0.0201 J	<0.000240	0.00261 J	0.0000593 JB	0.00217 J	0.00139 JB	0.00173 J	<0.000310	0.00423 J	0.00992 JB
	08/16/2017		234	0.648	6.10	93.5	1,030	<0.00515	0.00174 J	0.135	0.169	<0.000160	0.00176 J	<0.000260	0.000766 J	<0.0150	<0.000240	<0.000250	<0.0000490	0.00174 J	0.00106 JB	0.00299	<0.000310	0.00434 J	0.00897 J
	10/01/2018		99.6	0.599	2.48	73.8	659	<0.00515	0.00225	0.0916	0.240	<0.000160	0.00185 JB	<0.000260	0.00231 JB	<0.0150	0.000351 JB	0.000538 JB	<0.0000490	0.00166 J	0.0101	0.00252	<0.000310	0.00428 J	0.0334 B
	10/24/2019		120	0.634	3.82	113	653	<0.00515	0.00232	0.0826	0.168 J	<0.000160	0.00258 B	<0.000260	0.00302 JB	<0.0150	<0.000240	<0.000250	0.0000660 JB	0.00193 J	0.00878	0.00190 JB	<0.000310	0.00354 J	0.0682
	10/08/2020		214	0.491	4.72	171	1,090	<0.0554	0.00209	0.102	0.183 J	<0.000478	0.00337	<0.000477	0.00637	<0.0489	<0.00249	0.00412 J	--[1]	0.00166 J	0.0117	0.00196 J	<0.000513	<0.00754	0.124
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021																						
MW-18R	09/16/2021		138	0.677	3.32	96.5	653	<0.0185	0.00409	0.105	0.122 J	<0.000150	0.00139 J	<0.0000596	0.00238 JB	<0.0281	<0.000849	0.00166 J	<0.000100	0.00448 J	<0.000816	0.00455	<0.0000700	0.00269 J	0.00553 J

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-19	08/23/2010		469	0.536	2.94	178	1,650	0.101	0.0476	0.229	<0.020	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00666	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0227
	02/24/2011		235	0.713	2.87	90.7	828	<0.0100	<0.00500	0.0764	0.180	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0318
	07/18/2011		688	0.734	3.66	142	2,880	<0.0100	<0.00500	0.0920	0.266	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00781	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0553
	01/31/2012		610	0.568	4.12	121	1,770	<0.0100	<0.00500	0.0688	0.350	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00553	<0.000200	<0.00500	0.00525	<0.00500	<0.00500	<0.00500	0.0345
	07/25/2012		1,130	0.450	5.11	117	3,570	0.0114	<0.00500	0.106	0.535	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00593	<0.000200	<0.00500	0.00664	<0.00500	<0.00500	<0.00500	0.0714
	02/26/2013		540	0.519	4.21	115	1,650	<0.0100	<0.00500	0.0870	0.300	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00566	<0.00500	<0.00500	<0.00500	0.0629
	08/22/2013		487	0.645	3.43	92.6	1,430	<0.0100	<0.00500	0.0857	0.241	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00512
	08/22/2013	FD	475	0.672	3.38	95.7	1,670	0.0182	<0.00500	0.0864	0.237	<0.00200	0.0143	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00900	<0.00500	<0.00500	<0.00500	<0.00500
	02/26/2014		264	0.576	2.34	72.3	850	0.0120	<0.00500	0.0793	0.227	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0157	<0.000200	<0.00500	0.0122	<0.00500	<0.00500	<0.00500	0.0333
	02/26/2014	FD	288	0.555	2.51	76.0	950	0.0435	<0.00500	0.0753	0.204	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0165	<0.000200	<0.00500	0.0123	<0.00500	<0.00500	<0.00500	0.0350
	08/19/2014		233	0.592	2.48	84.5	774	0.0461	<0.00500	0.269	0.279	<0.00200	0.0352	<0.00500	<0.00500	0.263	<0.00500	0.0204	<0.000200	<0.00500	0.0261	<0.00500	<0.00500	<0.00500	0.00854
	08/19/2014	FD	241	0.627	2.59	84.7	820	0.0208	<0.00500	0.0846	0.236	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0106	<0.000200	<0.00500	0.00943	<0.00500	<0.00500	<0.00500	0.00640
	02/26/2015		140	0.87	2.3	82	630	<0.035	0.0046	0.070	0.22	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0032 J	<0.0049	<0.0074	<0.0028	0.0025 J	0.014 J
	02/26/2015	FD	130	0.86	2.4	85	660	0.089 J	0.0046	0.069	0.21	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0030 J	<0.0049	<0.0074	<0.0028	0.0025 J	0.013 J
	08/26/2015		236	0.789	2.86	70.9	888	<0.0350	0.00422	0.0875	0.185 J	<0.000160	0.00105 J	<0.000260	0.000732 J	<0.0141	<0.000240	<0.000250	<0.0000490	0.0107	0.00168 J	0.00138 J	<0.000310	0.00179 J	0.00486 J
	03/08/2016		297	0.749	2.81	63.2	1,170	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/2016		470	0.749	2.93	90.3	1,660	0.00479 JB	0.00383	0.0919	0.191	<0.000160	0.00129 JB	<0.000260	0.000646 JB	0.0268 JB	<0.000240	0.00104 JB	<0.0000490	0.00287 J	0.000547 JB	0.00148 J	<0.000310	0.00312 J	0.00397 J
	02/08/2017		302	0.735	2.39	57.6	864	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/2017		236	0.832	2.02	57.8	907	0.00686 JB	0.00365	0.104	0.148	<0.000160	0.000704 J	<0.000260	0.00395 J	<0.0150	<0.000240	0.000510 J	<0.0000490	0.00328 J	0.0123	0.00143 J	<0.000310	0.00208 J	0.0241 J
	08/16/2017	FD	257	0.626	2.08	61.8	944	<0.00515	0.00351	0.103	0.151	<0.000160	0.000627 J	<0.000260	0.00304 J	<0.0150	<0.000240	0.000995 JB	<0.0000490	0.00317 J	0.00919	0.00138 J	<0.000310	0.00220 J	0.0207 J
	04/05/2018		176	0.797	1.48	61.3	722	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/01/2018		292	0.706	2.96	85.6	1,270	0.00731 JB	0.00196 J	0.0939	0.145 J	<0.000160	0.000756 JB	0.00133 J	0.00446 JB	<0.0150	<0.000240	0.0179	<0.0000490	0.00480 J	0.0726	0.00109 J	<0.000310	0.00250 J	0.0926
	04/04/2019		276	0.647	2.32	81.8	1,090	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/24/2019		323	0.671	3.76	126	1,220	<0.00515	0.00135 J	0.0639	0.162 J	<0.000160	<0.000540	0.00261	0.00138 JB	<0.0150	<0.000240	0.0406	<0.0000490	0.00358 J	0.181	0.00146 JB	<0.000310	0.00274 J	0.0196 J
	06/18/2020		299	0.657	2.88	168	1,290	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/08/2020		--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)	--(1)
	04/15/2021		--(1)	--(1)	--(1)	--(1)	--(1)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021																						
MW-19R	09/16/2021		297	0.643	2.37	65.2	1,060	0.0302 J	0.00316	0.112	0.166 J	<0.000150	<0.00124	0.000518 J	0.00355 JB	<0.0281	<0.000849	0.0160	<0.000100	0.00424 J	0.0142	0.00150 J	<0.0000700	0.00244 J	0.0329
MW-20	08/23/2010		169	0.570	1.74	65.1	868	0.0891	<0.00500	0.122	0.143	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00970
	02/25/2011		187	0.603	2.58	66.3	840	<0.0100	<0.00500	0.120	0.150	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0643
	07/18/2011		148	0.765	2.06	51.3	1,020	<0.0100	<0.00500	0.134	0.159	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0278
	01/31/2012		174	0.641	2.51	61.4	726	<0.0100	<0.00500	0.114	0.149	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0171
	07/25/2012		189	0.742	2.24	56.0	848	<0.0100	<0.00500	0.107	0.217	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0187
	02/22/2013		155	0.570	2.26	55.8	600	0.0294	<0.00500	0.102	0.164	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0165
	08/20/2013		180	0.755	2.40	60.4	736	0.0104	<0.00500	0.102	0.172	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00966	<0.000200	<0.00500	0.0112	<0.00500	<0.00500	<0.00500	0.0242
	02/26/2014		159	0.664	2.70	53.4	696	<0.0100	<0.00500	0.112	0.173	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0107	<0.000200	<0.00500	0.00800	<0.00500	<0.00500	<0.00500	0.00954
	08/19/2014		138	0.574	2.09	58.5	672	0.290	<0.00500	0.108	0.194	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0116
	02/24/2015		120	0.65	2.6	56	690	0.038 J	0.0031	0.11	0.17 J	<0.00070	0.0020 J	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0024 J	<0.0049	<0.0074	<0.0028	0.0026 J	0.023 J
	08/25/2015		130	0.822	2.61	65.7	750	<0.0350	0.00396	0.108	0.180 J	<0.000160	0.000955 J	<0.000260	0.00109 J	<0.0141	<0.000240	<0.000250	<0.0000490	0.00167 J	0.000669 J	0.00141 J	<0.000310	0.00254 J	0.00578 J
	08/16/2016		137	0.663	2.50	59.9	652	0.00470 JB	0.00389	0.108	0.177	<0.000160	0.00177 JB	<0.000260	0.00552	0.0167 JB	0.000352 JB	0.000461 JB	<0.0000490	0.00236 J	0.000656 JB	0.00145 J	<0.000310	0.00275 J	0.00757 J
	08/17/2017		164	0.802	3.12	53.8	757	0.00779 JB	0.00353	0.112	0.152	<0.000160	0.000878 J	<0.000260	0.00200 J	<0.0150	<0.000240	0.000300 J	<0.0000490	0.00241 J	0.00383	0.00130 J	<0.000310	0.00222 J	0.0218 J
	10/01/2018		180	0.713	3.86	49.3	785	0.0130 JB	0.00195 J	0.119	0.156 J	<0.000160	0.00145 JB	0.00462	0.000825 JB	<0.0150	<0.000240	0.0259	<0.0000490	0.0270	0.142	0.00114 J	<0.000310	0.00196 J	0.0702
	10/24/2019		202	0.766	3.97	42.4	825	<0.00515	0.00342	0.139	0.164 J	<0.000160	0.00133 JB	<0.000260	<0.000520	<0.0150	<0.000240	0.000407 J	<0.0000490	0.0144	0.0135	0.00136 JB	<0.000310	0.00208 J	0.0260
	10/08/2020		167	0.786	4.47	54.5	762	<0.0554	0.00367	0.122	0.182 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100 [R	0.00276 J	0.00103 J	0.00117 J	<0.000513	<0.00754	0.0150 J
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021																						
MW-20R	09/16/2021		114	0.724	11.7	73.7	688	<0.0185	0.00322	0.114	0.195 J	<0.000150	<0.00124	0.000467 J	0.00401 JB	<0.0281	<0.000849	0.0109	<0.000100	0.0242	0.00560	0.00167 J	<0.0000700	0.00303 J	0.0399

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-21	08/23/2010		115	0.250	2.12	52.7	966	0.195	<0.00500	0.232	0.208	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0567	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00898	0.0307
	02/28/2011		182	0.257	3.02	56.7	1,050	<0.0100	<0.00500	0.258	0.257	<0.00200	0.00620	<0.00500	<0.00500	<0.200	<0.00500	0.102	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.0101	0.0184
	02/28/2011	FD	183	0.249	2.99	56.3	1,000	<0.0100	<0.00500	0.256	0.252	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.101	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00975	0.0213
	07/19/2011		191	0.163	2.62	57.0	1,250	<0.0100	<0.00500	0.242	0.225	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0346	<0.000200	<0.00500	0.00836	<0.00500	<0.00500	0.00873	0.0286
	01/31/2012		200	0.229	2.84	64.7	1,040	<0.0100	<0.00500	0.245	0.216	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0375	<0.000200	<0.00500	0.00746	<0.00500	<0.00500	0.00704	0.0170
	07/26/2012		186	0.306	2.64	60.4	1,130	<0.0100	<0.00500	0.244	0.261	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0380	<0.000200	<0.00500	0.00827	<0.00500	<0.00500	0.00862	0.0163
	02/22/2013		160	0.246	2.86	78.3	968	0.0818	<0.00500	0.224	0.286	<0.00200	0.0364	<0.00500	<0.00500	0.403	<0.00500	0.0467	<0.000200	<0.00500	0.0409	<0.00500	<0.00500	0.00962	0.0319
	08/20/2013		156	0.268	3.96	82.5	972	<0.0100	<0.00500	0.179	0.308	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0668	<0.000200	<0.00500	0.0219	<0.00500	<0.00500	0.00936	0.0195
	02/25/2014		134	0.213	3.78	75.9	918	<0.0100	<0.00500	0.187	0.335	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0709	<0.000200	<0.00500	0.0171	<0.00500	<0.00500	0.00939	0.0531
	08/19/2014		156	0.250	3.35	72.7	938	0.0299	<0.00500	0.180	0.350	<0.00200	<0.00500	<0.00500	<0.00500	0.344	<0.00500	0.0439	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00844	0.0208
	02/24/2015		160	0.32	3.7	70	1,100	<0.035	0.0017 J	0.21	0.36	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	0.00032 J	0.028	<0.000049	0.00074 J	<0.0049	<0.0074	<0.0028	0.0089 J	0.025 J
	08/25/2015		197	0.341	3.06	77.0	1,430	<0.0350	0.00221	0.224	0.369	<0.000160	0.000810 J	<0.000260	0.000702 J	<0.0141	0.000854 J	0.0110	<0.0000490	<0.00160	0.00180 J	0.000525 J	<0.000310	0.00837 J	0.00615 J
	08/16/2016		131	0.253	4.05	71.7	--	0.00210 JB	0.00147 J	0.171	0.460	<0.000160	0.00115 JB	<0.000260	0.000881 JB	<0.0150	<0.000240	0.00793	--	0.000639 J	0.00167 JB	0.000702 J	<0.000310	0.00920 J	0.00432 J
	08/17/2017		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/01/2018		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/24/2019		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/08/2020		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/16/2021		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	08/23/2010		115	0.552	1.76	62.3	726	0.121	<0.00500	0.165	0.174	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0306	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00604	0.0916
	02/28/2011		117	0.587	2.36	68.6	678	<0.0100	<0.00500	0.146	0.173	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0108	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00616	0.0487
	07/19/2011		107	0.568	2.06	64.1	740	<0.0100	<0.00500	0.150	0.178	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00721	<0.000200	<0.00500	0.00546	<0.00500	<0.00500	0.00638	0.0203
	01/31/2012		141	0.570	2.26	74.3	766	<0.0100	<0.00500	0.151	0.141	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0103	<0.000200	<0.00500	0.00762	<0.00500	<0.00500	0.00501	0.0183
	07/26/2012		149	0.628	2.09	68.3	830	<0.0100	<0.00500	0.143	0.196	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00949	<0.000200	<0.00500	0.00839	<0.00500	<0.00500	0.00564	0.00680
	02/21/2013		178	0.500	2.30	80.4	798	0.0231	<0.00500	0.145	0.180	<0.00200	0.0305	<0.00500	<0.00500	0.269	<0.00500	0.0386	<0.000200	<0.00500	0.0520	<0.00500	<0.00500	0.00590	0.0208
	08/21/2013		176	0.606	2.94	83.0	890	<0.0100	<0.00500	0.137	0.210	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0233	<0.000200	<0.00500	0.0209	<0.00500	<0.00500	0.00658	0.00566
	02/25/2014		172	0.416	3.53	85.2	842	<0.0100	<0.00500	0.143	0.204	<0.00200	0.0133	<0.00500	<0.00500	<0.200	<0.00500	0.0238	<0.000200	<0.00500	0.0266	<0.00500	<0.00500	0.00632	0.0150
	08/20/2014		120	1.00	2.36	127	738	40.3	0.00642	0.141	0.239	<0.00200	0.184	<0.00500	0.00983	4.32	0.00743	0.0715	<0.000200	0.00881	0.0999	<0.00500	<0.00500	0.0336	0.0370
	02/24/2015		110	0.57	3.3	81	820	0.037 J	0.0025	0.18	0.21	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	0.00077 J	0.0026 J	<0.000049	0.0014 J	<0.0049	<0.0074	<0.0028	0.012	0.019 J
	08/25/2015		118	0.618	4.85	81.1	928	0.0452 J	0.00279	0.167	0.208	<0.000160	0.00139 J	0.000337 J	0.000760 J	<0.0141	<0.000240	0.00253 J	<0.0000490	<0.00160	0.00240	<0.000380	<0.000310	0.00934 J	0.00438 J
	08/16/2016		128	0.577	5.86	57.6	827	0.00281 JB	0.00241	0.150	0.190	<0.000160	0.00199 JB	<0.000260	0.000854 JB	<0.0150	<0.000240	0.00134 JB	<0.0000490	0.00142 J	0.00143 JB	0.000387 J	<0.000310	0.00865 J	0.00380 J
	08/17/2017		87.4	0.644	48.6	53.6	700	0.00751 JB	0.00196 J	0.130	0.159	<0.000160	0.00103 J	<0.000260	0.000730 J	<0.0150	<0.000240	0.000893 J	<0.0000490	0.00161 J	0.0670	0.000652 J	<0.000310	0.00690 J	0.00439 J
	10/01/2018		34.3	0.652	12.9	46.7	883	0.00765 JB	0.00219	0.121	0.190 J	<0.000160	0.00267 B	<0.000260	0.00812	<0.0150	0.000354 JB	0.000828 JB	<0.0000490	0.00183 J	0.0219	0.000795 J	<0.000310	0.00585 J	0.0566
	10/24/2019		61.9	0.775	6.54	42.7	637	<0.00515	0.00238	0.122	0.184 J	<0.000160	0.00289	<0.000260	0.0144	<0.0150	0.000482 J	0.000636 J	<0.0000490	0.00214 J	0.0150	0.000956 JB	<0.000310	0.00609 J	0.130
	10/08/2020		49.2	0.800	5.85	41.1	651	<0.0554	0.00225	0.106	0.216	<0.000478	0.00593	<0.000477	0.0113	<0.0489	<0.00249	<0.00132	0.000100 J	0.00280 J	0.0109	<0.000657	<0.000513	<0.00754	0.105
	09/16/2021		53.8	0.742	3.58	58.4	659	0.0236 J	0.00209	0.103	0.205	<0.000150	0.00865	<0.0000596	0.00392 JB	<0.0281	<0.000849	<0.000704	<0.000100	0.00330 J	0.00983	<0.000300	<0.0000700	0.00889 J	0.0140 J
MW-23	08/23/2010		645	0.782	2.92	121	2,260	0.237	<0.00500	0.245	0.157	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00669	<0.000200	<0.00500	0.00859	<0.00500	<0.00500	<0.00500	0.0570
	02/28/2011		511	0.676	3.47	81.9	1,540	<0.0100	<0.00500	0.164	0.151	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00831	<0.000200	<0.00500	0.00930	<0.00500	<0.00500	<0.00500	0.0463
	07/19/2011		712	0.670	3.79	108	3,090	<0.0100	<0.00500	0.272	0.181	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00647	<0.000200	<0.00500	0.00912	<0.00500	<0.00500	<0.00500	0.0213
	02/01/2012		887	0.697	4.07	85.4	2,720	0.0108	<0.00500	0.268	0.159	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00658	<0.000200	<0.00500	0.00714	<0.00500	<0.00500	<0.00500	0.0207
	07/26/2012		774	0.750	3.45	100	3,060	<0.0100	<0.00500	0.252	0.198	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0101
	02/26/2013		662	0.690	3.46	93.9	2,040	<0.0100	<0.00500	0.170	0.196	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00944	<0.000200	<0.00500	0.0155	<0.00500	<0.00500	<0.00500	0.0179
	08/21/2013		530	0.808	3.29	115	1,910	<0.0100	<0.00500	0.141	0.207	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0315	<0.000200	<0.00500	0.0286	<0.00500	<0.00500	0.00533	0.00919
	02/25/2014		574	0.605	3.41	89.0	1,860	<0.0100	<0.00500	0.162	0.198	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0486	<0.000200	<0.00500	0.0410	<0.00500	<0.00500	<0.00500	0.0224
	08/21/2014		443	0.792	2.89	98.1	1,680	0.0606	<0.00500	0.147	0.138	<0.00200	0.0129	<0.00500	<0.00500	<0.200	<0.00500	0.157	<0.000200	0.00522	0.0719	<0.00500	<0.00500	<0.00500	0.0104
	02/25/2015		57	0.63	3.1	92	1,000	0.042 J	0.0024	0.11	0.21	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	0.00031 J	<0.0012	<0.000049	0.0017 J	<0.0049	<0.0074	<0.0028	0.0052 J	0.046 J
	08/25/2015		431	0.874	4.39	91.9	2,190	<0.0350	0.00255	0.152	0.195 J	<0.000160	0.00188 J	<0.000260	0.00198 J	<0.0141	0.000316 J	0.00167 J	<0.0000490	<0.00160	0.00187 J	0.00147 J	<0.000310	0.00508 J	0.00494 J
	08/17/2016		411	0.792	3.02	88.5	1,400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/2017		237	0.917	2.45	97.4	1,050	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/01/2018		27.0	0.825	1.93	47.0	720	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/24/2019		--[1]	--[1]	4.67	--[1]	--[1]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/13/2020		DRY WELL - PLUGGED AND ABANDONED AUGUST 2020																						
MW-23R	10/08/2020		191	1.26	3.37	89.2	754	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/16/2021		176	1.01	3.85	100	793	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Received by OCD: 4/18/2022 4:17:12 PM

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-24	08/24/2010		34.6	2.31	2.40	53.9	422	0.187	<0.00500	0.0867	0.140	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00922
	02/28/2011		39.6	2.16	2.94	55.3	414	<0.0100	<0.00500	0.0878	0.154	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00634	<0.00500	<0.00500	<0.00500	0.0245
	07/14/2011		43.1	1.55	2.38	48.1	504	<0.0100	<0.00500	0.0932	0.173	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00543	<0.00500	<0.00500	<0.00500	0.0249
	02/01/2012		50.6	2.42	2.32	62.3	418	<0.0100	<0.00500	0.0946	0.127	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00760	<0.000200	<0.00500	0.00725	<0.00500	<0.00500	<0.00500	0.0101
	07/30/2012		51.8	2.42	2.39	55.1	420	<0.0100	<0.00500	0.0889	0.179	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00508	<0.000200	<0.00500	0.00758	<0.00500	<0.00500	<0.00500	0.0127
	07/30/2012	FD	55.5	2.34	2.34	58.8	446	<0.0100	<0.00500	0.0851	0.160	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00731	<0.00500	<0.00500	<0.00500	0.0155
	02/26/2013		46.6	2.39	2.05	68.6	442	<0.0100	<0.00500	0.0913	0.187	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0106	<0.000200	<0.00500	0.0165	<0.00500	<0.00500	<0.00500	0.0151
	08/21/2013		56.5	2.77	2.04	55.6	426	<0.0100	<0.00500	0.0856	0.183	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0146	<0.000200	<0.00500	0.0157	<0.00500	<0.00500	<0.00500	0.00684
	02/27/2014		37.3	2.28	2.11	51.3	396	0.0247	<0.00500	0.0803	0.197	<0.00200	0.0128	<0.00500	<0.00500	<0.200	<0.00500	0.0139	<0.000200	<0.00500	0.0213	<0.00500	<0.00500	<0.00500	0.0207
	08/21/2014		29.2	2.76	2.39	44.0	368	0.270	<0.00500	0.0901	0.117	<0.00200	0.258	<0.00500	0.00634	1.28	<0.00500	0.0383	<0.000200	0.00911	0.135	<0.00500	<0.00500	<0.00500	0.0114
	02/25/2015		24	2.7	2.8	42	360	0.040 J	0.0055	0.078	0.19 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0025 J	<0.0049	<0.0074	<0.0028	0.0026 J	0.013 J
	08/25/2015		25.5	2.75	2.95	43.2	494	<0.0350	0.00600	0.0765	0.177 J	<0.000160	<0.000540	<0.000260	0.000742 J	<0.0141	<0.000240	0.000287 J	<0.0000490	0.00185 J	0.000580 J	0.00102 J	<0.000310	0.00239 J	0.00575 J
	08/16/2016		26.0	2.78	2.83	42.9	407	0.00364 JB	0.00606	0.0725	0.168	<0.000160	0.00155 JB	<0.000260	0.00302 JB	0.0247 JB	<0.000240	0.000485 JB	<0.0000490	0.00290 J	0.000402 JB	0.00140 J	<0.000310	0.00237 J	0.00752 J
	08/17/2017		40.5	2.96	2.86	45.2	388	0.0133 JB	0.00539	0.0724	0.137	<0.000160	0.00205	<0.000260	0.00136 J	<0.0150	<0.000240	0.000648 J	<0.0000490	0.00245 J	0.00205 B	0.00140 J	<0.000310	0.00209 J	0.00720 J
	10/01/2018		35.8	2.65	3.80	35.3	397	0.0128 JB	0.00565	0.0801	0.136 J	<0.000160	0.00110 JB	<0.000260	0.00636 B	<0.0150	0.000379 JB	0.00140 JB	<0.0000490	0.00228 J	0.0114	0.000648 J	<0.000310	0.00283 J	0.150
	10/24/2019		34.8	2.93	3.69	41.7	344	<0.00515	0.00556	0.0794	0.152 J	<0.000160	0.00101 JB	<0.000260	0.00158 JB	<0.0150	0.000342 J	0.00107 J	0.0000560 JB	0.00279 J	0.00167 J	0.000408 JB	<0.000310	0.00298 J	0.0285
	10/08/2020		21.4	2.68	4.94	36.9	417	<0.0554	0.00547	0.0854	0.166 J	<0.000478	0.00362	<0.000477	<0.00250	<0.0489	<0.00249	0.00401 J	0.000100 J	0.00244 J	0.00104 J	<0.000657	<0.000513	<0.00754	0.0192 J
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021																						
MW-24R	09/16/2021		80.8	2.79	2.51	72.8	455	0.0434 J	0.00479	0.0812	0.132 J	<0.000150	0.0224	<0.0000596	0.00269 JB	<0.0281	<0.000849	<0.000704	<0.000100	0.00939	0.00426	0.00235	<0.0000700	0.00226 J	0.0110 J
MW-25	08/23/2010		178	0.871	2.42	182	946	0.244	<0.00500	0.246	0.174	<0.00200	0.0476	<0.00500	<0.00500	<0.200	<0.00500	0.0109	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0194
	02/28/2011		256	0.729	2.83	93.9	998	<0.0100	<0.00500	0.205	0.198	<0.00200	0.0537	<0.00500	<0.00500	<0.200	<0.00500	0.00715	<0.000200	<0.00500	0.00516	<0.00500	<0.00500	0.00535	0.0424
	07/18/2011		77.8	1.12	3.64	96.2	634	0.0444	<0.00500	0.186	0.173	<0.00200	0.00732	<0.00500	<0.00500	<0.200	<0.00500	0.00608	<0.000200	<0.00500	0.00832	<0.00500	<0.00500	<0.00500	0.00556
	02/01/2012		175	0.813	4.56	84.4	820	<0.0100	<0.00500	0.228	0.175	<0.00200	0.00744	<0.00500	<0.00500	<0.200	<0.00500	0.00804	<0.000200	<0.00500	0.00708	<0.00500	<0.00500	0.00602	0.00582
	07/26/2012		133	0.892	37.1	144	1,110	<0.0100	<0.00500	0.178	0.220	<0.00200	0.00961	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0102
	02/26/2013		109	0.710	19.4	113	788	<0.0100	<0.00500	0.149	0.241	<0.00200	0.00822	<0.00500	<0.00500	<0.200	<0.00500	0.0104	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00807	0.0148
	08/22/2013		314	0.696	3.36	74.7	1,350	<0.0100	<0.00500	0.224	0.262	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0122	<0.000200	<0.00500	0.0210	<0.00500	<0.00500	0.00862	<0.00500
	08/22/2013	FD	310	0.684	3.42	74.3	1,350	<0.0100	<0.00500	0.226	0.263	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0127	<0.000200	<0.00500	0.0210	<0.00500	<0.00500	0.00860	0.00607
	02/26/2014		293	0.476	2.98	69.3	1,100	<0.0100	<0.00500	0.220	0.231	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00881	<0.000200	<0.00500	0.00775	<0.00500	<0.00500	0.00724	0.0210
	02/26/2014	FD	289	0.546	2.98	68.6	1,090	<0.0100	<0.00500	0.213	0.218	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00882	<0.000200	<0.00500	0.00701	<0.00500	<0.00500	0.00645	0.0205
	08/19/2014		302	<0.500	3.06	79.5	1,230	0.285	<0.00500	0.198	0.265	<0.00200	0.154	<0.00500	<0.00500	0.814	<0.00500	0.0456	<0.000200	0.00573	0.100	<0.00500	<0.00500	0.00749	0.0106
	08/19/2014	FD	319	<0.500	2.76	83.5	1,200	0.291	<0.00500	0.201	0.263	<0.00200	0.185	<0.00500	0.00504	0.968	<0.00500	0.0511	<0.000200	0.00638	0.113	<0.00500	<0.00500	0.00764	0.0120
	02/25/2015		38	0.73	3.1	69	870	0.13	0.0023	0.20	0.23	<0.00070	0.0016 J	<0.0023	<0.0053	<0.014	0.00050 J	<0.0012	<0.000049	0.0029 J	0.0056 J	<0.0074	<0.0028	0.0078 J	0.0086 J
	02/25/2015	FD	180	0.71	3.1	69	840	<0.035	0.0023	0.20	0.22	<0.00070	0.0017 J	<0.0023	<0.0053	<0.014	0.00026 J	<0.0012	<0.000049	0.0011 J	0.0054 J	<0.0074	<0.0028	0.0080 J	0.014 J
	08/25/2015		211	0.693	2.96	72.6	1,110	<0.0350	0.00287	0.227	0.216	<0.000160	0.00160 J	0.00119 J	<0.000520	<0.0141	<0.000240	0.00279 J	<0.0000490	<0.00160	0.00514	0.00109 J	<0.000310	0.00732 J	0.00472 J
	08/25/2015	FD	207	0.631	2.9	71.1	1,140	<0.0350	0.00296	0.231	0.214	<0.000160	0.00170 J	0.00113 J	0.00103 J	<0.0141	<0.000240	0.00287 J	<0.0000490	<0.00160	0.00528	0.00102 J	<0.000310	0.00748 J	0.00497 J
	03/09/2016		345	0.618	2.65	68.5	1,140	0.00206 JB	0.00229	0.301	0.214	<0.000160	0.000609 J	0.00141 J	0.000781 J	0.0403 J	<0.000240	0.0386	<0.0000490	0.00171 JB	0.00572 B	0.00054 J	<0.000310	0.00852 J	0.00590 JB
	08/16/2016		292	0.637	1.44	73.9	976	0.00850 JB	0.00248	0.285	0.228	<0.000160	0.00166 JB	0.00171 J	0.00107 JB	0.0293 JB	<0.000240	0.0314	<0.0000490	0.00139 J	0.00617	0.000689 J	<0.000310	0.00928 J	0.00584 J
	08/16/2016	FD	287	0.638	1.50	73.5	1,010	0.00458 JB	0.00262	0.284	0.223	<0.000160	0.00155 JB	0.00179 J	0.000790 JB	0.0474 JB	<0.000240	0.0326	<0.0000490	0.00131 J	0.00570	0.000791 J	<0.000310	0.00939 J	0.00627 J
	02/07/2017		298	0.567	1.64	93.4	1,000	<0.0258	0.00261 J	0.322	0.227	<0.000800	<0.00270	0.00382 J	0.00406 J	<0.0750	<0.00120	0.0478	<0.0000490	0.00306 J	0.0165	0.000505 J	<0.00155	0.0104 J	<0.0128
	08/16/2017		280	0.791	1.52	68.4	996	0.00773 JB	0.00227	0.206	0.171	<0.000160	0.00158 J	0.00522	0.00310 J	<0.0150	<0.000240	<0.000250	0.0000544 J	0.00113 J	0.0556	0.00162 J	<0.000310	0.00588 J	0.0276
	08/16/2017	FD	287	0.600	1.57	71.2	1,050	0.00864 JB	0.00242	0.210	0.181	<0.000160	0.00153 J	0.00520	0.00289 J	<0.0150	<0.000240	<0.000250	<0.0000490	0.00124 J	0.0551	0.00128 J	<0.000310	0.00606 J	0.0262
	04/05/2018		82.6	0.568	2.16	76.4	1,380	<0.00515	0.00232 B	0.293	0.234	<0.000160	0.00101 JB	0.0114	0.00712	<0.0150	<0.000240	0.00523	<0.0000490	0.00158 JB	0.0125	0.00112 JB	<0.000310	0.00814 J	0.0133 J
	04/05/2018	FD	401	0.605	2.17	79.5	1,360	0.102	0.00226 B	0.299	0.229	<0.000160	0.000990 JB	0.0117	0.00671	0.0304 J	0.000307 JB	0.00709	<0.0000490	0.00121 JB	0.0120	0.00107 JB	<0.000310	0.00828 J	0.0153 J
	10/01/2018		284	0.518	3.89	105	1,090	0.0144 JB	0.00260	0.177	0.210	<0.000160	0.00110 JB	0.00874	0.00398 JB	<0.0150	0.000733 JB	0.0225	<0.0000490	0.00111 J	0.0123	0.000987 J	<0.000310	0.00919 J	0.00965 JB
	10/01/2018	FD	288	0.508	3.86	110	1,180	<0.00515	0.00246	0.192	0.209	<0.000160	0.000896 J	0.00925	0.00468 J	<0.0150	0.000421 J	0.0221	<0.0000490	0.00111 J	0.0122	0.000917 J	<0.000310	0.0101	0.00804 J
	04/04/2019		224	0.509	3.84	103	1,040	0.00661 JB	0.00262	0.195	0.225	<0.000160	<0.000540	0.00634	0.00495 J	<0.0150	0.000358 J	0.0317	<0.0000490	0.00163 J	0.0120	0.000430 J	<0.000310	0.00984 J	0.00846 J
	04/04/2019	FD	224	0.500	4.57	104	1,030	<0.00515	0.00243	0.184	0.139 J	<0.000160	<0.000540	0.00605	0.00384 J	<0.0150	0.000480 J	0.0377	<0.0000490	0.00118 J	0.0106	0.000395 J	<0.000310	0.00927 J	0.00656 J
	10/24/2019		232	0.586	3.89	112	986	<0.00515	0.00264	0.223	0.230	<0.000160	0.000564 JB	0.0124	0.0791	<0.0150	0.00292	0.0597	0.0000625 JB	0.00130 J	0.0149	0.00122 JB	<0.000310	0.0102	0.234
	10/24/2019	FD	223	0.572	3.91	107	1,010	<0.00515	0.00261	0.235	0.242	<0.000160	0.000541 J	0.0121	0.0867	<0.0150	0.00509	0.0758	0.0000660 JB	0.00137 J	0.0162	0.000627 J	<0.000310	0.00970 J	0.212
	06/18/2020		368	0.467	3.96	188	1,460	<0.0554	0.00274	0.127	0.297	<0.000478	<0.00149	0.0158	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00121 J	0.0104	<0.000657	<0.000513	0.0115 J	<0.00996
	10/08/2020		390	0.383	2.83	129	1,440	<0.0554	0.00233	0.126	0.275	<0.000478	<0.00149	0.00930	0.00324 J	<0.0489	<0.00249	0.0112	0.000108 J	0.00101 J	0.0189	<0.000657	<0.000513	0.00881 J	0.0261
	04/15/2021		361	0.405	3.80	119	1,320	<0.0185	0.00209	0.142	0.258	<0.000150	<0.00124	0.00562	0.00281 J	<0.0281	<0.000849	<0.000704	<0.000100	0.00123 J	0.00763	<0.000300	<0.0000700	0.0102 J	0.00447 JB
	06/09/2021		PLUGGED AND ABANDONED JUNE 2021																						

Released to Imaging: 7/20/2022 10:39:48 AM

Received by OCD: 4/18/2022 4:17:12 PM

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-26	08/24/2010		217	0.484	2.88	98.5	958	0.115	<0.00500	0.131	0.169	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0156	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0254
	02/28/2011		202	0.517	3.86	125	940	<0.0100	<0.00500	0.110	0.187	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00890	<0.000200	<0.00500	0.00734	<0.00500	<0.00500	0.00602	0.0328
	07/14/2011		184	<0.500	3.95	128	1,030	<0.0100	<0.00500	0.0994	0.192	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00679	<0.000200	<0.00500	0.00792	<0.00500	<0.00500	0.00546	0.00949
	02/01/2012		196	0.568	3.68	131	952	<0.0100	<0.00500	0.0854	0.163	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0122	<0.000200	<0.00500	0.0133	<0.00500	<0.00500	<0.00500	0.00949
	07/26/2012		179	0.647	3.11	121	940	0.0121	<0.00500	0.0966	0.214	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00694	<0.000200	<0.00500	0.00568	<0.00500	<0.00500	0.00559	0.0117
	02/26/2013		144	0.640	4.78	138	760	0.0134	<0.00500	0.103	0.189	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0635	<0.000200	<0.00500	0.0558	<0.00500	<0.00500	<0.00500	0.0233
	08/22/2013		222	0.611	5.55	133	1,170	0.0319	<0.00500	0.0910	0.209	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0174	<0.000200	<0.00500	0.00539	<0.00500	<0.00500	0.00577	0.00877
	02/26/2014		187	0.470	3.11	146	944	0.0236	<0.00500	0.0739	0.198	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00979	<0.000200	<0.00500	0.0128	<0.00500	<0.00500	0.00583	<0.00500
	08/21/2014		67.8	0.511	3.18	78.9	644	0.132	0.00816	0.138	0.167	<0.00200	0.0152	<0.00500	<0.00500	<0.200	<0.00500	0.00938	<0.000200	<0.00500	0.00900	<0.00500	<0.00500	0.00548	0.00770
	02/25/2015		190	0.71	2.3	110	790	0.051 J	0.0024	0.099	0.18 J	<0.00070	<0.0014	<0.0023	<0.0053	0.058 J	<0.00024	0.0022 J	<0.000049	0.0011 J	<0.0049	<0.0074	<0.0028	0.0041 J	0.015 J
	08/25/2015		220	0.670	2.93	143	1,160	<0.0350	0.00263	0.0990	0.181 J	<0.000160	0.000822 J	0.000366 J	0.000593 J	<0.0141	<0.000240	0.00175 J	<0.0000490	<0.00160	0.00104 J	<0.000380	<0.000310	0.00440 J	0.00418 J
	08/17/2016		223	0.645	2.28	122	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/2017		301	0.162	4.06	92.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/01/2018		235	0.466	--	126	1,020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/24/2019		244	0.722	4.11	132	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/13/2020		DRY WELL - PLUGGED AND ABANDONED AUGUST 2020																						
MW-26R	10/08/2020		238	0.530	10.0	131	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/16/2021		329	0.429	11.6	161	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-27	08/18/2010		115	0.644	5.10	118	752	0.218	<0.00500	0.100	0.152	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0534	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00544	0.0453
	02/25/2011		144	0.595	<0.500	78.5	746	<0.0100	<0.00500	0.0985	0.139	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0336	<0.000200	<0.00500	0.00769	<0.00500	<0.00500	0.00625	0.0294
	07/20/2011		150	0.510	1.69	73.2	812	0.0378	<0.00500	0.112	0.165	<0.00200	0.0353	<0.00500	<0.00500	0.393	<0.00500	0.0179	<0.000200	<0.00500	0.0415	<0.00500	<0.00500	0.00571	0.0121
	02/01/2012		164	0.691	2.43	99.8	676	<0.0100	<0.00500	0.0902	0.126	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00556	<0.00800	<0.00500	0.00533	<0.00500	<0.00500	<0.00500	0.0121
	07/26/2012		164	0.680	2.95	65.3	754	0.0155	<0.00500	0.118	0.172	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00587	<0.000200	<0.00500	0.00737	<0.00500	<0.00500	<0.00500	0.0117
	02/26/2013		199	0.647	2.77	70.7	756	<0.0100	<0.00500	0.120	0.184	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0586	<0.000200	0.00513	0.0593	<0.00500	<0.00500	<0.00500	0.0104
	08/20/2013		315	0.562	7.12	75.5	1,180	0.0440	<0.00500	0.162	0.222	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0239	<0.000200	<0.00500	0.0189	<0.00500	<0.00500	0.00899	<0.00500
	02/27/2014		298	0.415	8.00	89.3	1,150	<0.0100	<0.00500	0.139	0.232	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0134	<0.000200	<0.00500	0.0286	<0.00500	<0.00500	0.00680	0.00624
	08/21/2014		256	0.540	4.99	85.1	1,100	0.210	<0.00500	0.126	0.160	<0.00200	0.0447	<0.00500	<0.00500	0.278	<0.00500	0.0636	<0.000200	<0.00500	0.0592	<0.00500	<0.00500	0.00648	0.0182
	02/27/2015		170	1.0	3.8	96	790	<0.035	0.0033	0.084	0.30	<0.00070	0.0038 J	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0029 J	<0.0049	0.0080 J	<0.0028	0.0098 J	<0.0059
	08/26/2015		139	2.27	2.94	95.2	690	<0.0350	0.00353	0.0571	0.264	<0.000160	0.00256	<0.000260	0.000627 J	<0.0141	<0.000240	0.00206 J	<0.0000490	0.0139	0.00405	0.00318	<0.000310	0.00550 J	<0.00256
	03/08/2016		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/18/2016		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/08/2017		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/2017		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/05/2018		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/01/2018		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/04/2019		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/24/2019		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/18/2020		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/08/2020		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/15/2021		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/16/2021		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Released to Imaging: 7/20/2022 10:39:48 AM

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
MW-28	08/24/2010		71.2	1.66	1.70	60.3	440	0.129	<0.00500	0.0846	0.153	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/28/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/23/2011		106	1.57	<0.500	67.4	540	<0.0100	<0.00500	0.0923	0.147	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0190
	07/14/2011		106	1.28	2.40	67.8	732	<0.0100	<0.00500	0.103	0.172	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00658	<0.000200	<0.00500	0.00696	<0.00500	<0.00500	<0.00500	0.0113
	01/30/2012		80.6	1.68	2.53	81.1	572	<0.0100	<0.00500	0.0746	0.152	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0113
	07/24/2012		74.9	1.79	2.33	81.6	500	<0.0100	<0.00500	0.0830	0.204	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00812
	02/19/2013		65.5	1.61	2.57	88.4	468	<0.0100	<0.00500	0.0883	0.174	<0.00200	<0.00500	<0.00500	0.203	<0.200	<0.00500	0.0275	<0.000200	0.0100	<0.00500	<0.00500	<0.00500	<0.00500	0.0466
	08/20/2013		70.4	1.77	2.42	77.4	480	<0.0100	<0.00500	0.0790	0.168	<0.00200	<0.00500	<0.00500	0.0101	<0.200	<0.00500	0.00874	<0.000200	<0.00500	0.00561	<0.00500	<0.00500	<0.00500	0.0168
	02/24/2014		71.7	1.30	2.60	74.2	480	<0.0100	<0.00500	0.0836	0.180	<0.00200	<0.00500	<0.00500	0.00514	<0.200	<0.00500	0.00509	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00674
	08/19/2014		70.0	1.65	2.31	78.2	512	0.947	<0.00500	0.106	0.205	<0.00200	0.0238	<0.00500	0.0396	0.760	<0.00500	0.0128	<0.000200	<0.00500	0.0129	<0.00500	<0.00500	<0.00500	0.0335
	02/23/2015		70	1.6	2.8	72	500	<0.035	0.0040	0.090	0.17 J	<0.00070	<0.0014	<0.0023	0.0055 J	<0.014	<0.00024	<0.0012	<0.000049	0.0018 J	<0.0049	<0.0074	<0.0028	0.0025 J	0.017 J
	08/27/2015		142	3.07	3.08	143	549	<0.0350	0.00433	0.0849	0.171	<0.000160	<0.000540	<0.000260	0.00598	0.0385 J	<0.000240	0.000680 J	<0.0000490	0.00186 J	<0.000350	0.00220	<0.000310	0.00238 J	0.00393 J
	03/07/2016		73.1	1.62	3.31	70.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/15/2016		73.2	1.37	3.08	70.6	612	0.00413 JB	0.00448	0.0819	0.167	<0.000160	0.00104 JB	<0.000260	0.00860	0.0226 JB	<0.000240	0.000376 JB	<0.0000490	0.00221 J	0.000525 JB	0.00268	<0.000310	0.00266 J	0.00540 J
	02/06/2017		79.1	1.63	3.92	98.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/2017		66.3	1.82	4.02	97.5	524	0.0112 JB	0.00383	0.0715	0.136	<0.000160	<0.000540	<0.000260	0.00523	<0.0150	<0.000240	<0.000250	<0.0000490	0.00227 J	0.00178 JB	0.00158 J	<0.000310	0.00252 J	0.00955 J
	04/05/2018		63.1	1.74	4.11	99.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/01/2018		63.6	1.76	3.91	92.2	490	0.0229 JB	0.00430	0.0754	0.135 J	<0.000160	0.000809 JB	<0.000260	0.00409 JB	<0.0150	<0.000240	0.000260 JB	<0.0000490	0.00187 J	0.00286	0.00237	<0.000310	0.00250 J	0.0226 JB
	04/04/2019		75.3	1.76	3.69	80.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/24/2019		87.8	2.04	3.40	79.9	519	<0.00515	0.00394	0.0920	0.144 J	<0.000160	0.000804 J	<0.000260	0.00468 J	<0.0150	0.000284 J	0.00166 J	0.0000569 JB	0.00182 J	0.00149 J	0.00177 J	<0.000310	0.00242 J	0.0290
	06/18/2020		103	2.11	3.45	76.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/08/2020		152	1.81	3.41	98.8	664	<0.0554	0.00389	0.111	0.167 J	<0.000478	<0.00149	<0.000477	0.00502	<0.0489	<0.00249	0.00169 J	<0.000100 [R	0.00292 J	0.00132 J	0.00216	<0.000513	<0.00754	0.0305
	04/15/2021		119	1.91	4.06	84.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/16/2021		141	1.86	4.12	79.2	639	0.0243 J	0.00393	0.105	0.166 J	<0.000150	<0.00124	<0.0000596	0.00567 B	0.0285 JB	<0.000849	<0.000704	<0.000100	0.00195 J	<0.000816	0.00243	<0.0000700	0.00254 J	0.00556 J
MW-29	08/24/2010		456	0.753	2.18	167	726	0.0261	<0.00500	0.0644	0.189	<0.00200	0.0317	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0375
	08/24/2010	FD	132	0.741	2.15	100	742	<0.0100	<0.00500	0.0652	0.186	<0.00200	0.0321	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0301
	02/28/2011		119	0.819	3.05	101	670	<0.0100	<0.00500	0.0630	0.195	<0.00200	0.0694	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0267
	07/14/2011		135	0.707	2.61	71.6	798	<0.0100	<0.00500	0.0652	0.189	<0.00200	0.162	<0.00500	<0.00500	<0.200	<0.00500	0.00532	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0240
	01/30/2012		152	0.769	3.22	96.3	898	<0.0100	<0.00500	0.0580	0.181	<0.00200	0.106	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0240
	07/24/2012		250	0.828	4.08	90.1	1,120	<0.0100	<0.00500	0.0978	0.249	<0.00200	0.261	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0162
	02/26/2013		159	0.788	2.90	82.4	722	<0.0100	<0.00500	0.0857	0.182	<0.00200	0.0690	<0.00500	<0.00500	<0.200	<0.00500	0.0471	<0.000200	<0.00500	0.0334	<0.00500	<0.00500	<0.00500	0.0132
	08/20/2013		152	0.934	2.95	96.2	654	<0.0100	<0.00500	0.0738	0.187	<0.00200	0.117	<0.00500	<0.00500	<0.200	<0.00500	0.0159	<0.000200	<0.00500	0.00667	<0.00500	<0.00500	<0.00500	<0.00500
	02/27/2014		141	0.811	3.22	74.4	660	<0.0100	<0.00500	0.0725	0.171	<0.00200	0.250	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0115
	02/27/2014	FD	141	0.819	3.37	74.3	690	<0.0100	<0.00500	0.0764	0.183	<0.00200	0.261	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00739
	08/20/2014		177	0.809	3.44	72.9	826	0.188	<0.00500	0.106	0.134	<0.00200	0.331	<0.00500	<0.00500	0.697	<0.00500	0.0754	<0.000200	0.00594	0.0777	<0.00500	<0.00500	<0.00500	0.00902
	02/25/2015		250	0.95	5.6	90	1,000	<0.035	0.0020	0.13	0.26	<0.00070	0.24	<0.0023	<0.0053	<0.014	<0.00024	<0.0012	<0.000049	0.0012 J	<0.0049	<0.0074	<0.0028	0.0062 J	0.013 J
	08/27/2015		247	0.573	6.77	81.8	1,220	<0.0350	0.00246	0.0884	0.238	<0.000160	0.130	<0.000260	0.000784 J	<0.0141	<0.000240	0.00153 J	<0.0000490	0.00111 J	0.000629 J	0.00169 J	<0.000310	0.00641 J	0.00333 J
	03/08/2016		--	--	--	--	--	0.00829 JB	0.00465	0.0757	0.165	<0.000160	0.00111 J	<0.000260	0.000558 J	<0.0150	<0.000240	0.000652 JB	<0.0000490	0.00482 J	0.00069 JB	0.00190 J	<0.000310	0.00213 J	<0.00256
	08/17/2016		171	0.693	4.61	81.5	349	<0.00200	0.00253	0.0851	0.204	<0.000160	0.00897	<0.000260	0.000863 JB	<0.0150	<0.000240	0.00135 JB	<0.0000490	0.00204 J	0.00119 JB	0.00140 J	<0.000310	0.00380 J	0.00330 JB
	02/09/2017		--	--	--	--	--	<0.0258	0.00263 J	0.0932	0.203	<0.000800	0.00552 J	<0.00130	0.00328 J	<0.0750	<0.00120	0.0150 J	<0.0000490	0.00291 J	0.00524 J	0.00148 J	<0.00155	0.00391 J	<0.0128
	08/17/2017		201	0.723	4.76	86.4	920	0.00798 JB	0.00242	0.0870	0.172	<0.000160	0.0178	<0.000260	0.00489 J	<0.0150	<0.000240	0.000305 J	<0.0000490	0.00200 J	0.00567	0.00181 J	<0.000310	0.00451 J	0.0308
	04/05/2018		--	--	--	--	--	<0.00515	0.00299	0.174	0.215	<0.000160	0.0268	<0.000260	0.00876	<0.0150	0.000398 JB	0.000735 JB	<0.0000490	0.00174 JB	0.0427	0.00163 JB	<0.000310	0.00571 J	0.162
	10/01/2018		175	0.490	5.62	113	1,010	<0.00515	0.00307	0.256	0.193 J	<0.000160	0.0293	<0.000260	0.00362 J	<0.0150	<0.000240	0.00110 J	<0.0000490	0.00122 J	0.00607	0.00193 J	<0.000310	0.00618 J	0.0644
	04/04/2019		--	--	--	--	--	0.0106 JB	0.00252	0.109	0.203	<0.000160	0.0171	<0.000260	0.00635	<0.0150	<0.000240	0.000417 J	<0.0000490	0.00157 J	0.00320	0.00116 J	<0.000310	0.00448 J	0.0829
	10/24/2019		264	0.674	5.33	87.7	1,000	<0.00515	0.00227	0.117	0.193 J	<0.000160	0.0528	<0.000260	0.00457 J	<0.0150	<0.000240	0.00139 J	0.0000693 JB	0.00144 J	0.00230	0.00168 J	<0.000310	0.00539 J	0.0628
	10/24/2019	FD	258	0.649	5.32	87.9	1,060	<0.00515	0.00230	0.113	0.207	<0.000160	0.0560	<0.000260	0.00949	<0.0150	0.000462 J	0.00170 J	0.0000681 JB	0.00145 J	0.00382	0.00161 J	<0.000310	0.00535 J	0.0811
	06/18/2020		--	--	--	--	--	<0.0554	0.00259	0.0880	0.194 J	<0.000478	0.0163	<0.000477	0.00330 J	<0.0489	<0.00249	<0.00132	<0.000100	0.00169 J	0.00189 J	0.00136 J	<0.000513	<0.00754	0.0215 J
	10/08/2020		150	0.748	6.90	96.1	705	<0.0554	0.00296	0.0672	0.177 J	<0.000478	0.00364	<0.000477	0.00283 J	<0.0489	<0.00249	<0.00132	<0.000100 [R	0.00217 J	<0.000952	0.00178 J	<0.000513	<0.00754	0.0271
	04/15/2021		--	--	--	--	--	<0.0185	0.00241	0.0834	0.191 J	<0.000150	0.00334	<0.0000596	0.00235 J	<0.0281	<0.000849	<0.000704	<0.000100	0.00185 J	0.00125 J	0.00137 J	<0.0000700	0.00355 J	0.0101 JB
	09/16/2021		187	0.672	6.40	76.8	827	<0.0185	0.00464	0.133	0.188 J	0.000543 J	0.00141 J	0.0000838 J	0.00757 B	<0.0281	<0.000849	0.00807	<0.000100	0.00263 J	0.00309	0.00137 J	<0.0000700	0.00361 J	0.0788

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			250	1.6	10.0	600.0	1,000	5.0	0.01	2	0.75	0.005	0.05	0.05	1.0	1.0	0.015	0.2	0.002	1.0	0.2	0.05	0.05	0.03	10.0
MW-30	06/21/2013		51.2	1.87	3.51	96.7	426	0.0436	0.00588	0.0424	0.164	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	0.00913	<0.00500	0.00554	<0.00500	<0.00500	<0.00500
	08/20/2013		63.7	1.59	2.85	87.0	438	<0.0100	<0.00500	0.0761	0.159	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0589	<0.000200	<0.00500	0.0263	<0.00500	<0.00500	<0.00500	<0.00500
	02/27/2014		64.0	1.07	2.96	90.0	476	0.0201	<0.00500	0.0672	0.180	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0644	<0.000200	0.00588	0.0516	<0.00500	<0.00500	<0.00500	<0.00500
	08/22/2014		61.1	1.45	2.75	84.5	444	0.132	<0.00500	0.0736	<0.0200	<0.00200	0.0137	<0.00500	<0.00500	<0.200	<0.00500	0.148	<0.000200	0.00597	0.0485	<0.00500	<0.00500	<0.00500	<0.00500
	02/25/2015		75	1.4	3.1	81	460	0.077 J	0.0043	0.073	0.16 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	0.0066 J	<0.000049	0.0027 J	<0.0049	<0.0074	<0.0028	0.0018 J	<0.0059
	08/28/2015		83.6	1.61	3.97	86.2	525	<0.0350	0.00478	0.0757	0.163	<0.000160	<0.000540	<0.000260	0.000922 J	<0.0141	<0.000240	0.00315 J	<0.0000490	0.00248 J	0.00109 J	0.00177 J	<0.000310	0.00203 J	<0.00256
	03/08/2016		70.6	1.3	3.53	83	450	0.00402 JB	0.00375	0.0711	0.152	<0.000160	0.0032	<0.000260	0.000933 J	<0.0150	<0.000240	0.000911 JB	<0.0000490	0.00219 J	0.000955 JB	0.00253	<0.000310	0.00187 J	<0.00256
	03/08/2016	FD	70.4	1.3	3.54	83	464	0.00986 JB	0.00457	0.071	0.154	<0.000160	0.00148 J	<0.000260	0.00123 JB	<0.0150	0.000299 JB	0.000664 JB	<0.0000490	0.00479 J	0.000797 JB	0.00175 J	0.000842 J	0.00197 J	0.00268 JB
	08/16/2016		71.6	1.29	3.24	87.5	534	0.00299 JB	0.00476	0.0734	0.175	<0.000160	0.00110 JB	<0.000260	<0.000520	<0.0150	<0.000240	0.00222 JB	<0.0000490	0.00263 J	0.000470 JB	0.00198 J	<0.000310	0.00223 J	<0.00256
	08/16/2016	FD	75.5	1.29	3.22	87.7	491	0.0189 JB	0.00479	0.0733	0.175	<0.000160	0.00110 JB	<0.000260	0.00371 JB	<0.0150	<0.000240	0.00228 JB	<0.0000490	0.00252 J	0.000495 JB	0.00210	<0.000310	0.00224 J	<0.00256
	02/09/2017		71.7	1.26	3.52	87.3	497	<0.0258	0.00428 J	0.0852	0.182	<0.000800	<0.00270	<0.00130	0.00675 J	<0.0750	<0.00120	0.0332	<0.0000490	0.00302 J	0.00266 J	0.00191 J	<0.00155	0.00227 J	<0.0128
	08/16/2017		68.3	1.31	3.38	78.9	468	0.0259 JB	0.00436	0.0735	0.159	<0.000160	0.00104 J	<0.000260	0.000947 J	<0.0150	<0.000240	0.000987 J	<0.0000490	0.00229 J	0.00289	0.00205	<0.000310	0.00216 J	0.00591 J
	08/16/2017	FD	68.4	1.05	3.50	82.2	479	0.0132 JB	0.00431	0.0727	0.158	<0.000160	0.00103 J	<0.000260	0.000862 J	<0.0150	<0.000240	0.000551 JB	<0.0000490	0.00218 J	0.00280	0.00196 J	<0.000310	0.00213 J	0.00628 J
	04/05/2018		70.8	1.19	3.35	77.2	474	<0.00515	0.00457	0.0723	0.184 J	<0.000160	0.000946 JB	<0.000260	0.00170 JB	<0.0150	<0.000240	0.000941 JB	<0.0000490	0.00218 JB	0.00870	0.00199 JB	<0.000310	0.00217 JB	0.0335
	10/01/2018		76.7	1.11	3.52	81.2	517	0.00689 J	0.00486	0.0819	0.154 J	<0.000160	0.000984 J	<0.000260	0.00169 J	<0.0150	<0.000240	0.000769 J	<0.0000490	0.00231 J	0.00755	0.00205	<0.000310	0.00223 J	0.0432
	10/01/2018	FD	76.3	1.09	3.70	80.6	509	0.00560 J	0.00421	0.0843	0.145 J	<0.000160	0.00111 J	<0.000260	0.00121 J	<0.0150	<0.000240	0.000398 J	<0.0000490	0.00243 J	0.00804	0.00218	<0.000310	0.00234 J	0.0449
	04/04/2019		78.5	1.06	3.61	69.4	513	<0.00515	0.00424	0.0850	0.181 J	<0.000160	0.00225	<0.000260	0.00232 J	<0.0150	<0.000240	0.000363 J	<0.0000490	0.00240 J	0.00473	0.00215	<0.000310	0.00223 J	0.0511
	10/24/2019		85.0	1.24	3.29	71.7	479	0.00831 J	0.00381	0.0903	0.171 J	<0.000160	0.00162 J	<0.000260	0.00273 J	<0.0150	<0.000240	0.00286 J	0.0000605 JB	0.00199 J	0.00417	0.00174 J	<0.000310	0.00208 J	0.0682
	10/24/2019	FD	86.0	1.23	3.18	72.6	501	<0.00515	0.00414	0.0871	0.174 J	<0.000160	0.00245	<0.000260	0.00275 J	<0.0150	<0.000240	0.000416 J	0.0000596 JB	0.00198 J	0.00409	0.00179 J	<0.000310	0.00206 J	0.0528
	06/18/2020		91.7	1.20	3.31	71.2	520	<0.0554	0.00408	0.0896	0.182 J	<0.000478	0.00542	<0.000477	0.00274 J	<0.0489	<0.00249	<0.00132	<0.000100	0.00208 J	0.00435	0.00207	<0.000513	<0.00754	0.0437
	10/08/2020		94.3	1.05	3.29	77.3	496	<0.0554	0.00417	0.0863	0.187 J	<0.000478	0.00718	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	0.000101 J	0.00223 J	0.00157 J	0.00186 J	<0.000513	<0.00754	0.0314
	04/15/2021		93.2	0.960	3.68	62.9	501	0.0293 JB	0.00423	0.0928	0.185 J	<0.000150	0.0145	<0.0000596	0.00327 J	<0.0281	<0.000849	0.00326 JB	<0.000100	0.00226 J	0.00207	0.00191 J	<0.0000700	0.00220 J	0.00496 JB
	09/16/2021		95.4	0.990	3.57	62.7	539	<0.0185	0.00428	0.0914	0.177 J	<0.000150	0.0166	<0.0000596	<0.00151	<0.0281	<0.000849	<0.000704	<0.000100	0.00228 J	0.00194 J	0.00199 J	<0.0000700	0.00203 J	0.0118 J
MW-32	06/15/2017		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/15/2017	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/2017		109	2.77	<0.0197	99.4	683	0.0212 JB	0.00332	0.188	0.564	<0.000160	<0.000540	0.00108 J	0.000684 J	<0.0150	<0.000240	0.536	<0.0000490	0.0141	0.00430	<0.000380	<0.000310	0.00888 J	0.00320 J
	04/05/2018		165	1.12	1.74	143	939	0.00732 JB	0.00281	0.244	0.253	<0.000160	0.000888 JB	0.000847 JB	0.00193 JB	<0.0150	<0.000240	0.772	<0.0000490	0.00489 J	0.0195	0.000443 JB	<0.000310	0.0166	0.0122 J
	10/01/2018		34.7	0.357 B	<0.0197	47.4	383	0.00589 J	0.00652	0.176	0.0321 J	<0.000160	<0.000540	<0.000260	0.000794 J	<0.0150	0.000283 J	0.0499	<0.0000490	0.00348 J	0.00357	<0.000380	<0.000310	0.00146 J	<0.00256
	10/01/2018	FD	34.9	0.360 B	<0.0197	47.7	451	0.0111 J	0.00619	0.179	0.0332 J	<0.000160	<0.000540	0.000302 J	0.00105 J	<0.0150	0.000273 J	0.0561	<0.0000490	0.00350 J	0.00382	<0.000380	<0.000310	0.00148 J	<0.00256
	04/04/2019		159	0.478	1.10	146	940	0.00526 JB	0.00198 J	0.384	0.184 J	<0.000160	<0.000540	0.00109 J	0.00918	<0.0150	<0.000240	0.349	<0.0000490	0.00259 J	0.00792	<0.000380	<0.000310	0.00751 J	0.0128 J
	10/24/2019		90.5	0.453	7.15	173	745	<0.00515	0.00353	0.341	0.188 J	<0.000160	<0.000540	0.000415 J	0.00397 J	<0.0150	<0.000240	0.278	0.0000640 JB	0.00197 J	0.0150	0.000492 J	<0.000310	0.00884 J	0.0379
	10/24/2019	FD	89.1	0.422	7.08	172	827	<0.00515	0.00342	0.345	0.213	<0.000160	<0.000540	0.000372 J	0.00418 J	<0.0150	<0.000240	0.262	0.0000644 JB	0.00209 J	0.0130	<0.000380	<0.000310	0.00883 J	0.0405
	06/18/2020		92.7	0.355	6.25	183	872	<0.0554	0.00323	0.454	0.207	<0.000478	<0.00149	<0.000477	0.00255 J	<0.0489	<0.00249	0.0616	<0.000100	0.00132 J	0.00557	<0.000657	<0.000513	0.00769 J	0.0147 J
	10/08/2020		54.1	0.286	3.36	182	741	<0.0554	0.00317	0.372	0.168 J	<0.000478	<0.00149	0.000936 J	<0.00250	<0.0489	<0.00249	0.207	<0.000100 [R	0.00263 J	0.00427	<0.000657	<0.000513	<0.00754	0.0141 J
	10/08/2020	FD	50.6	0.278	3.13	190	760	<0.0554	0.00329	0.370	0.162 J	<0.000478	<0.00149	0.000654 J	0.00316 J	<0.0489	<0.00249	0.160	0.000106 J	0.00260 J	0.00408	<0.000657	<0.000513	<0.00754	0.103
	04/15/2021		61.8	0.292	1.71	132	692	0.284	0.00395	0.440	0.142 J	<0.000150	<0.00124	<0.0000596	0.00584	<0.0281	<0.000849	0.00436 JB	<0.000100	0.00131 J	0.00425	0.000466 J	<0.0000700	0.00609 J	0.0241 J
	04/15/2021	FD	60.4	0.292	1.70	128	677	<0.0185	0.00421	0.426	0.141 J	<0.000150	<0.00124	0.0000794 J	0.00591 B	<0.0281	<0.000849	0.0111	<0.000100	0.00119 J	0.00435	0.000932 J	<0.0000700	0.00589 J	0.0228 J
	09/16/2021		57.0	0.247	3.56	142	728	<0.0185	0.00416	0.380	0.170 J	<0.000150	<0.00124	0.000141 J	0.00386 J	<0.0281	<0.000849	0.0402	<0.000100	0.00714	0.00418	0.000943 J	<0.0000700	0.00547 J	0.0196 J
	09/16/2021	FD	57.4	0.245	3.57	150	740	<0.0185	0.00404	0.405	0.160 J	<0.000150	<0.00124	0.000155 J	0.00411 J	<0.0281	<0.000849	0.0433	<0.000100	0.00725	0.00415	0.000731 J	<0.0000700	0.00576 J	0.0188 J
MW-33	06/15/2017		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/2017		74.7	2.26	<0.0197	57.1	792	0.0123 JB	0.00377	0.218	0.447	<0.000160	<0.000540	0.000834 J	0.00129 J	0.0373 J	<0.000240	0.985	<0.0000490	0.00531	0.000613 J	<0.000380	<0.000310	0.00325 J	0.00358 J
	04/05/2018		84.1	1.15	<0.0197	15.4	902	<0.00515	0.0104	0.380	0.304	<0.000160	0.00155 JB	<0.000260	0.00292 JB	0.0351 J	<0.000240	1.77	<0.0000490	0.000146 JB	0.00170 JB	<0.000380	<0.000310	0.00269 J	0.00546 J
	10/01/2018		118	0.859	<0.0197	13.8	1,170	0.00613 J	0.00411	0.481	0.194 J	<0.000160	<0.000540	<0.000260	<0.000520	0.0186 J	<0.000240	1.79	<0.0000490	0.000602 J	0.00312	<0.000380	<0.000310	0.00829 J	<0.00256
	04/04/2019		137	0.729	<0.0197	12.4	1,230	0.00865 JB	0.00179 J	0.476	0.150 J	<0.000160	<0.000540	<0.000260	0.00411 J	0.0299 J	<0.000240	1.39	<0.0000490	0.00158 J	0.00157 JB	<0.000380	<0.000310	0.0131	0.00566 J
	10/24/2019		160	0.748	<0.0197	7.98	1,160	<0.00515	0.00228	0.496	0.158 J	<0.000160	<0.000540	<0.000260	<0.000520	0.0209 J	<0.000240	1.02	<0.0000490	0.00183 J	0.00323	<0.000380	<0.000310	0.0167	0.00581 J
	06/18/2020		145	0.770	<0.0500	12.8	1,220	<0.0554	0.00202	0.500	0.163 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.816	<0.000100	0.00268 J	0.00409	<0.000657	<0.000513	0.0241	<0.00996
	10/08/2020		95.3	0.647	<0.0500	21.6	1,090	<0.0554	0.00322	0.423	0.167 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.699	<0.000100 [R	0.00280 J	0.00164 J	<0.000657	<0.000513	0.0236	<0.00996
	10/08/2020	FD	96.3	0.644	<0.0500	21.3	1,060	<0.0554	0.00316	0.411	0.167 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.691	0.000121 J	0.00277 J	0.00111 J	<0.000657	<0.000513	0.0233	0.0171 J
	04/15/2021		78.7	0.635	<0.0500 [R	9.75	1,090	<0.0185	0.00297	0.471	0.159 J	<0.000150	<0.00124	0.000108 J	<0.00151	0.526	<0.000849	0.701	<0.000100	0.00330 J	0.00198 J	<0.000300	<0.0000700	0.0322	0.00441 JB
	04/15/2021	FD	79.3	0.620	<0.0500 [R	9.74	1,100	<0.0185	0.00187 J	0.441	0.159 J	<0.000150	<0.00124	0.0000890 J	0.00175 JB	<0.0281	<0.000849	0.685	<0.000100	0.00289 J	0.00178 J	<0.000300	<0.0000700	0.0308	<0.00302
	09/16/2021		56.3	0.640	<0.0500	11.5	1,130	<0.0185	0.00293	0.409	0.168 J	<0.000150	<0.00124	0.0000660 J	<0.00151	<0.0281	<0.000849	0.621	<0.000100	0.00267 J	0.00157 J	0.000473 J	<0.0000700	0.0314	<0.00302
	09/16/2021	FD	56.3	0.639	<0.0500	11.7	1,130	0.389	0.00297	0.436	0.165 J	<0.000150	<0.00124	0.000123 J	<0.00151	0.263 B	<0.000849	0.645	<0.000100	0.00266 JB	0.00234	<0.000300	<0.0000700	0.0328	<0.00302

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
North Well	06/18/2009		140	0.933	2.72	80.6	664	<0.0100	0.00536	0.0997	0.151	<0.00200	0.0104	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	<0.00500
	01/14/2010		143	0.793	2.90	74.2	638	<0.0100	<0.00500	0.107	0.172	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00134	0.00920
	08/24/2010		127	0.932	1.81	80.4	594	<0.0100	0.00552	0.100	0.147	<0.00200	<0.00500	<0.00500	0.00856	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.0161	<0.00500	<0.00500	<0.00500	<0.00500
	03/03/2011		137	0.932	2.76	75.2	804	<0.0100	0.00503	0.0968	0.159	<0.00200	0.0199	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0695
	07/20/2011		124	0.803	2.07	76.5	628	<0.0100	<0.00500	0.106	0.142	<0.00200	0.0140	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/02/2012		149	0.977	2.54	82.1	656	0.0126	<0.00500	0.0944	0.132	<0.00200	0.0145	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	07/30/2012		121	0.986	2.63	72.7	528	<0.0100	0.00523	0.106	0.159	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0178
	02/19/2013		105	1.02	2.54	83.3	496	<0.0100	0.00693	0.0998	0.162	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00537	<0.00500	<0.00500	<0.00500	0.00873
	08/22/2014		57.3	0.462	2.73	37.6	532	0.0170	0.00530	0.106	<0.0200	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0119
	12/17/2014		110	0.91	3.0	69	- -	<0.0100	0.00579	0.0985	0.121	<0.00100	0.00101	<0.00100	0.00108	0.0180	<0.00100	<0.00100	<0.00020	0.00346	<0.00100	0.00359	<0.00100	0.00179	0.00315
	03/09/2015		11	0.098 J	2.7	7.3	520	<0.035	0.0055	0.11	0.15	<0.00070	<0.0014	<0.0023	0.012 J	<0.014	0.00062 J	<0.0012	<0.000049	0.0032 J	<0.0049	0.0097 J	<0.0028	0.0016 J	0.015 J
	05/19/2015		110	0.88	3.2	73	550	<0.035	0.0060	0.11	0.14 J	<0.00070	0.0018 J	<0.0023	0.015 J	<0.014	0.00074 J	<0.0012	<0.000049	0.0042 J	<0.0049	0.0033	<0.0028	0.0018 J	0.017 J
	08/28/2015		193	1.55	4.34	127	593	<0.0350	0.00551	0.103	0.155	<0.000160	0.000676 J	<0.000260	0.00121 J	<0.0141	<0.000240	0.000878 J	<0.0000490	0.00306 J	<0.000350	0.00332	<0.000310	0.00156 J	<0.00256
	12/17/2015		121	0.982	3.46	76.7	588	<0.0350	0.00572	0.104	0.155 J	<0.000160	0.00103 J	<0.000260	0.00216 J	0.0158 J	<0.000240	0.000476 J	<0.0000490	<0.00160	0.000388 J	0.00342	<0.000310	0.00160 J	0.00427 J
	03/10/2016		136	0.939	3.34	74.1	575	0.00383 J	0.00557	0.108	0.138	<0.000160	0.00106 J	<0.000260	0.00183 JB	0.0200 J	<0.000240	0.000748 J	<0.0000490	0.00307 JB	0.000364 JB	0.00342	<0.000310	0.00161 J	0.00420 JB
	05/25/2016		128	0.941	3.03	75.1	634	<0.00200	0.00451	0.104	0.166	<0.000160	<0.000540	<0.000260	0.0141	<0.0150	0.000323 J	0.00281 J	<0.0000490	0.00272 J	0.000909 J	0.00365	<0.000310	0.00159 J	0.0101 J
	08/18/2016		129	0.872	5.76	70.9	626	0.00295 JB	0.00548	0.111	0.157	<0.000160	0.00139 JB	<0.000260	0.00146 JB	<0.0150	<0.000240	0.00101 JB	0.0000503 JB	0.00293 J	0.00103 JB	0.00367	<0.000310	0.00176 J	0.00285 JB
	12/08/2016		156	0.942	3.23	74.3	676	0.00412 JB	0.00544	0.122	0.127	<0.000160	0.00108 J	<0.000260	0.00236 J	<0.0150	<0.000240	0.000506 JB	<0.0000490	0.00281 J	<0.000350	0.00333	<0.000310	0.00177 J	0.00374 J
	02/07/2017		148	0.893	3.55	82.9	613	<0.0258	0.00615 J	0.143	0.163	<0.000800	<0.00270	<0.00130	0.00320 J	<0.0750	<0.00120	<0.00125	<0.0000490	0.00293 J	<0.00175	0.00336	<0.00155	0.00188 J	<0.0128
	05/31/2017		150	0.836	3.27	75.9	597	<0.00515	0.00559	0.127	0.149	<0.000160	0.00101 J	<0.000260	0.00435 J	<0.0150	<0.000240	0.000388 JB	<0.0000490	0.00280 J	0.000572 J	0.00322	<0.000310	0.00183 J	0.00513 JB
	08/17/2017		135	0.740	3.19	76.5	662	0.0185 JB	0.00569	0.113	0.142	<0.000160	0.00110 J	<0.000260	0.00355 J	<0.0150	0.000261 J	0.00121 JB	<0.0000490	0.00282 J	0.000633 J	0.00347	<0.000310	0.00177 J	0.00834 J
	12/14/2017		133	0.816	3.13	77.3	616	0.00620 JB	0.00598	0.109	0.135	<0.000160	0.00142 J	<0.000260	0.00253 JB	0.0491 J	0.000679 J	0.00115 J	<0.0000490	0.00282 J	0.000606 J	0.00355	<0.000310	0.00183 J	0.00679 J
	02/23/2018		133	0.948	3.46	76.5	603	0.00601 JB	0.00621	0.109	0.189 J	<0.000160	0.00134 JB	<0.000260	0.00292 J	<0.0150	<0.000240	0.000796 JB	<0.0000490	0.00304 J	0.000612 JB	0.00371	<0.000310	0.00176 J	0.00383 J
	04/05/2018		131	0.878	3.09	75.6	584	0.0183 JB	0.00657	0.118	0.156 J	0.000910 JB	0.000849 JB	0.000894 JB	0.0135	0.0237 J	0.00120 JB	0.00467 J	<0.0000490	0.00380 J	0.00244 B	0.00397	<0.000310	0.00270 J	0.0298
	07/31/2018		121	0.881	3.03	74.7	584	0.00795 JB	0.00596	0.104	0.169 J	0.000172 JB	0.00117 J	<0.000260	0.00470 J	<0.0150	0.000793 J	0.000983 J	<0.0000490	0.00283 J	0.000634 J	0.00362	<0.000310	0.00173 J	0.00798 J
	10/01/2018		121	0.797	3.11	79.9	573	0.00570 J	0.00632	0.112	0.128 J	<0.000160	0.00116 J	<0.000260	0.00233 J	<0.0150	0.000674 J	0.00161 J	<0.0000490	0.00302 J	0.000651 J	0.00409	<0.000310	0.00177 J	0.00386 J
	01/23/2019		120	0.775	2.86	75.6	550	0.0108 J	0.00621	0.110	0.152	<0.000160	0.00139 J	<0.000260	0.00259 JB	<0.0150	0.000378 J	0.00193 J	<0.0000490	0.00293 J	0.00114 JB	0.00393	<0.000310	0.00184 J	0.00809 J
	04/04/2019		120	0.776	3.17	74.9	590	0.00882 JB	0.00599	0.118	0.169 J	<0.000160	0.00137 J	<0.000260	0.0129	0.0185 J	0.000607 J	0.00509	<0.0000490	0.00295 J	0.00101 JB	0.00375	<0.000310	0.00194 J	0.0199 J
	07/11/2019		121	0.931	3.29	77.5	571	<0.00515	0.00582	0.111	0.146 J	<0.000160	0.00162 JB	<0.000260	0.00322 JB	<0.0150	0.000313 JB	0.00042 J	<0.0000490	0.00303 J	0.000416 J	0.00414	<0.000310	0.00173 J	0.006 J
	10/24/2019		122	0.930	2.57	76.8	484	<0.00515	0.00483	0.106	0.149 J	<0.000160	0.00115 J	<0.000260	0.00265 J	<0.0150	<0.000240	0.0172	0.0000637 JB	0.00279 J	0.000441 J	0.00306	<0.000310	0.00148 J	0.0105 J
	01/15/2020		117	0.860	2.94	77.5	549	0.0222 JB	0.00611	0.105	0.152 J	<0.000160	0.00159 JB	<0.000260	0.0459	<0.0150	0.00257	0.00113 JB	<0.0000490	0.00298 J	0.00184 JB	0.00381	<0.000310	0.00195 J	0.0282
	06/18/2020		118	0.953	2.92	78.6	548	<0.0554	0.00601	0.106	0.150 J	<0.000478	0.00178 J	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00297 J	0.000965 J	0.00412	<0.000513	<0.00754	<0.00996
	08/19/2020		111	0.837	2.82	78.3	568	<0.0554	0.00592	0.0976	0.150 J	<0.000478	0.00178 J	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00284 J	<0.000952	0.00352	<0.000513	<0.00754	<0.00996
	10/08/2020		116	0.824	2.74	83.4	519	<0.0554	0.00637	0.102	0.153 J	<0.000478	0.00233	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00286 J	<0.000952	0.00316	<0.000513	<0.00754	<0.00996
	01/28/2021		120	0.798	2.86	80.1	520	<0.0185	0.00505	0.106	0.143 J	<0.000150	0.00141 J	0.000118 J	0.00209 J	<0.0281	<0.000849	0.00175 J	<0.000100	0.00309 J	0.00121 J	0.00361	<0.0000700	0.00171 J	0.0109 JB
	04/15/2021		113	0.796	3.20	78.1	530	<0.0185	0.00634	0.106	0.143 J	<0.000150	0.00227 B	0.000115 J	0.0723	<0.0281	0.00354 B	0.000746 J	<0.000100	0.00314 J	0.00231	0.00462	<0.0000700	0.00161 J	0.0519
	07/15/2021		114	0.802	3.15	77.8	541	<0.0185	0.00518	0.102	0.137 J	<0.000150	0.00219	0.0000724 J	0.00672 B	<0.0281	<0.000849	0.00522 B	<0.000100	0.00282 J	0.00227 B	0.00332	<0.0000700	0.00151 J	0.0140 JB
	09/16/2021		128	0.771	2.90	78.0	580	<0.0185	0.00522	0.110	0.142 J	<0.000150	0.00205	0.000107 J	0.0439	<0.0281	0.00141 J	0.000928 J	<0.000100	0.00277 JB	0.00186 J	0.00373	<0.0000700	0.00162 J	0.0295

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			**250**	**1.6**	**10.0**	**600.0**	**1,000**	**5.0**	**0.01**	**2**	**0.75**	**0.005**	**0.05**	**0.05**	**1.0**	**1.0**	**0.015**	**0.2**	**0.002**	**1.0**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
	06/22/2009		497	0.665	3.02	106	1,450	<0.0100	<0.00500	0.154	0.189	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	<0.00500
	01/14/2010		498	0.686	3.27	113	1,520	0.0176	<0.00500	0.138	0.229	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0224	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00236	0.0207
	08/24/2010		477	0.651	2.18	101	1,760	<0.0100	<0.00500	0.172	0.186	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00576	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0329
	03/03/2011		549	0.647	3.24	122	1,840	<0.0100	<0.00500	0.147	0.261	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0226	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	07/20/2011		420	0.687	2.48	103	1,600	<0.0100	<0.00500	0.157	0.195	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00777
	02/02/2012		368	0.756	3.02	89.0	1,210	<0.0100	<0.00500	0.117	0.165	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00777
	07/30/2012		135	1.01	2.53	73.3	582	<0.0100	<0.00500	0.103	0.160	<0.00200	0.0111	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0401
	02/19/2013		359	0.743	2.88	99.2	1,170	<0.0100	0.00576	0.149	0.197	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0172
	02/28/2014		352	0.575	0.660	99.2	1,210	<0.0100	<0.00500	0.131	0.195	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00571	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0155
	08/22/2014		435	0.720	3.00	100	1,480	<0.0100	<0.00500	0.136	0.144	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.00670	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0159
	08/22/2014	FD	437	0.724	3.00	107	1,480	0.0689	<0.00500	0.145	<0.0200	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	0.0103	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0214
	12/17/2014		390	0.63	3.2	91	- -	<0.0100	0.00431	0.125	0.159	<0.00100	0.00178	<0.00100	0.00128	0.0277	<0.00100	0.00422	<0.00020	0.00242	<0.00100	0.00387	<0.00100	0.00227	0.0163
	12/17/2014	FD	390	0.63	3.2	90	- -	<0.0100	0.00422	0.126	0.162	<0.00100	0.00179	<0.00100	0.00136	0.0226	<0.00100	0.00409	<0.00020	0.00203	<0.00100	0.00359	<0.00100	0.00217	0.0151
	03/09/2015		340	0.82	2.7	99	1,100	<0.035	0.0040	0.14	0.20	<0.00070	0.0015 J	<0.0023	0.032	<0.014	0.0031	0.0046 J	<0.000049	0.0020 J	<0.0049	0.012 J	<0.0028	0.0021 J	0.049 J
	03/09/2015	FD	340	0.82	650	98	1,100	0.037 J	0.0042	0.14	0.20	<0.00070	<0.0014	<0.0023	0.019 J	<0.014	0.0026	0.0030 J	<0.000049	0.0021 J	<0.0049	0.015 J	<0.0028	0.0021 J	0.025 J
	05/19/2015		330	0.76	3.2	92	1,100	<0.035	0.0023	0.14	0.18 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	0.0088 J	<0.000049	0.0022 J	<0.0049	0.0034	<0.0028	0.0021 J	<0.0059
	05/19/2015	FD	340	0.76	3.1	95	1,000	<0.035	0.0024	0.14	0.18 J	<0.00070	<0.0014	<0.0023	<0.0053	<0.014	<0.00024	0.0081 J	<0.000049	0.0023 J	<0.0049	0.0032	<0.0028	0.0021 J	<0.0059
	08/28/2015		426	0.810	3.48	107	1,440	<0.0350	0.00436	0.137	0.194	<0.000700	0.00156 J	<0.00230	<0.00530	0.0168 J	0.000477 J	0.00776 J	<0.0000490	0.00204 J	<0.00490	0.00360	<0.00280	0.00214 J	0.00662 J
	08/28/2015	FD	382	0.734	3.50	95.9	1,320	<0.0350	0.00430	0.133	0.197	<0.000160	0.00127 J	<0.000260	0.00376 J	<0.0141	<0.000240	0.00654	0.0000599 J	0.00199 J	<0.000350	0.00328	<0.000310	0.00205 J	0.00638 J
	12/17/2015		400	0.751	3.35	115	1,400	<0.0350	0.00426	0.138	0.235	<0.000160	0.00205	<0.000260	0.00257 J	<0.0141	<0.000240	0.00564	<0.0000490	<0.00160	0.000645 J	0.00334	<0.000310	0.00238 J	0.00388 J
	12/17/2015	FD	402	0.752	3.47	114	1,360	<0.0350	0.00425	0.136	0.193 J	<0.000160	0.00160 J	<0.000260	0.00250 J	<0.0141	<0.000240	0.00546	<0.0000490	<0.00160	0.000442 J	0.00343	<0.000310	0.00238 J	0.00430 J
	03/10/2016		354	0.76	3.53	103	1,100	0.00624 J	0.00425	0.118	0.211	<0.000160	0.00135 J	<0.000260	0.00864	<0.0150	0.000256 J	0.00332 JB	<0.0000490	0.00204 JB	0.000524 JB	0.00354	<0.000310	0.00230 J	0.0119 JB
	05/25/2016		361	0.743	3.11	101	1,620	<0.00200	0.00433	0.124	0.214	<0.000160	0.00139 J	<0.000260	0.00384 J	<0.0150	<0.000240	0.00551	<0.0000490	0.00196 J	<0.000350	0.00374	<0.000310	0.00249 J	0.00351 J
	05/25/2016	FD	377	0.741	3.11	102	1,440	<0.00200	0.00459	0.125	0.224	<0.000160	0.00196 J	<0.000260	0.00445 J	<0.0150	<0.000240	0.00535	<0.0000490	0.00194 J	<0.000350	0.00343	<0.000310	0.00247 J	0.00394 J
	08/18/2016		381	0.692	3.18	98.2	1,420	<0.00200	0.00419	0.134	0.224	<0.000160	0.00138 J	<0.000260	0.00444 JB	<0.0150	<0.000240	0.00250 J	0.0000764 JB	0.00188 J	0.00106 JB	0.00326	<0.000310	0.00257 J	0.00833 JB
	08/18/2016	FD	385	0.695	3.18	97.6	1,390	0.00377 JB	0.00370	0.137	0.233	<0.000160	0.00165 J	<0.000260	0.00485 JB	<0.0150	<0.000240	0.00270 J	0.0000788 JB	0.00201 J	0.00128 JB	0.00318	<0.000310	0.00262 J	0.00936 JB
	12/08/2016		419	0.772	3.27	105	1,300	0.00439 JB	0.00310	0.120	0.188	<0.000160	0.000590 J	<0.000260	0.00192 J	<0.0150	<0.000240	0.00796	<0.0000490	0.00181 J	<0.000350	0.00373	<0.000310	0.00257 J	0.00418 J
	12/08/2016	FD	425	0.777	3.27	106	1,310	0.00364 JB	0.00313	0.120	0.194	<0.000160	0.000601 J	<0.000260	0.00215 J	<0.0150	0.000317 J	0.00673	<0.0000490	0.00184 J	<0.000350	0.00307	<0.000310	0.00253 J	0.00420 J
	02/07/2017		379	0.712	3.41	115	1,110	0.00532 J	0.00343	0.117	0.223	<0.000160	0.000753 J	<0.000260	0.00340 J	<0.0150	0.000385 JB	0.00227 J	<0.0000490	0.00190 J	<0.000350	0.00337	<0.000310	0.00229 J	0.00405 J
	02/07/2017	FD	375	0.723	3.77	114	1,170	<0.0258	0.00424 J	0.140	0.228	<0.000800	<0.00270	<0.00130	0.00352 J	<0.0750	<0.00120	0.00308 J	<0.0000490	0.00217 J	<0.00175	0.00338	<0.00155	0.00266 J	<0.0128
South Well	05/31/2017		433	0.636	3.20	101	1,350	<0.00515	0.00327	0.144	0.209	<0.000160	0.000988 J	<0.000260	0.00419 J	<0.0150	<0.000240	0.00311 J	0.0000506 J	0.00174 J	<0.000350	0.00303	<0.000310	0.00235 J	0.00458 JB
	05/31/2017	FD	426	0.619	3.16	101	1,330	0.00778 JB	0.00326	0.139	0.197	<0.000160	0.00106 J	<0.000260	0.00419 J	<0.0150	<0.000240	0.00315 J	0.0000515 J	0.00163 J	0.000376 J	0.00338	<0.000310	0.00236 J	0.00426 JB
	08/17/2017		406	0.579	2.96	97.7	1,260	0.00883 JB	0.00392	0.125	0.191	<0.000160	0.00187 J	<0.000260	0.00229 J	<0.0150	<0.000240	0.00253 JB	<0.0000490	0.00183 J	<0.000350	0.00353	<0.000310	0.00230 J	0.00365 J
	08/17/2017	FD	400	0.577	2.94	92.4	1,460	0.00607 JB	0.00413	0.127	0.191	<0.000160	0.00204	<0.000260	0.00364 J	<0.0150	<0.000240	0.00182 JB	<0.0000490	0.00185 J	<0.000350	0.00338	<0.000310	0.00232 J	0.00339 J
	12/14/2017		383	0.625	2.97	92.4	1,290	<0.00515	0.00417	0.125	0.176	<0.000160	0.00221	<0.000260	0.00500 B	<0.0150	<0.000240	0.00223 J	<0.0000490	0.00180 J	0.000406 J	0.00357	<0.000310	0.00237 J	0.00659 J
	12/14/2017	FD	405	0.625	3.03	94.4	1,410	<0.00515	0.00417	0.129	0.184	<0.000160	0.00223	<0.000260	0.00526 B	<0.0150	0.000263 J	0.00259 J	<0.0000490	0.00185 J	0.000357 J	0.00356	<0.000310	0.00244 J	0.00474 J
	02/23/2018		429	0.746	3.28	103	1,410	0.00900 JB	0.00419	0.143	0.258	<0.000160	0.00265 B	<0.000260	0.00656	<0.0150	0.000278 JB	0.00225 J	<0.0000490	0.00191 J	0.000488 JB	0.00453	<0.000310	0.00245 J	0.00958 J
	02/23/2018	FD	432	0.735	3.27	104	1,270	0.0243 JB	0.00603	0.145	0.222	0.00194	0.00432 B	0.00187 J	0.00829	0.0231 J	0.00195 J	0.00373 J	0.0000945 J	0.00411 J	0.00243	0.00571	0.000372 J	0.00424 J	0.0115 J
	04/05/2018		406	0.676	2.98	99.9	1,300	0.0142 JB	0.00434	0.140	0.202	<0.000160	0.00311 B	<0.000260	0.00598	<0.0150	<0.000240	0.00245 JB	<0.0000490	0.00184 JB	<0.000350	0.00335 B	<0.000310	0.00252 J	0.00408 J
	07/31/2018		409	0.752	3.14	103	1,420	0.0109 JB	0.00377	0.130	0.239	0.000179 JB	0.00186 J	<0.000260	0.00235 JB	<0.0150	0.000264 J	0.00101 J	<0.0000490	0.00208 J	0.000389 J	0.00413	<0.000310	0.00220 J	0.0461
	07/31/2018	FD	396	0.685	3.20	97.5	1,230	<0.00515	0.00401	0.133	0.203	0.000172 JB	0.00180 J	<0.000260	0.00179 JB	<0.0150	<0.000240	0.00143 J	<0.0000490	0.00197 J	0.000463 J	0.00326	<0.000310	0.00219 J	0.0262
	10/01/2018		368	0.625	3.00	97.0	1,360	<0.00515	0.00431	0.138	0.177 J	<0.000160	0.00169 J	<0.000260	0.00177 J	<0.0150	<0.000240	0.00219 J	0.0000509 J	0.00219 J	0.00308	0.00386	<0.000310	0.00238 J	0.148
	01/23/2019		396	0.601	2.67	90.1	1,100	0.0343 J	0.00407	0.140	0.204	<0.000160	0.00230	<0.000260	0.00274 JB	<0.0150	<0.000240	0.00228 J	<0.0000490	0.00209 J	0.00157 JB	0.00348	<0.000310	0.00241 J	0.230
	01/23/2019	FD	382	0.606	2.64	88.3	1,100	0.00963 J	0.00424	0.136	0.197	<0.000160	0.00199 J	<0.000260	0.00225 JB	<0.0150	<0.000240	0.00187 J	<0.0000490	0.00202 J	0.00131 JB	0.00396	<0.000310	0.00234 J	0.0889
	04/04/2019		344	0.619	3.18	97.3	1,280	<0.00515	0.00421	0.140	0.612	<0.000160	0.00110 J	<0.000260	0.00172 J	<0.0150	<0.000240	0.00382 J	<0.0000490	0.00226 J	0.000640 JB	0.00325	<0.000310	0.00238 J	0.0510
	07/11/2019		360	0.741	3.48	97.3	1,190	<0.00515	0.00375	0.126	0.198 J	<0.000160	0.00178 JB	<0.000260	0.00191 JB	<0.0150	0.00054 JB	0.00269 J	<0.0000490	0.00229 J	0.000881 J	0.00384	<0.000310	0.00223 J	0.101
	10/24/2019		335	0.798	2.80	86.8	992	<0.00515	0.00405	0.119	0.190 J	<0.000160	0.000880 J	<0.000260	0.000922 J	<0.0150	<0.000240	0.00155 J	0.0000822 JB	0.00212 J	0.00157 J	0.00343	<0.000310	0.00188 J	0.0189 J
	01/15/2020		328	0.692	3.12	94.7	1,010	0.00859 JB	0.00287	0.122	0.184 J	<0.000160	0.000722 JB	<0.000260	0.00316 J	<0.0150	0.000365 JB	0.0101	<0.0000490	0.00215 J	0.0106	0.00482	<0.000310	0.00245 J	0.0942
	06/18/2020		330	0.784	3.10	95.7	1,090	<0.0554	0.00430	0.116	0.183 J	<0.000478	0.00168 J	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00210 J	<0.000952	0.00360	<0.000513	<0.00754	0.0142 J
	08/19/2020		333	0.690	2.99	96.1	1,040	<0.0554	0.00419	0.105	0.190 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.00168 J	<0.000100	0.00206 J	<0.000952	0.00417	<0.000513	<0.00754	0.0193 J
	08/19/2020	FD	341	0.684	2.99	95.8	1,070	<0.0554	0.00419	0.105	0.192 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.00145 J	<0.000100	0.00200 J	<0.000952	0.00394	<0.000513	<0.00754	0.0194 J
	10/08/2020		309	0.711	2.93	92.5	1,010	<0.0554	0.00324	0.108	0.188 J	<0.000478	<0.00149	<0.000477	<0.00250	<0.0489	<0.00249	0.00949	<0.000100	0.00225 J	0.00472	0.00400	<0.000513	<0.00754	0.0494
	10/08/2020	FD	312	0.637	2.97	96.5	1,010	<0.0554	0.00254	0.107	0.192 J	<0.000478	<0.00149	<0.000477	0.00292 J	<0.0489	<0.00249	0.0173	0.000114 J	0.00221 J	0.0201	0.00387	<0.000513	<0.00754	0.0868
	01/28/2021		334	0.646	3.06	96.2	986	<0.0185	0.00420	0.116	0.178 J	<0.000150	0.00173 J	<0.0000596	<0.00151	<0.0281	0.00152 J	0.00208 J	<0.000100	0.00218 J	0.000963 J	0.00367	<0.0000700	0.00241 J	0.0278 B
	01/28/2021	FD	349	0.650	3.05	96.7	1,040	<0.0185	0.00397	0.116	0.180 J	<0.000150	0.00125 J	<0.0000596	0.00189 J	<0.0281	<0.000849	0.00184 J	<0.000100	0.00219 J	<0.000816	0.00372	<0.0000700	0.00222 J	0.0183 JB
	04/15/2021		302	0.659	3.36	91.6	948	<0.0185	0.00233	0.112	0.177 J	<0.000150	0.00184 JB	0.000201 J	0.00881 B	0.0389 J	<0.000849	0.0174	<0.000100	0.00211 J	0.0334	0.00409	<0.0000700	0.00217 J	0.0951
	04/15/2021	FD	304	0.658	3.36	91.7	960	<0.0185	0.00391	0.109	0.183 J	<0.000150	<0.00124	<0.0000596	0.00264 JB	<0.0281	<0.000849	0.00545	<0.000100	0.00192 J	0.00192 J	0.00350	<0.0000700	0.00205 J	0.0379
	07/15/2021		267	0.700	3.11	99.1	1,010	<0.0185	0.00407	0.106	0.173 J	<0.000150	0.00151 J	<0.0000596	0.00206 JB	<0.0281	<0.000849	0.00275 JB	0.000102 J	0.00227 J	0.00113 JB	0.00313	<0.0000700	0.00212 J	0.0163 JB
	07/15/2021	FD	266	0.677	3.04	95.3	1,020	<0.0185	0.00394	0.107	0.179 J	<0.000150	0.00161 J	0.0000875 J	0.00186 JB	<0.0281	0.00118 J	0.00411 JB	<0.000100	0.00213 J	0.00117 JB	0.00316	<0.0000700	0.00202 J	0.0175 JB
	09/16/2021		315	0.637	3.32	94.8	1,050	<0.0185	0.00407	0.110	0.188 J	<0.000150	0.00136 J	<0.0000596	0.00241 J	<0.0281	<0.000849	0.00199 J	<0.000100	0.00202 JB	0.00133 J	0.00370	<0.0000700	0.00222 J	0.0155 J
	09/16/2021	FD	301	0.628	3.35	90.9	990	<0.0185	0.00387	0.113	0.184 J	<0.000150	0.00177 J	0.0000678 J	0.00294 J	<0.0281	<0.000849	0.00630	<0.000100	0.00207 JB	0.00101 J	0.00372	<0.0000700	0.00217 J	0.0246 J

Table 3. Inorganic Constituent Concentrations in Groundwater

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Monitor Well	Sample Date	Duplicate	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium 238 (mg/L)	Zinc (mg/L)
New Mexico WQCC Groundwater Standards			250	1.6	10.0	600.0	1,000	5.0	0.01	2	0.75	0.005	0.05	0.05	1.0	1.0	0.015	0.2	0.002	1.0	0.2	0.05	0.05	0.03	10.0
East Well	06/18/2009		107	0.980	2.59	84.0	554	0.0131	<0.00500	0.0820	0.143	<0.00200	<0.00500	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	- -	0.0291
	01/14/2010		138	0.991	2.70	72.7	676	<0.0100	<0.00500	0.0941	0.154	<0.00200	0.0119	<0.00500	0.00953	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00111	0.0146
	08/25/2010		106	1.00	0.523	74.5	522	<0.0100	<0.00500	0.0873	0.136	<0.00200	0.0145	<0.00500	0.00745	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0347
	03/03/2011		135	0.905	2.68	75.6	644	<0.0100	<0.00500	0.0970	0.152	<0.00200	0.0189	<0.00500	<0.00500	<0.200	0.00662	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00936
	07/20/2011		124	0.810	1.83	73.8	596	<0.0100	<0.00500	0.104	0.142	<0.00200	0.0200	<0.00500	<0.00500	<0.200	0.0116	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0937
	02/02/2012		150	0.967	2.56	81.4	664	0.0150	<0.00500	0.0993	0.145	<0.00200	0.0166	<0.00500	<0.00500	<0.200	0.00988	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0937
	07/30/2012		144	0.962	2.40	80.9	636	<0.0100	<0.00500	0.0922	0.136	<0.00200	0.0157	<0.00500	0.00774	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0166
	08/27/2012		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.000200	- -	- -	- -	- -	- -	- -
	09/26/2012		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.000200	- -	- -	- -	- -	- -	- -
	10/22/2012		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.000200	- -	- -	- -	- -	- -	- -
	12/27/2012		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.000200	- -	- -	- -	- -	- -	- -
	02/28/2014		138	0.899	0.564	80.6	658	0.0104	<0.00500	0.116	0.158	<0.00200	0.0139	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0317
	08/22/2014		124	0.914	2.71	78.5	614	<0.0100	<0.00500	0.103	<0.0200	<0.00200	0.0119	<0.00500	<0.00500	<0.200	<0.00500	0.00812	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0156
	12/17/2014		120	0.90	2.7	73	- -	<0.0100	0.00436	0.0905	0.120	<0.00100	0.0112	<0.00100	<0.00100	0.143	<0.00100	0.00430	<0.00020	0.00241	<0.00100	0.00395	<0.00100	0.00181	0.0147
	03/09/2015		120	1.1	2.6	81	570	<0.035	0.0046	0.10	0.15	<0.00070	0.012	<0.0023	0.068	<0.014	0.0012 J	0.0021 J	<0.000049	0.0023 J	<0.0049	0.010 J	<0.0028	0.0018 J	0.086
	05/19/2015		120	0.90	2.8	78	560	<0.035	0.0050	0.10	0.14 J	<0.00070	0.012	<0.0023	<0.0053	<0.014	<0.00024	0.0016 J	<0.000049	0.0028 J	<0.0049	0.0037	<0.0028	0.0019 J	0.013 J
	08/28/2015		206	1.75	3.00	145	603	<0.0350	0.00445	0.0981	0.149	<0.000700	0.00866 J	<0.00230	<0.00530	0.0248 J	0.000241 J	0.0129	<0.0000490	0.00236 J	<0.00490	0.00388	<0.00280	0.00174 J	0.0284 J
	12/17/2015		114	1.03	3.01	80.9	621	0.0668 J	0.00507	0.0997	0.167 J	<0.000160	0.00866	<0.000260	0.00143 J	<0.0141	<0.000240	0.00217 J	<0.0000490	<0.00160	0.000365 J	0.00387	<0.000310	0.00188 J	0.0101 J
	03/10/2016		112	1.01	3.01	78.9	562	0.00534 J	0.00454	0.0926	0.143	<0.000160	0.00835	<0.000260	0.000987 J	<0.0150	<0.000240	0.00274 JB	<0.0000490	0.00246 JB	0.000662 JB	0.00384	<0.000310	0.00166 J	0.0260 B
	05/25/2016		114	1.01	2.70	80.0	608	<0.00200	0.00483	0.0906	0.154	<0.000160	0.00902	<0.000260	0.0315	<0.0150	0.00141 J	0.00181 JB	<0.0000490	0.00217 J	<0.000350	0.00376	<0.000310	0.00181 J	0.0399
	08/18/2016		104	0.915	3.12	74.4	555	0.00258 JB	0.00454	0.0939	0.162	<0.000160	0.00451 B	<0.000260	0.00196 JB	0.0337 J	<0.000240	0.00346 J	<0.0000490	0.00288 J	0.00121 JB	0.00386	<0.000310	0.00194 J	0.0291 B
	12/08/2016		104	1.02	2.88	79.9	582	0.00471 JB	0.00464	0.0858	0.122	<0.000160	0.00702	<0.000260	0.00390 J	<0.0150	<0.000240	0.00178 J	<0.0000490	0.00254 J	<0.000350	0.00384	<0.000310	0.00172 J	0.0269
	02/07/2017		112	0.975	3.26	88.7	498	<0.0258	0.00523 J	0.105	0.158	<0.000800	0.00749 J	<0.00130	<0.00260	<0.0750	<0.00120	0.00214 J	<0.0000490	0.00260 J	<0.00175	0.00358	<0.00155	0.00201 J	0.0141 J
	05/31/2017		110	0.926	2.91	81.5	532	<0.00515	0.00462	0.0928	0.144	<0.000160	0.00662	<0.000260	0.0259	<0.0150	0.00115 J	0.00132 J	<0.0000490	0.00228 J	0.000529 J	0.00351	<0.000310	0.00184 J	0.0297
	08/17/2017		109	0.812	3.02	83.0	547	0.0583 J	0.00476	0.0903	0.134	<0.000160	0.00699	<0.000260	0.000968 J	<0.0150	<0.000240	0.000802 JB	<0.0000490	0.00237 J	<0.000350	0.00396	<0.000310	0.00181 J	0.00556 J
	12/14/2017		108	0.883	2.88	83.3	560	0.0284 JB	0.00527	0.0881	0.128	0.000195 J	0.00619	0.000334 J	0.00244 JB	0.0331 J	0.000575 J	0.00129 J	<0.0000490	0.00286 J	0.000638 J	0.00386	<0.000310	0.00221 J	0.00987 J
	02/23/2018		110	1.04	3.06	82.7	564	0.0326 JB	0.00531	0.0893	0.150 J	0.000266 J	0.00730	0.000381 J	0.00559	0.0313 J	0.00188 J	0.000591 JB	<0.0000490	0.00303 J	0.000904 JB	0.00491	<0.000310	0.00212 J	0.0340
	04/05/2018		110	0.968	2.81	81.3	543	0.00660 JB	0.00515	0.0947	0.148 J	<0.000160	0.00555	<0.000260	0.00183 JB	<0.0150	0.000365 JB	0.000358 JB	<0.0000490	0.00243 JB	0.000394 JB	0.00402	<0.000310	0.00195 JB	0.0666
	07/31/2018		110	1.03	2.93	84.8	578	0.0113 JB	0.00384	0.0902	0.132 J	0.000193 JB	0.00369	<0.000260	0.00911	<0.0150	0.000287 J	0.00145 J	<0.0000490	0.00244 J	0.000789 J	0.00374	<0.000310	0.00182 J	0.210
	10/01/2018		109	0.871	2.92	88.2	583	0.00755 J	0.00534	0.0961	0.114 J	<0.000160	0.00537	<0.000260	0.00189 J	<0.0150	0.000589 J	0.000543 J	<0.0000490	0.00277 J	<0.000350	0.00472	<0.000310	0.00189 J	0.0536
	01/23/2019		103	0.861	2.66	80.8	525	0.0301 J	0.00520	0.0908	0.137	0.000279 J	0.00585	0.000346 J	0.00249 JB	0.0297 J	0.000666 J	0.000402 J	<0.0000490	0.00287 J	0.00104 JB	0.00382	<0.000310	0.00231 J	0.0208 J
	04/04/2019		110	0.877	2.93	81.8	560	<0.00515	0.00472	0.0919	0.195 J	<0.000160	0.00504	<0.000260	0.0109	<0.0150	0.000844 J	0.000373 JB	<0.0000490	0.00243 J	<0.000350	0.00341	<0.000310	0.00193 J	0.0476
	07/11/2019		112	1.02	3.09	84.7	557	<0.00515	0.00495	0.0952	0.142 J	<0.000160	0.00647	<0.000260	0.00995 B	<0.0150	0.000637 JB	<0.000250	<0.0000490	0.00266 J	0.000563 J	0.00341	<0.000310	0.00186 J	0.0128 J
	10/24/2019		111	1.04	2.71	79.2	547	<0.00515	0.00454	0.0937	0.138 J	<0.000160	0.00320	<0.000260	<0.000520	<0.0150	<0.000240	0.000903 J	0.0000613 JB	0.00260 J	0.000377 J	0.00393	<0.000310	0.00168 J	0.00418 J
	01/15/2020		114	0.967	2.84	83.5	549	<0.00515	0.00436	0.0986	0.143 J	<0.000160	0.000797 JB	<0.000260	0.000843 J	<0.0150	<0.000240	0.00221 JB	<0.0000490	0.00269 J	0.000845 JB	0.00564	<0.000310	0.00209 J	0.00523 J
	06/18/2020		124	1.04	2.84	85.3	568	<0.0554	0.00489	0.0965	0.140 J	<0.000478	0.00504	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00258 J	<0.000952	0.00420	<0.000513	<0.00754	0.0300
	08/19/2020		119	0.928	2.79	86.1	592	<0.0554	0.00516	0.0909	0.148 J	<0.000478	0.00348	<0.000477	<0.00250	<0.0489	<0.00249	0.00242 J	<0.000100	0.00254 J	<0.000952	0.00419	<0.000513	<0.00754	<0.00996
	10/08/2020		123	0.864	2.75	91.1	570	<0.0554	0.00495	0.0927	0.146 J	<0.000478	0.00482	<0.000477	<0.00250	<0.0489	<0.00249	<0.00132	<0.000100	0.00262 J	<0.000952	0.00404	<0.000513	<0.00754	0.0112 J
	01/28/2021		130	0.866	2.82	89.0	565	<0.0185	0.00516	0.0975	0.142 J	<0.000150	0.00541	0.0000716 J	0.00497 J	<0.0281	0.00224	0.000778 J	<0.000100	0.00269 J	0.000993 J	0.00419	<0.0000700	0.00192 J	0.0338
	04/15/2021		115	0.869	3.12	86.2	551	0.0274 J	0.00504	0.0943	0.139 J	<0.000150	0.00473 B	0.0000755 J	<0.00151	<0.0281	<0.000849	<0.000704	<0.000100	0.00239 J	0.000944 J	0.00448	<0.0000700	0.00182 J	0.0102 J
	07/15/2021		112	0.906	3.08	86.7	563	<0.0185	0.00481	0.0870	0.129 J	<0.000150	0.00511	0.0000821 J	0.00159 JB	<0.0281	<0.000849	0.00152 JB	<0.000100	0.00263 J	0.000916 JB	0.00404	<0.0000700	0.00170 J	0.0101 JB
	09/16/2021		116	0.880	2.90	86.9	558	<0.0185	0.00452	0.0920	0.150 J	<0.000150	0.00342	0.0000724 J	0.00303 J	<0.0281	<0.000849	0.00522	<0.000100	0.00257 JB	<0.000816	0.00403	<0.0000700	0.00191 J	0.0321
	11/10/2021		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	11/10/2021	FD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Notes:

Shading indicates detected result exceeded the New Mexico Water Quality Control Commission (WQCC) Groundwater Standard

N/A = Not Applicable, no New Mexico WQCC Groundwater Standard established for constituent

mg/L = milligrams per liter

FD = Field Duplicate

< = Not reported above laboratory reporting limit

-- = Not Analyzed

(1)= Not analyzed due to insufficient water volume

J = analyte was detected below the laboratory reporting limit (June 2009 to December 2014) or the method quantitation limit (February 2015 to November 2021), reported value is estimated

B = same analyte was detected in the associated laboratory blank or equipment blank; sample concentration is within 5 times the blank concentration

[R] analyte not usable for project objectives according to the United States Environmental Protection Agency (USEPA) *National Functional Guidelines for Organic Superfund Methods Data Review* or the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, January 2017)

Samples collected for metals analysis (except for Total Mercury) were field- or lab-filtered with 0.45 micron filter

June 2009 to August 2014 analyses completed by ALS Laboratory Group, Houston, Texas

December 2014 analyses completed by Hall Environmental Analysis Laboratory in Albuquerque, New Mexico

February 2015 to present analyses completed by Pace Analytical National Center for Testing & Innovation (formerly ESC Lab Sciences) in Mount Juliet, Tennessee

Analytical data from 2009 to 2011 were provided by a previous consultant and could not be confirmed against the original data packages

APPENDIX A

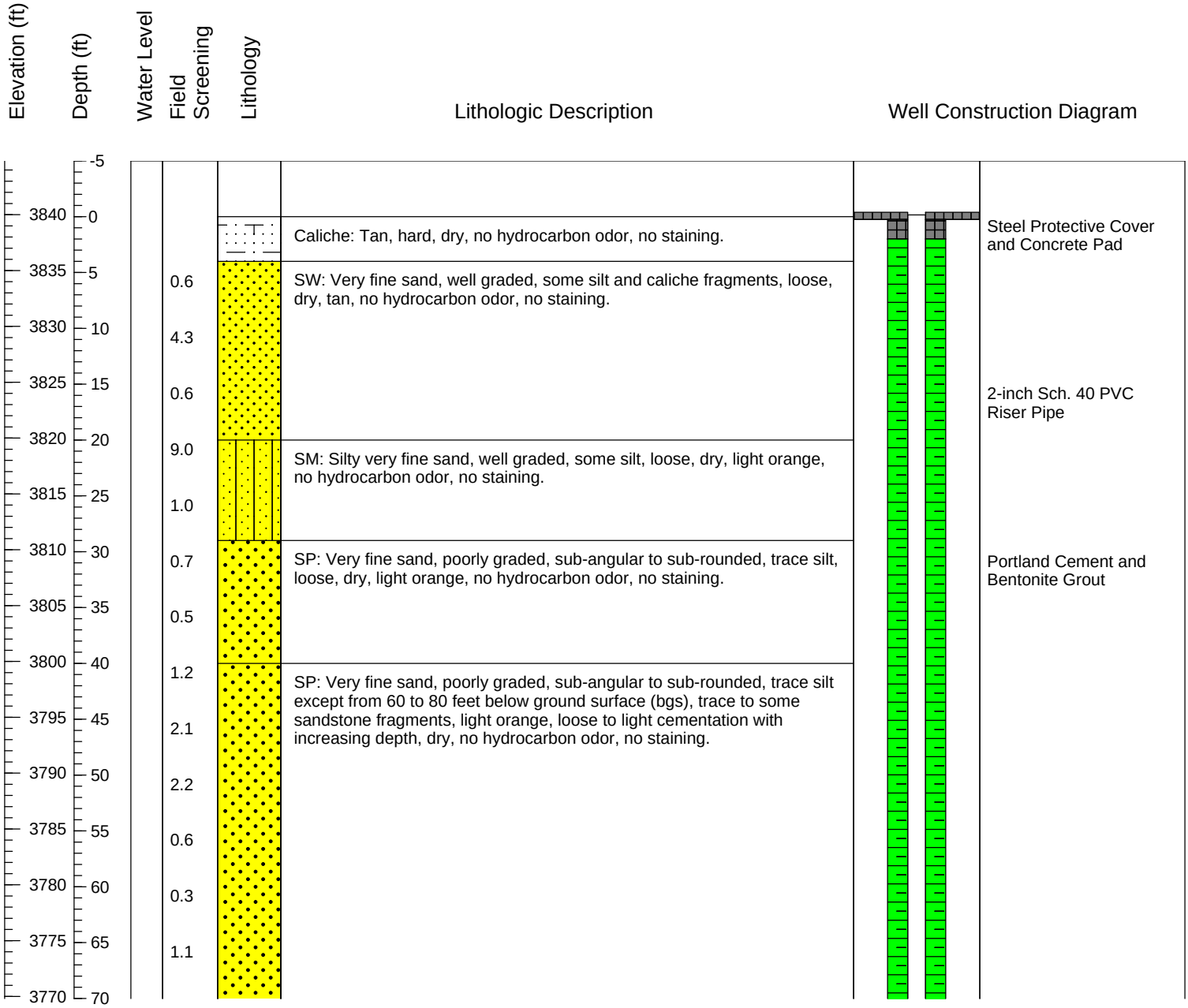
SOIL BORING/WELL COMPLETION LOGS

Released to Imaging: 7/20/2022 10:39:48 AM

BORING LOG and WELL CONSTRUCTION

MW-15R

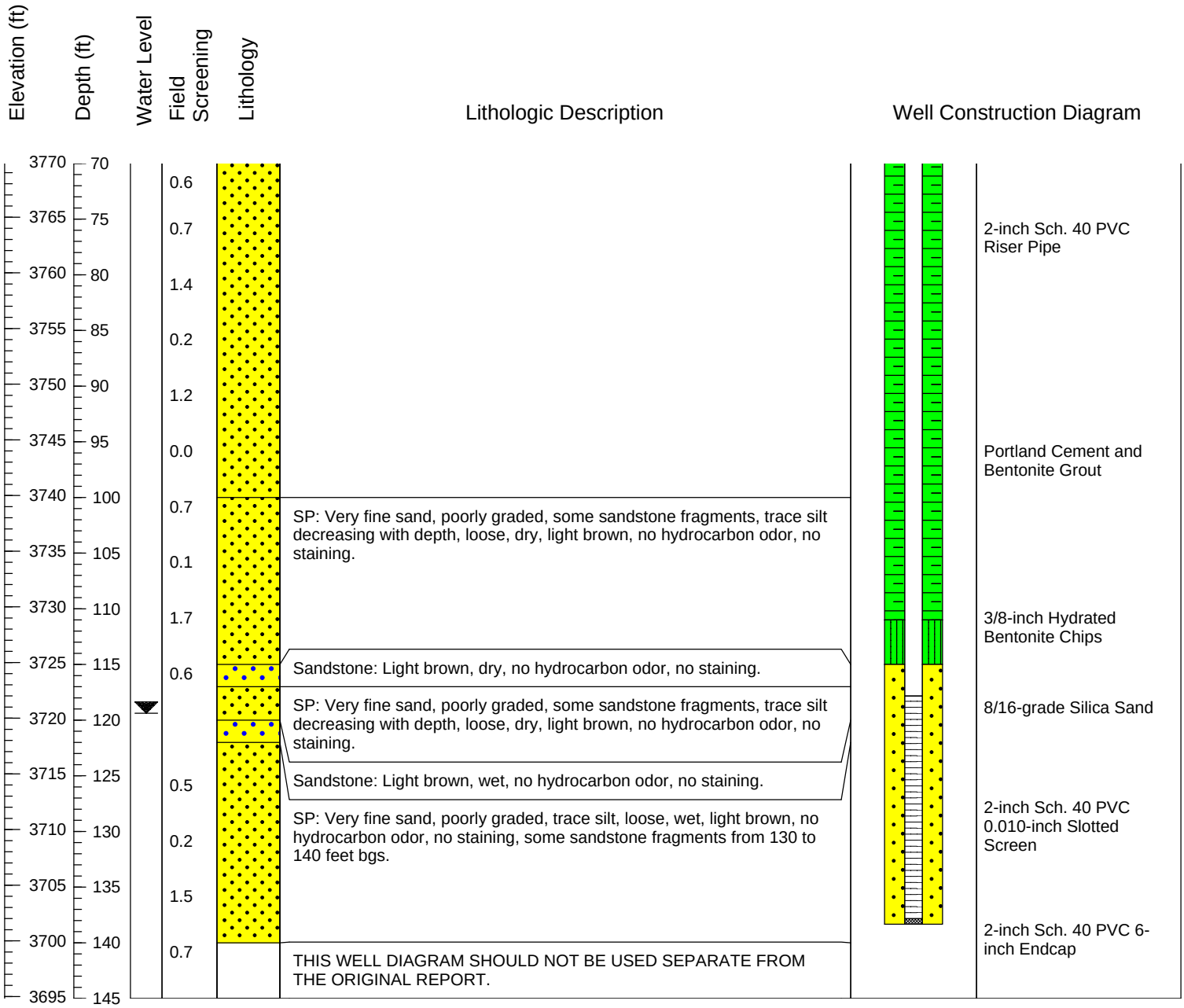
Client: HollyFrontier Navajo Refining LLC	TRC Project #: 427590
Site: Navajo Lovington Refinery	Start Date: 9/8/2021
Address: 7406 South Main Street, Lovington, New Mexico 88260	Finish Date: 9/8/2021
Project: Lovington Well Replacement 2021	Permit #: L-12562
Drilling Company: Talon LPE — Drilling Crew: Jose Salas and crew	TRC Site Rep.: John O'Neal
Drilling Method: Air Rotary	TRC Reviewer: Audrey Eljuri
Boring Diameter (in): 6.5 — Boring Depth (ft bgs): 140.0	Coord. System: NM State Plane East Zone
Sampling Method: Not applicable	Northing: 686269.76
Blow Count Method: Not applicable	Easting: 857214.51
Field Screening Parameter: Volatile Organic Compounds	Elevation Datum: NAVD1988
Meter: MiniRAE 2000 PID — Units: ppm	Ground Elevation (ft): 3839.822
Well Depth (ft bgs): 138.33 — Well Depth (ft toc): 138.49	Well Elevation (ft): 3839.985
Casing Length (ft): 117.99 — Screen Length (ft): 20.0	Well Measuring Point: Top of casing
Surface Completion: Flush mount steel cover and concrete pad	Depth to Water (ft toc): 119.38
Well Development: Pump and surge	Date/Time: 9/8/2021 13:15



BORING LOG and WELL CONSTRUCTION

MW-15R

Client: HollyFrontier Navajo Refining LLC | Site: Navajo Lovington Refinery | Page 2 of 2



BORING LOG and WELL CONSTRUCTION

MW-18R

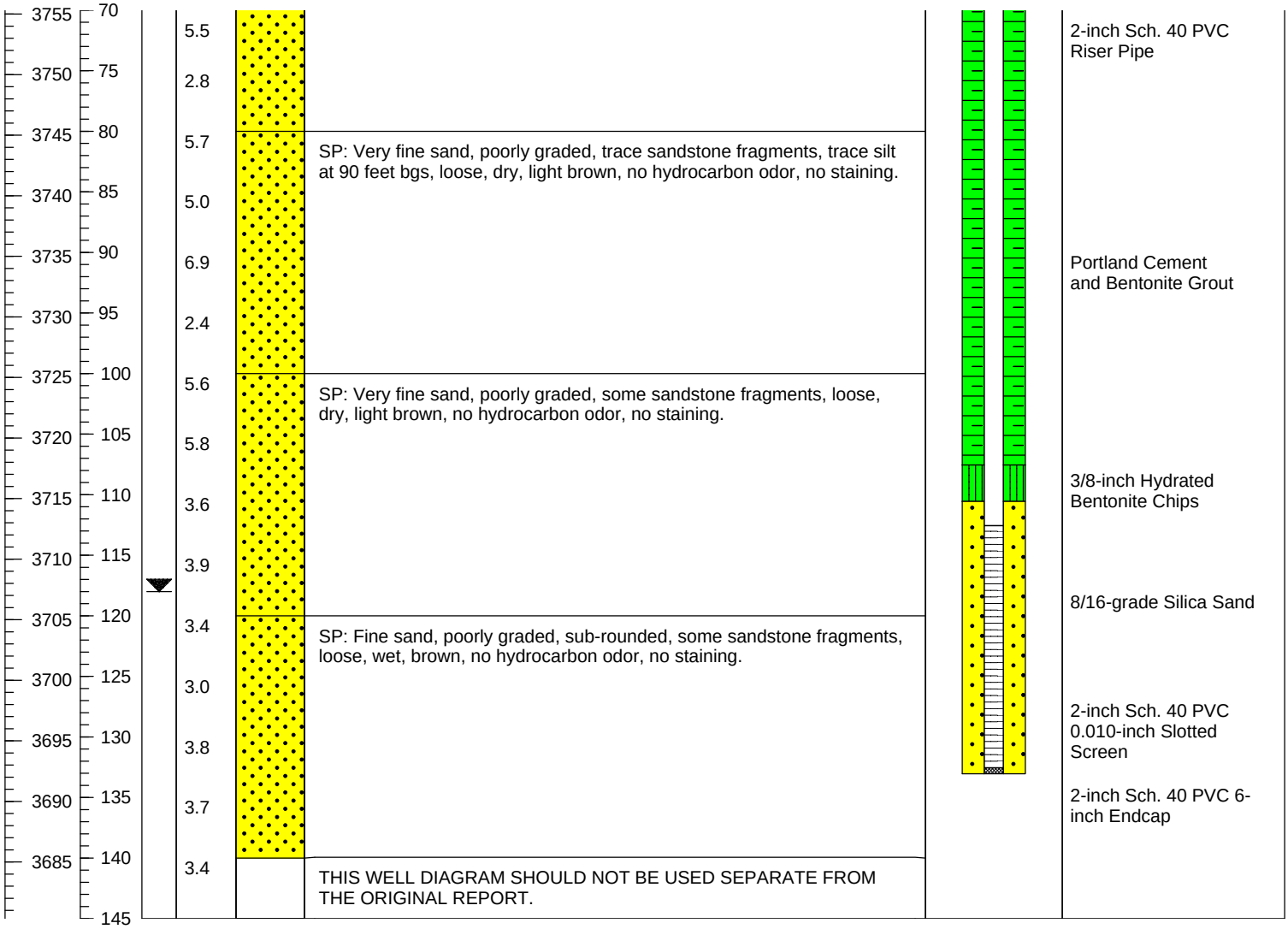
Client: HollyFrontier Navajo Refining LLC	TRC Project #: 427590
Site: Navajo Lovington Refinery	Start Date: 9/8/2021
Address: 7406 South Main Street, Lovington, New Mexico 88260	Finish Date: 9/8/2021
Project: Lovington Well Replacement 2021	Permit #: L-12562
Drilling Company: Talon LPE — Drilling Crew: Jose Salas and crew	TRC Site Rep.: John O'Neal
Drilling Method: Air Rotary	TRC Reviewer: Audrey Eljuri
Boring Diameter (in): 6.5 — Boring Depth (ft bgs): 140.0	Coord. System: NM State Plane East Zone
Sampling Method: Not applicable	Northing: 684564.37
Blow Count Method: Not applicable	Easting: 427590
Field Screening Parameter: Volatile Organic Compounds	Elevation Datum: NAVD1988
Meter: MiniRAE 2000 PID — Units: ppm	Ground Elevation (ft): 3825.318
Well Depth (ft bgs): 133.04 — Well Depth (ft toc): 133.05	Well Elevation (ft): 3825.332
Casing Length (ft): 112.55 — Screen Length (ft): 20.0	Well Measuring Point: Top of casing
Surface Completion: Flush mount steel cover and concrete pad	Depth to Water (ft toc): 118.00
Well Development: Pump and surge	Date/Time: 9/8/2021 17:00

Elevation (ft)	Depth (ft)	Water Level	Field Screening	Lithology	Lithologic Description	Well Construction Diagram
3830	-5					
3825	0					Steel Protective Cover and Concrete Pad
3820	5		1.5		Caliche: Tan, hard, dry, no hydrocarbon odor, no staining.	
3815	10		2.1		Caliche/Sandstone: Layering of caliche and sandstone with very fine sand, poorly graded, hard, dry, light brown, no hydrocarbon odor, no staining, increase in sandstone after 15 feet below ground surface (bgs).	
3810	15		2.8			
3805	20		0.5			
3800	25		0.7		SP: Very fine sand, poorly graded, sub-rounded, trace sandstone fragments, increase to some sandstone fragments starting at 28 feet bgs; loose with light cementation, dry, light orange, no hydrocarbon odor, no staining.	2-inch Sch. 40 PVC Riser Pipe
3795	30		0.3			
3790	35		1.5			
3785	40		2.1		Sandstone: Light orange, hard, dry, no hydrocarbon odor, no staining.	Portland Cement and Bentonite Grout
3780	45		0.9		SP: Very fine sand, poorly graded, sub-rounded, trace silt, some sandstone fragments, loose, dry, light brown, no hydrocarbon odor, no staining.	
3775	50		0.8			
3770	55		0.4			
3765	60		1.1		SP: Very fine sand, poorly graded, some sandstone fragments, trace silt, loose, dry, light brown, no hydrocarbon odor, no staining.	
3760	65		2.2			
3755	70					

BORING LOG and WELL CONSTRUCTION

MW-18R

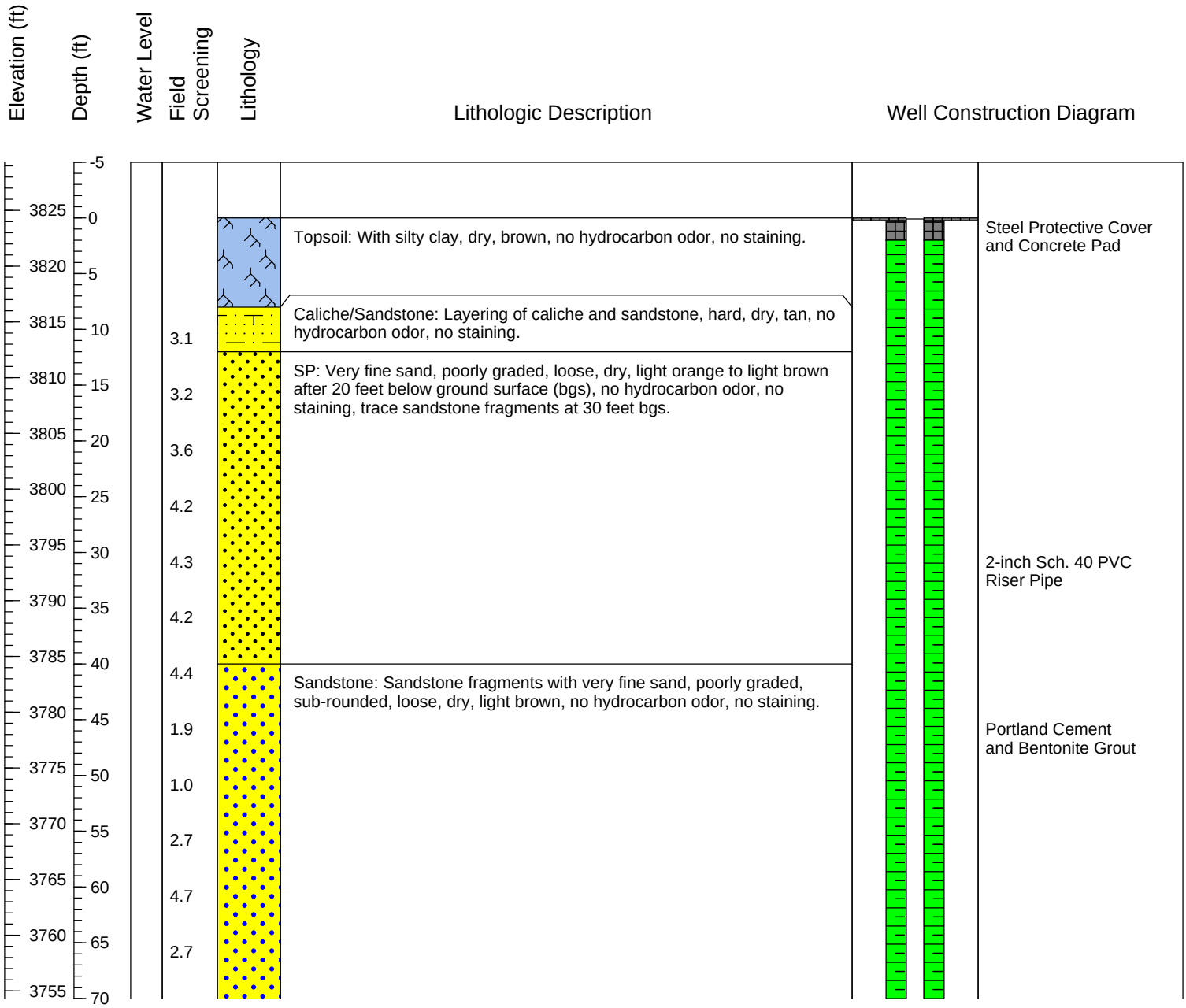
Client: HollyFrontier Navajo Refining LLC | Site: Navajo Lovington Refinery | Page 2 of 2



BORING LOG and WELL CONSTRUCTION

MW-19R

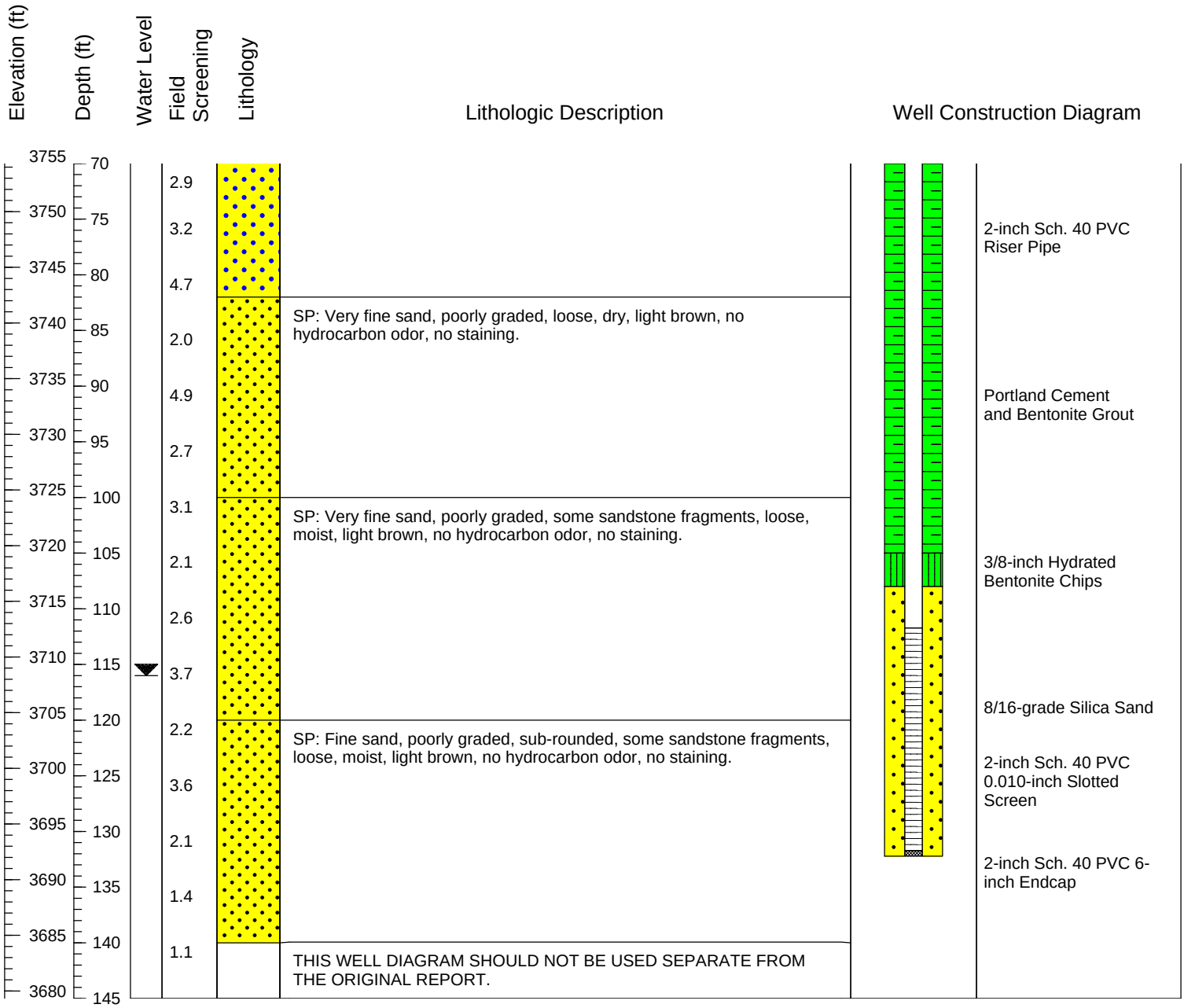
Client: HollyFrontier Navajo Refining LLC	TRC Project #: 427590
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Project: Lovington Well Replacement 2021	Permit #: L-12562
Drilling Company: Talon LPE — Drilling Crew: Jose Salas and crew	TRC Site Rep.: John O'Neal
Drilling Method: Air Rotary	TRC Reviewer: Audrey Eljuri
Boring Diameter (in): 6.5 — Boring Depth (ft bgs): 140.0	Coord. System: NM State Plane East Zone
Sampling Method: Not applicable	Northing: 684254.98
Blow Count Method: Not applicable	Easting: 858424.59
Field Screening Parameter: Volatile Organic Compounds	Elevation Datum: NAVD1988
Meter: MiniRAE 2000 PID — Units: ppm	Ground Elevation (ft): 3824.327
Well Depth (ft bgs): 132.22 — Well Depth (ft toc): 132.13	Well Elevation (ft): 3824.241
Casing Length (ft): 111.63 — Screen Length (ft): 20.0	Well Measuring Point: Top of casing
Surface Completion: Flush mount steel cover and concrete pad	Depth to Water (ft toc): 116.00
Well Development: Pump and surge	Date/Time: 9/9/21 11:00



BORING LOG and WELL CONSTRUCTION

MW-19R

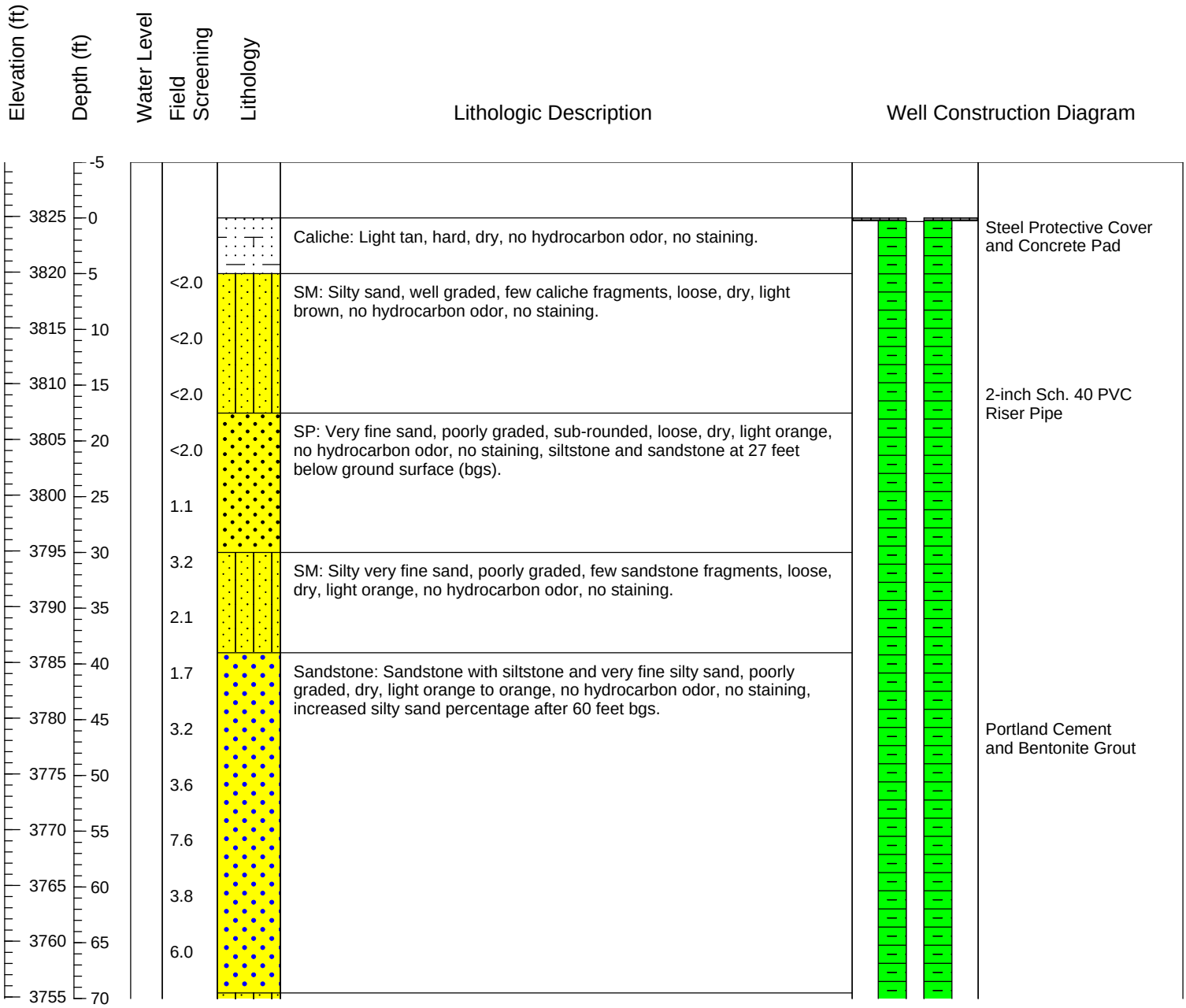
Client: HollyFrontier Navajo Refining LLC | Site: Navajo Lovington Refinery | Page 2 of 2



BORING LOG and WELL CONSTRUCTION

MW-20R

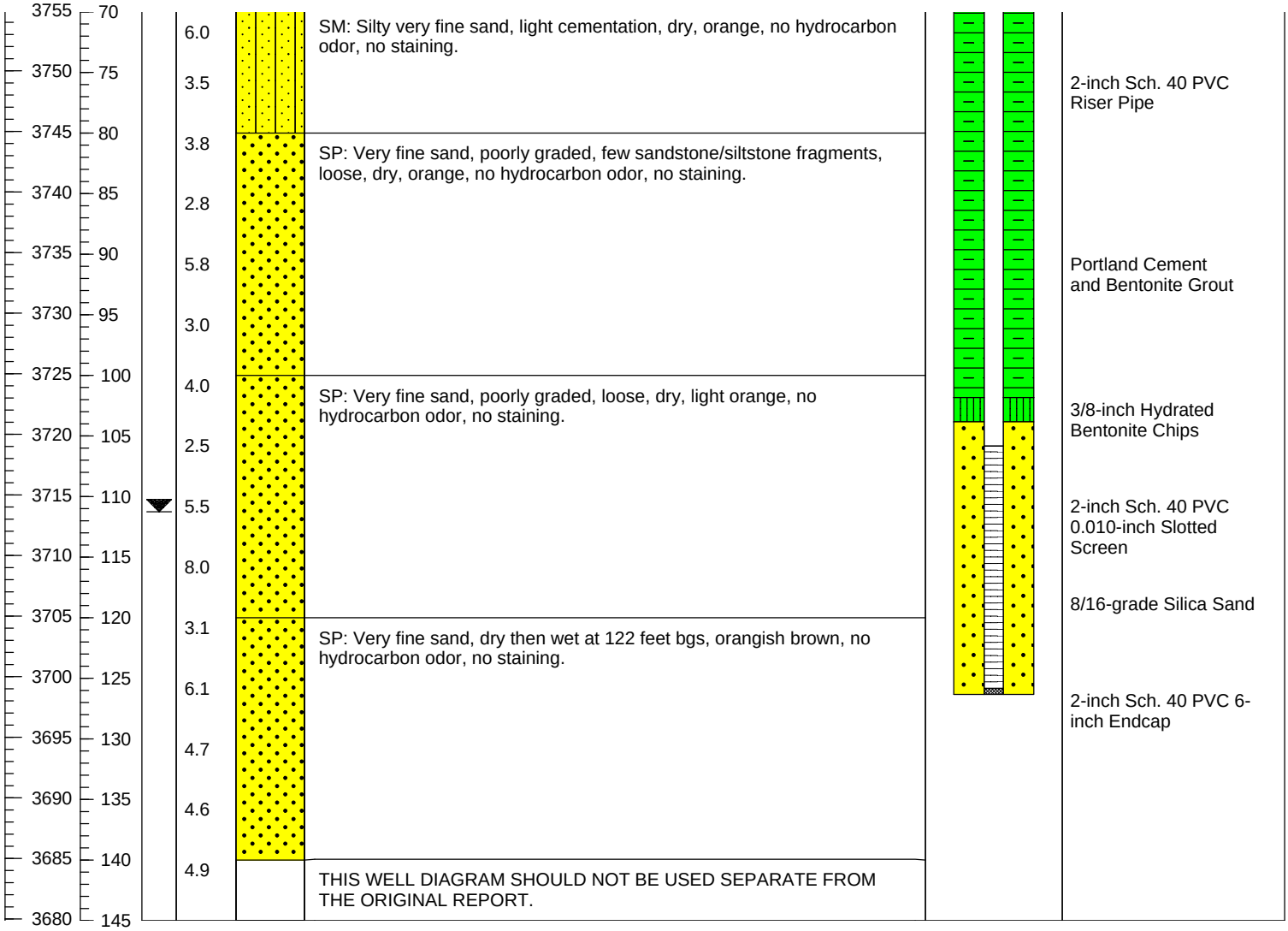
Client: HollyFrontier Navajo Refining LLC	TRC Project #: 427590
Site: Navajo Lovington Refinery	Start Date: 6/10/2021
Address: 7406 South Main Street, Lovington, New Mexico 88260	Finish Date: 6/10/2021
Project: Lovington Well Replacement 2021	Permit #: L-12562
Drilling Company: Talon LPE — Drilling Crew: Jose Salas and crew	TRC Site Rep.: John O'Neal
Drilling Method: Air Rotary	TRC Reviewer: Audrey Eljuri
Boring Diameter (in): 8.25 — Boring Depth (ft bgs): 140.0	Coord. System: NM State Plane East Zone
Sampling Method: Not applicable	Northing: 683763.12
Blow Count Method: Not applicable	Easting: 858382.65
Field Screening Parameter: Volatile Organic Compounds	Elevation Datum: NAVD1988
Meter: MiniRAE 2000 PID — Units: ppm	Ground Elevation (ft): 3824.863
Well Depth (ft bgs): 126.33 — Well Depth (ft toc): 126.0	Well Elevation (ft): 3824.627
Casing Length (ft): 105.59 — Screen Length (ft): 126.09	Well Measuring Point: Top of casing
Surface Completion: Flush mount steel cover and concrete pad	Depth to Water (ft toc): 111.25
Well Development: Pump and surge	Date/Time: 6/10/2021 10:10



BORING LOG and WELL CONSTRUCTION

MW-20R

Client: HollyFrontier Navajo Refining LLC | Site: Navajo Lovington Refinery | Page 2 of 2



BORING LOG and WELL CONSTRUCTION

MW-24R

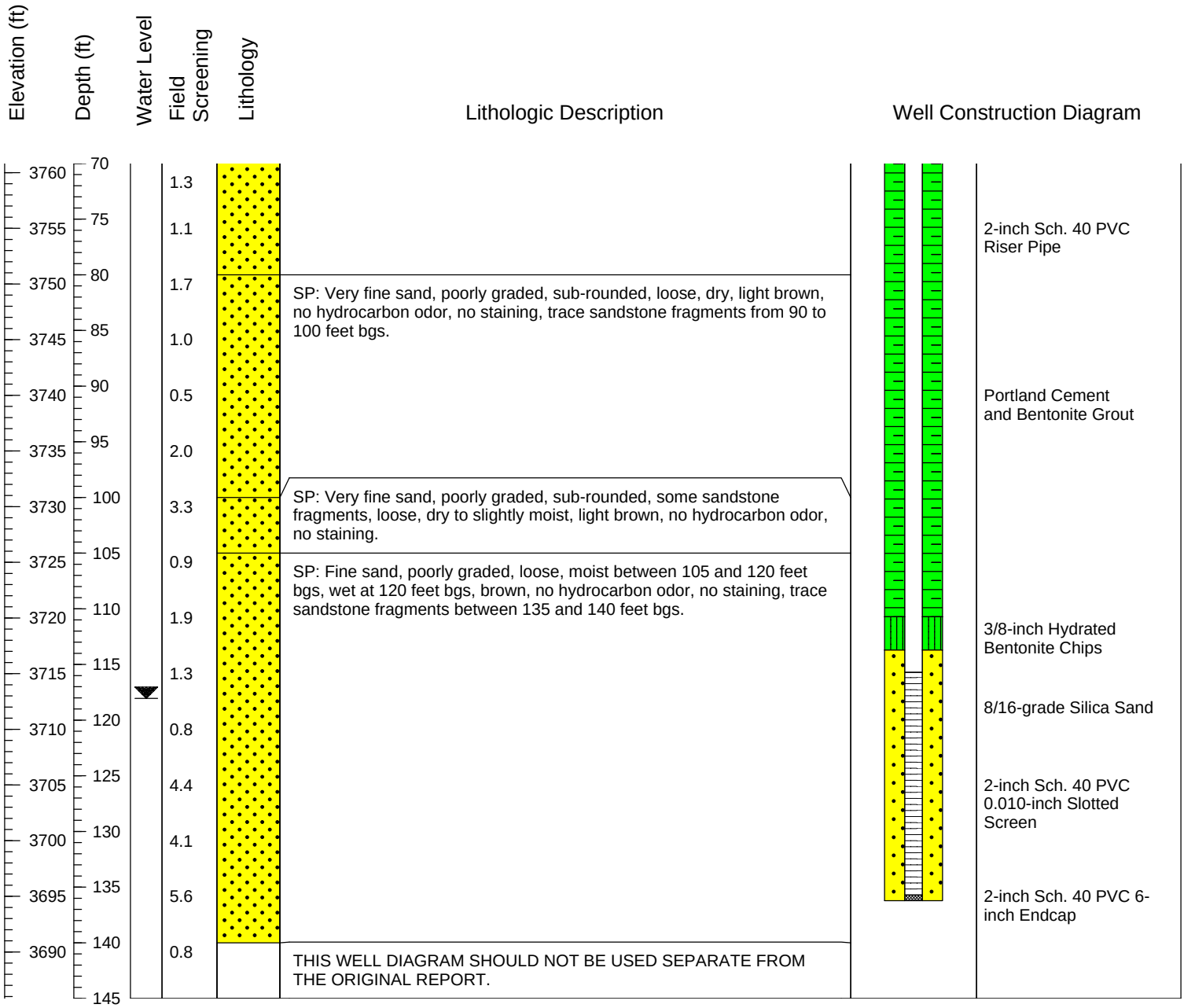
Client: HollyFrontier Navajo Refining LLC	TRC Project #: 427590
Site: Navajo Lovington Refinery	Start Date: 9/9/21
Address: 7406 South Main Street, Lovington, New Mexico 88260	Finish Date: 9/9/21
Project: Lovington Well Replacement 2021	Permit #: L-12562
Drilling Company: Talon LPE — Drilling Crew: Jose Salas and crew	TRC Site Rep.: John O'Neal
Drilling Method: Air Rotary	TRC Reviewer: Audrey Eljuri
Boring Diameter (in): 6.5 — Boring Depth (ft bgs): 140.0	Coord. System: NM State Plane East Zone
Sampling Method: Not applicable	Northing: 684989.08
Blow Count Method: Not applicable	Easting: 859272.02
Field Screening Parameter: Volatile Organic Compounds	Elevation Datum: NAVD1988
Meter: MiniRAE 2000 PID — Units: ppm	Ground Elevation (ft): 3830.82
Well Depth (ft bgs): 136.21 — Well Depth (ft toc): 135.77	Well Elevation (ft): 3830.381
Casing Length (ft): 115.27 — Screen Length (ft): 20.0	Well Measuring Point: Top of casing
Surface Completion: Flush mount steel cover and concrete pad	Depth to Water (ft toc): 118.04
Well Development: Pump and surge	Date/Time: 9/9/21 17:35

Elevation (ft)	Depth (ft)	Water Level	Field Screening	Lithology	Lithologic Description	Well Construction Diagram
3835	-5					
3830	0		0.0		Caliche: Tan, hard, dry, no hydrocarbon odor, no staining, some fine sand and silt (tan) between 5 and 10 feet below ground surface (bgs).	Steel Protective Cover and Concrete Pad
3825	5		0.0		SM: Silty very fine sand, some caliche and sandstone fragments, hard, dry, tan, no hydrocarbon odor, no staining.	
3820	10		0.9			2-inch Sch. 40 PVC Riser Pipe
3815	15		0.8			
3810	20		1.4		SP: Very fine sand, poorly graded, sub-rounded, loose, dry, light orange, no hydrocarbon odor, no staining, some sandstone and siltstone between 35 and 40 feet bgs.	
3805	25		2.3			
3800	30		1.2			
3795	35		3.4		SP: Very fine sand, poorly graded, sub-rounded, loose, dry, light brown, no hydrocarbon odor, no staining, trace sandstone fragments between 55 and 60 feet bgs.	Portland Cement and Bentonite Grout
3790	40		0.4			
3785	45		0.6			
3780	50		0.0			
3775	55		2.7		SP: Very fine sand, poorly graded, sub-rounded, light cementation, dry, light brown, no hydrocarbon odor, no staining, trace sandstone fragments from 70 to 80 feet bgs.	
3770	60		1.1			
3765	65					
3760	70					

BORING LOG and WELL CONSTRUCTION

MW-24R

Client: HollyFrontier Navajo Refining LLC | Site: Navajo Lovington Refinery | Page 2 of 2

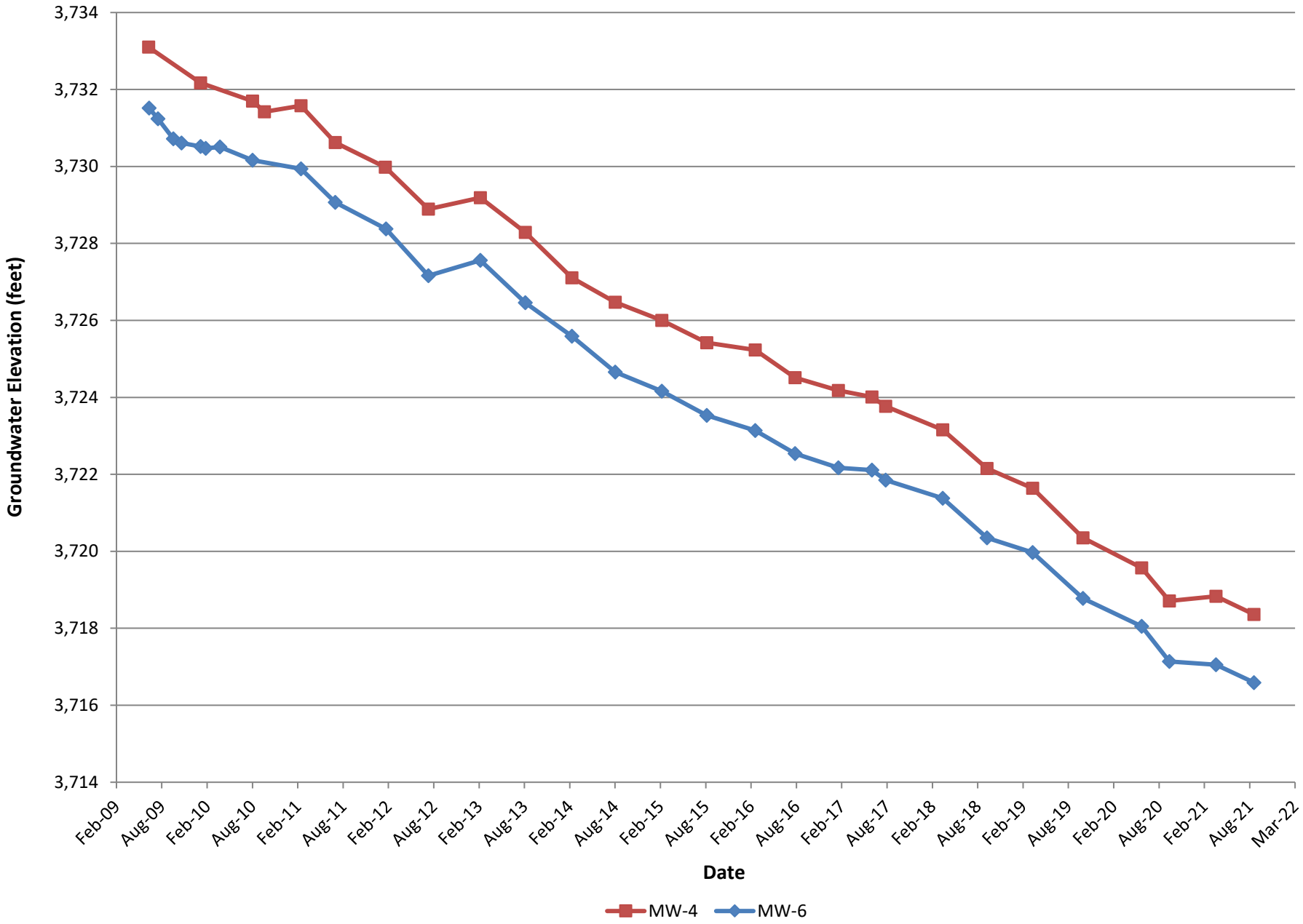


APPENDIX B

PLOT OF GROUNDWATER ELEVATIONS OVER TIME

Released to Imaging: 7/20/2022 10:39:48 AM

APPENDIX B - GROUNDWATER ELEVATIONS OVER TIME
HollyFrontier Navajo Refining LLC
AP-110, Lovington, New Mexico



APPENDIX C

LABORATORY ANALYTICAL REPORTS

Released to Imaging: 7/20/2022 10:39:48 AM

ANALYTICAL REPORT

April 22, 2021

Revised Report

TRC Solutions - Austin, TX

Sample Delivery Group:	L1311938
Samples Received:	01/29/2021
Project Number:	425919.0000.0000.
Description:	Lovington Lea Refinery

Report To: Julie Speer
505 E. Huntland Drive, Suite 250
Austin, TX 78752

Entire Report Reviewed By:

Chris McCord
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.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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WW-NORTH L1311938-01 GW

Collected by	Collected date/time	Received date/time
BB & HMI Team	01/28/21 10:25	01/29/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1615529	1	02/03/21 10:45	02/03/21 11:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1614633	1	02/02/21 12:47	02/02/21 12:47	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1614669	1	02/02/21 20:56	02/02/21 20:56	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1615154	1	02/04/21 07:31	02/04/21 07:31	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1615154	5	02/04/21 07:43	02/04/21 07:43	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1614360	1	02/02/21 16:56	02/03/21 10:10	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1614799	1	02/04/21 04:59	02/04/21 08:53	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1614800	1	02/04/21 11:40	02/04/21 15:07	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1614916	1	02/04/21 10:06	02/04/21 10:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1614311	1	02/01/21 04:16	02/01/21 04:16	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1615839	1	02/04/21 17:42	02/05/21 12:36	WCR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1615128	1	02/03/21 12:47	02/04/21 15:55	AO	Mt. Juliet, TN

WW-SOUTH L1311938-02 GW

Collected by	Collected date/time	Received date/time
BB & HMI Team	01/28/21 09:45	01/29/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1615529	1	02/03/21 10:45	02/03/21 11:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1614633	1	02/02/21 13:09	02/02/21 13:09	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1614669	1	02/02/21 20:59	02/02/21 20:59	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1615154	1	02/04/21 07:56	02/04/21 07:56	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1615154	5	02/04/21 08:09	02/04/21 08:09	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1614360	1	02/02/21 16:56	02/03/21 10:12	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1614799	1	02/04/21 04:59	02/04/21 08:56	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1614800	1	02/04/21 11:40	02/04/21 15:11	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1614916	1	02/04/21 10:33	02/04/21 10:33	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1614311	1	02/01/21 04:36	02/01/21 04:36	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1615839	1	02/04/21 17:42	02/05/21 13:02	WCR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1615128	1	02/03/21 12:47	02/04/21 16:18	AO	Mt. Juliet, TN

WW-EAST L1311938-03 GW

Collected by	Collected date/time	Received date/time
BB & HMI Team	01/28/21 11:15	01/29/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1615529	1	02/03/21 10:45	02/03/21 11:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1614633	1	02/02/21 13:33	02/02/21 13:33	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1614669	1	02/02/21 21:00	02/02/21 21:00	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1615154	1	02/04/21 08:22	02/04/21 08:22	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1615154	5	02/04/21 08:34	02/04/21 08:34	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1614360	1	02/02/21 16:56	02/03/21 10:14	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1614799	1	02/04/21 04:59	02/04/21 08:59	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1614800	1	02/04/21 11:40	02/04/21 15:14	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1614916	1	02/04/21 10:59	02/04/21 10:59	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1614311	1	02/01/21 04:57	02/01/21 04:57	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1615839	1	02/04/21 17:42	02/05/21 13:28	WCR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1615128	1	02/03/21 12:47	02/04/21 16:42	AO	Mt. Juliet, TN

SAMPLE SUMMARY

DUP-01 L1311938-04 GW

Collected by: BB & HMI Team
Collected date/time: 01/28/21 10:00
Received date/time: 01/29/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1615529	1	02/03/21 10:45	02/03/21 11:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1614633	1	02/02/21 13:45	02/02/21 13:45	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1614669	1	02/02/21 21:01	02/02/21 21:01	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1615154	1	02/04/21 08:47	02/04/21 08:47	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1615154	5	02/04/21 09:00	02/04/21 09:00	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1614360	1	02/02/21 16:56	02/03/21 10:16	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1614799	1	02/04/21 04:59	02/04/21 09:02	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1614800	1	02/04/21 11:40	02/04/21 15:17	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1614916	1	02/04/21 11:26	02/04/21 11:26	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1614311	1	02/01/21 05:17	02/01/21 05:17	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1615839	1	02/04/21 17:42	02/05/21 13:54	WCR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1615128	1	02/03/21 12:47	02/04/21 17:05	AO	Mt. Juliet, TN

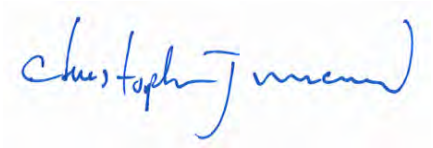
TRIP BLANK L1311938-05 GW

Collected by: BB & HMI Team
Collected date/time: 01/28/21 00:00
Received date/time: 01/29/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1614311	1	02/01/21 01:33	02/01/21 01:33	ADM	Mt. Juliet, TN

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

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. 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.



Chris McCord
Project Manager

Report Revision History

Level II Report - Version 1: 02/08/21 15:56

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	520		10.0	10.0	1	02/03/2021 11:31	WG1615529

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	171		8.45	20.0	20.0	1	02/02/2021 12:47	WG1614633

Sample Narrative:

L1311938-01 WG1614633: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	2.86		0.0500	0.100	0.100	1	02/02/2021 20:56	WG1614669

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	120		1.90	1.00	5.00	5	02/04/2021 07:43	WG1615154
Fluoride	0.798		0.0640	0.150	0.150	1	02/04/2021 07:31	WG1615154
Sulfate	80.1		0.594	5.00	5.00	1	02/04/2021 07:31	WG1615154

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	02/03/2021 10:10	WG1614360

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.143	J	0.0200	0.200	0.200	1	02/04/2021 08:53	WG1614799

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	02/04/2021 15:07	WG1614800
Arsenic,Dissolved	0.00505		0.000180	0.00200	0.00200	1	02/04/2021 15:07	WG1614800
Barium,Dissolved	0.106		0.000381	0.0200	0.0200	1	02/04/2021 15:07	WG1614800
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	02/04/2021 15:07	WG1614800
Chromium,Dissolved	0.00141	J	0.00124	0.00200	0.00200	1	02/04/2021 15:07	WG1614800
Copper,Dissolved	0.00209	J	0.00151	0.00500	0.00500	1	02/04/2021 15:07	WG1614800
Cobalt,Dissolved	0.000118	J	0.0000596	0.00200	0.00200	1	02/04/2021 15:07	WG1614800
Iron,Dissolved	U		0.0281	0.100	0.100	1	02/04/2021 15:07	WG1614800
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	02/04/2021 15:07	WG1614800
Manganese,Dissolved	0.00175	J	0.000704	0.00500	0.00500	1	02/04/2021 15:07	WG1614800
Molybdenum,Dissolved	0.00309	J	0.000348	0.00500	0.00500	1	02/04/2021 15:07	WG1614800
Nickel,Dissolved	0.00121	J	0.000816	0.00200	0.00200	1	02/04/2021 15:07	WG1614800
Selenium,Dissolved	0.00361		0.000300	0.00200	0.00200	1	02/04/2021 15:07	WG1614800
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	02/04/2021 15:07	WG1614800
Uranium,Dissolved	0.00171	J	0.0000700	0.0200	0.0200	1	02/04/2021 15:07	WG1614800
Zinc,Dissolved	0.0109	B J	0.00302	0.0250	0.0250	1	02/04/2021 15:07	WG1614800

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0420	B J	0.0314	0.100	0.100	1	02/04/2021 10:06	WG1614916
(S) a,a,a-Trifluorotoluene(FID)	*102*				*78.0-120*		*02/04/2021 10:06*	WG1614916

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	02/01/2021 04:16	WG1614311
Benzene	U		0.0000941	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Bromoform	U		0.000129	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Bromomethane	U		0.000605	0.00500	0.00500	1	02/01/2021 04:16	WG1614311
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Carbon tetrachloride	U		0.000128	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Chlorobenzene	U		0.000116	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Chloroethane	U		0.000192	0.00500	0.00500	1	02/01/2021 04:16	WG1614311
Chloroform	U		0.000111	0.00500	0.00500	1	02/01/2021 04:16	WG1614311
Chloromethane	U		0.000960	0.00250	0.00250	1	02/01/2021 04:16	WG1614311
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Ethylbenzene	U		0.000137	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
2-Hexanone	U		0.000787	0.0100	0.0100	1	02/01/2021 04:16	WG1614311
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	02/01/2021 04:16	WG1614311
Methylene Chloride	U		0.000430	0.00500	0.00500	1	02/01/2021 04:16	WG1614311
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	02/01/2021 04:16	WG1614311
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Naphthalene	U		0.00100	0.00500	0.00500	1	02/01/2021 04:16	WG1614311
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Styrene	U		0.000118	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Toluene	U		0.000278	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Trichloroethene	U		0.000190	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Vinyl chloride	U		0.000234	0.00100	0.00100	1	02/01/2021 04:16	WG1614311
Xylenes, Total	U		0.000174	0.00300	0.00300	1	02/01/2021 04:16	WG1614311
(S) Toluene-d8	*109*				*80.0-120*		*02/01/2021 04:16*	WG1614311
(S) 4-Bromofluorobenzene	*96.6*				*77.0-126*		*02/01/2021 04:16*	WG1614311
(S) 1,2-Dichloroethane-d4	*124*				*70.0-130*		*02/01/2021 04:16*	WG1614311

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0450	B J	0.0247	0.100	0.100	1	02/05/2021 12:36	WG1615839
(S) o-Terphenyl	*115*				*31.0-160*		*02/05/2021 12:36*	WG1615839

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Acetophenone	U		0.000208	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Anthracene	U		0.0000804	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Atrazine	U		0.000255	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Benzaldehyde	U		0.00169	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	02/04/2021 15:55	WG1615128
Biphenyl	U		0.000790	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Caprolactam	U		0.000309	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Carbazole	U		0.000111	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Chrysene	U		0.000130	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	02/04/2021 15:55	WG1615128
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Fluoranthene	U		0.000102	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Fluorene	U		0.0000844	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Hexachloroethane	U		0.000127	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Isophorone	U		0.000143	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Naphthalene	U		0.000159	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Nitrobenzene	U		0.000297	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Phenanthrene	U		0.000112	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	02/04/2021 15:55	WG1615128
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	02/04/2021 15:55	WG1615128
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	02/04/2021 15:55	WG1615128
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	02/04/2021 15:55	WG1615128
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	02/04/2021 15:55	WG1615128
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	02/04/2021 15:55	WG1615128
Pyrene	U		0.000107	0.00100	0.00100	1	02/04/2021 15:55	WG1615128
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	02/04/2021 15:55	WG1615128

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
Phenol	U		0.00433	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	02/04/2021 15:55	WG1615128
(S) 2-Fluorophenol	*28.7*				*10.0-120*		*02/04/2021 15:55*	WG1615128
(S) Phenol-d5	*14.8*				*10.0-120*		*02/04/2021 15:55*	WG1615128
(S) Nitrobenzene-d5	*62.7*				*10.0-127*		*02/04/2021 15:55*	WG1615128
(S) 2-Fluorobiphenyl	*87.4*				*10.0-130*		*02/04/2021 15:55*	WG1615128
(S) 2,4,6-Tribromophenol	*50.5*				*10.0-155*		*02/04/2021 15:55*	WG1615128
(S) p-Terphenyl-d14	*80.5*				*10.0-128*		*02/04/2021 15:55*	WG1615128

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	986		20.0	20.0	1	02/03/2021 11:31	WG1615529

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	176		8.45	20.0	20.0	1	02/02/2021 13:09	WG1614633

Sample Narrative:

L1311938-02 WG1614633: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	3.06		0.0500	0.100	0.100	1	02/02/2021 20:59	WG1614669

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	334		1.90	1.00	5.00	5	02/04/2021 08:09	WG1615154
Fluoride	0.646		0.0640	0.150	0.150	1	02/04/2021 07:56	WG1615154
Sulfate	96.2		0.594	5.00	5.00	1	02/04/2021 07:56	WG1615154

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	02/03/2021 10:12	WG1614360

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.178	J	0.0200	0.200	0.200	1	02/04/2021 08:56	WG1614799

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	02/04/2021 15:11	WG1614800
Arsenic,Dissolved	0.00420		0.000180	0.00200	0.00200	1	02/04/2021 15:11	WG1614800
Barium,Dissolved	0.116		0.000381	0.0200	0.0200	1	02/04/2021 15:11	WG1614800
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	02/04/2021 15:11	WG1614800
Chromium,Dissolved	0.00173	J	0.00124	0.00200	0.00200	1	02/04/2021 15:11	WG1614800
Copper,Dissolved	U		0.00151	0.00500	0.00500	1	02/04/2021 15:11	WG1614800
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	02/04/2021 15:11	WG1614800
Iron,Dissolved	U		0.0281	0.100	0.100	1	02/04/2021 15:11	WG1614800
Lead,Dissolved	0.00152	J	0.000849	0.00200	0.00200	1	02/04/2021 15:11	WG1614800
Manganese,Dissolved	0.00208	J	0.000704	0.00500	0.00500	1	02/04/2021 15:11	WG1614800
Molybdenum,Dissolved	0.00218	J	0.000348	0.00500	0.00500	1	02/04/2021 15:11	WG1614800
Nickel,Dissolved	0.000963	J	0.000816	0.00200	0.00200	1	02/04/2021 15:11	WG1614800
Selenium,Dissolved	0.00367		0.000300	0.00200	0.00200	1	02/04/2021 15:11	WG1614800
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	02/04/2021 15:11	WG1614800
Uranium,Dissolved	0.00241	J	0.0000700	0.0200	0.0200	1	02/04/2021 15:11	WG1614800
Zinc,Dissolved	0.0278	B	0.00302	0.0250	0.0250	1	02/04/2021 15:11	WG1614800

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	02/04/2021 10:33	WG1614916
(S) a,a,a-Trifluorotoluene(FID)	*102*				*78.0-120*		*02/04/2021 10:33*	WG1614916

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	02/01/2021 04:36	WG1614311
Benzene	0.000323	J	0.0000941	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Bromoform	U		0.000129	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Bromomethane	U		0.000605	0.00500	0.00500	1	02/01/2021 04:36	WG1614311
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Carbon tetrachloride	0.000197	J	0.000128	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Chlorobenzene	U		0.000116	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Chloroethane	U		0.000192	0.00500	0.00500	1	02/01/2021 04:36	WG1614311
Chloroform	0.000936	J	0.000111	0.00500	0.00500	1	02/01/2021 04:36	WG1614311
Chloromethane	U		0.000960	0.00250	0.00250	1	02/01/2021 04:36	WG1614311
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Ethylbenzene	U		0.000137	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
2-Hexanone	U		0.000787	0.0100	0.0100	1	02/01/2021 04:36	WG1614311
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	02/01/2021 04:36	WG1614311
Methylene Chloride	U		0.000430	0.00500	0.00500	1	02/01/2021 04:36	WG1614311
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	02/01/2021 04:36	WG1614311
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Naphthalene	U		0.00100	0.00500	0.00500	1	02/01/2021 04:36	WG1614311
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Styrene	U		0.000118	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Toluene	U		0.000278	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Trichloroethene	U		0.000190	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Vinyl chloride	U		0.000234	0.00100	0.00100	1	02/01/2021 04:36	WG1614311
Xylenes, Total	U		0.000174	0.00300	0.00300	1	02/01/2021 04:36	WG1614311
(S) Toluene-d8	*104*				*80.0-120*		*02/01/2021 04:36*	WG1614311
(S) 4-Bromofluorobenzene	*91.5*				*77.0-126*		*02/01/2021 04:36*	WG1614311
(S) 1,2-Dichloroethane-d4	*127*				*70.0-130*		*02/01/2021 04:36*	WG1614311

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0582	B J	0.0247	0.100	0.100	1	02/05/2021 13:02	WG1615839
(S) o-Terphenyl	*117*				*31.0-160*		*02/05/2021 13:02*	WG1615839

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Acetophenone	U		0.000208	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Anthracene	U		0.0000804	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Atrazine	U		0.000255	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Benzaldehyde	U		0.00169	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	02/04/2021 16:18	WG1615128
Biphenyl	U		0.000790	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Caprolactam	U		0.000309	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Carbazole	U		0.000111	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Chrysene	U		0.000130	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	02/04/2021 16:18	WG1615128
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Fluoranthene	U		0.000102	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Fluorene	U		0.0000844	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Hexachloroethane	U		0.000127	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Isophorone	U		0.000143	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Naphthalene	U		0.000159	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Nitrobenzene	U		0.000297	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Phenanthrene	U		0.000112	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	02/04/2021 16:18	WG1615128
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	02/04/2021 16:18	WG1615128
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	02/04/2021 16:18	WG1615128
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	02/04/2021 16:18	WG1615128
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	02/04/2021 16:18	WG1615128
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	02/04/2021 16:18	WG1615128
Pyrene	U		0.000107	0.00100	0.00100	1	02/04/2021 16:18	WG1615128
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	02/04/2021 16:18	WG1615128

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
Phenol	U		0.00433	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	02/04/2021 16:18	WG1615128
(S) 2-Fluorophenol	*27.7*				*10.0-120*		*02/04/2021 16:18*	WG1615128
(S) Phenol-d5	*15.2*				*10.0-120*		*02/04/2021 16:18*	WG1615128
(S) Nitrobenzene-d5	*61.9*				*10.0-127*		*02/04/2021 16:18*	WG1615128
(S) 2-Fluorobiphenyl	*85.3*				*10.0-130*		*02/04/2021 16:18*	WG1615128
(S) 2,4,6-Tribromophenol	*53.2*				*10.0-155*		*02/04/2021 16:18*	WG1615128
(S) p-Terphenyl-d14	*80.5*				*10.0-128*		*02/04/2021 16:18*	WG1615128

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	565		10.0	10.0	1	02/03/2021 11:31	WG1615529

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	166		8.45	20.0	20.0	1	02/02/2021 13:33	WG1614633

Sample Narrative:

L1311938-03 WG1614633: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	2.82		0.0500	0.100	0.100	1	02/02/2021 21:00	WG1614669

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	130		1.90	1.00	5.00	5	02/04/2021 08:34	WG1615154
Fluoride	0.866		0.0640	0.150	0.150	1	02/04/2021 08:22	WG1615154
Sulfate	89.0		0.594	5.00	5.00	1	02/04/2021 08:22	WG1615154

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	02/03/2021 10:14	WG1614360

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.142	J	0.0200	0.200	0.200	1	02/04/2021 08:59	WG1614799

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	02/04/2021 15:14	WG1614800
Arsenic,Dissolved	0.00516		0.000180	0.00200	0.00200	1	02/04/2021 15:14	WG1614800
Barium,Dissolved	0.0975		0.000381	0.0200	0.0200	1	02/04/2021 15:14	WG1614800
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	02/04/2021 15:14	WG1614800
Chromium,Dissolved	0.00541		0.00124	0.00200	0.00200	1	02/04/2021 15:14	WG1614800
Copper,Dissolved	0.00497	J	0.00151	0.00500	0.00500	1	02/04/2021 15:14	WG1614800
Cobalt,Dissolved	0.0000716	J	0.0000596	0.00200	0.00200	1	02/04/2021 15:14	WG1614800
Iron,Dissolved	U		0.0281	0.100	0.100	1	02/04/2021 15:14	WG1614800
Lead,Dissolved	0.00224		0.000849	0.00200	0.00200	1	02/04/2021 15:14	WG1614800
Manganese,Dissolved	0.000778	J	0.000704	0.00500	0.00500	1	02/04/2021 15:14	WG1614800
Molybdenum,Dissolved	0.00269	J	0.000348	0.00500	0.00500	1	02/04/2021 15:14	WG1614800
Nickel,Dissolved	0.000993	J	0.000816	0.00200	0.00200	1	02/04/2021 15:14	WG1614800
Selenium,Dissolved	0.00419		0.000300	0.00200	0.00200	1	02/04/2021 15:14	WG1614800
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	02/04/2021 15:14	WG1614800
Uranium,Dissolved	0.00192	J	0.0000700	0.0200	0.0200	1	02/04/2021 15:14	WG1614800
Zinc,Dissolved	0.0338	B	0.00302	0.0250	0.0250	1	02/04/2021 15:14	WG1614800

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	02/04/2021 10:59	WG1614916
(S) a,a,a-Trifluorotoluene(FID)	*103*				*78.0-120*		*02/04/2021 10:59*	WG1614916

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	02/01/2021 04:57	WG1614311
Benzene	U		0.0000941	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Bromoform	U		0.000129	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Bromomethane	U		0.000605	0.00500	0.00500	1	02/01/2021 04:57	WG1614311
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Carbon tetrachloride	U		0.000128	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Chlorobenzene	U		0.000116	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Chloroethane	U		0.000192	0.00500	0.00500	1	02/01/2021 04:57	WG1614311
Chloroform	U		0.000111	0.00500	0.00500	1	02/01/2021 04:57	WG1614311
Chloromethane	U		0.000960	0.00250	0.00250	1	02/01/2021 04:57	WG1614311
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Ethylbenzene	U		0.000137	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
2-Hexanone	U		0.000787	0.0100	0.0100	1	02/01/2021 04:57	WG1614311
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	02/01/2021 04:57	WG1614311
Methylene Chloride	U		0.000430	0.00500	0.00500	1	02/01/2021 04:57	WG1614311
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	02/01/2021 04:57	WG1614311
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Naphthalene	U		0.00100	0.00500	0.00500	1	02/01/2021 04:57	WG1614311
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Styrene	U		0.000118	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Toluene	U		0.000278	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Trichloroethene	U		0.000190	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Vinyl chloride	U		0.000234	0.00100	0.00100	1	02/01/2021 04:57	WG1614311
Xylenes, Total	U		0.000174	0.00300	0.00300	1	02/01/2021 04:57	WG1614311
(S) Toluene-d8	*104*				*80.0-120*		*02/01/2021 04:57*	WG1614311
(S) 4-Bromofluorobenzene	*94.4*				*77.0-126*		*02/01/2021 04:57*	WG1614311
(S) 1,2-Dichloroethane-d4	*124*				*70.0-130*		*02/01/2021 04:57*	WG1614311

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) High Fraction	0.0943	B J	0.0247	0.100	0.100	1	02/05/2021 13:28	WG1615839
(S) o-Terphenyl	*118*				*31.0-160*		*02/05/2021 13:28*	WG1615839

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acenaphthene	U		0.0000886	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Acetophenone	U		0.000208	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Anthracene	U		0.0000804	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Atrazine	U		0.000255	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Benzaldehyde	U		0.00169	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	02/04/2021 16:42	WG1615128
Biphenyl	U		0.000790	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Caprolactam	U		0.000309	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Carbazole	U		0.000111	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Chrysene	U		0.000130	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	02/04/2021 16:42	WG1615128
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Fluoranthene	U		0.000102	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Fluorene	U		0.0000844	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Hexachloroethane	U		0.000127	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Isophorone	U		0.000143	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Naphthalene	U		0.000159	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Nitrobenzene	U		0.000297	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Phenanthrene	U		0.000112	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	02/04/2021 16:42	WG1615128
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	02/04/2021 16:42	WG1615128
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	02/04/2021 16:42	WG1615128
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	02/04/2021 16:42	WG1615128
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	02/04/2021 16:42	WG1615128
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	02/04/2021 16:42	WG1615128
Pyrene	U		0.000107	0.00100	0.00100	1	02/04/2021 16:42	WG1615128
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	02/04/2021 16:42	WG1615128

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
Phenol	U		0.00433	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	02/04/2021 16:42	WG1615128
(S) 2-Fluorophenol	*30.4*				*10.0-120*		*02/04/2021 16:42*	WG1615128
(S) Phenol-d5	*15.9*				*10.0-120*		*02/04/2021 16:42*	WG1615128
(S) Nitrobenzene-d5	*64.5*				*10.0-127*		*02/04/2021 16:42*	WG1615128
(S) 2-Fluorobiphenyl	*89.0*				*10.0-130*		*02/04/2021 16:42*	WG1615128
(S) 2,4,6-Tribromophenol	*55.5*				*10.0-155*		*02/04/2021 16:42*	WG1615128
(S) p-Terphenyl-d14	*80.4*				*10.0-128*		*02/04/2021 16:42*	WG1615128

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1040		20.0	20.0	1	02/03/2021 11:31	WG1615529

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	173		8.45	20.0	20.0	1	02/02/2021 13:45	WG1614633

Sample Narrative:

L1311938-04 WG1614633: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.05		0.0500	0.100	0.100	1	02/02/2021 21:01	WG1614669

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	349		1.90	1.00	5.00	5	02/04/2021 09:00	WG1615154
Fluoride	0.650		0.0640	0.150	0.150	1	02/04/2021 08:47	WG1615154
Sulfate	96.7		0.594	5.00	5.00	1	02/04/2021 08:47	WG1615154

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	02/03/2021 10:16	WG1614360

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.180	J	0.0200	0.200	0.200	1	02/04/2021 09:02	WG1614799

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	02/04/2021 15:17	WG1614800
Arsenic,Dissolved	0.00397		0.000180	0.00200	0.00200	1	02/04/2021 15:17	WG1614800
Barium,Dissolved	0.116		0.000381	0.0200	0.0200	1	02/04/2021 15:17	WG1614800
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	02/04/2021 15:17	WG1614800
Chromium,Dissolved	0.00125	J	0.00124	0.00200	0.00200	1	02/04/2021 15:17	WG1614800
Copper,Dissolved	0.00189	J	0.00151	0.00500	0.00500	1	02/04/2021 15:17	WG1614800
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	02/04/2021 15:17	WG1614800
Iron,Dissolved	U		0.0281	0.100	0.100	1	02/04/2021 15:17	WG1614800
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	02/04/2021 15:17	WG1614800
Manganese,Dissolved	0.00184	J	0.000704	0.00500	0.00500	1	02/04/2021 15:17	WG1614800
Molybdenum,Dissolved	0.00219	J	0.000348	0.00500	0.00500	1	02/04/2021 15:17	WG1614800
Nickel,Dissolved	U		0.000816	0.00200	0.00200	1	02/04/2021 15:17	WG1614800
Selenium,Dissolved	0.00372		0.000300	0.00200	0.00200	1	02/04/2021 15:17	WG1614800
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	02/04/2021 15:17	WG1614800
Uranium,Dissolved	0.00222	J	0.0000700	0.0200	0.0200	1	02/04/2021 15:17	WG1614800
Zinc,Dissolved	0.0183	B J	0.00302	0.0250	0.0250	1	02/04/2021 15:17	WG1614800

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	02/04/2021 11:26	WG1614916
(S) a,a,a-Trifluorotoluene(FID)	*101*				*78.0-120*		*02/04/2021 11:26*	WG1614916

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	02/01/2021 05:17	WG1614311
Benzene	0.000194	J	0.0000941	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Bromoform	U		0.000129	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Bromomethane	U		0.000605	0.00500	0.00500	1	02/01/2021 05:17	WG1614311
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Carbon tetrachloride	0.000313	J	0.000128	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Chlorobenzene	U		0.000116	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Chloroethane	U		0.000192	0.00500	0.00500	1	02/01/2021 05:17	WG1614311
Chloroform	0.00127	J	0.000111	0.00500	0.00500	1	02/01/2021 05:17	WG1614311
Chloromethane	U		0.000960	0.00250	0.00250	1	02/01/2021 05:17	WG1614311
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Ethylbenzene	U		0.000137	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
2-Hexanone	U		0.000787	0.0100	0.0100	1	02/01/2021 05:17	WG1614311
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	02/01/2021 05:17	WG1614311
Methylene Chloride	U		0.000430	0.00500	0.00500	1	02/01/2021 05:17	WG1614311
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	02/01/2021 05:17	WG1614311
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Naphthalene	U		0.00100	0.00500	0.00500	1	02/01/2021 05:17	WG1614311
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Styrene	U		0.000118	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Toluene	U		0.000278	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Trichloroethene	U		0.000190	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Vinyl chloride	U		0.000234	0.00100	0.00100	1	02/01/2021 05:17	WG1614311
Xylenes, Total	U		0.000174	0.00300	0.00300	1	02/01/2021 05:17	WG1614311
(S) Toluene-d8	*104*				*80.0-120*		*02/01/2021 05:17*	WG1614311
(S) 4-Bromofluorobenzene	*92.7*				*77.0-126*		*02/01/2021 05:17*	WG1614311
(S) 1,2-Dichloroethane-d4	*122*				*70.0-130*		*02/01/2021 05:17*	WG1614311

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0575	B J	0.0247	0.100	0.100	1	02/05/2021 13:54	WG1615839
(S) o-Terphenyl	*119*				*31.0-160*		*02/05/2021 13:54*	WG1615839

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Acetophenone	U		0.000208	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Anthracene	U		0.0000804	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Atrazine	U		0.000255	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Benzaldehyde	U		0.00169	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	02/04/2021 17:05	WG1615128
Biphenyl	U		0.000790	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Caprolactam	U		0.000309	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Carbazole	U		0.000111	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Chrysene	U		0.000130	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	02/04/2021 17:05	WG1615128
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Fluoranthene	U		0.000102	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Fluorene	U		0.0000844	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Hexachloroethane	U		0.000127	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Isophorone	U		0.000143	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Naphthalene	U		0.000159	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Nitrobenzene	U		0.000297	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Phenanthrene	U		0.000112	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	02/04/2021 17:05	WG1615128
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	02/04/2021 17:05	WG1615128
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	02/04/2021 17:05	WG1615128
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	02/04/2021 17:05	WG1615128
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	02/04/2021 17:05	WG1615128
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	02/04/2021 17:05	WG1615128
Pyrene	U		0.000107	0.00100	0.00100	1	02/04/2021 17:05	WG1615128
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	02/04/2021 17:05	WG1615128

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
Phenol	U		0.00433	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	02/04/2021 17:05	WG1615128
(S) 2-Fluorophenol	*21.6*				*10.0-120*		*02/04/2021 17:05*	WG1615128
(S) Phenol-d5	*11.9*				*10.0-120*		*02/04/2021 17:05*	WG1615128
(S) Nitrobenzene-d5	*58.1*				*10.0-127*		*02/04/2021 17:05*	WG1615128
(S) 2-Fluorobiphenyl	*80.5*				*10.0-130*		*02/04/2021 17:05*	WG1615128
(S) 2,4,6-Tribromophenol	*47.4*				*10.0-155*		*02/04/2021 17:05*	WG1615128
(S) p-Terphenyl-d14	*75.9*				*10.0-128*		*02/04/2021 17:05*	WG1615128

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	02/01/2021 01:33	WG1614311
Benzene	U		0.0000941	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Bromoform	U		0.000129	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Bromomethane	U		0.000605	0.00500	0.00500	1	02/01/2021 01:33	WG1614311
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Carbon tetrachloride	U		0.000128	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Chlorobenzene	U		0.000116	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Chloroethane	U		0.000192	0.00500	0.00500	1	02/01/2021 01:33	WG1614311
Chloroform	U		0.000111	0.00500	0.00500	1	02/01/2021 01:33	WG1614311
Chloromethane	U		0.000960	0.00250	0.00250	1	02/01/2021 01:33	WG1614311
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Ethylbenzene	U		0.000137	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
2-Hexanone	U		0.000787	0.0100	0.0100	1	02/01/2021 01:33	WG1614311
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	02/01/2021 01:33	WG1614311
Methylene Chloride	U		0.000430	0.00500	0.00500	1	02/01/2021 01:33	WG1614311
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	02/01/2021 01:33	WG1614311
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Naphthalene	U		0.00100	0.00500	0.00500	1	02/01/2021 01:33	WG1614311
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Styrene	U		0.000118	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Toluene	U		0.000278	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Trichloroethene	U		0.000190	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Vinyl chloride	U		0.000234	0.00100	0.00100	1	02/01/2021 01:33	WG1614311
Xylenes, Total	U		0.000174	0.00300	0.00300	1	02/01/2021 01:33	WG1614311
(S) Toluene-d8	*102*				*80.0-120*		*02/01/2021 01:33*	WG1614311
(S) 4-Bromofluorobenzene	*90.8*				*77.0-126*		*02/01/2021 01:33*	WG1614311
(S) 1,2-Dichloroethane-d4	*120*				*70.0-130*		*02/01/2021 01:33*	WG1614311

Method Blank (MB)

(MB) R3619452-1 02/03/21 11:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L1311938-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1311938-03 02/03/21 11:31 • (DUP) R3619452-3 02/03/21 11:31

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	565	568	1	0.530		5

L1312014-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1312014-01 02/03/21 11:31 • (DUP) R3619452-4 02/03/21 11:31

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	704	700	1	0.570		5

Laboratory Control Sample (LCS)

(LCS) R3619452-2 02/03/21 11:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8810	100	77.4-123	

Method Blank (MB)

(MB) R3618675-1 02/02/21 11:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1311938-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1311938-01 02/02/21 12:47 • (DUP) R3618675-3 02/02/21 12:58

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	171	171	1	0.0605		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1312119-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1312119-05 02/02/21 16:01 • (DUP) R3618675-6 02/02/21 16:13

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	44.2	44.3	1	0.313		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3618675-5 02/02/21 13:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100	97.3	97.3	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3618728-1 02/02/21 20:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1311938-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1311938-01 02/02/21 20:56 • (DUP) R3618728-3 02/02/21 20:58

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	2.86	2.87	1	0.349		20

L1312411-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1312411-02 02/02/21 21:46 • (DUP) R3618728-5 02/02/21 21:47

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	13.0	12.8	5	0.775		20

Laboratory Control Sample (LCS)

(LCS) R3618728-2 02/02/21 20:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	5.00	2.56	102	90.0-110	

L1312195-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1312195-01 02/02/21 21:10 • (MS) R3618728-4 02/02/21 21:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	0.250	8.29	11.1	112	10	90.0-110	J5

L1312527-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1312527-01 02/02/21 21:49 • (MS) R3618728-6 02/02/21 21:50 • (MSD) R3618728-7 02/02/21 21:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	0.261	2.65	2.60	95.6	93.6	1	90.0-110			1.90	20

Method Blank (MB)

(MB) R3619457-1 02/04/21 02:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1311584-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1311584-01 02/04/21 03:54 • (DUP) R3619457-5 02/04/21 04:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	0.853	0.857	1	0.409	J	15
Fluoride	U	U	1	0.000		15
Sulfate	7.02	6.97	1	0.691		15

L1311864-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1311864-04 02/04/21 06:27 • (DUP) R3619457-6 02/04/21 06:40

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2.37	2.45	1	3.27		15
Fluoride	U	U	1	0.000		15
Sulfate	3.51	3.57	1	1.71	J	15

Laboratory Control Sample (LCS)

(LCS) R3619457-8 02/04/21 10:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.7	102	80.0-120	
Fluoride	8.00	8.48	106	80.0-120	
Sulfate	40.0	41.9	105	80.0-120	

L1311583-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1311583-01 02/04/21 03:16 • (MS) R3619457-3 02/04/21 03:29 • (MSD) R3619457-4 02/04/21 03:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	1.26	52.9	52.9	103	103	1	80.0-120			0.0369	15
Fluoride	5.00	U	5.27	5.23	105	105	1	80.0-120			0.709	15
Sulfate	50.0	6.78	60.1	59.7	107	106	1	80.0-120			0.619	15

L1311864-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1311864-04 02/04/21 06:27 • (MS) R3619457-7 02/04/21 06:53

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	2.37	54.6	104	1	80.0-120	
Fluoride	5.00	U	5.27	105	1	80.0-120	
Sulfate	50.0	3.51	56.9	107	1	80.0-120	

Method Blank (MB)

(MB) R3618923-1 02/03/21 09:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3618923-2 02/03/21 09:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.00300	0.00298	99.5	80.0-120	

L1312071-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1312071-01 02/03/21 09:41 • (MS) R3618923-3 02/03/21 09:43 • (MSD) R3618923-4 02/03/21 09:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	U	0.00334	0.00326	111	109	1	75.0-125			2.62	20

Method Blank (MB)

(MB) R3619402-1 02/04/21 08:14

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R3619402-2 02/04/21 08:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron,Dissolved	1.00	1.01	101	80.0-120	

L1311901-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1311901-03 02/04/21 08:19 • (MS) R3619402-4 02/04/21 08:25 • (MSD) R3619402-5 02/04/21 08:27

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron,Dissolved	1.00	0.339	1.32	1.32	98.2	98.2	1	75.0-125			0.0143	20

Method Blank (MB)

(MB) R3619500-1 02/04/21 14:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0185	0.100
Arsenic,Dissolved	U		0.000180	0.00200
Barium,Dissolved	U		0.000381	0.0200
Cadmium,Dissolved	U		0.000150	0.00100
Chromium,Dissolved	U		0.00124	0.00200
Copper,Dissolved	U		0.00151	0.00500
Cobalt,Dissolved	U		0.0000596	0.00200
Iron,Dissolved	U		0.0281	0.100
Lead,Dissolved	U		0.000849	0.00200
Manganese,Dissolved	U		0.000704	0.00500
Molybdenum,Dissolved	U		0.000348	0.00500
Nickel,Dissolved	U		0.000816	0.00200
Selenium,Dissolved	U		0.000300	0.00200
Silver,Dissolved	U		0.0000700	0.00200
Uranium,Dissolved	U		0.0000700	0.0200
Zinc,Dissolved	0.00605	J	0.00302	0.0250

Laboratory Control Sample (LCS)

(LCS) R3619500-2 02/04/21 14:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	5.00	5.02	100	80.0-120	
Arsenic,Dissolved	0.0500	0.0492	98.3	80.0-120	
Barium,Dissolved	0.0500	0.0487	97.5	80.0-120	
Cadmium,Dissolved	0.0500	0.0526	105	80.0-120	
Chromium,Dissolved	0.0500	0.0523	105	80.0-120	
Copper,Dissolved	0.0500	0.0503	101	80.0-120	
Cobalt,Dissolved	0.0500	0.0523	105	80.0-120	
Iron,Dissolved	5.00	5.35	107	80.0-120	
Lead,Dissolved	0.0500	0.0498	99.5	80.0-120	
Manganese,Dissolved	0.0500	0.0520	104	80.0-120	
Molybdenum,Dissolved	0.0500	0.0489	97.7	80.0-120	
Nickel,Dissolved	0.0500	0.0531	106	80.0-120	
Selenium,Dissolved	0.0500	0.0511	102	80.0-120	
Silver,Dissolved	0.0500	0.0497	99.4	80.0-120	
Uranium,Dissolved	0.0500	0.0484	96.9	80.0-120	
Zinc,Dissolved	0.500	0.489	97.8	80.0-120	

L1311901-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1311901-03 02/04/21 14:19 • (MS) R3619500-4 02/04/21 14:25 • (MSD) R3619500-5 02/04/21 14:28

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	5.00	U	4.85	5.03	97.1	101	1	75.0-125			3.47	20
Arsenic,Dissolved	0.0500	0.000538	0.0489	0.0500	96.8	98.9	1	75.0-125			2.16	20
Barium,Dissolved	0.0500	0.101	0.154	0.153	105	103	1	75.0-125			0.650	20
Cadmium,Dissolved	0.0500	U	0.0528	0.0530	106	106	1	75.0-125			0.284	20
Chromium,Dissolved	0.0500	0.00179	0.0521	0.0523	101	101	1	75.0-125			0.310	20
Copper,Dissolved	0.0500	0.00183	0.0502	0.0519	96.8	100	1	75.0-125			3.36	20
Cobalt,Dissolved	0.0500	0.000280	0.0497	0.0507	98.8	101	1	75.0-125			2.09	20
Iron,Dissolved	5.00	U	5.06	5.00	101	100	1	75.0-125			1.04	20
Lead,Dissolved	0.0500	U	0.0512	0.0528	102	106	1	75.0-125			2.95	20
Manganese,Dissolved	0.0500	0.113	0.160	0.159	93.9	93.3	1	75.0-125			0.209	20
Molybdenum,Dissolved	0.0500	0.00558	0.0572	0.0573	103	103	1	75.0-125			0.0859	20
Nickel,Dissolved	0.0500	0.00226	0.0516	0.0527	98.6	101	1	75.0-125			2.21	20
Selenium,Dissolved	0.0500	0.00120	0.0524	0.0552	102	108	1	75.0-125			5.30	20
Silver,Dissolved	0.0500	U	0.0510	0.0518	102	104	1	75.0-125			1.49	20
Uranium,Dissolved	0.0500	0.00504	0.0553	0.0573	101	104	1	75.0-125			3.54	20
Zinc,Dissolved	0.500	0.00898	0.474	0.482	92.9	94.6	1	75.0-125			1.77	20

Method Blank (MB)

(MB) R3619352-2 02/04/21 04:50

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	0.0345	J	0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3619352-1 02/04/21 03:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.52	100	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*88.1*	*78.0-120*	

Method Blank (MB)

(MB) R3619271-2 02/01/21 00:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
1,2-Dibromoethane	U		0.000126	0.00100
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
2-Hexanone	U		0.000787	0.0100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100

Method Blank (MB)

(MB) R3619271-2 02/01/21 00:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*91.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3619271-1 01/31/21 23:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.0250	0.0371	148	19.0-160	
Benzene	0.00500	0.00475	95.0	70.0-123	
Bromodichloromethane	0.00500	0.00488	97.6	75.0-120	
Bromoform	0.00500	0.00594	119	68.0-132	
Bromomethane	0.00500	0.00614	123	10.0-160	
n-Butylbenzene	0.00500	0.00475	95.0	73.0-125	
sec-Butylbenzene	0.00500	0.00489	97.8	75.0-125	
tert-Butylbenzene	0.00500	0.00494	98.8	76.0-124	
Carbon disulfide	0.00500	0.00516	103	61.0-128	
Carbon tetrachloride	0.00500	0.00542	108	68.0-126	
Chlorobenzene	0.00500	0.00489	97.8	80.0-121	
Chlorodibromomethane	0.00500	0.00511	102	77.0-125	
Chloroethane	0.00500	0.00600	120	47.0-150	
Chloroform	0.00500	0.00529	106	73.0-120	
Chloromethane	0.00500	0.00395	79.0	41.0-142	
1,2-Dibromoethane	0.00500	0.00515	103	80.0-122	
1,1-Dichloroethane	0.00500	0.00509	102	70.0-126	
1,2-Dichloroethane	0.00500	0.00534	107	70.0-128	
1,1-Dichloroethene	0.00500	0.00503	101	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00508	102	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00527	105	73.0-120	
1,2-Dichloropropane	0.00500	0.00492	98.4	77.0-125	
cis-1,3-Dichloropropene	0.00500	0.00505	101	80.0-123	
trans-1,3-Dichloropropene	0.00500	0.00478	95.6	78.0-124	

Received by OCD: 4/18/2022 4:17:12 PM

Laboratory Control Sample (LCS)

(LCS) R3619271-1 01/31/21 23:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	0.00500	0.00508	102	79.0-123	
Hexachloro-1,3-butadiene	0.00500	0.00515	103	54.0-138	
2-Hexanone	0.0250	0.0234	93.6	67.0-149	
Isopropylbenzene	0.00500	0.00486	97.2	76.0-127	
p-Isopropyltoluene	0.00500	0.00501	100	76.0-125	
2-Butanone (MEK)	0.0250	0.0269	108	44.0-160	
Methylene Chloride	0.00500	0.00505	101	67.0-120	
4-Methyl-2-pentanone (MIBK)	0.0250	0.0239	95.6	68.0-142	
Methyl tert-butyl ether	0.00500	0.00476	95.2	68.0-125	
Naphthalene	0.00500	0.00429	85.8	54.0-135	
n-Propylbenzene	0.00500	0.00511	102	77.0-124	
Styrene	0.00500	0.00485	97.0	73.0-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00511	102	65.0-130	
Tetrachloroethene	0.00500	0.00595	119	72.0-132	
Toluene	0.00500	0.00463	92.6	79.0-120	
1,1,1-Trichloroethane	0.00500	0.00545	109	73.0-124	
1,1,2-Trichloroethane	0.00500	0.00510	102	80.0-120	
Trichloroethene	0.00500	0.00542	108	78.0-124	
1,2,4-Trimethylbenzene	0.00500	0.00512	102	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00496	99.2	76.0-122	
Vinyl chloride	0.00500	0.00547	109	67.0-131	
Xylenes, Total	0.0150	0.0147	98.0	79.0-123	
(S) Toluene-d8			*99.6*	*80.0-120*	
(S) 4-Bromofluorobenzene			*95.5*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*119*	*70.0-130*	

Released to Imaging: 7/20/2022 10:39:48 AM

Method Blank (MB)

(MB) R3619659-1 02/04/21 22:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	0.0731	J	0.0247	0.100
(S) o-Terphenyl	*108*			*31.0-160*

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

(LCS) R3619659-2 02/04/21 22:51 • (LCSD) R3619659-3 02/04/21 23:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	1.58	1.55	105	103	50.0-150			1.92	20
(S) o-Terphenyl				*135*	*130*	*31.0-160*				

Method Blank (MB)

(MB) R3619733-2 02/04/21 13:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

Method Blank (MB)

(MB) R3619733-2 02/04/21 13:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*65.2*			*10.0-127*
(S) 2-Fluorobiphenyl	*90.6*			*10.0-130*
(S) p-Terphenyl-d14	*81.6*			*10.0-128*
(S) Phenol-d5	*14.5*			*10.0-120*
(S) 2-Fluorophenol	*28.0*			*10.0-120*
(S) 2,4,6-Tribromophenol	*45.6*			*10.0-155*

Laboratory Control Sample (LCS)

(LCS) R3619733-1 02/04/21 13:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0500	0.0341	68.2	41.0-120	
Acenaphthylene	0.0500	0.0376	75.2	43.0-120	
Acetophenone	0.0500	0.0494	98.8	29.0-120	
Anthracene	0.0500	0.0359	71.8	45.0-120	
Atrazine	0.0500	0.0394	78.8	39.0-141	
Benzaldehyde	0.0500	0.0776	155	10.0-160	
Benzo(a)anthracene	0.0500	0.0392	78.4	47.0-120	
Benzo(b)fluoranthene	0.0500	0.0357	71.4	46.0-120	
Benzo(k)fluoranthene	0.0500	0.0393	78.6	46.0-120	
Benzo(g,h,i)perylene	0.0500	0.0413	82.6	48.0-121	
Benzo(a)pyrene	0.0500	0.0411	82.2	47.0-120	
Biphenyl	0.0500	0.0365	73.0	38.0-120	
Bis(2-chlorethoxy)methane	0.0500	0.0328	65.6	33.0-120	
Bis(2-chloroethyl)ether	0.0500	0.0389	77.8	23.0-120	
2,2-Oxybis(1-Chloropropane)	0.0500	0.0369	73.8	28.0-120	
4-Bromophenyl-phenylether	0.0500	0.0395	79.0	45.0-120	
Caprolactam	0.0500	0.00675	13.5	10.0-120	
Carbazole	0.0500	0.0363	72.6	51.0-122	
4-Chloroaniline	0.0500	0.0262	52.4	25.0-120	
2-Chloronaphthalene	0.0500	0.0384	76.8	37.0-120	
4-Chlorophenyl-phenylether	0.0500	0.0397	79.4	44.0-120	
Chrysene	0.0500	0.0406	81.2	48.0-120	
Dibenz(a,h)anthracene	0.0500	0.0414	82.8	47.0-120	
Dibenzofuran	0.0500	0.0379	75.8	44.0-120	
3,3-Dichlorobenzidine	0.100	0.0857	85.7	44.0-120	
2,4-Dinitrotoluene	0.0500	0.0390	78.0	49.0-124	
2,6-Dinitrotoluene	0.0500	0.0371	74.2	46.0-120	
Fluoranthene	0.0500	0.0382	76.4	51.0-120	
Fluorene	0.0500	0.0378	75.6	47.0-120	
Hexachlorobenzene	0.0500	0.0416	83.2	44.0-120	
Hexachloro-1,3-butadiene	0.0500	0.0362	72.4	19.0-120	
Hexachlorocyclopentadiene	0.0500	0.0375	75.0	15.0-120	
Hexachloroethane	0.0500	0.0326	65.2	15.0-120	
Indeno(1,2,3-cd)pyrene	0.0500	0.0376	75.2	49.0-122	
Isophorone	0.0500	0.0289	57.8	36.0-120	
1-Methylnaphthalene	0.0500	0.0321	64.2	33.0-120	
2-Methylnaphthalene	0.0500	0.0310	62.0	33.0-120	
Naphthalene	0.0500	0.0329	65.8	27.0-120	
2-Nitroaniline	0.0500	0.0383	76.6	43.0-120	
3-Nitroaniline	0.0500	0.0349	69.8	38.0-120	

Received by OCD: 4/18/2022 4:17:12 PM

Laboratory Control Sample (LCS)

(LCS) R3619733-1 02/04/21 13:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Nitroaniline	0.0500	0.0357	71.4	18.0-160	
Nitrobenzene	0.0500	0.0322	64.4	27.0-120	
n-Nitrosodiphenylamine	0.0500	0.0361	72.2	47.0-120	
n-Nitrosodi-n-propylamine	0.0500	0.0337	67.4	31.0-120	
Phenanthrene	0.0500	0.0355	71.0	46.0-120	
Benzylbutyl phthalate	0.0500	0.0367	73.4	43.0-121	
Bis(2-ethylhexyl)phthalate	0.0500	0.0357	71.4	43.0-122	
Di-n-butyl phthalate	0.0500	0.0366	73.2	49.0-121	
Diethyl phthalate	0.0500	0.0376	75.2	48.0-122	
Dimethyl phthalate	0.0500	0.0374	74.8	48.0-120	
Di-n-octyl phthalate	0.0500	0.0394	78.8	42.0-125	
Pyrene	0.0500	0.0408	81.6	47.0-120	
1,2,4-Trichlorobenzene	0.0500	0.0347	69.4	24.0-120	
4-Chloro-3-methylphenol	0.0500	0.0266	53.2	40.0-120	
2-Chlorophenol	0.0500	0.0299	59.8	25.0-120	
2-Methylphenol	0.0500	0.0234	46.8	28.0-120	
3&4-Methyl Phenol	0.0500	0.0228	45.6	31.0-120	
2,4-Dichlorophenol	0.0500	0.0332	66.4	36.0-120	
2,4-Dimethylphenol	0.0500	0.0271	54.2	33.0-120	
4,6-Dinitro-2-methylphenol	0.0500	0.0382	76.4	38.0-138	
2,4-Dinitrophenol	0.0500	0.0328	65.6	10.0-120	
2-Nitrophenol	0.0500	0.0345	69.0	31.0-120	
4-Nitrophenol	0.0500	0.00613	12.3	10.0-120	
Pentachlorophenol	0.0500	0.0319	63.8	23.0-120	
Phenol	0.0500	0.00846	16.9	10.0-120	
2,4,5-Trichlorophenol	0.0500	0.0378	75.6	44.0-120	
2,4,6-Trichlorophenol	0.0500	0.0388	77.6	42.0-120	
(S) Nitrobenzene-d5			*58.1*	*10.0-127*	
(S) 2-Fluorobiphenyl			*77.4*	*10.0-130*	
(S) p-Terphenyl-d14			*79.4*	*10.0-128*	
(S) Phenol-d5			*16.2*	*10.0-120*	
(S) 2-Fluorophenol			*29.8*	*10.0-120*	
(S) 2,4,6-Tribromophenol			*86.5*	*10.0-155*	

Released to Imaging: 7/20/2022 10:39:48 AM

L1312129-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1312129-04 02/04/21 19:25 • (MS) R3619733-3 02/04/21 19:49 • (MSD) R3619733-4 02/04/21 20:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	U	0.0320	0.0313	64.0	62.6	1	28.0-120			2.21	25
Acenaphthylene	0.0500	U	0.0345	0.0338	69.0	67.6	1	31.0-121			2.05	25
Acetophenone	0.0500	U	0.0413	0.0405	82.6	81.0	1	20.0-120			1.96	35
Anthracene	0.0500	U	0.0352	0.0357	70.4	71.4	1	36.0-120			1.41	23
Atrazine	0.0500	U	0.0402	0.0406	80.4	81.2	1	39.0-130			0.990	23
Benzaldehyde	0.0500	U	0.0656	0.0645	131	129	1	10.0-160			1.69	40
Benzo(a)anthracene	0.0500	U	0.0368	0.0378	73.6	75.6	1	39.0-120			2.68	23
Benzo(b)fluoranthene	0.0500	U	0.0324	0.0352	64.8	70.4	1	37.0-120			8.28	23
Benzo(k)fluoranthene	0.0500	U	0.0360	0.0362	72.0	72.4	1	37.0-120			0.554	26
Benzo(g,h,i)perylene	0.0500	U	0.0357	0.0379	71.4	75.8	1	37.0-123			5.98	25
Benzo(a)pyrene	0.0500	U	0.0379	0.0392	75.8	78.4	1	37.0-120			3.37	24
Biphenyl	0.0500	U	0.0330	0.0322	66.0	64.4	1	29.0-120			2.45	33
Bis(2-chlorethoxy)methane	0.0500	U	0.0287	0.0276	57.4	55.2	1	17.0-120			3.91	31
Bis(2-chloroethyl)ether	0.0500	U	0.0326	0.0316	65.2	63.2	1	14.0-120			3.12	33
2,2-Oxybis(1-Chloropropane)	0.0500	U	0.0313	0.0302	62.6	60.4	1	18.0-120			3.58	34
4-Bromophenyl-phenylether	0.0500	U	0.0373	0.0364	74.6	72.8	1	37.0-120			2.44	24
Caprolactam	0.0500	U	0.00653	0.00750	13.1	15.0	1	10.0-120			13.8	40
Carbazole	0.0500	U	0.0359	0.0359	71.8	71.8	1	38.0-127			0.000	21
4-Chloroaniline	0.0500	U	0.0200	0.0206	40.0	41.2	1	10.0-120			2.96	31
2-Chloronaphthalene	0.0500	U	0.0340	0.0323	68.0	64.6	1	29.0-120			5.13	28
4-Chlorophenyl-phenylether	0.0500	U	0.0373	0.0364	74.6	72.8	1	36.0-120			2.44	23
Chrysene	0.0500	U	0.0379	0.0393	75.8	78.6	1	38.0-120			3.63	23
Dibenz(a,h)anthracene	0.0500	U	0.0360	0.0376	72.0	75.2	1	36.0-121			4.35	24
Dibenzofuran	0.0500	U	0.0359	0.0347	71.8	69.4	1	32.0-120			3.40	26
3,3-Dichlorobenzidine	0.100	U	0.0548	0.0565	54.8	56.5	1	10.0-134			3.05	30
2,4-Dinitrotoluene	0.0500	U	0.0360	0.0367	72.0	73.4	1	39.0-125			1.93	25
2,6-Dinitrotoluene	0.0500	U	0.0352	0.0357	70.4	71.4	1	36.0-120			1.41	27
Fluoranthene	0.0500	U	0.0373	0.0376	74.6	75.2	1	41.0-121			0.801	22
Fluorene	0.0500	U	0.0358	0.0356	71.6	71.2	1	37.0-120			0.560	24
Hexachlorobenzene	0.0500	U	0.0392	0.0390	78.4	78.0	1	35.0-122			0.512	24
Hexachloro-1,3-butadiene	0.0500	U	0.0309	0.0292	61.8	58.4	1	12.0-120			5.66	34
Hexachlorocyclopentadiene	0.0500	U	0.0334	0.0320	66.8	64.0	1	10.0-120			4.28	33
Hexachloroethane	0.0500	U	0.0269	0.0258	53.8	51.6	1	10.0-120			4.17	40
Indeno(1,2,3-cd)pyrene	0.0500	U	0.0336	0.0352	67.2	70.4	1	38.0-125			4.65	24
Isophorone	0.0500	U	0.0253	0.0245	50.6	49.0	1	21.0-120			3.21	27
1-Methylnaphthalene	0.0500	U	0.0289	0.0273	57.8	54.6	1	11.0-120			5.69	27
2-Methylnaphthalene	0.0500	U	0.0277	0.0266	55.4	53.2	1	17.0-120			4.05	28
Naphthalene	0.0500	U	0.0288	0.0276	57.6	55.2	1	10.0-120			4.26	31
2-Nitroaniline	0.0500	U	0.0329	0.0333	65.8	66.6	1	33.0-120			1.21	27
3-Nitroaniline	0.0500	U	0.0276	0.0293	55.2	58.6	1	20.0-120			5.98	27

L1312129-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1312129-04 02/04/21 19:25 • (MS) R3619733-3 02/04/21 19:49 • (MSD) R3619733-4 02/04/21 20:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0500	U	0.0279	0.0285	55.8	57.0	1	10.0-160			2.13	26
Nitrobenzene	0.0500	U	0.0285	0.0272	57.0	54.4	1	12.0-120			4.67	30
n-Nitrosodiphenylamine	0.0500	U	0.0344	0.0339	68.8	67.8	1	37.0-120			1.46	24
n-Nitrosodi-n-propylamine	0.0500	U	0.0297	0.0295	59.4	59.0	1	16.0-120			0.676	30
Phenanthrene	0.0500	U	0.0343	0.0342	68.6	68.4	1	33.0-120			0.292	22
Benzylbutyl phthalate	0.0500	U	0.0368	0.0372	73.6	74.4	1	34.0-126			1.08	24
Bis(2-ethylhexyl)phthalate	0.0500	U	0.0306	0.0323	61.2	64.6	1	33.0-126			5.41	25
Di-n-butyl phthalate	0.0500	U	0.0367	0.0364	73.4	72.8	1	35.0-128			0.821	23
Diethyl phthalate	0.0500	U	0.0366	0.0364	73.2	72.8	1	39.0-125			0.548	24
Dimethyl phthalate	0.0500	U	0.0358	0.0354	71.6	70.8	1	37.0-120			1.12	24
Di-n-octyl phthalate	0.0500	U	0.0333	0.0343	66.6	68.6	1	25.0-135			2.96	26
Pyrene	0.0500	U	0.0394	0.0401	78.8	80.2	1	39.0-120			1.76	22
1,2,4-Trichlorobenzene	0.0500	U	0.0297	0.0280	59.4	56.0	1	15.0-120			5.89	31
4-Chloro-3-methylphenol	0.0500	U	0.0206	0.0209	41.2	41.8	1	26.0-120			1.45	27
2-Chlorophenol	0.0500	U	0.0208	0.0208	41.6	41.6	1	18.0-120			0.000	34
2-Methylphenol	0.0500	U	0.0171	0.0175	34.2	35.0	1	10.0-120			2.31	30
3&4-Methyl Phenol	0.0500	U	0.0166	0.0171	33.2	34.2	1	10.0-120			2.97	36
2,4-Dichlorophenol	0.0500	U	0.0248	0.0245	49.6	49.0	1	19.0-120			1.22	27
2,4-Dimethylphenol	0.0500	U	0.0229	0.0232	45.8	46.4	1	15.0-120			1.30	28
4,6-Dinitro-2-methylphenol	0.0500	U	0.0330	0.0346	66.0	69.2	1	10.0-144			4.73	39
2,4-Dinitrophenol	0.0500	U	0.0272	0.0295	54.4	59.0	1	10.0-120			8.11	40
2-Nitrophenol	0.0500	U	0.0258	0.0262	51.6	52.4	1	20.0-120			1.54	30
4-Nitrophenol	0.0500	U	0.00589	0.00639	11.8	12.8	1	10.0-120			8.14	40
Pentachlorophenol	0.0500	U	0.0306	0.0327	61.2	65.4	1	10.0-128			6.64	37
Phenol	0.0500	U	0.00639	0.00677	12.8	13.5	1	10.0-120			5.78	40
2,4,5-Trichlorophenol	0.0500	U	0.0307	0.0307	61.4	61.4	1	33.0-120			0.000	31
2,4,6-Trichlorophenol	0.0500	U	0.0307	0.0314	61.4	62.8	1	26.0-120			2.25	31
(S) Nitrobenzene-d5					*50.6*	*47.9*		*10.0-127*				
(S) 2-Fluorobiphenyl					*70.8*	*68.3*		*10.0-130*				
(S) p-Terphenyl-d14					*74.2*	*75.3*		*10.0-128*				
(S) Phenol-d5					*12.3*	*12.9*		*10.0-120*				
(S) 2-Fluorophenol					*20.9*	*21.6*		*10.0-120*				
(S) 2,4,6-Tribromophenol					*74.5*	*75.0*		*10.0-155*				

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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(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.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	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 [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

* 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 Analytical.

TRC Solutions - Austin, TX

505 E. Huntland Drive, Suite 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095

Pres Chk

Report to: Julie Speer

Email To: jspeer@trccompanies.com;aelijuri@trccompani

Project Description: Lovington Lea Refinery

City/State Collected: Lovington, NM

Please Circle: PT MT CT ET

Phone: 512-684-3176

Client Project # 377274.0000.0000.

Lab Project # TRCATX-LOVINGTON NAV

Collected by (print): Bryan Bayles + HMI Team

Site/Facility ID #

P.O. # 149784

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8270TX 100ml Amb NoPres	DROLVI 40mlAmb-HCl-BT	GRO 40mlAmb HCl	HG 250mlHDPE-HNO3	NAVAJOMETALSDISS 250mlHDPE-NoPres	NO2NO3 250mlHDPE-H2SO4	V8260 40mlAmb-HCl	V8260-TripBlank 40mlAmb-HCl-Blk	WetChem 500mlHDPE-NoPres		Remarks	Sample # (lab only)
WW-NORTH	Grab	GW		1.28.21	1025	13	X	X	X	X	X	X	X		X			-01
WW-SOUTH		GW			945	13	X	X	X	X	X	X	X		X			-02
WW-EAST		GW			1115	13	X	X	X	X	X	X	X		X			-03
DUP-01		GW			1000	13	X	X	X	X	X	X	X		X			-04
TRIP BLANK		GW			—	1								X				-05

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1311938
1076

Acctnum: TRCATX
Template: T118335
Prelogin: P821432
PM: 526 - Chris McCord
PB:

Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: WetChem = ALK,CHLORIDE,FLUORIDE,SULFATE,TDS.
Lab filter NAVAJOMETALSDISS.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS ✓ FedEx __ Courier _____

Tracking # 934816018977

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: ✓Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	1.28.21	1215		1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp °C Bottles Received: 10-3=.7 52	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/29/21 Time: 09:30	Hold: Condition: NCF / OK

ANALYTICAL REPORT

May 17, 2021

Revised Report

TRC Solutions - Austin, TX

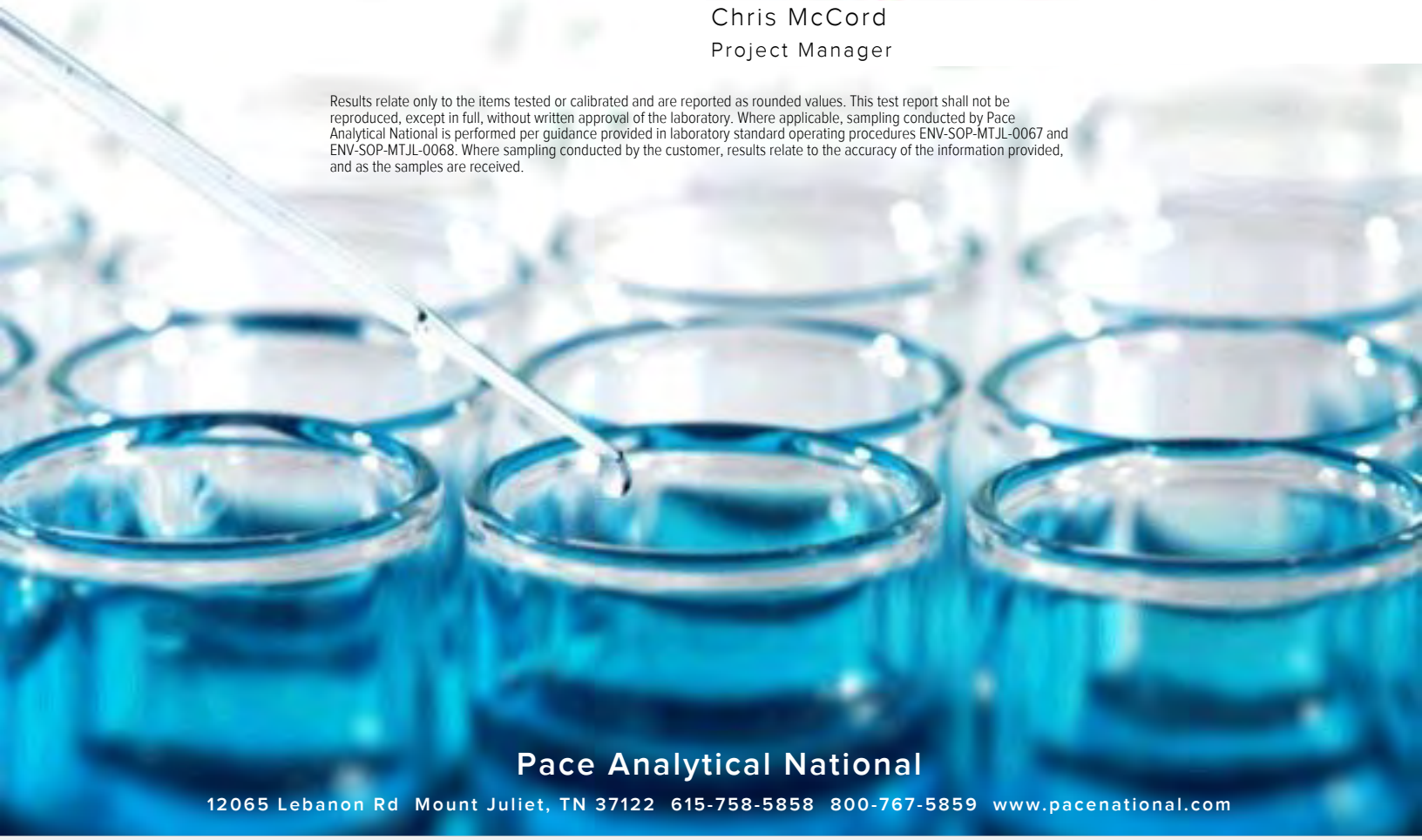
Sample Delivery Group:	L1340101
Samples Received:	04/16/2021
Project Number:	425919.0000.0000
Description:	Lovington Lea Refinery

Report To: Julie Speer
505 E. Huntland Drive, Suite 250
Austin, TX 78752

Entire Report Reviewed By:

Chris McCord
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.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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MW-1 L1340101-01 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 12:25 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:27	05/03/21 18:27	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/23/21 23:39	04/23/21 23:39	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654192	1	04/22/21 10:41	04/22/21 16:18	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:11	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 14:31	JDG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:42	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 00:37	04/20/21 00:37	ADM	Mt. Juliet, TN

MW-2 L1340101-02 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 11:00 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 00:56	04/20/21 00:56	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1656991	1	04/22/21 16:12	04/23/21 03:35	JNJ	Mt. Juliet, TN

MW-3 L1340101-03 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 11:25 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG1661716	1	05/03/21 18:28	05/03/21 18:28	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 00:28	04/24/21 00:28	MSP	Mt. Juliet, TN

MW-6 L1340101-04 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 13:25 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:31	05/03/21 18:31	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 00:44	04/24/21 00:44	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654192	1	04/22/21 10:41	04/22/21 16:20	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:14	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 14:34	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:46	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 01:15	04/20/21 01:15	ADM	Mt. Juliet, TN

MW-8 L1340101-05 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 10:35 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656617	1	04/22/21 09:30	04/22/21 12:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	5	05/03/21 18:32	05/03/21 18:32	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 01:01	04/24/21 01:01	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	5	04/24/21 01:17	04/24/21 01:17	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 01:34	04/20/21 01:34	ADM	Mt. Juliet, TN

MW-11R L1340101-06 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 11:05 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656617	1	04/22/21 09:30	04/22/21 12:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1657327	1	04/24/21 06:42	04/24/21 06:42	AMH	Mt. Juliet, TN
Mercury by Method 7470A	WG1654192	1	04/22/21 10:41	04/22/21 16:22	BMF	Mt. Juliet, TN

MW-11R L1340101-06 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 11:05
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:16	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 14:37	JDG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:49	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 01:52	04/20/21 01:52	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1655177	1	04/20/21 17:19	04/20/21 17:19	TPR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1656991	1	04/22/21 16:12	04/23/21 03:56	JNJ	Mt. Juliet, TN

MW-12R2 L1340101-07 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 10:55
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656617	1	04/22/21 09:30	04/22/21 12:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1657327	1	04/24/21 06:56	04/24/21 06:56	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:33	05/03/21 18:33	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 01:34	04/24/21 01:34	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654192	1	04/22/21 10:41	04/22/21 16:24	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:19	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 14:40	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:52	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 02:11	04/20/21 02:11	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1656991	1	04/22/21 16:12	04/23/21 04:17	JNJ	Mt. Juliet, TN

MW-13R L1340101-08 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 10:25
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656617	1	04/22/21 09:30	04/22/21 12:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	5	05/03/21 18:34	05/03/21 18:34	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 02:23	04/24/21 02:23	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	10	04/24/21 02:40	04/24/21 02:40	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654192	1	04/22/21 10:41	04/22/21 16:26	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:27	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 14:44	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 16:02	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 02:30	04/20/21 02:30	ADM	Mt. Juliet, TN

MW-15 L1340101-09 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 12:55
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656617	1	04/22/21 09:30	04/22/21 12:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1657326	1	04/23/21 13:29	04/23/21 13:29	SL	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:40	05/03/21 18:40	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 02:56	04/24/21 02:56	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	10	04/24/21 03:12	04/24/21 03:12	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654192	1	04/22/21 10:41	04/22/21 16:28	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:30	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 14:53	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 16:05	JPD	Mt. Juliet, TN

MW-17R L1340101-10 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 11:05 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656617	1	04/22/21 09:30	04/22/21 12:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 08:35	04/24/21 08:35	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	1	05/03/21 18:41	05/03/21 18:41	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 03:29	04/24/21 03:29	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654192	1	04/22/21 10:41	04/22/21 16:30	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:33	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 14:57	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 16:08	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 02:49	04/20/21 02:49	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1656991	1	04/22/21 16:12	04/23/21 04:38	JNJ	Mt. Juliet, TN

MW-25 L1340101-11 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 11:55 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656617	1	04/22/21 09:30	04/22/21 12:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 08:43	04/24/21 08:43	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:43	05/03/21 18:43	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 03:45	04/24/21 03:45	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	10	04/24/21 04:02	04/24/21 04:02	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654192	1	04/22/21 10:41	04/22/21 14:52	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:36	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:00	JDG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 16:12	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 03:08	04/20/21 03:08	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1656991	1	04/22/21 16:12	04/23/21 04:59	JNJ	Mt. Juliet, TN

MW-27 L1340101-12 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 13:10 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 03:27	04/20/21 03:27	ADM	Mt. Juliet, TN

MW-28 L1340101-13 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 12:40 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 09:00	04/24/21 09:00	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:45	05/03/21 18:45	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 04:18	04/24/21 04:18	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	5	04/24/21 04:35	04/24/21 04:35	MSP	Mt. Juliet, TN

MW-29 L1340101-14 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 12:20 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 09:49	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:39	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:03	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 16:15	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 03:46	04/20/21 03:46	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1655177	1	04/20/21 17:40	04/20/21 17:40	TPR	Mt. Juliet, TN

MW-30 L1340101-15 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 12:00
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 09:13	04/24/21 09:13	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:46	05/03/21 18:46	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 04:51	04/24/21 04:51	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 09:52	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:41	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:10	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 16:18	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 04:05	04/20/21 04:05	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1655177	1	04/20/21 18:02	04/20/21 18:02	TPR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1656991	1	04/22/21 16:12	04/23/21 05:20	JNJ	Mt. Juliet, TN

MW-32 L1340101-16 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 10:30
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 09:22	04/24/21 09:22	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	1	05/03/21 18:47	05/03/21 18:47	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 05:57	04/24/21 05:57	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	5	04/24/21 06:13	04/24/21 06:13	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 09:54	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:44	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:13	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 16:21	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 07:04	04/24/21 07:04	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 04:24	04/20/21 04:24	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/27/21 06:49	AEG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1656991	1	04/22/21 16:12	04/23/21 05:41	JNJ	Mt. Juliet, TN

MW-33 L1340101-17 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 11:40
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 09:30	04/24/21 09:30	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	1	05/03/21 18:48	05/03/21 18:48	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 06:30	04/24/21 06:30	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 09:39	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:01	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 13:43	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656515	1	04/27/21 11:16	04/28/21 15:29	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 07:25	04/24/21 07:25	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 04:43	04/20/21 04:43	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/27/21 21:40	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1656991	1	04/22/21 16:12	04/23/21 06:02	JNJ	Mt. Juliet, TN

WW-NORTH L1340101-18 GW

Collected by	Collected date/time	Received date/time
SU / HMI Team	04/15/21 10:50	04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 09:58	04/24/21 09:58	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:56	05/03/21 18:56	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 07:19	04/24/21 07:19	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	5	04/24/21 07:36	04/24/21 07:36	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 09:55	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:47	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656517	1	04/27/21 00:36	04/27/21 10:26	JDG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 07:47	04/24/21 07:47	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 05:02	04/20/21 05:02	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/27/21 08:10	AEG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1655273	1	04/22/21 01:04	04/23/21 02:06	JNJ	Mt. Juliet, TN

WW-SOUTH L1340101-19 GW

Collected by	Collected date/time	Received date/time
SU / HMI Team	04/15/21 11:35	04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 10:12	04/24/21 10:12	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:57	05/03/21 18:57	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 07:52	04/24/21 07:52	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	5	04/24/21 08:08	04/24/21 08:08	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 09:57	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:49	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656517	1	04/27/21 00:36	04/27/21 10:42	JDG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 08:09	04/24/21 08:09	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 05:20	04/20/21 05:20	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/27/21 08:30	AEG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1655274	1	04/21/21 18:00	04/22/21 15:56	JNJ	Mt. Juliet, TN

WW-EAST L1340101-20 GW

Collected by	Collected date/time	Received date/time
SU / HMI Team	04/15/21 12:15	04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 10:24	04/24/21 10:24	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 18:59	05/03/21 18:59	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 08:58	04/24/21 08:58	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	5	04/24/21 09:14	04/24/21 09:14	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 09:59	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 16:52	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656517	1	04/27/21 00:36	04/27/21 10:46	JDG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 08:31	04/24/21 08:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 05:39	04/20/21 05:39	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/28/21 00:01	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1655274	1	04/21/21 18:00	04/22/21 16:19	JNJ	Mt. Juliet, TN

DUP-01 L1340101-21 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 10:00 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 10:37	04/24/21 10:37	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	2	05/03/21 19:00	05/03/21 19:00	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 09:31	04/24/21 09:31	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	5	04/24/21 09:47	04/24/21 09:47	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 10:01	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 17:00	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656517	1	04/27/21 00:36	04/27/21 10:49	JDG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 08:53	04/24/21 08:53	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 05:58	04/20/21 05:58	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/28/21 00:21	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1655274	1	04/21/21 18:00	04/22/21 16:42	JNJ	Mt. Juliet, TN

DUP-02 L1340101-22 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 10:00 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 10:49	04/24/21 10:49	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	1	05/03/21 19:01	05/03/21 19:01	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 10:04	04/24/21 10:04	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	5	04/24/21 10:20	04/24/21 10:20	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 10:03	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 17:03	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656517	1	04/27/21 00:36	04/27/21 11:02	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 09:15	04/24/21 09:15	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 06:17	04/20/21 06:17	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/28/21 00:41	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1655274	1	04/21/21 18:00	04/22/21 17:05	JNJ	Mt. Juliet, TN

DUP-03 L1340101-23 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 12:00 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 10:58	04/24/21 10:58	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	1	05/03/21 19:02	05/03/21 19:02	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 10:37	04/24/21 10:37	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 10:09	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 17:06	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656517	1	04/27/21 00:36	04/27/21 11:06	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 09:37	04/24/21 09:37	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654140	1	04/20/21 06:36	04/20/21 06:36	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/28/21 01:01	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1655270	1	04/22/21 07:18	04/22/21 18:44	AO	Mt. Juliet, TN

EB-01 L1340101-24 GW

Collected by: SU / HMI Team | Collected date/time: 04/15/21 12:45 | Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 11:06	04/24/21 11:06	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661716	1	05/03/21 19:04	05/03/21 19:04	KEG	Mt. Juliet, TN

EB-01 L1340101-24 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 12:45
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1657222	1	04/24/21 10:53	04/24/21 10:53	MSP	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 10:11	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 17:09	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656517	1	04/27/21 00:36	04/27/21 11:09	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1657432	1	04/24/21 09:58	04/24/21 09:58	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654740	1	04/20/21 00:52	04/20/21 00:52	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1655241	1	04/20/21 17:54	04/20/21 17:54	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1659217	1	04/26/21 23:23	04/28/21 01:21	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1655270	1	04/22/21 07:18	04/22/21 19:05	AO	Mt. Juliet, TN

EB-02 L1340101-25 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 12:15
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1656611	1	04/22/21 09:24	04/22/21 11:33	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1658050	1	04/24/21 11:15	04/24/21 11:15	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1661755	1	05/03/21 19:46	05/03/21 19:46	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1657223	1	04/24/21 20:04	04/24/21 20:04	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1654193	1	04/21/21 17:51	04/22/21 10:13	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1659248	1	04/27/21 11:22	04/27/21 17:12	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1656517	1	04/27/21 00:36	04/27/21 11:12	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654740	1	04/20/21 01:13	04/20/21 01:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1655241	1	04/20/21 18:14	04/20/21 18:14	JHH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1655270	1	04/22/21 07:18	04/22/21 19:27	AO	Mt. Juliet, TN

TRIP BLANK-01 L1340101-26 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 00:00
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654740	1	04/19/21 22:08	04/19/21 22:08	JAH	Mt. Juliet, TN

TRIP BLANK-02 L1340101-27 GW

Collected by: SU / HMI Team
Collected date/time: 04/15/21 00:00
Received date/time: 04/16/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1654740	1	04/19/21 22:28	04/19/21 22:28	JAH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. 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.



Chris McCord
Project Manager

Report Revision History

Level II Report - Version 1: 05/05/21 14:37

Sample Delivery Group (SDG) Narrative

Analysis was performed from an unpreserved or improperly preserved sample.

Lab Sample ID	Project Sample ID	Method
L1340101-01	MW-1	353.2
L1340101-03	MW-3	353.2
L1340101-04	MW-6	353.2
L1340101-05	MW-8	353.2
L1340101-07	MW-12R2	353.2
L1340101-08	MW-13R	353.2
L1340101-09	MW-15	353.2
L1340101-10	MW-17R	353.2
L1340101-11	MW-25	353.2
L1340101-13	MW-28	353.2
L1340101-15	MW-30	353.2
L1340101-16	MW-32	353.2
L1340101-17	MW-33	353.2
L1340101-18	WW-NORTH	353.2
L1340101-19	WW-SOUTH	353.2
L1340101-20	WW-EAST	353.2
L1340101-21	DUP-01	353.2
L1340101-22	DUP-02	353.2
L1340101-23	DUP-03	353.2
L1340101-24	EB-01	353.2
L1340101-25	EB-02	353.2

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1340101-17	MW-33	3511/8015
L1340101-23	DUP-03	3511/8015

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	4.04		0.100	0.100	0.200	2	05/03/2021 18:27	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	50.6		0.379	1.00	1.00	1	04/23/2021 23:39	WG1657222
Fluoride	0.926		0.0640	0.150	0.150	1	04/23/2021 23:39	WG1657222
Sulfate	68.6		0.594	5.00	5.00	1	04/23/2021 23:39	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 16:18	WG1654192

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.166	J	0.0200	0.200	0.200	1	04/27/2021 16:11	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 14:31	WG1656515
Arsenic,Dissolved	0.00542		0.000180	0.00200	0.00200	1	04/28/2021 14:31	WG1656515
Barium,Dissolved	0.151		0.000381	0.0200	0.0200	1	04/28/2021 14:31	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 14:31	WG1656515
Chromium,Dissolved	0.00157	J	0.00124	0.00200	0.00200	1	04/28/2021 14:31	WG1656515
Copper,Dissolved	0.00216	J	0.00151	0.00500	0.00500	1	04/28/2021 14:31	WG1656515
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/28/2021 14:31	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 14:31	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 14:31	WG1656515
Manganese,Dissolved	U		0.000704	0.00500	0.00500	1	04/28/2021 14:31	WG1656515
Molybdenum,Dissolved	0.00318	J	0.000348	0.00500	0.00500	1	04/28/2021 14:31	WG1656515
Nickel,Dissolved	U		0.000816	0.00200	0.00200	1	04/28/2021 14:31	WG1656515
Selenium,Dissolved	0.00213		0.000300	0.00200	0.00200	1	04/28/2021 14:31	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 14:31	WG1656515
Uranium,Dissolved	0.00173	J	0.0000700	0.0200	0.0200	1	04/28/2021 15:42	WG1656515
Zinc,Dissolved	0.00613	B J	0.00302	0.0250	0.0250	1	04/28/2021 14:31	WG1656515

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 00:37	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 00:37	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 00:37	WG1654140

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 00:37	WG1654140
Chloroform	0.000439	J	0.000111	0.00500	0.00500	1	04/20/2021 00:37	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 00:37	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Ethylbenzene	0.000266	J	0.000137	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 00:37	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 00:37	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 00:37	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 00:37	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 00:37	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 00:37	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 00:37	WG1654140
(S) Toluene-d8	*101*				*80.0-120*		*04/20/2021 00:37*	WG1654140
(S) 4-Bromofluorobenzene	*105*				*77.0-126*		*04/20/2021 00:37*	WG1654140
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*04/20/2021 00:37*	WG1654140

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 00:56	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 00:56	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 00:56	WG1654140
Chloroform	0.000448	J	0.000111	0.00500	0.00500	1	04/20/2021 00:56	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 00:56	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,2-Dichloroethane	0.000299	J	0.0000819	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 00:56	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 00:56	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 00:56	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 00:56	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 00:56	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 00:56	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 00:56	WG1654140
(S) Toluene-d8	*102*				*80.0-120*		*04/20/2021 00:56*	WG1654140
(S) 4-Bromofluorobenzene	*100*				*77.0-126*		*04/20/2021 00:56*	WG1654140
(S) 1,2-Dichloroethane-d4	*111*				*70.0-130*		*04/20/2021 00:56*	WG1654140

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Acetophenone	U		0.000208	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/23/2021 03:35	WG1656991
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Caprolactam	U		0.000309	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/23/2021 03:35	WG1656991
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 03:35	WG1656991
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 03:35	WG1656991
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 03:35	WG1656991
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 03:35	WG1656991
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 03:35	WG1656991
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 03:35	WG1656991
Pyrene	U		0.000107	0.00100	0.00100	1	04/23/2021 03:35	WG1656991
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 03:35	WG1656991

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 03:35	WG1656991
(S) 2-Fluorophenol	*41.6*				*10.0-120*		*04/23/2021 03:35*	WG1656991
(S) Phenol-d5	*27.8*				*10.0-120*		*04/23/2021 03:35*	WG1656991
(S) Nitrobenzene-d5	*60.3*				*10.0-127*		*04/23/2021 03:35*	WG1656991
(S) 2-Fluorobiphenyl	*75.3*				*10.0-130*		*04/23/2021 03:35*	WG1656991
(S) 2,4,6-Tribromophenol	*73.7*				*10.0-155*		*04/23/2021 03:35*	WG1656991
(S) p-Terphenyl-d14	*77.4*				*10.0-128*		*04/23/2021 03:35*	WG1656991

MW-3
Collected date/time: 04/15/21 11:25
L1340101

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	1.85	J6	0.0500	0.100	0.100	1	05/03/2021 18:28	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	26.7		0.379	1.00	1.00	1	04/24/2021 00:28	WG1657222
Fluoride	0.353		0.0640	0.150	0.150	1	04/24/2021 00:28	WG1657222
Sulfate	76.1		0.594	5.00	5.00	1	04/24/2021 00:28	WG1657222

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.66		0.100	0.100	0.200	2	05/03/2021 18:31	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	53.9		0.379	1.00	1.00	1	04/24/2021 00:44	WG1657222
Fluoride	0.854		0.0640	0.150	0.150	1	04/24/2021 00:44	WG1657222
Sulfate	69.6		0.594	5.00	5.00	1	04/24/2021 00:44	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 16:20	WG1654192

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.173	J	0.0200	0.200	0.200	1	04/27/2021 16:14	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 14:34	WG1656515
Arsenic,Dissolved	0.00780		0.000180	0.00200	0.00200	1	04/28/2021 14:34	WG1656515
Barium,Dissolved	0.151		0.000381	0.0200	0.0200	1	04/28/2021 14:34	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 14:34	WG1656515
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/28/2021 14:34	WG1656515
Copper,Dissolved	0.00261	J	0.00151	0.00500	0.00500	1	04/28/2021 14:34	WG1656515
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/28/2021 14:34	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 14:34	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 14:34	WG1656515
Manganese,Dissolved	0.00292	J	0.000704	0.00500	0.00500	1	04/28/2021 14:34	WG1656515
Molybdenum,Dissolved	0.00260	J	0.000348	0.00500	0.00500	1	04/28/2021 14:34	WG1656515
Nickel,Dissolved	0.00101	J	0.000816	0.00200	0.00200	1	04/28/2021 14:34	WG1656515
Selenium,Dissolved	0.00302		0.000300	0.00200	0.00200	1	04/28/2021 14:34	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 14:34	WG1656515
Uranium,Dissolved	0.00283	J	0.0000700	0.0200	0.0200	1	04/28/2021 15:46	WG1656515
Zinc,Dissolved	0.0402		0.00302	0.0250	0.0250	1	04/28/2021 14:34	WG1656515

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 01:15	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 01:15	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 01:15	WG1654140

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 01:15	WG1654140
Chloroform	0.000149	J	0.000111	0.00500	0.00500	1	04/20/2021 01:15	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 01:15	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 01:15	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 01:15	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 01:15	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 01:15	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 01:15	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 01:15	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 01:15	WG1654140
(S) Toluene-d8	*105*				*80.0-120*		*04/20/2021 01:15*	WG1654140
(S) 4-Bromofluorobenzene	*100*				*77.0-126*		*04/20/2021 01:15*	WG1654140
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*04/20/2021 01:15*	WG1654140

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	648		13.3	13.3	1	04/22/2021 12:27	WG1656617

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	5.80		0.250	0.100	0.500	5	05/03/2021 18:32	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	126		1.90	1.00	5.00	5	04/24/2021 01:17	WG1657222
Fluoride	0.710		0.0640	0.150	0.150	1	04/24/2021 01:01	WG1657222
Sulfate	78.2		0.594	5.00	5.00	1	04/24/2021 01:01	WG1657222

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 01:34	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 01:34	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 01:34	WG1654140
Chloroform	0.000573	J	0.000111	0.00500	0.00500	1	04/20/2021 01:34	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 01:34	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 01:34	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 01:34	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 01:34	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 01:34	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 01:34	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 01:34	WG1654140

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 01:34	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 01:34	WG1654140
(S) Toluene-d8	*100*				*80.0-120*		*04/20/2021 01:34*	WG1654140
(S) 4-Bromofluorobenzene	*95.7*				*77.0-126*		*04/20/2021 01:34*	WG1654140
(S) 1,2-Dichloroethane-d4	*115*				*70.0-130*		*04/20/2021 01:34*	WG1654140

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	1120		20.0	20.0	1	04/22/2021 12:27	WG1656617

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	341		8.45	20.0	20.0	1	04/24/2021 06:42	WG1657327

Sample Narrative:

L1340101-06 WG1657327: Endpoint pH 4.5 Headspace

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 16:22	WG1654192

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.303		0.0200	0.200	0.200	1	04/27/2021 16:16	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 14:37	WG1656515
Arsenic,Dissolved	0.00247		0.000180	0.00200	0.00200	1	04/28/2021 14:37	WG1656515
Barium,Dissolved	0.201		0.000381	0.0200	0.0200	1	04/28/2021 14:37	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 14:37	WG1656515
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/28/2021 14:37	WG1656515
Copper,Dissolved	0.00452	J	0.00151	0.00500	0.00500	1	04/28/2021 14:37	WG1656515
Cobalt,Dissolved	0.000102	J	0.0000596	0.00200	0.00200	1	04/28/2021 14:37	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 14:37	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 14:37	WG1656515
Manganese,Dissolved	0.00409	J	0.000704	0.00500	0.00500	1	04/28/2021 14:37	WG1656515
Molybdenum,Dissolved	0.00106	J	0.000348	0.00500	0.00500	1	04/28/2021 14:37	WG1656515
Nickel,Dissolved	0.00193	J	0.000816	0.00200	0.00200	1	04/28/2021 14:37	WG1656515
Selenium,Dissolved	0.000975	J	0.000300	0.00200	0.00200	1	04/28/2021 14:37	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 14:37	WG1656515
Uranium,Dissolved	0.00623	J	0.0000700	0.0200	0.0200	1	04/28/2021 15:49	WG1656515
Zinc,Dissolved	0.00533	B J	0.00302	0.0250	0.0250	1	04/28/2021 14:37	WG1656515

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 01:52	WG1654140
Benzene	0.000660	J	0.0000941	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Bromodichloromethane	0.000179	J	0.000136	0.00100	0.00100	1	04/20/2021 17:19	WG1655177
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 01:52	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 01:52	WG1654140

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 01:52	WG1654140
Chloroform	0.000900	J	0.000111	0.00500	0.00500	1	04/20/2021 01:52	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 01:52	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 01:52	WG1654140
Isopropylbenzene	0.000396	J	0.000105	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 01:52	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 01:52	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 01:52	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 01:52	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 01:52	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 01:52	WG1654140
(S) Toluene-d8	*110*				*80.0-120*		*04/20/2021 01:52*	WG1654140
(S) Toluene-d8	*96.9*				*80.0-120*		*04/20/2021 17:19*	WG1655177
(S) 4-Bromofluorobenzene	*102*				*77.0-126*		*04/20/2021 01:52*	WG1654140
(S) 4-Bromofluorobenzene	*87.1*				*77.0-126*		*04/20/2021 17:19*	WG1655177
(S) 1,2-Dichloroethane-d4	*111*				*70.0-130*		*04/20/2021 01:52*	WG1654140
(S) 1,2-Dichloroethane-d4	*113*				*70.0-130*		*04/20/2021 17:19*	WG1655177

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Acetophenone	U		0.000208	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/23/2021 03:56	WG1656991

MW-11R
Collected date/time: 04/15/21 11:05
L1340101

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/23/2021 03:56	WG1656991
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Caprolactam	U		0.000309	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/23/2021 03:56	WG1656991
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 03:56	WG1656991
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 03:56	WG1656991
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 03:56	WG1656991
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 03:56	WG1656991
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 03:56	WG1656991
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 03:56	WG1656991
Pyrene	U		0.000107	0.00100	0.00100	1	04/23/2021 03:56	WG1656991
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 03:56	WG1656991

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 03:56	WG1656991
(S) 2-Fluorophenol	*27.4*				*10.0-120*		*04/23/2021 03:56*	WG1656991
(S) Phenol-d5	*21.1*				*10.0-120*		*04/23/2021 03:56*	WG1656991
(S) Nitrobenzene-d5	*44.1*				*10.0-127*		*04/23/2021 03:56*	WG1656991
(S) 2-Fluorobiphenyl	*61.1*				*10.0-130*		*04/23/2021 03:56*	WG1656991
(S) 2,4,6-Tribromophenol	*58.9*				*10.0-155*		*04/23/2021 03:56*	WG1656991
(S) p-Terphenyl-d14	*70.5*				*10.0-128*		*04/23/2021 03:56*	WG1656991

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	456		10.0	10.0	1	04/22/2021 12:27	WG1656617

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	174		8.45	20.0	20.0	1	04/24/2021 06:56	WG1657327

Sample Narrative:

L1340101-07 WG1657327: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	4.32		0.100	0.100	0.200	2	05/03/2021 18:33	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	86.7		0.379	1.00	1.00	1	04/24/2021 01:34	WG1657222
Fluoride	0.924		0.0640	0.150	0.150	1	04/24/2021 01:34	WG1657222
Sulfate	59.1		0.594	5.00	5.00	1	04/24/2021 01:34	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 16:24	WG1654192

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.197	J	0.0200	0.200	0.200	1	04/27/2021 16:19	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 14:40	WG1656515
Arsenic,Dissolved	0.00425		0.000180	0.00200	0.00200	1	04/28/2021 14:40	WG1656515
Barium,Dissolved	0.118		0.000381	0.0200	0.0200	1	04/28/2021 14:40	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 14:40	WG1656515
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/28/2021 14:40	WG1656515
Copper,Dissolved	0.00196	J	0.00151	0.00500	0.00500	1	04/28/2021 14:40	WG1656515
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/28/2021 14:40	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 14:40	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 14:40	WG1656515
Manganese,Dissolved	0.00109	J	0.000704	0.00500	0.00500	1	04/28/2021 14:40	WG1656515
Molybdenum,Dissolved	0.00454	J	0.000348	0.00500	0.00500	1	04/28/2021 14:40	WG1656515
Nickel,Dissolved	0.00430		0.000816	0.00200	0.00200	1	04/28/2021 14:40	WG1656515
Selenium,Dissolved	0.00202		0.000300	0.00200	0.00200	1	04/28/2021 14:40	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 14:40	WG1656515
Uranium,Dissolved	0.00169	J	0.0000700	0.0200	0.0200	1	04/28/2021 15:52	WG1656515
Zinc,Dissolved	0.00906	B J	0.00302	0.0250	0.0250	1	04/28/2021 14:40	WG1656515

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 02:11	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 02:11	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 02:11	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 02:11	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 02:11	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 02:11	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 02:11	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 02:11	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 02:11	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 02:11	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 02:11	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 02:11	WG1654140
(S) Toluene-d8	*106*				*80.0-120*		*04/20/2021 02:11*	WG1654140
(S) 4-Bromofluorobenzene	*118*				*77.0-126*		*04/20/2021 02:11*	WG1654140
(S) 1,2-Dichloroethane-d4	*116*				*70.0-130*		*04/20/2021 02:11*	WG1654140

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Acetophenone	U		0.000208	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/23/2021 04:17	WG1656991
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Caprolactam	0.000616	J	0.000309	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/23/2021 04:17	WG1656991
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 04:17	WG1656991
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 04:17	WG1656991
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 04:17	WG1656991
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 04:17	WG1656991
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 04:17	WG1656991
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 04:17	WG1656991
Pyrene	U		0.000107	0.00100	0.00100	1	04/23/2021 04:17	WG1656991
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 04:17	WG1656991

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 04:17	WG1656991
(S) 2-Fluorophenol	*48.1*				*10.0-120*		*04/23/2021 04:17*	WG1656991
(S) Phenol-d5	*33.6*				*10.0-120*		*04/23/2021 04:17*	WG1656991
(S) Nitrobenzene-d5	*65.7*				*10.0-127*		*04/23/2021 04:17*	WG1656991
(S) 2-Fluorobiphenyl	*82.8*				*10.0-130*		*04/23/2021 04:17*	WG1656991
(S) 2,4,6-Tribromophenol	*77.4*				*10.0-155*		*04/23/2021 04:17*	WG1656991
(S) p-Terphenyl-d14	*83.3*				*10.0-128*		*04/23/2021 04:17*	WG1656991

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	1200		20.0	20.0	1	04/22/2021 12:27	WG1656617

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	6.15		0.250	0.100	0.500	5	05/03/2021 18:34	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	291		3.79	1.00	10.0	10	04/24/2021 02:40	WG1657222
Fluoride	0.370		0.0640	0.150	0.150	1	04/24/2021 02:23	WG1657222
Sulfate	123		5.94	5.00	50.0	10	04/24/2021 02:40	WG1657222

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 16:26	WG1654192

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.253		0.0200	0.200	0.200	1	04/27/2021 16:27	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 14:44	WG1656515
Arsenic,Dissolved	0.00258		0.000180	0.00200	0.00200	1	04/28/2021 14:44	WG1656515
Barium,Dissolved	0.121		0.000381	0.0200	0.0200	1	04/28/2021 14:44	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 14:44	WG1656515
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/28/2021 14:44	WG1656515
Copper,Dissolved	0.00821		0.00151	0.00500	0.00500	1	04/28/2021 14:44	WG1656515
Cobalt,Dissolved	0.000640	J	0.0000596	0.00200	0.00200	1	04/28/2021 14:44	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 14:44	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 14:44	WG1656515
Manganese,Dissolved	0.0255		0.000704	0.00500	0.00500	1	04/28/2021 14:44	WG1656515
Molybdenum,Dissolved	0.000796	J	0.000348	0.00500	0.00500	1	04/28/2021 14:44	WG1656515
Nickel,Dissolved	0.00629		0.000816	0.00200	0.00200	1	04/28/2021 14:44	WG1656515
Selenium,Dissolved	0.00102	J	0.000300	0.00200	0.00200	1	04/28/2021 14:44	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 14:44	WG1656515
Uranium,Dissolved	0.00962	J	0.0000700	0.0200	0.0200	1	04/28/2021 16:02	WG1656515
Zinc,Dissolved	0.0126	B J	0.00302	0.0250	0.0250	1	04/28/2021 14:44	WG1656515

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 02:30	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 02:30	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 02:30	WG1654140

MW-15R
Collected date/time: 04/15/21 10:25
L1340101

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 02:30	WG1654140
Chloroform	0.000195	J	0.000111	0.00500	0.00500	1	04/20/2021 02:30	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 02:30	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 02:30	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 02:30	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 02:30	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 02:30	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 02:30	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 02:30	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 02:30	WG1654140
(S) Toluene-d8	*99.1*				*80.0-120*		*04/20/2021 02:30*	WG1654140
(S) 4-Bromofluorobenzene	*108*				*77.0-126*		*04/20/2021 02:30*	WG1654140
(S) 1,2-Dichloroethane-d4	*117*				*70.0-130*		*04/20/2021 02:30*	WG1654140

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	679		13.3	13.3	1	04/22/2021 12:27	WG1656617

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	206		8.45	20.0	20.0	1	04/23/2021 13:29	WG1657326

Sample Narrative:

L1340101-09 WG1657326: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	4.00		0.100	0.100	0.200	2	05/03/2021 18:40	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	173		3.79	1.00	10.0	10	04/24/2021 03:12	WG1657222
Fluoride	0.610		0.0640	0.150	0.150	1	04/24/2021 02:56	WG1657222
Sulfate	98.3		5.94	5.00	50.0	10	04/24/2021 03:12	WG1657222

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 16:28	WG1654192

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.180	J	0.0200	0.200	0.200	1	04/27/2021 16:30	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 14:53	WG1656515
Arsenic,Dissolved	0.00217		0.000180	0.00200	0.00200	1	04/28/2021 14:53	WG1656515
Barium,Dissolved	0.120		0.000381	0.0200	0.0200	1	04/28/2021 14:53	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 14:53	WG1656515
Chromium,Dissolved	0.00670		0.00124	0.00200	0.00200	1	04/28/2021 14:53	WG1656515
Copper,Dissolved	0.0219		0.00151	0.00500	0.00500	1	04/28/2021 14:53	WG1656515
Cobalt,Dissolved	0.000593	J	0.0000596	0.00200	0.00200	1	04/28/2021 14:53	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 14:53	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 14:53	WG1656515
Manganese,Dissolved	0.00472	J	0.000704	0.00500	0.00500	1	04/28/2021 14:53	WG1656515
Molybdenum,Dissolved	0.0102		0.000348	0.00500	0.00500	1	04/28/2021 14:53	WG1656515
Nickel,Dissolved	1.29		0.000816	0.00200	0.00200	1	04/28/2021 14:53	WG1656515
Selenium,Dissolved	0.00206		0.000300	0.00200	0.00200	1	04/28/2021 14:53	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 14:53	WG1656515
Uranium,Dissolved	0.00251	J	0.0000700	0.0200	0.0200	1	04/28/2021 16:05	WG1656515
Zinc,Dissolved	3.68		0.00302	0.0250	0.0250	1	04/28/2021 14:53	WG1656515

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	505		10.0	10.0	1	04/22/2021 12:27	WG1656617

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	209		8.45	20.0	20.0	1	04/24/2021 08:35	WG1658050

Sample Narrative:

L1340101-10 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.64		0.0500	0.100	0.100	1	05/03/2021 18:41	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	80.5		0.379	1.00	1.00	1	04/24/2021 03:29	WG1657222
Fluoride	0.641		0.0640	0.150	0.150	1	04/24/2021 03:29	WG1657222
Sulfate	82.0		0.594	5.00	5.00	1	04/24/2021 03:29	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 16:30	WG1654192

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.145	J	0.0200	0.200	0.200	1	04/27/2021 16:33	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 14:57	WG1656515
Arsenic,Dissolved	0.00406		0.000180	0.00200	0.00200	1	04/28/2021 14:57	WG1656515
Barium,Dissolved	0.101		0.000381	0.0200	0.0200	1	04/28/2021 14:57	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 14:57	WG1656515
Chromium,Dissolved	0.00244		0.00124	0.00200	0.00200	1	04/28/2021 14:57	WG1656515
Copper,Dissolved	0.00308	J	0.00151	0.00500	0.00500	1	04/28/2021 14:57	WG1656515
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/28/2021 14:57	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 14:57	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 14:57	WG1656515
Manganese,Dissolved	U		0.000704	0.00500	0.00500	1	04/28/2021 14:57	WG1656515
Molybdenum,Dissolved	0.00195	J	0.000348	0.00500	0.00500	1	04/28/2021 14:57	WG1656515
Nickel,Dissolved	0.00163	J	0.000816	0.00200	0.00200	1	04/28/2021 14:57	WG1656515
Selenium,Dissolved	0.00233		0.000300	0.00200	0.00200	1	04/28/2021 14:57	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 14:57	WG1656515
Uranium,Dissolved	0.00163	J	0.0000700	0.0200	0.0200	1	04/28/2021 16:08	WG1656515
Zinc,Dissolved	0.0107	B J	0.00302	0.0250	0.0250	1	04/28/2021 14:57	WG1656515

MW-17R
Collected date/time: 04/15/21 11:05
L1340101

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 02:49	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 02:49	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 02:49	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 02:49	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 02:49	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 02:49	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 02:49	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 02:49	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 02:49	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 02:49	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 02:49	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 02:49	WG1654140
(S) Toluene-d8	*92.8*				*80.0-120*		*04/20/2021 02:49*	WG1654140
(S) 4-Bromofluorobenzene	*94.7*				*77.0-126*		*04/20/2021 02:49*	WG1654140
(S) 1,2-Dichloroethane-d4	*117*				*70.0-130*		*04/20/2021 02:49*	WG1654140

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Acetophenone	U		0.000208	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/23/2021 04:38	WG1656991
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Caprolactam	U		0.000309	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/23/2021 04:38	WG1656991
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 04:38	WG1656991
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 04:38	WG1656991
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 04:38	WG1656991
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 04:38	WG1656991
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 04:38	WG1656991
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 04:38	WG1656991
Pyrene	U		0.000107	0.00100	0.00100	1	04/23/2021 04:38	WG1656991
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 04:38	WG1656991

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 04:38	WG1656991
(S) 2-Fluorophenol	*41.6*				*10.0-120*		*04/23/2021 04:38*	WG1656991
(S) Phenol-d5	*27.6*				*10.0-120*		*04/23/2021 04:38*	WG1656991
(S) Nitrobenzene-d5	*59.3*				*10.0-127*		*04/23/2021 04:38*	WG1656991
(S) 2-Fluorobiphenyl	*77.4*				*10.0-130*		*04/23/2021 04:38*	WG1656991
(S) 2,4,6-Tribromophenol	*69.3*				*10.0-155*		*04/23/2021 04:38*	WG1656991
(S) p-Terphenyl-d14	*76.1*				*10.0-128*		*04/23/2021 04:38*	WG1656991

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	1320		25.0	25.0	1	04/22/2021 12:27	WG1656617

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	456		8.45	20.0	20.0	1	04/24/2021 08:43	WG1658050

Sample Narrative:

L1340101-11 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	3.80		0.100	0.100	0.200	2	05/03/2021 18:43	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	361		3.79	1.00	10.0	10	04/24/2021 04:02	WG1657222
Fluoride	0.405		0.0640	0.150	0.150	1	04/24/2021 03:45	WG1657222
Sulfate	119		5.94	5.00	50.0	10	04/24/2021 04:02	WG1657222

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 14:52	WG1654192

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.258		0.0200	0.200	0.200	1	04/27/2021 16:36	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 15:00	WG1656515
Arsenic,Dissolved	0.00209		0.000180	0.00200	0.00200	1	04/28/2021 15:00	WG1656515
Barium,Dissolved	0.142		0.000381	0.0200	0.0200	1	04/28/2021 15:00	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 15:00	WG1656515
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/28/2021 15:00	WG1656515
Copper,Dissolved	0.00281	J	0.00151	0.00500	0.00500	1	04/28/2021 15:00	WG1656515
Cobalt,Dissolved	0.00562		0.0000596	0.00200	0.00200	1	04/28/2021 15:00	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 15:00	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 15:00	WG1656515
Manganese,Dissolved	U		0.000704	0.00500	0.00500	1	04/28/2021 15:00	WG1656515
Molybdenum,Dissolved	0.00123	J	0.000348	0.00500	0.00500	1	04/28/2021 15:00	WG1656515
Nickel,Dissolved	0.00763		0.000816	0.00200	0.00200	1	04/28/2021 15:00	WG1656515
Selenium,Dissolved	U		0.000300	0.00200	0.00200	1	04/28/2021 15:00	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 15:00	WG1656515
Uranium,Dissolved	0.0102	J	0.0000700	0.0200	0.0200	1	04/28/2021 16:12	WG1656515
Zinc,Dissolved	0.00447	B J	0.00302	0.0250	0.0250	1	04/28/2021 15:00	WG1656515

MW-23
Collected date/time: 04/15/21 11:55
L1340101

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 03:08	WG1654140
Benzene	0.000809	J	0.0000941	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 03:08	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 03:08	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 03:08	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 03:08	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 03:08	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 03:08	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 03:08	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 03:08	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 03:08	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 03:08	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 03:08	WG1654140
(S) Toluene-d8	*99.2*				*80.0-120*		*04/20/2021 03:08*	WG1654140
(S) 4-Bromofluorobenzene	*109*				*77.0-126*		*04/20/2021 03:08*	WG1654140
(S) 1,2-Dichloroethane-d4	*117*				*70.0-130*		*04/20/2021 03:08*	WG1654140

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Acetophenone	U		0.000208	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Benzo(a)pyrene	0.0000759	J	0.0000381	0.000200	0.000200	1	04/23/2021 04:59	WG1656991
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Caprolactam	0.00406	J	0.000309	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Dibenz(a,h)anthracene	0.0000740	J	0.0000644	0.000200	0.000200	1	04/23/2021 04:59	WG1656991
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Fluoranthene	0.000129	J	0.000102	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 04:59	WG1656991
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 04:59	WG1656991
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 04:59	WG1656991
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 04:59	WG1656991
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 04:59	WG1656991
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 04:59	WG1656991
Pyrene	0.000112	J	0.000107	0.00100	0.00100	1	04/23/2021 04:59	WG1656991
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 04:59	WG1656991

MW-23
Collected date/time: 04/15/21 11:55
L1340101

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 04:59	WG1656991
(S) 2-Fluorophenol	*40.0*				*10.0-120*		*04/23/2021 04:59*	WG1656991
(S) Phenol-d5	*27.4*				*10.0-120*		*04/23/2021 04:59*	WG1656991
(S) Nitrobenzene-d5	*59.0*				*10.0-127*		*04/23/2021 04:59*	WG1656991
(S) 2-Fluorobiphenyl	*73.0*				*10.0-130*		*04/23/2021 04:59*	WG1656991
(S) 2,4,6-Tribromophenol	*80.0*				*10.0-155*		*04/23/2021 04:59*	WG1656991
(S) p-Terphenyl-d14	*78.2*				*10.0-128*		*04/23/2021 04:59*	WG1656991

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 03:27	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 03:27	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 03:27	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 03:27	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 03:27	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 03:27	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 03:27	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 03:27	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 03:27	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 03:27	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 03:27	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 03:27	WG1654140
(S) Toluene-d8	*102*				*80.0-120*		*04/20/2021 03:27*	WG1654140
(S) 4-Bromofluorobenzene	*103*				*77.0-126*		*04/20/2021 03:27*	WG1654140
(S) 1,2-Dichloroethane-d4	*116*				*70.0-130*		*04/20/2021 03:27*	WG1654140

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	152		8.45	20.0	20.0	1	04/24/2021 09:00	WG1658050

Sample Narrative:

L1340101-13 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	4.06		0.100	0.100	0.200	2	05/03/2021 18:45	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	119		1.90	1.00	5.00	5	04/24/2021 04:35	WG1657222
Fluoride	1.91		0.0640	0.150	0.150	1	04/24/2021 04:18	WG1657222
Sulfate	84.5		0.594	5.00	5.00	1	04/24/2021 04:18	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 09:49	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.191	J	0.0200	0.200	0.200	1	04/27/2021 16:39	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 15:03	WG1656515
Arsenic,Dissolved	0.00241		0.000180	0.00200	0.00200	1	04/28/2021 15:03	WG1656515
Barium,Dissolved	0.0834		0.000381	0.0200	0.0200	1	04/28/2021 15:03	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 15:03	WG1656515
Chromium,Dissolved	0.00334		0.00124	0.00200	0.00200	1	04/28/2021 15:03	WG1656515
Copper,Dissolved	0.00235	J	0.00151	0.00500	0.00500	1	04/28/2021 15:03	WG1656515
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/28/2021 15:03	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 15:03	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 15:03	WG1656515
Manganese,Dissolved	U		0.000704	0.00500	0.00500	1	04/28/2021 15:03	WG1656515
Molybdenum,Dissolved	0.00185	J	0.000348	0.00500	0.00500	1	04/28/2021 15:03	WG1656515
Nickel,Dissolved	0.00125	J	0.000816	0.00200	0.00200	1	04/28/2021 15:03	WG1656515
Selenium,Dissolved	0.00137	J	0.000300	0.00200	0.00200	1	04/28/2021 15:03	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 15:03	WG1656515
Uranium,Dissolved	0.00355	J	0.0000700	0.0200	0.0200	1	04/28/2021 16:15	WG1656515
Zinc,Dissolved	0.0101	B J	0.00302	0.0250	0.0250	1	04/28/2021 15:03	WG1656515

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 03:46	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Bromodichloromethane	0.000473	J	0.000136	0.00100	0.00100	1	04/20/2021 17:40	WG1655177
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 03:46	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 03:46	WG1654140
Chloroform	0.00156	J	0.000111	0.00500	0.00500	1	04/20/2021 03:46	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 03:46	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 03:46	WG1654140

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 03:46	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 03:46	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 03:46	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 03:46	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 03:46	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 03:46	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 03:46	WG1654140
(S) Toluene-d8	*98.5*				*80.0-120*		*04/20/2021 03:46*	WG1654140
(S) Toluene-d8	*96.9*				*80.0-120*		*04/20/2021 17:40*	WG1655177
(S) 4-Bromofluorobenzene	*90.5*				*77.0-126*		*04/20/2021 03:46*	WG1654140
(S) 4-Bromofluorobenzene	*86.1*				*77.0-126*		*04/20/2021 17:40*	WG1655177
(S) 1,2-Dichloroethane-d4	*116*				*70.0-130*		*04/20/2021 03:46*	WG1654140
(S) 1,2-Dichloroethane-d4	*117*				*70.0-130*		*04/20/2021 17:40*	WG1655177

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	501		10.0	10.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	197		8.45	20.0	20.0	1	04/24/2021 09:13	WG1658050

Sample Narrative:

L1340101-15 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.68		0.100	0.100	0.200	2	05/03/2021 18:46	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	93.2		0.379	1.00	1.00	1	04/24/2021 04:51	WG1657222
Fluoride	0.960		0.0640	0.150	0.150	1	04/24/2021 04:51	WG1657222
Sulfate	62.9		0.594	5.00	5.00	1	04/24/2021 04:51	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 09:52	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.185	J	0.0200	0.200	0.200	1	04/27/2021 16:41	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.0293	J	0.0185	0.100	0.100	1	04/28/2021 15:10	WG1656515
Arsenic,Dissolved	0.00423		0.000180	0.00200	0.00200	1	04/28/2021 15:10	WG1656515
Barium,Dissolved	0.0928		0.000381	0.0200	0.0200	1	04/28/2021 15:10	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 15:10	WG1656515
Chromium,Dissolved	0.0145		0.00124	0.00200	0.00200	1	04/28/2021 15:10	WG1656515
Copper,Dissolved	0.00327	J	0.00151	0.00500	0.00500	1	04/28/2021 15:10	WG1656515
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/28/2021 15:10	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 15:10	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 15:10	WG1656515
Manganese,Dissolved	0.00326	J	0.000704	0.00500	0.00500	1	04/28/2021 15:10	WG1656515
Molybdenum,Dissolved	0.00226	J	0.000348	0.00500	0.00500	1	04/28/2021 15:10	WG1656515
Nickel,Dissolved	0.00207		0.000816	0.00200	0.00200	1	04/28/2021 15:10	WG1656515
Selenium,Dissolved	0.00191	J	0.000300	0.00200	0.00200	1	04/28/2021 15:10	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 15:10	WG1656515
Uranium,Dissolved	0.00220	J	0.0000700	0.0200	0.0200	1	04/28/2021 16:18	WG1656515
Zinc,Dissolved	0.00496	B J	0.00302	0.0250	0.0250	1	04/28/2021 15:10	WG1656515

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 04:05	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Bromodichloromethane	0.00704		0.000136	0.00100	0.00100	1	04/20/2021 18:02	WG1655177
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 04:05	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Carbon tetrachloride	0.000413	J J4	0.000128	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 04:05	WG1654140
Chloroform	0.0266		0.000111	0.00500	0.00500	1	04/20/2021 04:05	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 04:05	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 04:05	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 04:05	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 04:05	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 04:05	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 04:05	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 04:05	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 04:05	WG1654140
(S) Toluene-d8	*97.2*				*80.0-120*		*04/20/2021 04:05*	WG1654140
(S) Toluene-d8	*97.2*				*80.0-120*		*04/20/2021 18:02*	WG1655177
(S) 4-Bromofluorobenzene	*97.1*				*77.0-126*		*04/20/2021 04:05*	WG1654140
(S) 4-Bromofluorobenzene	*86.6*				*77.0-126*		*04/20/2021 18:02*	WG1655177
(S) 1,2-Dichloroethane-d4	*117*				*70.0-130*		*04/20/2021 04:05*	WG1654140
(S) 1,2-Dichloroethane-d4	*115*				*70.0-130*		*04/20/2021 18:02*	WG1655177

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Acetophenone	U		0.000208	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/23/2021 05:20	WG1656991
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Caprolactam	U		0.000309	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/23/2021 05:20	WG1656991
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 05:20	WG1656991
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 05:20	WG1656991
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 05:20	WG1656991
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 05:20	WG1656991
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 05:20	WG1656991
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 05:20	WG1656991
Pyrene	U		0.000107	0.00100	0.00100	1	04/23/2021 05:20	WG1656991
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 05:20	WG1656991

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 05:20	WG1656991
(S) 2-Fluorophenol	*46.0*				*10.0-120*		*04/23/2021 05:20*	WG1656991
(S) Phenol-d5	*31.0*				*10.0-120*		*04/23/2021 05:20*	WG1656991
(S) Nitrobenzene-d5	*66.0*				*10.0-127*		*04/23/2021 05:20*	WG1656991
(S) 2-Fluorobiphenyl	*83.3*				*10.0-130*		*04/23/2021 05:20*	WG1656991
(S) 2,4,6-Tribromophenol	*78.9*				*10.0-155*		*04/23/2021 05:20*	WG1656991
(S) p-Terphenyl-d14	*83.3*				*10.0-128*		*04/23/2021 05:20*	WG1656991

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	692		13.3	13.3	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	372		8.45	20.0	20.0	1	04/24/2021 09:22	WG1658050

Sample Narrative:

L1340101-16 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.71		0.0500	0.100	0.100	1	05/03/2021 18:47	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	61.8		0.379	1.00	1.00	1	04/24/2021 05:57	WG1657222
Fluoride	0.292		0.0640	0.150	0.150	1	04/24/2021 05:57	WG1657222
Sulfate	132		2.97	5.00	25.0	5	04/24/2021 06:13	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 09:54	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.142	J	0.0200	0.200	0.200	1	04/27/2021 16:44	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.284		0.0185	0.100	0.100	1	04/28/2021 15:13	WG1656515
Arsenic,Dissolved	0.00395		0.000180	0.00200	0.00200	1	04/28/2021 15:13	WG1656515
Barium,Dissolved	0.440		0.000381	0.0200	0.0200	1	04/28/2021 15:13	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 15:13	WG1656515
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/28/2021 15:13	WG1656515
Copper,Dissolved	0.00584		0.00151	0.00500	0.00500	1	04/28/2021 15:13	WG1656515
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/28/2021 15:13	WG1656515
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/28/2021 15:13	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 15:13	WG1656515
Manganese,Dissolved	0.00436	J	0.000704	0.00500	0.00500	1	04/28/2021 15:13	WG1656515
Molybdenum,Dissolved	0.00131	J	0.000348	0.00500	0.00500	1	04/28/2021 15:13	WG1656515
Nickel,Dissolved	0.00425		0.000816	0.00200	0.00200	1	04/28/2021 15:13	WG1656515
Selenium,Dissolved	0.000466	J	0.000300	0.00200	0.00200	1	04/28/2021 15:13	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 15:13	WG1656515
Uranium,Dissolved	0.00609	J	0.0000700	0.0200	0.0200	1	04/28/2021 16:21	WG1656515
Zinc,Dissolved	0.0241	B J	0.00302	0.0250	0.0250	1	04/28/2021 15:13	WG1656515

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	04/24/2021 07:04	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*100*				*78.0-120*		*04/24/2021 07:04*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 04:24	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 04:24	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 04:24	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 04:24	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 04:24	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 04:24	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 04:24	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 04:24	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 04:24	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 04:24	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 04:24	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 04:24	WG1654140
(S) Toluene-d8	*102*				*80.0-120*		*04/20/2021 04:24*	WG1654140
(S) 4-Bromofluorobenzene	*98.0*				*77.0-126*		*04/20/2021 04:24*	WG1654140
(S) 1,2-Dichloroethane-d4	*116*				*70.0-130*		*04/20/2021 04:24*	WG1654140

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.366		0.0247	0.100	0.100	1	04/27/2021 06:49	WG1659217
(S) o-Terphenyl	*75.0*				*31.0-160*		*04/27/2021 06:49*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Acetophenone	U		0.000208	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Benzo(b)fluoranthene	0.000281	J	0.000130	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Benzo(k)fluoranthene	0.000319	J	0.000120	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Benzo(g,h,i)perylene	0.000346	J	0.000121	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Benzo(a)pyrene	0.000225		0.0000381	0.000200	0.000200	1	04/23/2021 05:41	WG1656991
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Caprolactam	U		0.000309	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Dibenz(a,h)anthracene	0.000328		0.0000644	0.000200	0.000200	1	04/23/2021 05:41	WG1656991
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Indeno(1,2,3-cd)pyrene	0.000392	J	0.000279	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 05:41	WG1656991
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 05:41	WG1656991
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 05:41	WG1656991
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 05:41	WG1656991
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 05:41	WG1656991
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 05:41	WG1656991
Pyrene	U		0.000107	0.00100	0.00100	1	04/23/2021 05:41	WG1656991
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/23/2021 05:41	WG1656991

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 05:41	WG1656991
(S) 2-Fluorophenol	*44.8*				*10.0-120*		*04/23/2021 05:41*	WG1656991
(S) Phenol-d5	*31.4*				*10.0-120*		*04/23/2021 05:41*	WG1656991
(S) Nitrobenzene-d5	*64.2*				*10.0-127*		*04/23/2021 05:41*	WG1656991
(S) 2-Fluorobiphenyl	*81.3*				*10.0-130*		*04/23/2021 05:41*	WG1656991
(S) 2,4,6-Tribromophenol	*77.9*				*10.0-155*		*04/23/2021 05:41*	WG1656991
(S) p-Terphenyl-d14	*79.2*				*10.0-128*		*04/23/2021 05:41*	WG1656991

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	1090		20.0	20.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	968		8.45	20.0	20.0	1	04/24/2021 09:30	WG1658050

Sample Narrative:

L1340101-17 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.0500	0.100	0.100	1	05/03/2021 18:48	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	78.7		0.379	1.00	1.00	1	04/24/2021 06:30	WG1657222
Fluoride	0.635		0.0640	0.150	0.150	1	04/24/2021 06:30	WG1657222
Sulfate	9.75		0.594	5.00	5.00	1	04/24/2021 06:30	WG1657222

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U	J6	0.000100	0.000200	0.000200	1	04/22/2021 09:39	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.159	J	0.0200	0.200	0.200	1	04/27/2021 16:01	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/28/2021 13:43	WG1656515
Arsenic,Dissolved	0.00297		0.000180	0.00200	0.00200	1	04/28/2021 13:43	WG1656515
Barium,Dissolved	0.471		0.000381	0.0200	0.0200	1	04/28/2021 13:43	WG1656515
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/28/2021 13:43	WG1656515
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/28/2021 13:43	WG1656515
Copper,Dissolved	U		0.00151	0.00500	0.00500	1	04/28/2021 13:43	WG1656515
Cobalt,Dissolved	0.000108	J	0.0000596	0.00200	0.00200	1	04/28/2021 13:43	WG1656515
Iron,Dissolved	0.526		0.0281	0.100	0.100	1	04/28/2021 13:43	WG1656515
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/28/2021 13:43	WG1656515
Manganese,Dissolved	0.701	V	0.000704	0.00500	0.00500	1	04/28/2021 13:43	WG1656515
Molybdenum,Dissolved	0.00330	J	0.000348	0.00500	0.00500	1	04/28/2021 13:43	WG1656515
Nickel,Dissolved	0.00198	J	0.000816	0.00200	0.00200	1	04/28/2021 13:43	WG1656515
Selenium,Dissolved	U		0.000300	0.00200	0.00200	1	04/28/2021 13:43	WG1656515
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/28/2021 13:43	WG1656515
Uranium,Dissolved	0.0322	O1	0.0000700	0.0200	0.0200	1	04/28/2021 15:29	WG1656515
Zinc,Dissolved	0.00441	B J	0.00302	0.0250	0.0250	1	04/28/2021 13:43	WG1656515

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0501	J	0.0314	0.100	0.100	1	04/24/2021 07:25	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*99.9*				*78.0-120*		*04/24/2021 07:25*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 04:43	WG1654140
Benzene	0.000296	J	0.0000941	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 04:43	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
sec-Butylbenzene	0.000216	J	0.000125	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
tert-Butylbenzene	0.000156	J	0.000127	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 04:43	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 04:43	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 04:43	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 04:43	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 04:43	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 04:43	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 04:43	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 04:43	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 04:43	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 04:43	WG1654140
(S) Toluene-d8	*86.3*				*80.0-120*		*04/20/2021 04:43*	WG1654140
(S) 4-Bromofluorobenzene	*82.0*				*77.0-126*		*04/20/2021 04:43*	WG1654140
(S) 1,2-Dichloroethane-d4	*111*				*70.0-130*		*04/20/2021 04:43*	WG1654140

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) High Fraction	0.161		0.0247	0.100	0.100	1	04/27/2021 21:40	WG1659217
(S) o-Terphenyl	*89.5*				*31.0-160*		*04/27/2021 21:40*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Acetophenone	U		0.000208	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/23/2021 06:02	WG1656991
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Caprolactam	U		0.000309	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/23/2021 06:02	WG1656991
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 06:02	WG1656991
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 06:02	WG1656991
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 06:02	WG1656991
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 06:02	WG1656991
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 06:02	WG1656991
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 06:02	WG1656991
Pyrene	U		0.000107	0.00100	0.00100	1	04/23/2021 06:02	WG1656991
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/23/2021 06:02	WG1656991

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 06:02	WG1656991
(S) 2-Fluorophenol	*39.9*				*10.0-120*		*04/23/2021 06:02*	WG1656991
(S) Phenol-d5	*27.5*				*10.0-120*		*04/23/2021 06:02*	WG1656991
(S) Nitrobenzene-d5	*59.5*				*10.0-127*		*04/23/2021 06:02*	WG1656991
(S) 2-Fluorobiphenyl	*76.0*				*10.0-130*		*04/23/2021 06:02*	WG1656991
(S) 2,4,6-Tribromophenol	*75.1*				*10.0-155*		*04/23/2021 06:02*	WG1656991
(S) p-Terphenyl-d14	*78.0*				*10.0-128*		*04/23/2021 06:02*	WG1656991

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	530		10.0	10.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	171		8.45	20.0	20.0	1	04/24/2021 09:58	WG1658050

Sample Narrative:

L1340101-18 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.20		0.100	0.100	0.200	2	05/03/2021 18:56	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	113		1.90	1.00	5.00	5	04/24/2021 07:36	WG1657222
Fluoride	0.796		0.0640	0.150	0.150	1	04/24/2021 07:19	WG1657222
Sulfate	78.1		0.594	5.00	5.00	1	04/24/2021 07:19	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 09:55	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.143	J	0.0200	0.200	0.200	1	04/27/2021 16:47	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/27/2021 10:26	WG1656517
Arsenic,Dissolved	0.00634		0.000180	0.00200	0.00200	1	04/27/2021 10:26	WG1656517
Barium,Dissolved	0.106		0.000381	0.0200	0.0200	1	04/27/2021 10:26	WG1656517
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/27/2021 10:26	WG1656517
Chromium,Dissolved	0.00227	B	0.00124	0.00200	0.00200	1	04/27/2021 10:26	WG1656517
Copper,Dissolved	0.0723		0.00151	0.00500	0.00500	1	04/27/2021 10:26	WG1656517
Cobalt,Dissolved	0.000115	J	0.0000596	0.00200	0.00200	1	04/27/2021 10:26	WG1656517
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/27/2021 10:26	WG1656517
Lead,Dissolved	0.00354	B	0.000849	0.00200	0.00200	1	04/27/2021 10:26	WG1656517
Manganese,Dissolved	0.000746	J	0.000704	0.00500	0.00500	1	04/27/2021 10:26	WG1656517
Molybdenum,Dissolved	0.00314	J	0.000348	0.00500	0.00500	1	04/27/2021 10:26	WG1656517
Nickel,Dissolved	0.00231		0.000816	0.00200	0.00200	1	04/27/2021 10:26	WG1656517
Selenium,Dissolved	0.00462		0.000300	0.00200	0.00200	1	04/27/2021 10:26	WG1656517
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/27/2021 10:26	WG1656517
Uranium,Dissolved	0.00161	J	0.0000700	0.0200	0.0200	1	04/27/2021 10:26	WG1656517
Zinc,Dissolved	0.0519		0.00302	0.0250	0.0250	1	04/27/2021 10:26	WG1656517

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	04/24/2021 07:47	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*101*				*78.0-120*		*04/24/2021 07:47*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 05:02	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 05:02	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 05:02	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 05:02	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 05:02	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 05:02	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 05:02	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 05:02	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 05:02	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 05:02	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 05:02	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 05:02	WG1654140
(S) Toluene-d8	*97.8*				*80.0-120*		*04/20/2021 05:02*	WG1654140
(S) 4-Bromofluorobenzene	*95.9*				*77.0-126*		*04/20/2021 05:02*	WG1654140
(S) 1,2-Dichloroethane-d4	*118*				*70.0-130*		*04/20/2021 05:02*	WG1654140

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0644	J	0.0247	0.100	0.100	1	04/27/2021 08:10	WG1659217
(S) o-Terphenyl	*82.0*				*31.0-160*		*04/27/2021 08:10*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Acetophenone	U	J4	0.000208	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Anthracene	U		0.0000804	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Atrazine	U		0.000255	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Benzaldehyde	U	J4	0.00169	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/23/2021 02:06	WG1655273
Biphenyl	U		0.000790	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Caprolactam	U		0.000309	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Carbazole	U		0.000111	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Chrysene	U		0.000130	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/23/2021 02:06	WG1655273
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Fluorene	U		0.0000844	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Isophorone	U		0.000143	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Naphthalene	U		0.000159	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/23/2021 02:06	WG1655273
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/23/2021 02:06	WG1655273
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/23/2021 02:06	WG1655273
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/23/2021 02:06	WG1655273
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/23/2021 02:06	WG1655273
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/23/2021 02:06	WG1655273
Pyrene	U		0.000107	0.00100	0.00100	1	04/23/2021 02:06	WG1655273
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
4-Chloro-3-methylphenol	U	J4	0.000131	0.0100	0.0100	1	04/23/2021 02:06	WG1655273

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
Phenol	U		0.00433	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/23/2021 02:06	WG1655273
(S) 2-Fluorophenol	*18.1*				*10.0-120*		*04/23/2021 02:06*	WG1655273
(S) Phenol-d5	*12.7*				*10.0-120*		*04/23/2021 02:06*	WG1655273
(S) Nitrobenzene-d5	*55.7*				*10.0-127*		*04/23/2021 02:06*	WG1655273
(S) 2-Fluorobiphenyl	*58.6*				*10.0-130*		*04/23/2021 02:06*	WG1655273
(S) 2,4,6-Tribromophenol	*24.6*				*10.0-155*		*04/23/2021 02:06*	WG1655273
(S) p-Terphenyl-d14	*38.4*				*10.0-128*		*04/23/2021 02:06*	WG1655273

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	948		20.0	20.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	171		8.45	20.0	20.0	1	04/24/2021 10:12	WG1658050

Sample Narrative:

L1340101-19 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	3.36		0.100	0.100	0.200	2	05/03/2021 18:57	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	302		1.90	1.00	5.00	5	04/24/2021 08:08	WG1657222
Fluoride	0.659		0.0640	0.150	0.150	1	04/24/2021 07:52	WG1657222
Sulfate	91.6		0.594	5.00	5.00	1	04/24/2021 07:52	WG1657222

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 09:57	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.177	J	0.0200	0.200	0.200	1	04/27/2021 16:49	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/27/2021 10:42	WG1656517
Arsenic,Dissolved	0.00233		0.000180	0.00200	0.00200	1	04/27/2021 10:42	WG1656517
Barium,Dissolved	0.112		0.000381	0.0200	0.0200	1	04/27/2021 10:42	WG1656517
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/27/2021 10:42	WG1656517
Chromium,Dissolved	0.00184	B J	0.00124	0.00200	0.00200	1	04/27/2021 10:42	WG1656517
Copper,Dissolved	0.00881	B	0.00151	0.00500	0.00500	1	04/27/2021 10:42	WG1656517
Cobalt,Dissolved	0.000201	J	0.0000596	0.00200	0.00200	1	04/27/2021 10:42	WG1656517
Iron,Dissolved	0.0389	J	0.0281	0.100	0.100	1	04/27/2021 10:42	WG1656517
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/27/2021 10:42	WG1656517
Manganese,Dissolved	0.0174		0.000704	0.00500	0.00500	1	04/27/2021 10:42	WG1656517
Molybdenum,Dissolved	0.00211	J	0.000348	0.00500	0.00500	1	04/27/2021 10:42	WG1656517
Nickel,Dissolved	0.0334		0.000816	0.00200	0.00200	1	04/27/2021 10:42	WG1656517
Selenium,Dissolved	0.00409		0.000300	0.00200	0.00200	1	04/27/2021 10:42	WG1656517
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/27/2021 10:42	WG1656517
Uranium,Dissolved	0.00217	J	0.0000700	0.0200	0.0200	1	04/27/2021 10:42	WG1656517
Zinc,Dissolved	0.0951		0.00302	0.0250	0.0250	1	04/27/2021 10:42	WG1656517

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	04/24/2021 08:09	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*101*				*78.0-120*		*04/24/2021 08:09*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 05:20	WG1654140
Benzene	0.000397	J	0.0000941	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 05:20	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Carbon tetrachloride	0.000254	J J4	0.000128	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 05:20	WG1654140
Chloroform	0.000898	J	0.000111	0.00500	0.00500	1	04/20/2021 05:20	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 05:20	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 05:20	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 05:20	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 05:20	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 05:20	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 05:20	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 05:20	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 05:20	WG1654140
(S) Toluene-d8	*101*				*80.0-120*		*04/20/2021 05:20*	WG1654140
(S) 4-Bromofluorobenzene	*104*				*77.0-126*		*04/20/2021 05:20*	WG1654140
(S) 1,2-Dichloroethane-d4	*113*				*70.0-130*		*04/20/2021 05:20*	WG1654140

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0865	J	0.0247	0.100	0.100	1	04/27/2021 08:30	WG1659217
(S) o-Terphenyl	*82.0*				*31.0-160*		*04/27/2021 08:30*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U	J4	0.0000886	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Acenaphthylene	U	J4	0.0000921	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Acetophenone	U		0.000208	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Anthracene	U		0.0000804	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Atrazine	U		0.000255	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/22/2021 15:56	WG1655274
Biphenyl	U		0.000790	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
4-Chlorophenyl-phenylether	U	J4	0.0000926	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Caprolactam	U		0.000309	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Carbazole	U		0.000111	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Chrysene	U		0.000130	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/22/2021 15:56	WG1655274
Dibenzofuran	U	J4	0.0000970	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Fluorene	U	J4	0.0000844	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Isophorone	U		0.000143	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
1-Methylnaphthalene	U	J4	0.0000790	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
2-Methylnaphthalene	U	J4	0.000117	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Naphthalene	U		0.000159	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/22/2021 15:56	WG1655274
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/22/2021 15:56	WG1655274
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/22/2021 15:56	WG1655274
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/22/2021 15:56	WG1655274
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/22/2021 15:56	WG1655274
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/22/2021 15:56	WG1655274
Pyrene	U		0.000107	0.00100	0.00100	1	04/22/2021 15:56	WG1655274
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
4-Chloro-3-methylphenol	U	J4	0.000131	0.0100	0.0100	1	04/22/2021 15:56	WG1655274

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2,4-Dichlorophenol	U	J4	0.000102	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
Phenol	U		0.00433	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/22/2021 15:56	WG1655274
(S) 2-Fluorophenol	*24.1*				*10.0-120*		*04/22/2021 15:56*	WG1655274
(S) Phenol-d5	*16.0*				*10.0-120*		*04/22/2021 15:56*	WG1655274
(S) Nitrobenzene-d5	*40.1*				*10.0-127*		*04/22/2021 15:56*	WG1655274
(S) 2-Fluorobiphenyl	*43.9*				*10.0-130*		*04/22/2021 15:56*	WG1655274
(S) 2,4,6-Tribromophenol	*42.2*				*10.0-155*		*04/22/2021 15:56*	WG1655274
(S) p-Terphenyl-d14	*55.4*				*10.0-128*		*04/22/2021 15:56*	WG1655274

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	551		10.0	10.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	166		8.45	20.0	20.0	1	04/24/2021 10:24	WG1658050

Sample Narrative:

L1340101-20 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.12		0.100	0.100	0.200	2	05/03/2021 18:59	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	115		1.90	1.00	5.00	5	04/24/2021 09:14	WG1657222
Fluoride	0.869		0.0640	0.150	0.150	1	04/24/2021 08:58	WG1657222
Sulfate	86.2		0.594	5.00	5.00	1	04/24/2021 08:58	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 09:59	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.139	J	0.0200	0.200	0.200	1	04/27/2021 16:52	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.0274	J	0.0185	0.100	0.100	1	04/27/2021 10:46	WG1656517
Arsenic,Dissolved	0.00504		0.000180	0.00200	0.00200	1	04/27/2021 10:46	WG1656517
Barium,Dissolved	0.0943		0.000381	0.0200	0.0200	1	04/27/2021 10:46	WG1656517
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/27/2021 10:46	WG1656517
Chromium,Dissolved	0.00473	B	0.00124	0.00200	0.00200	1	04/27/2021 10:46	WG1656517
Copper,Dissolved	U		0.00151	0.00500	0.00500	1	04/27/2021 10:46	WG1656517
Cobalt,Dissolved	0.0000755	J	0.0000596	0.00200	0.00200	1	04/27/2021 10:46	WG1656517
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/27/2021 10:46	WG1656517
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/27/2021 10:46	WG1656517
Manganese,Dissolved	U		0.000704	0.00500	0.00500	1	04/27/2021 10:46	WG1656517
Molybdenum,Dissolved	0.00239	J	0.000348	0.00500	0.00500	1	04/27/2021 10:46	WG1656517
Nickel,Dissolved	0.000944	J	0.000816	0.00200	0.00200	1	04/27/2021 10:46	WG1656517
Selenium,Dissolved	0.00448		0.000300	0.00200	0.00200	1	04/27/2021 10:46	WG1656517
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/27/2021 10:46	WG1656517
Uranium,Dissolved	0.00182	J	0.0000700	0.0200	0.0200	1	04/27/2021 10:46	WG1656517
Zinc,Dissolved	0.0102	J	0.00302	0.0250	0.0250	1	04/27/2021 10:46	WG1656517

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	04/24/2021 08:31	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*101*				*78.0-120*		*04/24/2021 08:31*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 05:39	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 05:39	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 05:39	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 05:39	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 05:39	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 05:39	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 05:39	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 05:39	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 05:39	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 05:39	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 05:39	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 05:39	WG1654140
(S) Toluene-d8	*102*				*80.0-120*		*04/20/2021 05:39*	WG1654140
(S) 4-Bromofluorobenzene	*101*				*77.0-126*		*04/20/2021 05:39*	WG1654140
(S) 1,2-Dichloroethane-d4	*115*				*70.0-130*		*04/20/2021 05:39*	WG1654140

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0703	J	0.0247	0.100	0.100	1	04/28/2021 00:01	WG1659217
(S) o-Terphenyl	*82.5*				*31.0-160*		*04/28/2021 00:01*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U	J4	0.0000886	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Acenaphthylene	U	J4	0.0000921	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Acetophenone	U		0.000208	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Anthracene	U		0.0000804	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Atrazine	U		0.000255	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/22/2021 16:19	WG1655274
Biphenyl	U		0.000790	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
4-Chlorophenyl-phenylether	U	J4	0.0000926	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Caprolactam	0.000411	J	0.000309	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Carbazole	U		0.000111	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Chrysene	U		0.000130	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/22/2021 16:19	WG1655274
Dibenzofuran	U	J4	0.0000970	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Fluorene	U	J4	0.0000844	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Isophorone	U		0.000143	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
1-Methylnaphthalene	U	J4	0.0000790	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
2-Methylnaphthalene	U	J4	0.000117	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Naphthalene	U		0.000159	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/22/2021 16:19	WG1655274
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/22/2021 16:19	WG1655274
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/22/2021 16:19	WG1655274
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/22/2021 16:19	WG1655274
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/22/2021 16:19	WG1655274
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/22/2021 16:19	WG1655274
Pyrene	U		0.000107	0.00100	0.00100	1	04/22/2021 16:19	WG1655274
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
4-Chloro-3-methylphenol	U	J4	0.000131	0.0100	0.0100	1	04/22/2021 16:19	WG1655274

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2,4-Dichlorophenol	U	J4	0.000102	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
Phenol	U		0.00433	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/22/2021 16:19	WG1655274
(S) 2-Fluorophenol	*27.5*				*10.0-120*		*04/22/2021 16:19*	WG1655274
(S) Phenol-d5	*18.1*				*10.0-120*		*04/22/2021 16:19*	WG1655274
(S) Nitrobenzene-d5	*43.1*				*10.0-127*		*04/22/2021 16:19*	WG1655274
(S) 2-Fluorobiphenyl	*47.0*				*10.0-130*		*04/22/2021 16:19*	WG1655274
(S) 2,4,6-Tribromophenol	*43.5*				*10.0-155*		*04/22/2021 16:19*	WG1655274
(S) p-Terphenyl-d14	*58.5*				*10.0-128*		*04/22/2021 16:19*	WG1655274

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	960		20.0	20.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	172		8.45	20.0	20.0	1	04/24/2021 10:37	WG1658050

Sample Narrative:

L1340101-21 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	3.36		0.100	0.100	0.200	2	05/03/2021 19:00	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	304		1.90	1.00	5.00	5	04/24/2021 09:47	WG1657222
Fluoride	0.658		0.0640	0.150	0.150	1	04/24/2021 09:31	WG1657222
Sulfate	91.7		0.594	5.00	5.00	1	04/24/2021 09:31	WG1657222

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 10:01	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.183	J	0.0200	0.200	0.200	1	04/27/2021 17:00	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/27/2021 10:49	WG1656517
Arsenic,Dissolved	0.00391		0.000180	0.00200	0.00200	1	04/27/2021 10:49	WG1656517
Barium,Dissolved	0.109		0.000381	0.0200	0.0200	1	04/27/2021 10:49	WG1656517
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/27/2021 10:49	WG1656517
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/27/2021 10:49	WG1656517
Copper,Dissolved	0.00264	B J	0.00151	0.00500	0.00500	1	04/27/2021 10:49	WG1656517
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/27/2021 10:49	WG1656517
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/27/2021 10:49	WG1656517
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/27/2021 10:49	WG1656517
Manganese,Dissolved	0.00545		0.000704	0.00500	0.00500	1	04/27/2021 10:49	WG1656517
Molybdenum,Dissolved	0.00192	J	0.000348	0.00500	0.00500	1	04/27/2021 10:49	WG1656517
Nickel,Dissolved	0.00192	J	0.000816	0.00200	0.00200	1	04/27/2021 10:49	WG1656517
Selenium,Dissolved	0.00350		0.000300	0.00200	0.00200	1	04/27/2021 10:49	WG1656517
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/27/2021 10:49	WG1656517
Uranium,Dissolved	0.00205	J	0.0000700	0.0200	0.0200	1	04/27/2021 10:49	WG1656517
Zinc,Dissolved	0.0379		0.00302	0.0250	0.0250	1	04/27/2021 10:49	WG1656517

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	04/24/2021 08:53	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*101*				*78.0-120*		*04/24/2021 08:53*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 05:58	WG1654140
Benzene	0.000447	J	0.0000941	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 05:58	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Carbon tetrachloride	0.000262	J J4	0.000128	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 05:58	WG1654140
Chloroform	0.000949	J	0.000111	0.00500	0.00500	1	04/20/2021 05:58	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 05:58	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 05:58	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 05:58	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 05:58	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 05:58	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 05:58	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 05:58	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 05:58	WG1654140
(S) Toluene-d8	*101*				*80.0-120*		*04/20/2021 05:58*	WG1654140
(S) 4-Bromofluorobenzene	*101*				*77.0-126*		*04/20/2021 05:58*	WG1654140
(S) 1,2-Dichloroethane-d4	*118*				*70.0-130*		*04/20/2021 05:58*	WG1654140

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0812	J	0.0247	0.100	0.100	1	04/28/2021 00:21	WG1659217
(S) o-Terphenyl	*81.5*				*31.0-160*		*04/28/2021 00:21*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U	J4	0.0000886	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Acenaphthylene	U	J4	0.0000921	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Acetophenone	U		0.000208	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Anthracene	U		0.0000804	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Atrazine	U		0.000255	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/22/2021 16:42	WG1655274
Biphenyl	U		0.000790	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
4-Chlorophenyl-phenylether	U	J4	0.0000926	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Caprolactam	0.000441	J	0.000309	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Carbazole	U		0.000111	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Chrysene	U		0.000130	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/22/2021 16:42	WG1655274
Dibenzofuran	U	J4	0.0000970	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Fluorene	U	J4	0.0000844	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Isophorone	U		0.000143	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
1-Methylnaphthalene	U	J4	0.0000790	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
2-Methylnaphthalene	U	J4	0.000117	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Naphthalene	U		0.000159	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/22/2021 16:42	WG1655274
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/22/2021 16:42	WG1655274
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/22/2021 16:42	WG1655274
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/22/2021 16:42	WG1655274
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/22/2021 16:42	WG1655274
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/22/2021 16:42	WG1655274
Pyrene	U		0.000107	0.00100	0.00100	1	04/22/2021 16:42	WG1655274
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
4-Chloro-3-methylphenol	U	J4	0.000131	0.0100	0.0100	1	04/22/2021 16:42	WG1655274

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2,4-Dichlorophenol	U	J4	0.000102	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
Phenol	U		0.00433	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/22/2021 16:42	WG1655274
(S) 2-Fluorophenol	*24.1*				*10.0-120*		*04/22/2021 16:42*	WG1655274
(S) Phenol-d5	*15.7*				*10.0-120*		*04/22/2021 16:42*	WG1655274
(S) Nitrobenzene-d5	*38.0*				*10.0-127*		*04/22/2021 16:42*	WG1655274
(S) 2-Fluorobiphenyl	*42.5*				*10.0-130*		*04/22/2021 16:42*	WG1655274
(S) 2,4,6-Tribromophenol	*42.6*				*10.0-155*		*04/22/2021 16:42*	WG1655274
(S) p-Terphenyl-d14	*55.3*				*10.0-128*		*04/22/2021 16:42*	WG1655274

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	677		13.3	13.3	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	363		8.45	20.0	20.0	1	04/24/2021 10:49	WG1658050

Sample Narrative:

L1340101-22 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.70		0.0500	0.100	0.100	1	05/03/2021 19:01	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	60.4		0.379	1.00	1.00	1	04/24/2021 10:04	WG1657222
Fluoride	0.292		0.0640	0.150	0.150	1	04/24/2021 10:04	WG1657222
Sulfate	128		2.97	5.00	25.0	5	04/24/2021 10:20	WG1657222

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 10:03	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.141	J	0.0200	0.200	0.200	1	04/27/2021 17:03	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/27/2021 11:02	WG1656517
Arsenic,Dissolved	0.00421		0.000180	0.00200	0.00200	1	04/27/2021 11:02	WG1656517
Barium,Dissolved	0.426		0.000381	0.0200	0.0200	1	04/27/2021 11:02	WG1656517
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/27/2021 11:02	WG1656517
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/27/2021 11:02	WG1656517
Copper,Dissolved	0.00591	B	0.00151	0.00500	0.00500	1	04/27/2021 11:02	WG1656517
Cobalt,Dissolved	0.0000794	J	0.0000596	0.00200	0.00200	1	04/27/2021 11:02	WG1656517
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/27/2021 11:02	WG1656517
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/27/2021 11:02	WG1656517
Manganese,Dissolved	0.0111		0.000704	0.00500	0.00500	1	04/27/2021 11:02	WG1656517
Molybdenum,Dissolved	0.00119	J	0.000348	0.00500	0.00500	1	04/27/2021 11:02	WG1656517
Nickel,Dissolved	0.00435		0.000816	0.00200	0.00200	1	04/27/2021 11:02	WG1656517
Selenium,Dissolved	0.000932	J	0.000300	0.00200	0.00200	1	04/27/2021 11:02	WG1656517
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/27/2021 11:02	WG1656517
Uranium,Dissolved	0.00589	J	0.0000700	0.0200	0.0200	1	04/27/2021 11:02	WG1656517
Zinc,Dissolved	0.0228	J	0.00302	0.0250	0.0250	1	04/27/2021 11:02	WG1656517

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	04/24/2021 09:15	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*101*				*78.0-120*		*04/24/2021 09:15*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 06:17	WG1654140
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 06:17	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 06:17	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 06:17	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 06:17	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 06:17	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 06:17	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 06:17	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 06:17	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 06:17	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 06:17	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 06:17	WG1654140
(S) Toluene-d8	*102*				*80.0-120*		*04/20/2021 06:17*	WG1654140
(S) 4-Bromofluorobenzene	*98.6*				*77.0-126*		*04/20/2021 06:17*	WG1654140
(S) 1,2-Dichloroethane-d4	*118*				*70.0-130*		*04/20/2021 06:17*	WG1654140

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.380		0.0247	0.100	0.100	1	04/28/2021 00:41	WG1659217
(S) o-Terphenyl	*83.0*				*31.0-160*		*04/28/2021 00:41*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U	J4	0.0000886	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Acenaphthylene	U	J4	0.0000921	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Acetophenone	U		0.000208	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Anthracene	U		0.0000804	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Atrazine	U		0.000255	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/22/2021 17:05	WG1655274
Biphenyl	U		0.000790	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
4-Chlorophenyl-phenylether	U	J4	0.0000926	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Caprolactam	U		0.000309	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Carbazole	U		0.000111	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Chrysene	U		0.000130	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/22/2021 17:05	WG1655274
Dibenzofuran	U	J4	0.0000970	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Fluorene	U	J4	0.0000844	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Isophorone	U		0.000143	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
1-Methylnaphthalene	U	J4	0.0000790	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
2-Methylnaphthalene	U	J4	0.000117	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Naphthalene	U		0.000159	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/22/2021 17:05	WG1655274
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/22/2021 17:05	WG1655274
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/22/2021 17:05	WG1655274
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/22/2021 17:05	WG1655274
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/22/2021 17:05	WG1655274
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/22/2021 17:05	WG1655274
Pyrene	U		0.000107	0.00100	0.00100	1	04/22/2021 17:05	WG1655274
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
4-Chloro-3-methylphenol	U	J4	0.000131	0.0100	0.0100	1	04/22/2021 17:05	WG1655274

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2,4-Dichlorophenol	U	J4	0.000102	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
Phenol	U		0.00433	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/22/2021 17:05	WG1655274
(S) 2-Fluorophenol	*29.3*				*10.0-120*		*04/22/2021 17:05*	WG1655274
(S) Phenol-d5	*19.9*				*10.0-120*		*04/22/2021 17:05*	WG1655274
(S) Nitrobenzene-d5	*41.6*				*10.0-127*		*04/22/2021 17:05*	WG1655274
(S) 2-Fluorobiphenyl	*46.6*				*10.0-130*		*04/22/2021 17:05*	WG1655274
(S) 2,4,6-Tribromophenol	*55.3*				*10.0-155*		*04/22/2021 17:05*	WG1655274
(S) p-Terphenyl-d14	*61.2*				*10.0-128*		*04/22/2021 17:05*	WG1655274

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	1100		20.0	20.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	973		8.45	20.0	20.0	1	04/24/2021 10:58	WG1658050

Sample Narrative:

L1340101-23 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.0500	0.100	0.100	1	05/03/2021 19:02	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	79.3		0.379	1.00	1.00	1	04/24/2021 10:37	WG1657222
Fluoride	0.620		0.0640	0.150	0.150	1	04/24/2021 10:37	WG1657222
Sulfate	9.74		0.594	5.00	5.00	1	04/24/2021 10:37	WG1657222

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 10:09	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	0.159	J	0.0200	0.200	0.200	1	04/27/2021 17:06	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/27/2021 11:06	WG1656517
Arsenic,Dissolved	0.00187	J	0.000180	0.00200	0.00200	1	04/27/2021 11:06	WG1656517
Barium,Dissolved	0.441		0.000381	0.0200	0.0200	1	04/27/2021 11:06	WG1656517
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/27/2021 11:06	WG1656517
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/27/2021 11:06	WG1656517
Copper,Dissolved	0.00175	B J	0.00151	0.00500	0.00500	1	04/27/2021 11:06	WG1656517
Cobalt,Dissolved	0.0000890	J	0.0000596	0.00200	0.00200	1	04/27/2021 11:06	WG1656517
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/27/2021 11:06	WG1656517
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/27/2021 11:06	WG1656517
Manganese,Dissolved	0.685		0.000704	0.00500	0.00500	1	04/27/2021 11:06	WG1656517
Molybdenum,Dissolved	0.00289	J	0.000348	0.00500	0.00500	1	04/27/2021 11:06	WG1656517
Nickel,Dissolved	0.00178	J	0.000816	0.00200	0.00200	1	04/27/2021 11:06	WG1656517
Selenium,Dissolved	U		0.000300	0.00200	0.00200	1	04/27/2021 11:06	WG1656517
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/27/2021 11:06	WG1656517
Uranium,Dissolved	0.0308		0.0000700	0.0200	0.0200	1	04/27/2021 11:06	WG1656517
Zinc,Dissolved	U		0.00302	0.0250	0.0250	1	04/27/2021 11:06	WG1656517

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0474	J	0.0314	0.100	0.100	1	04/24/2021 09:37	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*98.9*				*78.0-120*		*04/24/2021 09:37*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 06:36	WG1654140
Benzene	0.000282	J	0.0000941	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Bromodichloromethane	U	J4	0.000136	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Bromoform	U		0.000129	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 06:36	WG1654140
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
sec-Butylbenzene	0.000210	J	0.000125	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
tert-Butylbenzene	0.000141	J	0.000127	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Carbon tetrachloride	U	J4	0.000128	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 06:36	WG1654140
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 06:36	WG1654140
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 06:36	WG1654140
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
trans-1,2-Dichloroethene	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
2-Hexanone	U		0.000787	0.0100	0.0100	1	04/20/2021 06:36	WG1654140
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 06:36	WG1654140
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 06:36	WG1654140
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 06:36	WG1654140
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 06:36	WG1654140
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,1,1-Trichloroethane	U	J4	0.000149	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 06:36	WG1654140
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 06:36	WG1654140
(S) Toluene-d8	*101*				*80.0-120*		*04/20/2021 06:36*	WG1654140
(S) 4-Bromofluorobenzene	*109*				*77.0-126*		*04/20/2021 06:36*	WG1654140
(S) 1,2-Dichloroethane-d4	*114*				*70.0-130*		*04/20/2021 06:36*	WG1654140

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.188		0.0247	0.100	0.100	1	04/28/2021 01:01	WG1659217
(S) o-Terphenyl	*87.5*				*31.0-160*		*04/28/2021 01:01*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U	J4	0.0000886	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Acetophenone	U		0.000208	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Anthracene	U		0.0000804	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Atrazine	U		0.000255	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/22/2021 18:44	WG1655270
Biphenyl	U		0.000790	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
4-Chlorophenyl-phenylether	U	J4	0.0000926	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Caprolactam	U		0.000309	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Carbazole	U		0.000111	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Chrysene	U		0.000130	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/22/2021 18:44	WG1655270
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Fluorene	U	J4	0.0000844	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Isophorone	U		0.000143	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Naphthalene	U		0.000159	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/22/2021 18:44	WG1655270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/22/2021 18:44	WG1655270
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/22/2021 18:44	WG1655270
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/22/2021 18:44	WG1655270
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/22/2021 18:44	WG1655270
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/22/2021 18:44	WG1655270
Pyrene	U		0.000107	0.00100	0.00100	1	04/22/2021 18:44	WG1655270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/22/2021 18:44	WG1655270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
Phenol	U		0.00433	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/22/2021 18:44	WG1655270
(S) 2-Fluorophenol	*28.5*				*10.0-120*		*04/22/2021 18:44*	WG1655270
(S) Phenol-d5	*18.1*				*10.0-120*		*04/22/2021 18:44*	WG1655270
(S) Nitrobenzene-d5	*43.3*				*10.0-127*		*04/22/2021 18:44*	WG1655270
(S) 2-Fluorobiphenyl	*45.4*				*10.0-130*		*04/22/2021 18:44*	WG1655270
(S) 2,4,6-Tribromophenol	*60.0*				*10.0-155*		*04/22/2021 18:44*	WG1655270
(S) p-Terphenyl-d14	*45.7*				*10.0-128*		*04/22/2021 18:44*	WG1655270

LB-01
Collected date/time: 04/15/21 12:45
L1340101

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	ND		10.0	10.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	U		8.45	20.0	20.0	1	04/24/2021 11:06	WG1658050

Sample Narrative:
L1340101-24 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.0500	0.100	0.100	1	05/03/2021 19:04	WG1661716

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	0.384	J	0.379	1.00	1.00	1	04/24/2021 10:53	WG1657222
Fluoride	U		0.0640	0.150	0.150	1	04/24/2021 10:53	WG1657222
Sulfate	U		0.594	5.00	5.00	1	04/24/2021 10:53	WG1657222

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 10:11	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	U		0.0200	0.200	0.200	1	04/27/2021 17:09	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	0.100	1	04/27/2021 11:09	WG1656517
Arsenic,Dissolved	U		0.000180	0.00200	0.00200	1	04/27/2021 11:09	WG1656517
Barium,Dissolved	0.00256	B J	0.000381	0.0200	0.0200	1	04/27/2021 11:09	WG1656517
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/27/2021 11:09	WG1656517
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/27/2021 11:09	WG1656517
Copper,Dissolved	0.00265	B J	0.00151	0.00500	0.00500	1	04/27/2021 11:09	WG1656517
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/27/2021 11:09	WG1656517
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/27/2021 11:09	WG1656517
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/27/2021 11:09	WG1656517
Manganese,Dissolved	0.00165	J	0.000704	0.00500	0.00500	1	04/27/2021 11:09	WG1656517
Molybdenum,Dissolved	U		0.000348	0.00500	0.00500	1	04/27/2021 11:09	WG1656517
Nickel,Dissolved	U		0.000816	0.00200	0.00200	1	04/27/2021 11:09	WG1656517
Selenium,Dissolved	U		0.000300	0.00200	0.00200	1	04/27/2021 11:09	WG1656517
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/27/2021 11:09	WG1656517
Uranium,Dissolved	U		0.0000700	0.0200	0.0200	1	04/27/2021 11:09	WG1656517
Zinc,Dissolved	U		0.00302	0.0250	0.0250	1	04/27/2021 11:09	WG1656517

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	04/24/2021 09:58	WG1657432
(S) a,a,a-Trifluorotoluene(FID)	*100*				*78.0-120*		*04/24/2021 09:58*	WG1657432

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 00:52	WG1654740
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 17:54	WG1655241
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Bromoform	U	J4	0.000129	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 00:52	WG1654740
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Carbon tetrachloride	U		0.000128	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 00:52	WG1654740
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 00:52	WG1654740
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 00:52	WG1654740
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
2-Hexanone	U	J4	0.000787	0.0100	0.0100	1	04/20/2021 00:52	WG1654740
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 00:52	WG1654740
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/20/2021 00:52	WG1654740
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 00:52	WG1654740
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 17:54	WG1655241
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 17:54	WG1655241
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 17:54	WG1655241
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 17:54	WG1655241
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 00:52	WG1654740
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 17:54	WG1655241
(S) Toluene-d8	*98.8*				*80.0-120*		*04/20/2021 00:52*	WG1654740
(S) Toluene-d8	*115*				*80.0-120*		*04/20/2021 17:54*	WG1655241
(S) 4-Bromofluorobenzene	*94.3*				*77.0-126*		*04/20/2021 00:52*	WG1654740
(S) 4-Bromofluorobenzene	*92.6*				*77.0-126*		*04/20/2021 17:54*	WG1655241

LB-01
Collected date/time: 04/15/21 12:45
L1340101

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*111*				*70.0-130*		*04/20/2021 00:52*	WG1654740
(S) 1,2-Dichloroethane-d4	*93.1*				*70.0-130*		*04/20/2021 17:54*	WG1655241

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0422	J	0.0247	0.100	0.100	1	04/28/2021 01:21	WG1659217
(S) o-Terphenyl	*88.5*				*31.0-160*		*04/28/2021 01:21*	WG1659217

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U	J4	0.0000886	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Acetophenone	U		0.000208	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Anthracene	U		0.0000804	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Atrazine	U		0.000255	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/22/2021 19:05	WG1655270
Biphenyl	U		0.000790	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
4-Chlorophenyl-phenylether	U	J4	0.0000926	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Caprolactam	U		0.000309	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Carbazole	U		0.000111	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Chrysene	U		0.000130	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/22/2021 19:05	WG1655270
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Fluorene	U	J4	0.0000844	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Isophorone	U		0.000143	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Naphthalene	U		0.000159	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/22/2021 19:05	WG1655270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/22/2021 19:05	WG1655270

LB-01
Collected date/time: 04/15/21 12:45
L1340101

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/22/2021 19:05	WG1655270
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/22/2021 19:05	WG1655270
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/22/2021 19:05	WG1655270
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/22/2021 19:05	WG1655270
Pyrene	U		0.000107	0.00100	0.00100	1	04/22/2021 19:05	WG1655270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
Phenol	U		0.00433	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/22/2021 19:05	WG1655270
(S) 2-Fluorophenol	*25.5*				*10.0-120*		*04/22/2021 19:05*	WG1655270
(S) Phenol-d5	*16.6*				*10.0-120*		*04/22/2021 19:05*	WG1655270
(S) Nitrobenzene-d5	*38.3*				*10.0-127*		*04/22/2021 19:05*	WG1655270
(S) 2-Fluorobiphenyl	*40.9*				*10.0-130*		*04/22/2021 19:05*	WG1655270
(S) 2,4,6-Tribromophenol	*48.9*				*10.0-155*		*04/22/2021 19:05*	WG1655270
(S) p-Terphenyl-d14	*39.8*				*10.0-128*		*04/22/2021 19:05*	WG1655270

LB-02
Collected date/time: 04/15/21 12:15
L1340101

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Dissolved Solids	ND		10.0	10.0	1	04/22/2021 11:33	WG1656611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Alkalinity	U		8.45	20.0	20.0	1	04/24/2021 11:15	WG1658050

Sample Narrative:
L1340101-25 WG1658050: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.0500	0.100	0.100	1	05/03/2021 19:46	WG1661755

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	U		0.379	1.00	1.00	1	04/24/2021 20:04	WG1657223
Fluoride	U		0.0640	0.150	0.150	1	04/24/2021 20:04	WG1657223
Sulfate	U		0.594	5.00	5.00	1	04/24/2021 20:04	WG1657223

Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	0.000200	1	04/22/2021 10:13	WG1654193

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Boron,Dissolved	U		0.0200	0.200	0.200	1	04/27/2021 17:12	WG1659248

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Aluminum,Dissolved	0.0236	J	0.0185	0.100	0.100	1	04/27/2021 11:12	WG1656517
Arsenic,Dissolved	U		0.000180	0.00200	0.00200	1	04/27/2021 11:12	WG1656517
Barium,Dissolved	0.00119	B J	0.000381	0.0200	0.0200	1	04/27/2021 11:12	WG1656517
Cadmium,Dissolved	U		0.000150	0.00100	0.00100	1	04/27/2021 11:12	WG1656517
Chromium,Dissolved	U		0.00124	0.00200	0.00200	1	04/27/2021 11:12	WG1656517
Copper,Dissolved	U		0.00151	0.00500	0.00500	1	04/27/2021 11:12	WG1656517
Cobalt,Dissolved	U		0.0000596	0.00200	0.00200	1	04/27/2021 11:12	WG1656517
Iron,Dissolved	U		0.0281	0.100	0.100	1	04/27/2021 11:12	WG1656517
Lead,Dissolved	U		0.000849	0.00200	0.00200	1	04/27/2021 11:12	WG1656517
Manganese,Dissolved	U		0.000704	0.00500	0.00500	1	04/27/2021 11:12	WG1656517
Molybdenum,Dissolved	U		0.000348	0.00500	0.00500	1	04/27/2021 11:12	WG1656517
Nickel,Dissolved	U		0.000816	0.00200	0.00200	1	04/27/2021 11:12	WG1656517
Selenium,Dissolved	U		0.000300	0.00200	0.00200	1	04/27/2021 11:12	WG1656517
Silver,Dissolved	U		0.0000700	0.00200	0.00200	1	04/27/2021 11:12	WG1656517
Uranium,Dissolved	U		0.0000700	0.0200	0.0200	1	04/27/2021 11:12	WG1656517
Zinc,Dissolved	U		0.00302	0.0250	0.0250	1	04/27/2021 11:12	WG1656517

LB-02
Collected date/time: 04/15/21 12:15
L1340101

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	0.0500	1	04/20/2021 01:13	WG1654740
Benzene	U		0.0000941	0.00100	0.00100	1	04/20/2021 18:14	WG1655241
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Bromoform	U	J4	0.000129	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Bromomethane	U		0.000605	0.00500	0.00500	1	04/20/2021 01:13	WG1654740
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Carbon tetrachloride	U		0.000128	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/20/2021 01:13	WG1654740
Chloroform	U		0.000111	0.00500	0.00500	1	04/20/2021 01:13	WG1654740
Chloromethane	U		0.000960	0.00250	0.00250	1	04/20/2021 01:13	WG1654740
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
2-Hexanone	U	J4	0.000787	0.0100	0.0100	1	04/20/2021 01:13	WG1654740
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/20/2021 01:13	WG1654740
Methylene Chloride	0.00134	J	0.000430	0.00500	0.00500	1	04/20/2021 01:13	WG1654740
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/20/2021 01:13	WG1654740
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Naphthalene	U		0.00100	0.00500	0.00500	1	04/20/2021 18:14	WG1655241
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Styrene	U		0.000118	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Toluene	U		0.000278	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/20/2021 18:14	WG1655241
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/20/2021 01:13	WG1654740
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/20/2021 18:14	WG1655241
(S) Toluene-d8	*101*				*80.0-120*		*04/20/2021 01:13*	WG1654740
(S) Toluene-d8	*118*				*80.0-120*		*04/20/2021 18:14*	WG1655241
(S) 4-Bromofluorobenzene	*90.2*				*77.0-126*		*04/20/2021 01:13*	WG1654740
(S) 4-Bromofluorobenzene	*90.9*				*77.0-126*		*04/20/2021 18:14*	WG1655241
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*04/20/2021 01:13*	WG1654740
(S) 1,2-Dichloroethane-d4	*92.7*				*70.0-130*		*04/20/2021 18:14*	WG1655241

LB-02
Collected date/time: 04/15/21 12:15
L1340101

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acenaphthene	U	J4	0.0000886	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Acenaphthylene	U		0.0000921	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Acetophenone	U		0.000208	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Anthracene	U		0.0000804	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Atrazine	U		0.000255	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Benzo(a)anthracene	U		0.000199	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Benzaldehyde	U		0.00169	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Benzo(b)fluoranthene	U		0.000130	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Benzo(k)fluoranthene	U		0.000120	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Benzo(g,h,i)perylene	U		0.000121	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Benzo(a)pyrene	U		0.0000381	0.000200	0.000200	1	04/22/2021 19:27	WG1655270
Biphenyl	U		0.000790	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2-Chloronaphthalene	U		0.0000648	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
4-Chlorophenyl-phenylether	U	J4	0.0000926	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Caprolactam	U		0.000309	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Carbazole	U		0.000111	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Chrysene	U		0.000130	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	0.000200	1	04/22/2021 19:27	WG1655270
Dibenzofuran	U		0.0000970	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
3,3-Dichlorobenzidine	U		0.000212	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2,4-Dinitrotoluene	U		0.0000983	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2,6-Dinitrotoluene	U		0.000250	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Fluoranthene	U		0.000102	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Fluorene	U	J4	0.0000844	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Hexachlorobenzene	U		0.0000755	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Hexachloroethane	U		0.000127	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Isophorone	U		0.000143	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
1-Methylnaphthalene	U		0.0000790	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
2-Methylnaphthalene	U		0.000117	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Naphthalene	U		0.000159	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Nitrobenzene	U		0.000297	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
n-Nitrosodiphenylamine	U		0.00237	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Phenanthrene	U		0.000112	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
Benzylbutyl phthalate	U		0.000765	0.00300	0.00300	1	04/22/2021 19:27	WG1655270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	0.00300	1	04/22/2021 19:27	WG1655270
Di-n-butyl phthalate	U		0.000453	0.00300	0.00300	1	04/22/2021 19:27	WG1655270
Diethyl phthalate	U		0.000287	0.00300	0.00300	1	04/22/2021 19:27	WG1655270
Dimethyl phthalate	U		0.000260	0.00300	0.00300	1	04/22/2021 19:27	WG1655270
Di-n-octyl phthalate	U		0.000932	0.00300	0.00300	1	04/22/2021 19:27	WG1655270
Pyrene	U		0.000107	0.00100	0.00100	1	04/22/2021 19:27	WG1655270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
4-Chloro-3-methylphenol	U		0.000131	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2-Chlorophenol	U		0.000133	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2,4-Dichlorophenol	U		0.000102	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2,4-Dimethylphenol	U		0.0000636	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2,4-Dinitrophenol	U		0.00593	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2-Nitrophenol	U		0.000117	0.0100	0.0100	1	04/22/2021 19:27	WG1655270

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

LB-02
Collected date/time: 04/15/21 12:15
L1340101

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2-Methylphenol	U		0.0000929	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
3&4-Methyl Phenol	U		0.000168	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
3-Nitroaniline	U		0.0000869	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
4-Chloroaniline	U		0.000234	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
4-Nitroaniline	U		0.0000910	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
4-Nitrophenol	U		0.000143	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Pentachlorophenol	U		0.000313	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
Phenol	U		0.00433	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2,4,5-Trichlorophenol	U		0.000109	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
2,4,6-Trichlorophenol	U		0.000100	0.0100	0.0100	1	04/22/2021 19:27	WG1655270
(S) 2-Fluorophenol	*28.2*				*10.0-120*		*04/22/2021 19:27*	WG1655270
(S) Phenol-d5	*17.5*				*10.0-120*		*04/22/2021 19:27*	WG1655270
(S) Nitrobenzene-d5	*44.0*				*10.0-127*		*04/22/2021 19:27*	WG1655270
(S) 2-Fluorobiphenyl	*47.4*				*10.0-130*		*04/22/2021 19:27*	WG1655270
(S) 2,4,6-Tribromophenol	*60.0*				*10.0-155*		*04/22/2021 19:27*	WG1655270
(S) p-Terphenyl-d14	*44.7*				*10.0-128*		*04/22/2021 19:27*	WG1655270

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/19/2021 22:08	WG1654740
Benzene	U		0.0000941	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Bromoform	U	J4	0.000129	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Bromomethane	U		0.000605	0.00500	0.00500	1	04/19/2021 22:08	WG1654740
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Carbon tetrachloride	U		0.000128	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/19/2021 22:08	WG1654740
Chloroform	U		0.000111	0.00500	0.00500	1	04/19/2021 22:08	WG1654740
Chloromethane	U		0.000960	0.00250	0.00250	1	04/19/2021 22:08	WG1654740
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
2-Hexanone	U	J4	0.000787	0.0100	0.0100	1	04/19/2021 22:08	WG1654740
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/19/2021 22:08	WG1654740
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/19/2021 22:08	WG1654740
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/19/2021 22:08	WG1654740
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Naphthalene	U		0.00100	0.00500	0.00500	1	04/19/2021 22:08	WG1654740
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Styrene	U		0.000118	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Toluene	U		0.000278	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/19/2021 22:08	WG1654740
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/19/2021 22:08	WG1654740
(S) Toluene-d8	*100*				*80.0-120*		*04/19/2021 22:08*	WG1654740
(S) 4-Bromofluorobenzene	*86.0*				*77.0-126*		*04/19/2021 22:08*	WG1654740
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*04/19/2021 22:08*	WG1654740

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	0.0500	1	04/19/2021 22:28	WG1654740
Benzene	U		0.0000941	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Bromodichloromethane	U		0.000136	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Bromoform	U	J4	0.000129	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Bromomethane	U		0.000605	0.00500	0.00500	1	04/19/2021 22:28	WG1654740
n-Butylbenzene	U		0.000157	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
sec-Butylbenzene	U		0.000125	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
tert-Butylbenzene	U		0.000127	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Carbon disulfide	U		0.0000962	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Carbon tetrachloride	U		0.000128	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Chlorobenzene	U		0.000116	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Chlorodibromomethane	U		0.000140	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Chloroethane	U	J4	0.000192	0.00500	0.00500	1	04/19/2021 22:28	WG1654740
Chloroform	U		0.000111	0.00500	0.00500	1	04/19/2021 22:28	WG1654740
Chloromethane	U		0.000960	0.00250	0.00250	1	04/19/2021 22:28	WG1654740
1,2-Dibromoethane	U		0.000126	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,1-Dichloroethane	U		0.000100	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,2-Dichloroethane	U		0.0000819	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,1-Dichloroethene	U		0.000188	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
cis-1,2-Dichloroethene	U		0.000126	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
trans-1,2-Dichloroethene	U		0.000149	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,2-Dichloropropane	U		0.000149	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
cis-1,3-Dichloropropene	U		0.000111	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
trans-1,3-Dichloropropene	U		0.000118	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Ethylbenzene	U		0.000137	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Hexachloro-1,3-butadiene	U		0.000337	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
2-Hexanone	U	J4	0.000787	0.0100	0.0100	1	04/19/2021 22:28	WG1654740
Isopropylbenzene	U		0.000105	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
p-Isopropyltoluene	U		0.000120	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
2-Butanone (MEK)	U		0.00119	0.0100	0.0100	1	04/19/2021 22:28	WG1654740
Methylene Chloride	U		0.000430	0.00500	0.00500	1	04/19/2021 22:28	WG1654740
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	0.0100	1	04/19/2021 22:28	WG1654740
Methyl tert-butyl ether	U		0.000101	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Naphthalene	U		0.00100	0.00500	0.00500	1	04/19/2021 22:28	WG1654740
n-Propylbenzene	U		0.0000993	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Styrene	U		0.000118	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Tetrachloroethene	U		0.000300	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Toluene	U		0.000278	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,1,1-Trichloroethane	U		0.000149	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,1,2-Trichloroethane	U		0.000158	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Trichloroethene	U		0.000190	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,2,4-Trimethylbenzene	U		0.000322	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
1,3,5-Trimethylbenzene	U		0.000104	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Vinyl chloride	U		0.000234	0.00100	0.00100	1	04/19/2021 22:28	WG1654740
Xylenes, Total	U		0.000174	0.00300	0.00300	1	04/19/2021 22:28	WG1654740
(S) Toluene-d8	*101*				*80.0-120*		*04/19/2021 22:28*	WG1654740
(S) 4-Bromofluorobenzene	*86.9*				*77.0-126*		*04/19/2021 22:28*	WG1654740
(S) 1,2-Dichloroethane-d4	*112*				*70.0-130*		*04/19/2021 22:28*	WG1654740

Method Blank (MB)

(MB) R3645921-1 04/22/21 11:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1340101-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-15 04/22/21 11:33 • (DUP) R3645921-3 04/22/21 11:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	501	517	1	3.14		5

L1340101-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-16 04/22/21 11:33 • (DUP) R3645921-4 04/22/21 11:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	692	705	1	1.91		5

Laboratory Control Sample (LCS)

(LCS) R3645921-2 04/22/21 11:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8870	101	77.4-123	

Method Blank (MB)

(MB) R3645929-1 04/22/21 12:27

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1340101-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-05 04/22/21 12:27 • (DUP) R3645929-3 04/22/21 12:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	648	668	1	3.04		5

L1340101-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-06 04/22/21 12:27 • (DUP) R3645929-4 04/22/21 12:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1120	1160	1	4.04		5

Laboratory Control Sample (LCS)

(LCS) R3645929-2 04/22/21 12:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8620	98.0	77.4-123	

Method Blank (MB)

(MB) R3645811-1 04/23/21 07:46

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity	U		8.45	20.0

Sample Narrative:
BLANK: Endpoint pH 4.5

L1340087-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1340087-01 04/23/21 09:05 • (DUP) R3645811-2 04/23/21 09:13

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	392	392	1	0.0326		20

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

L1340101-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-09 04/23/21 13:29 • (DUP) R3645811-4 04/23/21 13:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	206	206	1	0.171		20

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

Laboratory Control Sample (LCS)

(LCS) R3645811-3 04/23/21 10:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100	104	104	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3646010-1 04/24/21 02:14

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity	U		8.45	20.0

Sample Narrative:
BLANK: Endpoint pH 4.5

L1340087-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1340087-02 04/24/21 02:31 • (DUP) R3646010-2 04/24/21 02:40

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	772	787	1	1.95		20

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

L1340101-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-07 04/24/21 06:56 • (DUP) R3646010-4 04/24/21 07:08

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	174	171	1	1.75		20

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

Laboratory Control Sample (LCS)

(LCS) R3646010-3 04/24/21 04:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100	106	106	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3646167-1 04/24/21 07:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1340101-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-11 04/24/21 08:43 • (DUP) R3646167-2 04/24/21 08:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	456	460	1	0.720		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1341828-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1341828-01 04/25/21 00:28 • (DUP) R3646167-4 04/25/21 00:42

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	29.0	28.8	1	0.826		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3646167-3 04/24/21 09:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100	110	110	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3649800-1 05/03/21 18:24

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1340101-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-10 05/03/21 18:41 • (DUP) R3649800-4 05/03/21 18:42

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	2.64	2.64	1	0.000		20

L1340101-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-24 05/03/21 19:04 • (DUP) R3649800-7 05/03/21 19:05

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3649800-2 05/03/21 18:26

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.70	108	90.0-110	

L1340101-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1340101-03 05/03/21 18:28 • (MS) R3649800-3 05/03/21 18:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	1.85	3.76	76.4	1	90.0-110	J6

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 05/03/21 18:48 • (MS) R3649800-5 05/03/21 18:50 • (MSD) R3649800-6 05/03/21 18:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	U	2.59	2.58	104	103	1	90.0-110			0.387	20

Method Blank (MB)

(MB) R3649812-1 05/03/21 19:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1340049-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1340049-21 05/03/21 19:28 • (DUP) R3649812-3 05/03/21 19:29

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.149	0.149	1	0.000		20

L1340127-28 Original Sample (OS) • Duplicate (DUP)

(OS) L1340127-28 05/03/21 19:51 • (DUP) R3649812-6 05/03/21 19:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3649812-2 05/03/21 19:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.71	108	90.0-110	

L1340049-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340049-22 05/03/21 19:30 • (MS) R3649812-4 05/03/21 19:32 • (MSD) R3649812-5 05/03/21 19:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	0.0991	2.78	2.67	107	103	1	90.0-110			4.04	20

L1340127-32 Original Sample (OS) • Matrix Spike (MS)

(OS) L1340127-32 05/03/21 19:57 • (MS) R3649812-7 05/03/21 19:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	U	2.45	98.0	1	90.0-110	

Method Blank (MB)

(MB) R3646092-1 04/23/21 22:04

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1340101-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-01 04/23/21 23:39 • (DUP) R3646092-3 04/23/21 23:55

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	50.6	50.4	1	0.361		15
Fluoride	0.926	0.923	1	0.270		15
Sulfate	68.6	68.7	1	0.0945		15

L1340101-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1340101-15 04/24/21 04:51 • (DUP) R3646092-5 04/24/21 05:40

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	93.2	93.2	1	0.00515		15
Fluoride	0.960	0.957	1	0.271		15
Sulfate	62.9	62.9	1	0.108		15

Laboratory Control Sample (LCS)

(LCS) R3646092-2 04/23/21 22:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	38.7	96.7	80.0-120	
Fluoride	8.00	7.97	99.7	80.0-120	
Sulfate	40.0	38.6	96.6	80.0-120	

L1340101-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1340101-01 04/23/21 23:39 • (MS) R3646092-4 04/24/21 00:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	50.6	100	98.9	1	80.0-120	E
Fluoride	5.00	0.926	6.07	103	1	80.0-120	
Sulfate	50.0	68.6	119	101	1	80.0-120	E

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/24/21 06:30 • (MS) R3646092-6 04/24/21 06:46 • (MSD) R3646092-7 04/24/21 07:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	78.7	127	127	97.1	96.4	1	80.0-120	E	E	0.292	15
Fluoride	5.00	0.635	5.69	5.65	101	100	1	80.0-120			0.703	15
Sulfate	50.0	9.75	60.7	60.4	102	101	1	80.0-120			0.625	15

Method Blank (MB)

(MB) R3646557-1 04/24/21 19:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	0.385	J	0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1340127-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1340127-09 04/25/21 01:18 • (DUP) R3646557-5 04/25/21 02:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	0.587	0.581	1	0.993		15

L1340127-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1340127-09 04/25/21 02:24 • (DUP) R3646557-6 04/25/21 02:40

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	533	531	20	0.496		15
Sulfate	1340	1340	20	0.597		15

L1340127-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1340127-20 04/25/21 09:48 • (DUP) R3646557-8 04/25/21 10:04

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	0.906	0.898	1	0.865		15

L1340127-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1340127-20 04/25/21 10:21 • (DUP) R3646557-9 04/25/21 10:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	339	332	10	2.17		15
Sulfate	475	475	10	0.0296		15

Laboratory Control Sample (LCS)

(LCS) R3646557-2 04/24/21 19:24

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	38.7	96.8	80.0-120	
Fluoride	8.00	7.94	99.3	80.0-120	
Sulfate	40.0	38.4	96.1	80.0-120	

L1340127-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340127-08 04/25/21 00:12 • (MS) R3646557-3 04/25/21 00:29 • (MSD) R3646557-4 04/25/21 00:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	138	183	183	89.3	90.4	1	80.0-120	E	E	0.309	15
Fluoride	5.00	0.347	4.89	4.95	90.8	92.0	1	80.0-120			1.24	15
Sulfate	50.0	1450	1460	1460	25.3	24.0	1	80.0-120	E V	E V	0.0428	15

L1340127-15 Original Sample (OS) • Matrix Spike (MS)

(OS) L1340127-15 04/25/21 06:14 • (MS) R3646557-7 04/25/21 06:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	274	311	74.2	1	80.0-120	E V
Fluoride	5.00	1.26	6.12	97.3	1	80.0-120	
Sulfate	50.0	1.59	50.3	97.4	1	80.0-120	

Method Blank (MB)

(MB) R3645374-1 04/22/21 14:48

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3645374-2 04/22/21 14:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.00300	0.00302	101	80.0-120	

L1340101-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-11 04/22/21 14:52 • (MS) R3645374-3 04/22/21 14:54 • (MSD) R3645374-4 04/22/21 14:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	U	0.00254	0.00276	84.8	92.0	1	75.0-125			8.19	20

Method Blank (MB)

(MB) R3645086-1 04/22/21 09:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3645086-2 04/22/21 09:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.00300	0.00315	105	80.0-120	

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/22/21 09:39 • (MS) R3645086-3 04/22/21 09:45 • (MSD) R3645086-4 04/22/21 09:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	U	0.00220	0.00203	73.3	67.6	1	75.0-125	J6	J6	8.10	20

Method Blank (MB)

(MB) R3647381-1 04/27/21 15:55

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R3647381-2 04/27/21 15:58

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron,Dissolved	1.00	0.979	97.9	80.0-120	

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/27/21 16:01 • (MS) R3647381-4 04/27/21 16:06 • (MSD) R3647381-5 04/27/21 16:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron,Dissolved	1.00	0.159	1.14	1.15	98.2	99.6	1	75.0-125			1.17	20

Method Blank (MB)

(MB) R3647759-1 04/28/21 13:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0185	0.100
Arsenic,Dissolved	U		0.000180	0.00200
Barium,Dissolved	U		0.000381	0.0200
Cadmium,Dissolved	U		0.000150	0.00100
Chromium,Dissolved	U		0.00124	0.00200
Copper,Dissolved	U		0.00151	0.00500
Cobalt,Dissolved	U		0.0000596	0.00200
Iron,Dissolved	U		0.0281	0.100
Lead,Dissolved	U		0.000849	0.00200
Manganese,Dissolved	U		0.000704	0.00500
Molybdenum,Dissolved	U		0.000348	0.00500
Nickel,Dissolved	U		0.000816	0.00200
Selenium,Dissolved	U		0.000300	0.00200
Silver,Dissolved	U		0.0000700	0.00200
Zinc,Dissolved	0.00324	J	0.00302	0.0250

Method Blank (MB)

(MB) R3647821-6 04/28/21 15:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Uranium,Dissolved	U		0.0000700	0.0200

Laboratory Control Sample (LCS)

(LCS) R3647759-2 04/28/21 13:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	5.00	5.40	108	80.0-120	
Arsenic,Dissolved	0.0500	0.0495	98.9	80.0-120	
Barium,Dissolved	0.0500	0.0524	105	80.0-120	
Cadmium,Dissolved	0.0500	0.0565	113	80.0-120	
Chromium,Dissolved	0.0500	0.0522	104	80.0-120	
Copper,Dissolved	0.0500	0.0448	89.6	80.0-120	
Cobalt,Dissolved	0.0500	0.0534	107	80.0-120	
Iron,Dissolved	5.00	5.58	112	80.0-120	
Lead,Dissolved	0.0500	0.0532	106	80.0-120	
Manganese,Dissolved	0.0500	0.0540	108	80.0-120	
Molybdenum,Dissolved	0.0500	0.0515	103	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3647759-2 04/28/21 13:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nickel,Dissolved	0.0500	0.0534	107	80.0-120	
Selenium,Dissolved	0.0500	0.0528	106	80.0-120	
Silver,Dissolved	0.0500	0.0497	99.4	80.0-120	
Zinc,Dissolved	0.500	0.522	104	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3647821-2 04/28/21 15:26

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium,Dissolved	0.0500	0.0520	104	80.0-120	

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/28/21 13:43 • (MS) R3647759-4 04/28/21 13:50 • (MSD) R3647759-5 04/28/21 13:53

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	5.00	U	5.33	5.39	107	108	1	75.0-125			1.08	20
Arsenic,Dissolved	0.0500	0.00297	0.0537	0.0540	102	102	1	75.0-125			0.480	20
Barium,Dissolved	0.0500	0.471	0.513	0.523	85.4	104	1	75.0-125			1.83	20
Cadmium,Dissolved	0.0500	U	0.0567	0.0573	113	115	1	75.0-125			0.889	20
Chromium,Dissolved	0.0500	U	0.0532	0.0534	106	107	1	75.0-125			0.244	20
Copper,Dissolved	0.0500	U	0.0510	0.0521	102	104	1	75.0-125			2.10	20
Cobalt,Dissolved	0.0500	0.000108	0.0528	0.0530	105	106	1	75.0-125			0.289	20
Iron,Dissolved	5.00	0.526	6.07	6.02	111	110	1	75.0-125			0.729	20
Lead,Dissolved	0.0500	U	0.0518	0.0526	104	105	1	75.0-125			1.56	20
Manganese,Dissolved	0.0500	0.701	0.753	0.769	105	136	1	75.0-125		V	2.08	20
Molybdenum,Dissolved	0.0500	0.00330	0.0567	0.0577	107	109	1	75.0-125			1.73	20
Nickel,Dissolved	0.0500	0.00198	0.0544	0.0543	105	105	1	75.0-125			0.253	20
Selenium,Dissolved	0.0500	U	0.0546	0.0552	109	110	1	75.0-125			1.05	20
Silver,Dissolved	0.0500	U	0.0491	0.0499	98.3	99.7	1	75.0-125			1.46	20
Zinc,Dissolved	0.500	0.00441	0.518	0.529	103	105	1	75.0-125			2.12	20

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/28/21 15:29 • (MS) R3647821-4 04/28/21 15:36 • (MSD) R3647821-5 04/28/21 15:39

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium,Dissolved	0.0500	0.0322	0.0857	0.0874	107	110	1	75.0-125			1.93	20

Method Blank (MB)

(MB) R3647041-1 04/27/21 10:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0185	0.100
Arsenic,Dissolved	U		0.000180	0.00200
Barium,Dissolved	0.000626	J	0.000381	0.0200
Cadmium,Dissolved	U		0.000150	0.00100
Chromium,Dissolved	0.00154	J	0.00124	0.00200
Copper,Dissolved	0.00213	J	0.00151	0.00500
Cobalt,Dissolved	U		0.0000596	0.00200
Iron,Dissolved	U		0.0281	0.100
Lead,Dissolved	0.00116	J	0.000849	0.00200
Manganese,Dissolved	U		0.000704	0.00500
Molybdenum,Dissolved	U		0.000348	0.00500
Nickel,Dissolved	U		0.000816	0.00200
Selenium,Dissolved	U		0.000300	0.00200
Silver,Dissolved	U		0.0000700	0.00200
Uranium,Dissolved	U		0.0000700	0.0200
Zinc,Dissolved	U		0.00302	0.0250

Laboratory Control Sample (LCS)

(LCS) R3647041-2 04/27/21 10:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	5.00	4.99	99.8	80.0-120	
Arsenic,Dissolved	0.0500	0.0489	97.9	80.0-120	
Barium,Dissolved	0.0500	0.0486	97.2	80.0-120	
Cadmium,Dissolved	0.0500	0.0526	105	80.0-120	
Chromium,Dissolved	0.0500	0.0507	101	80.0-120	
Copper,Dissolved	0.0500	0.0484	96.8	80.0-120	
Cobalt,Dissolved	0.0500	0.0517	103	80.0-120	
Iron,Dissolved	5.00	5.08	102	80.0-120	
Lead,Dissolved	0.0500	0.0497	99.3	80.0-120	
Manganese,Dissolved	0.0500	0.0505	101	80.0-120	
Molybdenum,Dissolved	0.0500	0.0502	100	80.0-120	
Nickel,Dissolved	0.0500	0.0511	102	80.0-120	
Selenium,Dissolved	0.0500	0.0512	102	80.0-120	
Silver,Dissolved	0.0500	0.0498	99.5	80.0-120	
Uranium,Dissolved	0.0500	0.0504	101	80.0-120	
Zinc,Dissolved	0.500	0.513	103	80.0-120	

L1340101-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-18 04/27/21 10:26 • (MS) R3647041-4 04/27/21 10:32 • (MSD) R3647041-5 04/27/21 10:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	5.00	U	5.14	5.06	103	101	1	75.0-125			1.56	20
Arsenic,Dissolved	0.0500	0.00634	0.0562	0.0558	99.8	98.8	1	75.0-125			0.885	20
Barium,Dissolved	0.0500	0.106	0.154	0.151	96.8	90.5	1	75.0-125			2.06	20
Cadmium,Dissolved	0.0500	U	0.0513	0.0525	103	105	1	75.0-125			2.24	20
Chromium,Dissolved	0.0500	0.00227	0.0544	0.0533	104	102	1	75.0-125			2.02	20
Copper,Dissolved	0.0500	0.0723	0.117	0.116	88.9	87.5	1	75.0-125			0.616	20
Cobalt,Dissolved	0.0500	0.000115	0.0522	0.0509	104	102	1	75.0-125			2.60	20
Iron,Dissolved	5.00	U	5.22	5.03	104	101	1	75.0-125			3.71	20
Lead,Dissolved	0.0500	0.00354	0.0532	0.0535	99.3	100	1	75.0-125			0.696	20
Manganese,Dissolved	0.0500	0.000746	0.0522	0.0497	103	97.9	1	75.0-125			4.94	20
Molybdenum,Dissolved	0.0500	0.00314	0.0515	0.0536	96.7	101	1	75.0-125			4.00	20
Nickel,Dissolved	0.0500	0.00231	0.0551	0.0529	106	101	1	75.0-125			4.12	20
Selenium,Dissolved	0.0500	0.00462	0.0545	0.0541	99.9	99.0	1	75.0-125			0.831	20
Silver,Dissolved	0.0500	U	0.0496	0.0496	99.2	99.2	1	75.0-125			0.0640	20
Uranium,Dissolved	0.0500	0.00161	0.0525	0.0526	102	102	1	75.0-125			0.321	20
Zinc,Dissolved	0.500	0.0519	0.581	0.567	106	103	1	75.0-125			2.55	20

Method Blank (MB)

(MB) R3646156-2 04/24/21 06:42

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3646156-1 04/24/21 05:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.15	93.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*110*	*78.0-120*	

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/24/21 07:25 • (MS) R3646156-3 04/24/21 14:20 • (MSD) R3646156-4 04/24/21 14:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.0501	0.742	0.836	12.6	14.3	1	10.0-160			11.9	22
(S) a,a,a-Trifluorotoluene(FID)					*102*	*102*		*78.0-120*				

Method Blank (MB)

(MB) R3644040-2 04/19/21 21:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
1,2-Dibromoethane	U		0.000126	0.00100
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
2-Hexanone	U		0.000787	0.0100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100

Method Blank (MB)

(MB) R3644040-2 04/19/21 21:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*92.4*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3644040-1 04/19/21 20:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.0250	0.0197	78.8	19.0-160	
Benzene	0.00500	0.00575	115	70.0-123	
Bromodichloromethane	0.00500	0.00676	135	75.0-120	J4
Bromoform	0.00500	0.00536	107	68.0-132	
Bromomethane	0.00500	0.00771	154	10.0-160	
n-Butylbenzene	0.00500	0.00482	96.4	73.0-125	
sec-Butylbenzene	0.00500	0.00495	99.0	75.0-125	
tert-Butylbenzene	0.00500	0.00418	83.6	76.0-124	
Carbon disulfide	0.00500	0.00583	117	61.0-128	
Carbon tetrachloride	0.00500	0.00645	129	68.0-126	J4
Chlorobenzene	0.00500	0.00489	97.8	80.0-121	
Chlorodibromomethane	0.00500	0.00494	98.8	77.0-125	
Chloroethane	0.00500	0.00767	153	47.0-150	J4
Chloroform	0.00500	0.00556	111	73.0-120	
Chloromethane	0.00500	0.00705	141	41.0-142	
1,2-Dibromoethane	0.00500	0.00452	90.4	80.0-122	
1,1-Dichloroethane	0.00500	0.00570	114	70.0-126	
1,2-Dichloroethane	0.00500	0.00636	127	70.0-128	
1,1-Dichloroethene	0.00500	0.00575	115	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00534	107	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00604	121	73.0-120	J4
1,2-Dichloropropane	0.00500	0.00562	112	77.0-125	
cis-1,3-Dichloropropene	0.00500	0.00519	104	80.0-123	
trans-1,3-Dichloropropene	0.00500	0.00464	92.8	78.0-124	

Laboratory Control Sample (LCS)

(LCS) R3644040-1 04/19/21 20:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	0.00500	0.00513	103	79.0-123	
Hexachloro-1,3-butadiene	0.00500	0.00563	113	54.0-138	
2-Hexanone	0.0250	0.0227	90.8	67.0-149	
Isopropylbenzene	0.00500	0.00482	96.4	76.0-127	
p-Isopropyltoluene	0.00500	0.00458	91.6	76.0-125	
2-Butanone (MEK)	0.0250	0.0247	98.8	44.0-160	
Methylene Chloride	0.00500	0.00509	102	67.0-120	
4-Methyl-2-pentanone (MIBK)	0.0250	0.0228	91.2	68.0-142	
Methyl tert-butyl ether	0.00500	0.00511	102	68.0-125	
Naphthalene	0.00500	0.00526	105	54.0-135	
n-Propylbenzene	0.00500	0.00442	88.4	77.0-124	
Styrene	0.00500	0.00456	91.2	73.0-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00417	83.4	65.0-130	
Tetrachloroethene	0.00500	0.00541	108	72.0-132	
Toluene	0.00500	0.00497	99.4	79.0-120	
1,1,1-Trichloroethane	0.00500	0.00653	131	73.0-124	J4
1,1,2-Trichloroethane	0.00500	0.00464	92.8	80.0-120	
Trichloroethene	0.00500	0.00621	124	78.0-124	
1,2,4-Trimethylbenzene	0.00500	0.00430	86.0	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00444	88.8	76.0-122	
Vinyl chloride	0.00500	0.00631	126	67.0-131	
Xylenes, Total	0.0150	0.0149	99.3	79.0-123	
(S) Toluene-d8			*94.7*	*80.0-120*	
(S) 4-Bromofluorobenzene			*96.7*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*111*	*70.0-130*	

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/20/21 04:43 • (MS) R3644040-3 04/20/21 06:55 • (MSD) R3644040-4 04/20/21 07:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.0500	U	0.0658	0.0640	132	128	1	10.0-160			2.77	35
Benzene	0.0100	0.000296	0.0120	0.0107	117	104	1	17.0-158			11.5	27
Bromodichloromethane	0.0100	U	0.0137	0.0128	137	128	1	31.0-150			6.79	27
Bromoform	0.0100	U	0.0115	0.0139	115	139	1	29.0-150			18.9	29
Bromomethane	0.0100	U	0.0134	0.0123	134	123	1	10.0-160			8.56	38
n-Butylbenzene	0.0100	U	0.00991	0.00906	99.1	90.6	1	31.0-150			8.96	30
sec-Butylbenzene	0.0100	0.000216	0.0103	0.00957	101	93.5	1	33.0-155			7.35	29
tert-Butylbenzene	0.0100	0.000156	0.00974	0.00875	95.8	85.9	1	34.0-153			10.7	28

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/20/21 04:43 • (MS) R3644040-3 04/20/21 06:55 • (MSD) R3644040-4 04/20/21 07:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	0.0100	U	0.0105	0.00941	105	94.1	1	10.0-156			10.9	28
Carbon tetrachloride	0.0100	U	0.0137	0.0123	137	123	1	23.0-159			10.8	28
Chlorobenzene	0.0100	U	0.0109	0.00974	109	97.4	1	33.0-152			11.2	27
Chlorodibromomethane	0.0100	U	0.0101	0.0111	101	111	1	37.0-149			9.43	27
Chloroethane	0.0100	U	0.0134	0.0122	134	122	1	10.0-160			9.37	30
Chloroform	0.0100	U	0.0123	0.0108	123	108	1	29.0-154			13.0	28
Chloromethane	0.0100	U	0.0135	0.0119	135	119	1	10.0-160			12.6	29
1,2-Dibromoethane	0.0100	U	0.00941	0.0103	94.1	103	1	34.0-147			9.03	27
1,1-Dichloroethane	0.0100	U	0.0121	0.0110	121	110	1	25.0-158			9.52	27
1,2-Dichloroethane	0.0100	U	0.0146	0.0138	146	138	1	29.0-151			5.63	27
1,1-Dichloroethene	0.0100	U	0.0119	0.0108	119	108	1	11.0-160			9.69	29
cis-1,2-Dichloroethene	0.0100	U	0.0120	0.0112	120	112	1	10.0-160			6.90	27
trans-1,2-Dichloroethene	0.0100	U	0.0118	0.0108	118	108	1	17.0-153			8.85	27
1,2-Dichloropropane	0.0100	U	0.0113	0.0105	113	105	1	30.0-156			7.34	27
cis-1,3-Dichloropropene	0.0100	U	0.0107	0.0103	107	103	1	34.0-149			3.81	28
trans-1,3-Dichloropropene	0.0100	U	0.00920	0.00983	92.0	98.3	1	32.0-149			6.62	28
Ethylbenzene	0.0100	U	0.0113	0.00972	113	97.2	1	30.0-155			15.0	27
Hexachloro-1,3-butadiene	0.0100	U	0.0110	0.0110	110	110	1	20.0-154			0.000	34
2-Hexanone	0.0500	U	0.0532	0.0581	106	116	1	21.0-160			8.81	29
Isopropylbenzene	0.0100	U	0.00955	0.0102	95.5	102	1	28.0-157			6.58	27
p-Isopropyltoluene	0.0100	U	0.00985	0.00893	98.5	89.3	1	30.0-154			9.80	29
2-Butanone (MEK)	0.0500	U	0.0651	0.0658	130	132	1	10.0-160			1.07	32
Methylene Chloride	0.0100	U	0.0113	0.0104	113	104	1	23.0-144			8.29	28
4-Methyl-2-pentanone (MIBK)	0.0500	U	0.0537	0.0600	107	120	1	29.0-160			11.1	29
Methyl tert-butyl ether	0.0100	U	0.0122	0.0116	122	116	1	28.0-150			5.04	29
Naphthalene	0.0100	U	0.0106	0.0110	106	110	1	12.0-156			3.70	35
n-Propylbenzene	0.0100	U	0.00999	0.00923	99.9	92.3	1	31.0-154			7.91	28
Styrene	0.0100	U	0.00912	0.00982	91.2	98.2	1	33.0-155			7.39	28
1,1,2,2-Tetrachloroethane	0.0100	U	0.0116	0.0115	116	115	1	33.0-150			0.866	28
Tetrachloroethene	0.0100	U	0.0102	0.0106	102	106	1	10.0-160			3.85	27
Toluene	0.0100	U	0.00970	0.00984	97.0	98.4	1	26.0-154			1.43	28
1,1,1-Trichloroethane	0.0100	U	0.0136	0.0124	136	124	1	23.0-160			9.23	28
1,1,2-Trichloroethane	0.0100	U	0.0100	0.0108	100	108	1	35.0-147			7.69	27
Trichloroethene	0.0100	U	0.0121	0.0111	121	111	1	10.0-160			8.62	25
1,2,4-Trimethylbenzene	0.0100	U	0.00941	0.00863	94.1	86.3	1	26.0-154			8.65	27
1,3,5-Trimethylbenzene	0.0100	U	0.00996	0.00954	99.6	95.4	1	28.0-153			4.31	27
Vinyl chloride	0.0100	U	0.0127	0.0117	127	117	1	10.0-160			8.20	27
Xylenes, Total	0.0300	U	0.0292	0.0304	97.3	101	1	29.0-154			4.03	28
(S) Toluene-d8					*86.3*	*99.2*		*80.0-120*				
(S) 4-Bromofluorobenzene					*87.8*	*120*		*77.0-126*				

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/20/21 04:43 • (MS) R3644040-3 04/20/21 06:55 • (MSD) R3644040-4 04/20/21 07:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) 1,2-Dichloroethane-d4					*116*	*118*		*70.0-130*				

Method Blank (MB)

(MB) R3644076-3 04/19/21 20:50

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
1,2-Dibromoethane	U		0.000126	0.00100
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	0.000358	J	0.000337	0.00100
2-Hexanone	U		0.000787	0.0100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100

Method Blank (MB)

(MB) R3644076-3 04/19/21 20:50

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*102*			*80.0-120*
(S) 4-Bromofluorobenzene	*86.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*

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

(LCS) R3644076-1 04/19/21 19:48 • (LCSD) R3644076-2 04/19/21 20:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0135	0.0161	54.0	64.4	19.0-160			17.6	27
Benzene	0.00500	0.00516	0.00569	103	114	70.0-123			9.77	20
Bromodichloromethane	0.00500	0.00502	0.00512	100	102	75.0-120			1.97	20
Bromoform	0.00500	0.00320	0.00358	64.0	71.6	68.0-132	J4		11.2	20
Bromomethane	0.00500	0.00593	0.00540	119	108	10.0-160			9.36	25
n-Butylbenzene	0.00500	0.00469	0.00528	93.8	106	73.0-125			11.8	20
sec-Butylbenzene	0.00500	0.00505	0.00521	101	104	75.0-125			3.12	20
tert-Butylbenzene	0.00500	0.00454	0.00454	90.8	90.8	76.0-124			0.000	20
Carbon disulfide	0.00500	0.00511	0.00544	102	109	61.0-128			6.26	20
Carbon tetrachloride	0.00500	0.00462	0.00547	92.4	109	68.0-126			16.8	20
Chlorobenzene	0.00500	0.00418	0.00492	83.6	98.4	80.0-121			16.3	20
Chlorodibromomethane	0.00500	0.00389	0.00471	77.8	94.2	77.0-125			19.1	20
Chloroethane	0.00500	0.00887	0.00914	177	183	47.0-150	J4	J4	3.00	20
Chloroform	0.00500	0.00490	0.00520	98.0	104	73.0-120			5.94	20
Chloromethane	0.00500	0.00503	0.00557	101	111	41.0-142			10.2	20
1,2-Dibromoethane	0.00500	0.00467	0.00484	93.4	96.8	80.0-122			3.58	20
1,1-Dichloroethane	0.00500	0.00571	0.00621	114	124	70.0-126			8.39	20
1,2-Dichloroethane	0.00500	0.00522	0.00549	104	110	70.0-128			5.04	20
1,1-Dichloroethene	0.00500	0.00445	0.00527	89.0	105	71.0-124			16.9	20
cis-1,2-Dichloroethene	0.00500	0.00455	0.00481	91.0	96.2	73.0-120			5.56	20
trans-1,2-Dichloroethene	0.00500	0.00489	0.00463	97.8	92.6	73.0-120			5.46	20
1,2-Dichloropropane	0.00500	0.00573	0.00569	115	114	77.0-125			0.701	20
cis-1,3-Dichloropropene	0.00500	0.00472	0.00481	94.4	96.2	80.0-123			1.89	20
trans-1,3-Dichloropropene	0.00500	0.00484	0.00511	96.8	102	78.0-124			5.43	20

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

(LCS) R3644076-1 04/19/21 19:48 • (LCSD) R3644076-2 04/19/21 20:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.00500	0.00443	0.00530	88.6	106	79.0-123			17.9	20
Hexachloro-1,3-butadiene	0.00500	0.00463	0.00485	92.6	97.0	54.0-138			4.64	20
2-Hexanone	0.0250	0.0166	0.0179	66.4	71.6	67.0-149	J4		7.54	20
Isopropylbenzene	0.00500	0.00428	0.00506	85.6	101	76.0-127			16.7	20
p-Isopropyltoluene	0.00500	0.00433	0.00498	86.6	99.6	76.0-125			14.0	20
2-Butanone (MEK)	0.0250	0.0166	0.0180	66.4	72.0	44.0-160			8.09	20
Methylene Chloride	0.00500	0.00510	0.00559	102	112	67.0-120			9.17	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0200	0.0224	80.0	89.6	68.0-142			11.3	20
Methyl tert-butyl ether	0.00500	0.00496	0.00512	99.2	102	68.0-125			3.17	20
Naphthalene	0.00500	0.00405	0.00426	81.0	85.2	54.0-135			5.05	20
n-Propylbenzene	0.00500	0.00445	0.00483	89.0	96.6	77.0-124			8.19	20
Styrene	0.00500	0.00405	0.00455	81.0	91.0	73.0-130			11.6	20
1,1,2,2-Tetrachloroethane	0.00500	0.00446	0.00481	89.2	96.2	65.0-130			7.55	20
Tetrachloroethene	0.00500	0.00452	0.00517	90.4	103	72.0-132			13.4	20
Toluene	0.00500	0.00467	0.00522	93.4	104	79.0-120			11.1	20
1,1,1-Trichloroethane	0.00500	0.00489	0.00520	97.8	104	73.0-124			6.14	20
1,1,2-Trichloroethane	0.00500	0.00432	0.00486	86.4	97.2	80.0-120			11.8	20
Trichloroethene	0.00500	0.00488	0.00501	97.6	100	78.0-124			2.63	20
1,2,4-Trimethylbenzene	0.00500	0.00448	0.00509	89.6	102	76.0-121			12.7	20
1,3,5-Trimethylbenzene	0.00500	0.00421	0.00450	84.2	90.0	76.0-122			6.66	20
Vinyl chloride	0.00500	0.00590	0.00609	118	122	67.0-131			3.17	20
Xylenes, Total	0.0150	0.0127	0.0148	84.7	98.7	79.0-123			15.3	20
(S) Toluene-d8				*95.3*	*99.7*	*80.0-120*				
(S) 4-Bromofluorobenzene				*83.4*	*89.8*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*108*	*108*	*70.0-130*				

L1339799-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339799-03 04/20/21 00:11 • (MS) R3644076-4 04/20/21 04:59 • (MSD) R3644076-5 04/20/21 05:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	U	0.0980	0.0700	392	280	1	10.0-160	J5	J5	33.3	35
Benzene	0.00500	0.686	0.608	0.579	0.000	0.000	1	17.0-158	E V	E V	4.89	27
Bromodichloromethane	0.00500	U	0.00488	0.00470	97.6	94.0	1	31.0-150			3.76	27
Bromoform	0.00500	U	0.00478	0.00401	95.6	80.2	1	29.0-150			17.5	29
Bromomethane	0.00500	U	0.00178	0.00134	35.6	26.8	1	10.0-160			28.2	38
n-Butylbenzene	0.00500	U	0.0549	0.0570	1100	1140	1	31.0-150	J5	J5	3.75	30
sec-Butylbenzene	0.00500	0.00145	0.00640	0.00611	99.0	93.2	1	33.0-155			4.64	29
tert-Butylbenzene	0.00500	U	0.00464	0.00427	92.8	85.4	1	34.0-153			8.31	28

L1339799-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339799-03 04/20/21 00:11 • (MS) R3644076-4 04/20/21 04:59 • (MSD) R3644076-5 04/20/21 05:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	0.00500	0.000198	0.00460	0.00406	88.0	77.2	1	10.0-156			12.5	28
Carbon tetrachloride	0.00500	U	0.00491	0.00419	98.2	83.8	1	23.0-159			15.8	28
Chlorobenzene	0.00500	U	0.00565	0.00476	113	95.2	1	33.0-152			17.1	27
Chlorodibromomethane	0.00500	U	0.00575	0.00491	115	98.2	1	37.0-149			15.8	27
Chloroethane	0.00500	U	0.0310	0.00980	620	196	1	10.0-160	J5	J3 J5	104	30
Chloroform	0.00500	U	0.00734	0.00675	147	135	1	29.0-154			8.37	28
Chloromethane	0.00500	U	0.00635	0.00581	127	116	1	10.0-160			8.88	29
1,2-Dibromoethane	0.00500	U	0.00533	0.00447	107	89.4	1	34.0-147			17.6	27
1,1-Dichloroethane	0.00500	U	0.00538	0.00460	108	92.0	1	25.0-158			15.6	27
1,2-Dichloroethane	0.00500	U	0.00672	0.00557	134	111	1	29.0-151			18.7	27
1,1-Dichloroethene	0.00500	U	0.00425	0.00374	85.0	74.8	1	11.0-160			12.8	29
cis-1,2-Dichloroethene	0.00500	U	0.00521	0.00456	104	91.2	1	10.0-160			13.3	27
trans-1,2-Dichloroethene	0.00500	U	0.00435	0.00378	87.0	75.6	1	17.0-153			14.0	27
1,2-Dichloropropane	0.00500	U	0.00636	0.00519	127	104	1	30.0-156			20.3	27
cis-1,3-Dichloropropene	0.00500	U	0.00432	0.00374	86.4	74.8	1	34.0-149			14.4	28
trans-1,3-Dichloropropene	0.00500	U	0.00504	0.00454	101	90.8	1	32.0-149			10.4	28
Ethylbenzene	0.00500	0.00723	0.0111	0.0116	77.4	87.4	1	30.0-155			4.41	27
Hexachloro-1,3-butadiene	0.00500	U	0.00474	0.00454	94.8	90.8	1	20.0-154			4.31	34
2-Hexanone	0.0250	U	0.0179	0.0136	71.6	54.4	1	21.0-160			27.3	29
Isopropylbenzene	0.00500	0.00364	0.00865	0.00800	100	87.2	1	28.0-157			7.81	27
p-Isopropyltoluene	0.00500	U	0.0145	0.0147	290	294	1	30.0-154	J5	J5	1.37	29
2-Butanone (MEK)	0.0250	U	0.0192	0.0143	76.8	57.2	1	10.0-160			29.3	32
Methylene Chloride	0.00500	U	0.00521	0.00434	104	86.8	1	23.0-144			18.2	28
4-Methyl-2-pentanone (MIBK)	0.0250	U	0.0201	0.0142	80.4	56.8	1	29.0-160		J3	34.4	29
Methyl tert-butyl ether	0.00500	0.796	0.718	0.657	0.000	0.000	1	28.0-150	E V	E V	8.87	29
Naphthalene	0.00500	0.209	0.151	0.116	0.000	0.000	1	12.0-156	V	V	26.2	35
n-Propylbenzene	0.00500	0.00112	0.00518	0.00524	81.2	82.4	1	31.0-154			1.15	28
Styrene	0.00500	U	0.0192	0.0183	384	366	1	33.0-155	J5	J5	4.80	28
1,1,2,2-Tetrachloroethane	0.00500	U	0.000748	0.000498	15.0	9.96	1	33.0-150	J6	J3 J6	40.1	28
Tetrachloroethene	0.00500	U	0.00560	0.00464	112	92.8	1	10.0-160			18.7	27
Toluene	0.00500	0.298	0.282	0.281	0.000	0.000	1	26.0-154	E V	E V	0.355	28
1,1,1-Trichloroethane	0.00500	U	0.00508	0.00412	102	82.4	1	23.0-160			20.9	28
1,1,2-Trichloroethane	0.00500	U	0.00641	0.00545	128	109	1	35.0-147			16.2	27
Trichloroethene	0.00500	U	0.00805	0.00769	161	154	1	10.0-160	J5		4.57	25
1,2,4-Trimethylbenzene	0.00500	U	0.00407	0.00302	81.4	60.4	1	26.0-154		J3	29.6	27
1,3,5-Trimethylbenzene	0.00500	0.150	0.162	0.174	240	480	1	28.0-153	V	V	7.14	27
Vinyl chloride	0.00500	U	0.00481	0.00431	96.2	86.2	1	10.0-160			11.0	27
Xylenes, Total	0.0150	0.517	0.506	0.505	0.000	0.000	1	29.0-154	V	V	0.198	28
(S) Toluene-d8					*92.8*	*94.4*		*80.0-120*				
(S) 4-Bromofluorobenzene					*87.4*	*89.9*		*77.0-126*				

L1339799-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339799-03 04/20/21 00:11 • (MS) R3644076-4 04/20/21 04:59 • (MSD) R3644076-5 04/20/21 05:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) 1,2-Dichloroethane-d4					*98.1*	*90.7*		*70.0-130*				

Method Blank (MB)

(MB) R3644357-4 04/20/21 15:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Bromodichloromethane	U		0.000136	0.00100
(S) Toluene-d8	*93.8*			*80.0-120*
(S) 4-Bromofluorobenzene	*85.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*

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

(LCS) R3644357-1 04/20/21 12:50 • (LCSD) R3644357-2 04/20/21 13:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromodichloromethane	0.00500	0.00547	0.00558	109	112	75.0-120			1.99	20
(S) Toluene-d8				*92.2*	*92.9*	*80.0-120*				
(S) 4-Bromofluorobenzene				*89.4*	*88.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*117*	*119*	*70.0-130*				

Method Blank (MB)

(MB) R3644733-3 04/20/21 17:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
Toluene	U		0.000278	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*119*			*80.0-120*
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*93.8*			*70.0-130*

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

(LCS) R3644733-1 04/20/21 16:12 • (LCSD) R3644733-2 04/20/21 16:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.00500	0.00422	0.00390	84.4	78.0	70.0-123			7.88	20
Methyl tert-butyl ether	0.00500	0.00440	0.00423	88.0	84.6	68.0-125			3.94	20
Naphthalene	0.00500	0.00472	0.00472	94.4	94.4	54.0-135			0.000	20
Toluene	0.00500	0.00528	0.00505	106	101	79.0-120			4.45	20
1,3,5-Trimethylbenzene	0.00500	0.00497	0.00470	99.4	94.0	76.0-122			5.58	20
Xylenes, Total	0.0150	0.0147	0.0140	98.0	93.3	79.0-123			4.88	20
(S) Toluene-d8				*113*	*114*	*80.0-120*				
(S) 4-Bromofluorobenzene				*94.4*	*94.8*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*93.9*	*92.3*	*70.0-130*				

Method Blank (MB)

(MB) R3646904-1 04/27/21 02:43

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	*91.5*			*31.0-160*

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

(LCS) R3646904-2 04/27/21 03:03 • (LCSD) R3646904-3 04/27/21 03:23

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	1.51	1.56	101	104	50.0-150			3.26	20
(S) o-Terphenyl				*120*	*133*	*31.0-160*				

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/27/21 21:40 • (MS) R3646904-6 04/27/21 22:00 • (MSD) R3646904-7 04/27/21 22:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	0.161	1.79	1.83	109	111	1	50.0-150			2.21	20
(S) o-Terphenyl					*114*	*114*		*31.0-160*				

Method Blank (MB)

(MB) R3645496-3 04/22/21 15:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

Method Blank (MB)

(MB) R3645496-3 04/22/21 15:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*49.2*			*10.0-127*
(S) 2-Fluorobiphenyl	*48.7*			*10.0-130*
(S) p-Terphenyl-d14	*53.7*			*10.0-128*
(S) Phenol-d5	*17.8*			*10.0-120*
(S) 2-Fluorophenol	*29.3*			*10.0-120*
(S) 2,4,6-Tribromophenol	*54.5*			*10.0-155*

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

(LCS) R3645496-1 04/22/21 14:30 • (LCSD) R3645496-2 04/22/21 14:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	0.0204	0.0222	40.8	44.4	41.0-120	J4		8.45	22
Acenaphthylene	0.0500	0.0224	0.0250	44.8	50.0	43.0-120			11.0	22
Acetophenone	0.0500	0.0245	0.0286	49.0	57.2	29.0-120			15.4	28
Anthracene	0.0500	0.0249	0.0265	49.8	53.0	45.0-120			6.23	20
Atrazine	0.0500	0.0253	0.0273	50.6	54.6	39.0-141			7.60	20
Benzaldehyde	0.0500	0.0480	0.0556	96.0	111	10.0-160			14.7	40
Benzo(a)anthracene	0.0500	0.0269	0.0290	53.8	58.0	47.0-120			7.51	20
Benzo(b)fluoranthene	0.0500	0.0272	0.0294	54.4	58.8	46.0-120			7.77	20
Benzo(k)fluoranthene	0.0500	0.0274	0.0301	54.8	60.2	46.0-120			9.39	21
Benzo(g,h,i)perylene	0.0500	0.0260	0.0278	52.0	55.6	48.0-121			6.69	20
Benzo(a)pyrene	0.0500	0.0296	0.0323	59.2	64.6	47.0-120			8.72	20
Biphenyl	0.0500	0.0212	0.0234	42.4	46.8	38.0-120			9.87	27
Bis(2-chlorethoxy)methane	0.0500	0.0231	0.0264	46.2	52.8	33.0-120			13.3	24
Bis(2-chloroethyl)ether	0.0500	0.0235	0.0268	47.0	53.6	23.0-120			13.1	33
2,2-Oxybis(1-Chloropropane)	0.0500	0.0212	0.0245	42.4	49.0	28.0-120			14.4	31
4-Bromophenyl-phenylether	0.0500	0.0236	0.0252	47.2	50.4	45.0-120			6.56	20
Caprolactam	0.0500	0.0132	0.0147	26.4	29.4	10.0-120			10.8	26
Carbazole	0.0500	0.0265	0.0287	53.0	57.4	51.0-122			7.97	20
4-Chloroaniline	0.0500	0.0264	0.0275	52.8	55.0	25.0-120			4.08	25
2-Chloronaphthalene	0.0500	0.0217	0.0240	43.4	48.0	37.0-120			10.1	25
4-Chlorophenyl-phenylether	0.0500	0.0217	0.0234	43.4	46.8	44.0-120	J4		7.54	20
Chrysene	0.0500	0.0272	0.0297	54.4	59.4	48.0-120			8.79	20
Dibenz(a,h)anthracene	0.0500	0.0292	0.0313	58.4	62.6	47.0-120			6.94	20
Dibenzofuran	0.0500	0.0229	0.0255	45.8	51.0	44.0-120			10.7	22
3,3-Dichlorobenzidine	0.100	0.0505	0.0569	50.5	56.9	44.0-120			11.9	20
2,4-Dinitrotoluene	0.0500	0.0288	0.0317	57.6	63.4	49.0-124			9.59	20
2,6-Dinitrotoluene	0.0500	0.0259	0.0276	51.8	55.2	46.0-120			6.36	21
Fluoranthene	0.0500	0.0264	0.0285	52.8	57.0	51.0-120			7.65	20
Fluorene	0.0500	0.0224	0.0241	44.8	48.2	47.0-120	J4		7.31	20
Hexachlorobenzene	0.0500	0.0222	0.0238	44.4	47.6	44.0-120			6.96	20
Hexachloro-1,3-butadiene	0.0500	0.0184	0.0203	36.8	40.6	19.0-120			9.82	32
Hexachlorocyclopentadiene	0.0500	0.0123	0.0136	24.6	27.2	15.0-120			10.0	31
Hexachloroethane	0.0500	0.0212	0.0234	42.4	46.8	15.0-120			9.87	37
Indeno(1,2,3-cd)pyrene	0.0500	0.0263	0.0281	52.6	56.2	49.0-122			6.62	20
Isophorone	0.0500	0.0237	0.0267	47.4	53.4	36.0-120			11.9	23
1-Methylnaphthalene	0.0500	0.0205	0.0231	41.0	46.2	33.0-120			11.9	24
2-Methylnaphthalene	0.0500	0.0202	0.0226	40.4	45.2	33.0-120			11.2	25
Naphthalene	0.0500	0.0202	0.0225	40.4	45.0	27.0-120			10.8	27
2-Nitroaniline	0.0500	0.0282	0.0305	56.4	61.0	43.0-120			7.84	22
3-Nitroaniline	0.0500	0.0289	0.0308	57.8	61.6	38.0-120			6.37	21

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

(LCS) R3645496-1 04/22/21 14:30 • (LCSD) R3645496-2 04/22/21 14:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0500	0.0285	0.0308	57.0	61.6	18.0-160			7.76	21
Nitrobenzene	0.0500	0.0223	0.0252	44.6	50.4	27.0-120			12.2	29
n-Nitrosodiphenylamine	0.0500	0.0243	0.0267	48.6	53.4	47.0-120			9.41	20
n-Nitrosodi-n-propylamine	0.0500	0.0242	0.0283	48.4	56.6	31.0-120			15.6	28
Phenanthrene	0.0500	0.0249	0.0262	49.8	52.4	46.0-120			5.09	20
Benzylbutyl phthalate	0.0500	0.0333	0.0357	66.6	71.4	43.0-121			6.96	20
Bis(2-ethylhexyl)phthalate	0.0500	0.0305	0.0333	61.0	66.6	43.0-122			8.78	20
Di-n-butyl phthalate	0.0500	0.0289	0.0314	57.8	62.8	49.0-121			8.29	20
Diethyl phthalate	0.0500	0.0273	0.0294	54.6	58.8	48.0-122			7.41	20
Dimethyl phthalate	0.0500	0.0258	0.0278	51.6	55.6	48.0-120			7.46	20
Di-n-octyl phthalate	0.0500	0.0320	0.0352	64.0	70.4	42.0-125			9.52	20
Pyrene	0.0500	0.0288	0.0308	57.6	61.6	47.0-120			6.71	20
1,2,4-Trichlorobenzene	0.0500	0.0201	0.0219	40.2	43.8	24.0-120			8.57	29
4-Chloro-3-methylphenol	0.0500	0.0258	0.0286	51.6	57.2	40.0-120			10.3	21
2-Chlorophenol	0.0500	0.0197	0.0227	39.4	45.4	25.0-120			14.2	35
2-Methylphenol	0.0500	0.0188	0.0216	37.6	43.2	28.0-120			13.9	29
3&4-Methyl Phenol	0.0500	0.0198	0.0231	39.6	46.2	31.0-120			15.4	30
2,4-Dichlorophenol	0.0500	0.0236	0.0265	47.2	53.0	36.0-120			11.6	26
2,4-Dimethylphenol	0.0500	0.0216	0.0248	43.2	49.6	33.0-120			13.8	26
4,6-Dinitro-2-methylphenol	0.0500	0.0359	0.0387	71.8	77.4	38.0-138			7.51	25
2,4-Dinitrophenol	0.0500	0.0348	0.0377	69.6	75.4	10.0-120			8.00	39
2-Nitrophenol	0.0500	0.0225	0.0252	45.0	50.4	31.0-120			11.3	29
4-Nitrophenol	0.0500	0.0142	0.0154	28.4	30.8	10.0-120			8.11	33
Pentachlorophenol	0.0500	0.0343	0.0365	68.6	73.0	23.0-120			6.21	25
Phenol	0.0500	0.00887	0.0102	17.7	20.4	10.0-120			13.9	36
2,4,5-Trichlorophenol	0.0500	0.0277	0.0305	55.4	61.0	44.0-120			9.62	22
2,4,6-Trichlorophenol	0.0500	0.0280	0.0311	56.0	62.2	42.0-120			10.5	23
(S) Nitrobenzene-d5				*39.6*	*48.9*	*10.0-127*				
(S) 2-Fluorobiphenyl				*45.7*	*50.3*	*10.0-130*				
(S) p-Terphenyl-d14				*50.3*	*55.2*	*10.0-128*				
(S) Phenol-d5				*17.0*	*19.9*	*10.0-120*				
(S) 2-Fluorophenol				*27.0*	*31.5*	*10.0-120*				
(S) 2,4,6-Tribromophenol				*62.5*	*66.5*	*10.0-155*				

Method Blank (MB)

(MB) R3645594-3 04/23/21 01:43

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

Method Blank (MB)

(MB) R3645594-3 04/23/21 01:43

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*69.2*			*10.0-127*
(S) 2-Fluorobiphenyl	*69.3*			*10.0-130*
(S) p-Terphenyl-d14	*71.0*			*10.0-128*
(S) Phenol-d5	*16.2*			*10.0-120*
(S) 2-Fluorophenol	*25.6*			*10.0-120*
(S) 2,4,6-Tribromophenol	*58.0*			*10.0-155*

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

(LCS) R3645594-1 04/23/21 00:57 • (LCSD) R3645594-2 04/23/21 01:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	0.0352	0.0350	70.4	70.0	41.0-120			0.570	22
Acenaphthylene	0.0500	0.0374	0.0372	74.8	74.4	43.0-120			0.536	22
Acetophenone	0.0500	0.0627	0.0648	125	130	29.0-120	J4	J4	3.29	28
Anthracene	0.0500	0.0378	0.0375	75.6	75.0	45.0-120			0.797	20
Atrazine	0.0500	0.0340	0.0328	68.0	65.6	39.0-141			3.59	20
Benzaldehyde	0.0500	0.114	0.116	228	232	10.0-160	J4	J4	1.74	40
Benzo(a)anthracene	0.0500	0.0367	0.0363	73.4	72.6	47.0-120			1.10	20
Benzo(b)fluoranthene	0.0500	0.0343	0.0337	68.6	67.4	46.0-120			1.76	20
Benzo(k)fluoranthene	0.0500	0.0344	0.0328	68.8	65.6	46.0-120			4.76	21
Benzo(g,h,i)perylene	0.0500	0.0384	0.0374	76.8	74.8	48.0-121			2.64	20
Benzo(a)pyrene	0.0500	0.0350	0.0336	70.0	67.2	47.0-120			4.08	20
Biphenyl	0.0500	0.0373	0.0376	74.6	75.2	38.0-120			0.801	27
Bis(2-chlorethoxy)methane	0.0500	0.0348	0.0352	69.6	70.4	33.0-120			1.14	24
Bis(2-chloroethyl)ether	0.0500	0.0484	0.0486	96.8	97.2	23.0-120			0.412	33
2,2-Oxybis(1-Chloropropane)	0.0500	0.0410	0.0415	82.0	83.0	28.0-120			1.21	31
4-Bromophenyl-phenylether	0.0500	0.0376	0.0374	75.2	74.8	45.0-120			0.533	20
Caprolactam	0.0500	0.00668	0.00625	13.4	12.5	10.0-120			6.65	26
Carbazole	0.0500	0.0415	0.0410	83.0	82.0	51.0-122			1.21	20
4-Chloroaniline	0.0500	0.0172	0.0157	34.4	31.4	25.0-120			9.12	25
2-Chloronaphthalene	0.0500	0.0378	0.0379	75.6	75.8	37.0-120			0.264	25
4-Chlorophenyl-phenylether	0.0500	0.0355	0.0353	71.0	70.6	44.0-120			0.565	20
Chrysene	0.0500	0.0341	0.0334	68.2	66.8	48.0-120			2.07	20
Dibenz(a,h)anthracene	0.0500	0.0394	0.0381	78.8	76.2	47.0-120			3.35	20
Dibenzofuran	0.0500	0.0377	0.0373	75.4	74.6	44.0-120			1.07	22
3,3-Dichlorobenzidine	0.100	0.0789	0.0794	78.9	79.4	44.0-120			0.632	20
2,4-Dinitrotoluene	0.0500	0.0415	0.0415	83.0	83.0	49.0-124			0.000	20
2,6-Dinitrotoluene	0.0500	0.0383	0.0383	76.6	76.6	46.0-120			0.000	21
Fluoranthene	0.0500	0.0370	0.0362	74.0	72.4	51.0-120			2.19	20
Fluorene	0.0500	0.0373	0.0371	74.6	74.2	47.0-120			0.538	20
Hexachlorobenzene	0.0500	0.0373	0.0368	74.6	73.6	44.0-120			1.35	20
Hexachloro-1,3-butadiene	0.0500	0.0274	0.0267	54.8	53.4	19.0-120			2.59	32
Hexachlorocyclopentadiene	0.0500	0.0148	0.0138	29.6	27.6	15.0-120			6.99	31
Hexachloroethane	0.0500	0.0334	0.0336	66.8	67.2	15.0-120			0.597	37
Indeno(1,2,3-cd)pyrene	0.0500	0.0371	0.0358	74.2	71.6	49.0-122			3.57	20
Isophorone	0.0500	0.0310	0.0320	62.0	64.0	36.0-120			3.17	23
1-Methylnaphthalene	0.0500	0.0292	0.0296	58.4	59.2	33.0-120			1.36	24
2-Methylnaphthalene	0.0500	0.0285	0.0286	57.0	57.2	33.0-120			0.350	25
Naphthalene	0.0500	0.0311	0.0314	62.2	62.8	27.0-120			0.960	27
2-Nitroaniline	0.0500	0.0424	0.0411	84.8	82.2	43.0-120			3.11	22
3-Nitroaniline	0.0500	0.0319	0.0294	63.8	58.8	38.0-120			8.16	21

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

(LCS) R3645594-1 04/23/21 00:57 • (LCSD) R3645594-2 04/23/21 01:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0500	0.0390	0.0388	78.0	77.6	18.0-160			0.514	21
Nitrobenzene	0.0500	0.0352	0.0353	70.4	70.6	27.0-120			0.284	29
n-Nitrosodiphenylamine	0.0500	0.0399	0.0403	79.8	80.6	47.0-120			0.998	20
n-Nitrosodi-n-propylamine	0.0500	0.0426	0.0446	85.2	89.2	31.0-120			4.59	28
Phenanthrene	0.0500	0.0379	0.0379	75.8	75.8	46.0-120			0.000	20
Benzylbutyl phthalate	0.0500	0.0413	0.0408	82.6	81.6	43.0-121			1.22	20
Bis(2-ethylhexyl)phthalate	0.0500	0.0367	0.0360	73.4	72.0	43.0-122			1.93	20
Di-n-butyl phthalate	0.0500	0.0428	0.0420	85.6	84.0	49.0-121			1.89	20
Diethyl phthalate	0.0500	0.0415	0.0406	83.0	81.2	48.0-122			2.19	20
Dimethyl phthalate	0.0500	0.0392	0.0395	78.4	79.0	48.0-120			0.762	20
Di-n-octyl phthalate	0.0500	0.0345	0.0331	69.0	66.2	42.0-125			4.14	20
Pyrene	0.0500	0.0374	0.0369	74.8	73.8	47.0-120			1.35	20
1,2,4-Trichlorobenzene	0.0500	0.0284	0.0280	56.8	56.0	24.0-120			1.42	29
4-Chloro-3-methylphenol	0.0500	0.0198	0.0198	39.6	39.6	40.0-120	J4	J4	0.000	21
2-Chlorophenol	0.0500	0.0234	0.0242	46.8	48.4	25.0-120			3.36	35
2-Methylphenol	0.0500	0.0189	0.0191	37.8	38.2	28.0-120			1.05	29
3&4-Methyl Phenol	0.0500	0.0197	0.0201	39.4	40.2	31.0-120			2.01	30
2,4-Dichlorophenol	0.0500	0.0232	0.0235	46.4	47.0	36.0-120			1.28	26
2,4-Dimethylphenol	0.0500	0.0215	0.0207	43.0	41.4	33.0-120			3.79	26
4,6-Dinitro-2-methylphenol	0.0500	0.0429	0.0448	85.8	89.6	38.0-138			4.33	25
2,4-Dinitrophenol	0.0500	0.0335	0.0344	67.0	68.8	10.0-120			2.65	39
2-Nitrophenol	0.0500	0.0300	0.0309	60.0	61.8	31.0-120			2.96	29
4-Nitrophenol	0.0500	0.0106	0.00946	21.2	18.9	10.0-120			11.4	33
Pentachlorophenol	0.0500	0.0333	0.0342	66.6	68.4	23.0-120			2.67	25
Phenol	0.0500	0.00942	0.00952	18.8	19.0	10.0-120			1.06	36
2,4,5-Trichlorophenol	0.0500	0.0324	0.0335	64.8	67.0	44.0-120			3.34	22
2,4,6-Trichlorophenol	0.0500	0.0322	0.0328	64.4	65.6	42.0-120			1.85	23
(S) Nitrobenzene-d5				*67.1*	*68.3*	*10.0-127*				
(S) 2-Fluorobiphenyl				*74.5*	*74.9*	*10.0-130*				
(S) p-Terphenyl-d14				*69.0*	*67.6*	*10.0-128*				
(S) Phenol-d5				*17.8*	*17.9*	*10.0-120*				
(S) 2-Fluorophenol				*26.9*	*27.8*	*10.0-120*				
(S) 2,4,6-Tribromophenol				*74.5*	*76.0*	*10.0-155*				

Method Blank (MB)

(MB) R3645255-2 04/22/21 10:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

Method Blank (MB)

(MB) R3645255-2 04/22/21 10:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*36.2*			*10.0-127*
(S) 2-Fluorobiphenyl	*38.8*			*10.0-130*
(S) p-Terphenyl-d14	*53.0*			*10.0-128*
(S) Phenol-d5	*13.3*			*10.0-120*
(S) 2-Fluorophenol	*20.3*			*10.0-120*
(S) 2,4,6-Tribromophenol	*37.4*			*10.0-155*

Laboratory Control Sample (LCS)

(LCS) R3645255-1 04/22/21 10:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0500	0.0190	38.0	41.0-120	J4
Acenaphthylene	0.0500	0.0203	40.6	43.0-120	J4
Acetophenone	0.0500	0.0361	72.2	29.0-120	
Anthracene	0.0500	0.0254	50.8	45.0-120	
Atrazine	0.0500	0.0233	46.6	39.0-141	
Benzaldehyde	0.0500	0.0655	131	10.0-160	
Benzo(a)anthracene	0.0500	0.0274	54.8	47.0-120	
Benzo(b)fluoranthene	0.0500	0.0252	50.4	46.0-120	
Benzo(k)fluoranthene	0.0500	0.0258	51.6	46.0-120	
Benzo(g,h,i)perylene	0.0500	0.0297	59.4	48.0-121	
Benzo(a)pyrene	0.0500	0.0280	56.0	47.0-120	
Biphenyl	0.0500	0.0199	39.8	38.0-120	
Bis(2-chlorethoxy)methane	0.0500	0.0205	41.0	33.0-120	
Bis(2-chloroethyl)ether	0.0500	0.0280	56.0	23.0-120	
2,2-Oxybis(1-Chloropropane)	0.0500	0.0236	47.2	28.0-120	
4-Bromophenyl-phenylether	0.0500	0.0237	47.4	45.0-120	
Caprolactam	0.0500	0.0108	21.6	10.0-120	
Carbazole	0.0500	0.0274	54.8	51.0-122	
4-Chloroaniline	0.0500	0.0206	41.2	25.0-120	
2-Chloronaphthalene	0.0500	0.0206	41.2	37.0-120	
4-Chlorophenyl-phenylether	0.0500	0.0209	41.8	44.0-120	J4
Chrysene	0.0500	0.0258	51.6	48.0-120	
Dibenz(a,h)anthracene	0.0500	0.0298	59.6	47.0-120	
Dibenzofuran	0.0500	0.0209	41.8	44.0-120	J4
3,3-Dichlorobenzidine	0.100	0.0525	52.5	44.0-120	
2,4-Dinitrotoluene	0.0500	0.0270	54.0	49.0-124	
2,6-Dinitrotoluene	0.0500	0.0230	46.0	46.0-120	
Fluoranthene	0.0500	0.0258	51.6	51.0-120	
Fluorene	0.0500	0.0211	42.2	47.0-120	J4
Hexachlorobenzene	0.0500	0.0244	48.8	44.0-120	
Hexachloro-1,3-butadiene	0.0500	0.0160	32.0	19.0-120	
Hexachlorocyclopentadiene	0.0500	0.0137	27.4	15.0-120	
Hexachloroethane	0.0500	0.0191	38.2	15.0-120	
Indeno(1,2,3-cd)pyrene	0.0500	0.0288	57.6	49.0-122	
Isophorone	0.0500	0.0215	43.0	36.0-120	
1-Methylnaphthalene	0.0500	0.0163	32.6	33.0-120	J4
2-Methylnaphthalene	0.0500	0.0158	31.6	33.0-120	J4
Naphthalene	0.0500	0.0177	35.4	27.0-120	
2-Nitroaniline	0.0500	0.0266	53.2	43.0-120	
3-Nitroaniline	0.0500	0.0283	56.6	38.0-120	

Laboratory Control Sample (LCS)

(LCS) R3645255-1 04/22/21 10:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Nitroaniline	0.0500	0.0313	62.6	18.0-160	
Nitrobenzene	0.0500	0.0197	39.4	27.0-120	
n-Nitrosodiphenylamine	0.0500	0.0245	49.0	47.0-120	
n-Nitrosodi-n-propylamine	0.0500	0.0293	58.6	31.0-120	
Phenanthrene	0.0500	0.0243	48.6	46.0-120	
Benzylbutyl phthalate	0.0500	0.0287	57.4	43.0-121	
Bis(2-ethylhexyl)phthalate	0.0500	0.0284	56.8	43.0-122	
Di-n-butyl phthalate	0.0500	0.0295	59.0	49.0-121	
Diethyl phthalate	0.0500	0.0278	55.6	48.0-122	
Dimethyl phthalate	0.0500	0.0255	51.0	48.0-120	
Di-n-octyl phthalate	0.0500	0.0263	52.6	42.0-125	
Pyrene	0.0500	0.0259	51.8	47.0-120	
1,2,4-Trichlorobenzene	0.0500	0.0166	33.2	24.0-120	
4-Chloro-3-methylphenol	0.0500	0.0180	36.0	40.0-120	J4
2-Chlorophenol	0.0500	0.0191	38.2	25.0-120	
2-Methylphenol	0.0500	0.0173	34.6	28.0-120	
3&4-Methyl Phenol	0.0500	0.0190	38.0	31.0-120	
2,4-Dichlorophenol	0.0500	0.0176	35.2	36.0-120	J4
2,4-Dimethylphenol	0.0500	0.0198	39.6	33.0-120	
4,6-Dinitro-2-methylphenol	0.0500	0.0340	68.0	38.0-138	
2,4-Dinitrophenol	0.0500	0.0301	60.2	10.0-120	
2-Nitrophenol	0.0500	0.0199	39.8	31.0-120	
4-Nitrophenol	0.0500	0.0127	25.4	10.0-120	
Pentachlorophenol	0.0500	0.0257	51.4	23.0-120	
Phenol	0.0500	0.00820	16.4	10.0-120	
2,4,5-Trichlorophenol	0.0500	0.0234	46.8	44.0-120	
2,4,6-Trichlorophenol	0.0500	0.0213	42.6	42.0-120	
(S) Nitrobenzene-d5			*37.9*	*10.0-127*	
(S) 2-Fluorobiphenyl			*41.3*	*10.0-130*	
(S) p-Terphenyl-d14			*50.5*	*10.0-128*	
(S) Phenol-d5			*15.9*	*10.0-120*	
(S) 2-Fluorophenol			*23.5*	*10.0-120*	
(S) 2,4,6-Tribromophenol			*51.5*	*10.0-155*	

L1340613-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340613-04 04/22/21 18:13 • (MS) R3645255-3 04/22/21 18:36 • (MSD) R3645255-4 04/22/21 18:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	U	0.0216	0.0196	43.2	39.2	10	28.0-120			9.71	25
Acenaphthylene	0.0500	U	0.0228	0.0202	45.6	40.4	10	31.0-121			12.1	25
Acetophenone	0.0500	U	0.0353	0.0300	70.6	60.0	10	20.0-120			16.2	35
Anthracene	0.0500	U	0.0243	0.0205	48.6	41.0	10	36.0-120			17.0	23
Atrazine	0.0500	U	0.0227	0.0181	45.4	36.2	10	39.0-130		J6	22.5	23
Benzaldehyde	0.0500	0.508	0.288	0.271	0.000	0.000	10	10.0-160	V	V	6.08	40
Benzo(a)anthracene	0.0500	U	0.0240	0.0214	48.0	42.8	10	39.0-120			11.5	23
Benzo(b)fluoranthene	0.0500	U	0.0231	0.0206	46.2	41.2	10	37.0-120			11.4	23
Benzo(k)fluoranthene	0.0500	U	0.0226	0.0207	45.2	41.4	10	37.0-120			8.78	26
Benzo(g,h,i)perylene	0.0500	U	0.0191	0.0163	38.2	32.6	10	37.0-123		J6	15.8	25
Benzo(a)pyrene	0.0500	U	0.0245	0.0220	49.0	44.0	10	37.0-120			10.8	24
Biphenyl	0.0500	U	0.0275	0.0244	55.0	48.8	10	29.0-120			11.9	33
Bis(2-chlorethoxy)methane	0.0500	U	0.0220	0.0194	44.0	38.8	10	17.0-120			12.6	31
Bis(2-chloroethyl)ether	0.0500	U	U	U	0.000	0.000	10	14.0-120	J6	J6	0.000	33
2,2-Oxybis(1-Chloropropane)	0.0500	U	U	U	0.000	0.000	10	18.0-120	J6	J6	0.000	34
4-Bromophenyl-phenylether	0.0500	U	0.0240	0.0203	48.0	40.6	10	37.0-120			16.7	24
Caprolactam	0.0500	U	U	U	0.000	0.000	10	10.0-120	J6	J6	0.000	40
Carbazole	0.0500	U	0.0253	0.0220	50.6	44.0	10	38.0-127			14.0	21
4-Chloroaniline	0.0500	U	0.0137	0.0109	27.4	21.8	10	10.0-120			22.8	31
2-Chloronaphthalene	0.0500	U	0.0246	0.0214	49.2	42.8	10	29.0-120			13.9	28
4-Chlorophenyl-phenylether	0.0500	U	0.0235	0.0214	47.0	42.8	10	36.0-120			9.35	23
Chrysene	0.0500	U	0.0229	0.0199	45.8	39.8	10	38.0-120			14.0	23
Dibenz(a,h)anthracene	0.0500	U	0.0196	0.0169	39.2	33.8	10	36.0-121		J6	14.8	24
Dibenzofuran	0.0500	U	0.0239	0.0213	47.8	42.6	10	32.0-120			11.5	26
3,3-Dichlorobenzidine	0.100	U	0.0474	0.0403	47.4	40.3	10	10.0-134			16.2	30
2,4-Dinitrotoluene	0.0500	U	0.0239	0.0212	47.8	42.4	10	39.0-125			12.0	25
2,6-Dinitrotoluene	0.0500	U	0.0242	0.0211	48.4	42.2	10	36.0-120			13.7	27
Fluoranthene	0.0500	U	0.0230	0.0201	46.0	40.2	10	41.0-121		J6	13.5	22
Fluorene	0.0500	U	0.0242	0.0209	48.4	41.8	10	37.0-120			14.6	24
Hexachlorobenzene	0.0500	U	0.0235	0.0203	47.0	40.6	10	35.0-122			14.6	24
Hexachloro-1,3-butadiene	0.0500	U	0.0155	0.0136	31.0	27.2	10	12.0-120			13.1	34
Hexachlorocyclopentadiene	0.0500	U	U	U	0.000	0.000	10	10.0-120	J6	J6	0.000	33
Hexachloroethane	0.0500	U	0.0142	0.0137	28.4	27.4	10	10.0-120			3.58	40
Indeno(1,2,3-cd)pyrene	0.0500	U	0.0196	0.0167	39.2	33.4	10	38.0-125		J6	16.0	24
Isophorone	0.0500	U	0.0647	0.0627	129	125	10	21.0-120	J5	J5	3.14	27
1-Methylnaphthalene	0.0500	U	0.0192	0.0164	38.4	32.8	10	11.0-120			15.7	27
2-Methylnaphthalene	0.0500	U	0.0184	0.0161	36.8	32.2	10	17.0-120			13.3	28
Naphthalene	0.0500	U	0.0195	0.0169	39.0	33.8	10	10.0-120			14.3	31
2-Nitroaniline	0.0500	U	0.0285	0.0260	57.0	52.0	10	33.0-120			9.17	27
3-Nitroaniline	0.0500	U	0.0241	0.0301	48.2	60.2	10	20.0-120			22.1	27

L1340613-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340613-04 04/22/21 18:13 • (MS) R3645255-3 04/22/21 18:36 • (MSD) R3645255-4 04/22/21 18:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0500	U	0.0308	0.0270	61.6	54.0	10	10.0-160			13.1	26
Nitrobenzene	0.0500	U	0.0229	0.0192	45.8	38.4	10	12.0-120			17.6	30
n-Nitrosodiphenylamine	0.0500	U	0.0250	U	50.0	0.000	10	37.0-120		J3 J6	200	24
n-Nitrosodi-n-propylamine	0.0500	U	0.0717	0.0688	143	138	10	16.0-120	J5	J5	4.13	30
Phenanthrene	0.0500	U	0.0243	0.0214	48.6	42.8	10	33.0-120			12.7	22
Benzylbutyl phthalate	0.0500	U	0.0263	0.0231	52.6	46.2	10	34.0-126			13.0	24
Bis(2-ethylhexyl)phthalate	0.0500	U	0.0255	0.0226	51.0	45.2	10	33.0-126			12.1	25
Di-n-butyl phthalate	0.0500	U	0.0276	0.0245	55.2	49.0	10	35.0-128			11.9	23
Diethyl phthalate	0.0500	U	0.0259	0.0233	51.8	46.6	10	39.0-125			10.6	24
Dimethyl phthalate	0.0500	U	0.0254	0.0220	50.8	44.0	10	37.0-120			14.3	24
Di-n-octyl phthalate	0.0500	U	0.0326	0.0286	65.2	57.2	10	25.0-135			13.1	26
Pyrene	0.0500	U	0.0231	0.0207	46.2	41.4	10	39.0-120			11.0	22
1,2,4-Trichlorobenzene	0.0500	U	0.0183	0.0161	36.6	32.2	10	15.0-120			12.8	31
4-Chloro-3-methylphenol	0.0500	U	0.0221	0.0194	44.2	38.8	10	26.0-120			13.0	27
2-Chlorophenol	0.0500	U	0.0210	0.0189	42.0	37.8	10	18.0-120			10.5	34
2-Methylphenol	0.0500	U	U	17.3	0.000	34600	10	10.0-120	J6	E J3 J5	200	30
3&4-Methyl Phenol	0.0500	U	0.0327	0.0247	65.4	49.4	10	10.0-120			27.9	36
2,4-Dichlorophenol	0.0500	U	0.0249	0.0219	49.8	43.8	10	19.0-120			12.8	27
2,4-Dimethylphenol	0.0500	U	0.0241	0.0211	48.2	42.2	10	15.0-120			13.3	28
4,6-Dinitro-2-methylphenol	0.0500	U	0.0422	0.0404	84.4	80.8	10	10.0-144			4.36	39
2,4-Dinitrophenol	0.0500	U	U	U	0.000	0.000	10	10.0-120	J6	J6	0.000	40
2-Nitrophenol	0.0500	U	0.0205	0.0181	41.0	36.2	10	20.0-120			12.4	30
4-Nitrophenol	0.0500	U	0.0137	0.0116	27.4	23.2	10	10.0-120			16.6	40
Pentachlorophenol	0.0500	U	0.0295	0.0250	59.0	50.0	10	10.0-128			16.5	37
Phenol	0.0500	0.737	0.683	0.578	0.000	0.000	10	10.0-120	V	V	16.7	40
2,4,5-Trichlorophenol	0.0500	U	0.0253	0.0221	50.6	44.2	10	33.0-120			13.5	31
2,4,6-Trichlorophenol	0.0500	U	0.0253	0.0209	50.6	41.8	10	26.0-120			19.0	31
(S) Nitrobenzene-d5					*42.9*	*38.8*		*10.0-127*				
(S) 2-Fluorobiphenyl					*49.2*	*42.0*		*10.0-130*				
(S) p-Terphenyl-d14					*49.6*	*41.0*		*10.0-128*				
(S) Phenol-d5					*25.6*	*21.9*		*10.0-120*				
(S) 2-Fluorophenol					*14.0*	*6.40*		*10.0-120*		J2		
(S) 2,4,6-Tribromophenol					*55.0*	*46.2*		*10.0-155*				

Sample Narrative:

OS: Dilution due to matrix.

Method Blank (MB)

(MB) R3645546-3 04/23/21 02:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

Method Blank (MB)

(MB) R3645546-3 04/23/21 02:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*52.4*			*10.0-127*
(S) 2-Fluorobiphenyl	*68.3*			*10.0-130*
(S) p-Terphenyl-d14	*75.1*			*10.0-128*
(S) Phenol-d5	*22.6*			*10.0-120*
(S) 2-Fluorophenol	*33.3*			*10.0-120*
(S) 2,4,6-Tribromophenol	*63.5*			*10.0-155*

Laboratory Control Sample (LCS)

(LCS) R3645546-1 04/23/21 01:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0500	0.0301	60.2	41.0-120	
Acenaphthylene	0.0500	0.0321	64.2	43.0-120	
Acetophenone	0.0500	0.0343	68.6	29.0-120	
Anthracene	0.0500	0.0385	77.0	45.0-120	
Atrazine	0.0500	0.0462	92.4	39.0-141	
Benzaldehyde	0.0500	0.0611	122	10.0-160	
Benzo(a)anthracene	0.0500	0.0421	84.2	47.0-120	
Benzo(b)fluoranthene	0.0500	0.0401	80.2	46.0-120	
Benzo(k)fluoranthene	0.0500	0.0419	83.8	46.0-120	
Benzo(g,h,i)perylene	0.0500	0.0404	80.8	48.0-121	
Benzo(a)pyrene	0.0500	0.0423	84.6	47.0-120	
Biphenyl	0.0500	0.0315	63.0	38.0-120	
Bis(2-chlorethoxy)methane	0.0500	0.0269	53.8	33.0-120	
Bis(2-chloroethyl)ether	0.0500	0.0290	58.0	23.0-120	
2,2-Oxybis(1-Chloropropane)	0.0500	0.0278	55.6	28.0-120	
4-Bromophenyl-phenylether	0.0500	0.0383	76.6	45.0-120	
Caprolactam	0.0500	0.0151	30.2	10.0-120	
Carbazole	0.0500	0.0428	85.6	51.0-122	
4-Chloroaniline	0.0500	0.0269	53.8	25.0-120	
2-Chloronaphthalene	0.0500	0.0315	63.0	37.0-120	
4-Chlorophenyl-phenylether	0.0500	0.0354	70.8	44.0-120	
Chrysene	0.0500	0.0391	78.2	48.0-120	
Dibenz(a,h)anthracene	0.0500	0.0423	84.6	47.0-120	
Dibenzofuran	0.0500	0.0342	68.4	44.0-120	
3,3-Dichlorobenzidine	0.100	0.0866	86.6	44.0-120	
2,4-Dinitrotoluene	0.0500	0.0413	82.6	49.0-124	
2,6-Dinitrotoluene	0.0500	0.0363	72.6	46.0-120	
Fluoranthene	0.0500	0.0434	86.8	51.0-120	
Fluorene	0.0500	0.0349	69.8	47.0-120	
Hexachlorobenzene	0.0500	0.0385	77.0	44.0-120	
Hexachloro-1,3-butadiene	0.0500	0.0278	55.6	19.0-120	
Hexachlorocyclopentadiene	0.0500	0.0216	43.2	15.0-120	
Hexachloroethane	0.0500	0.0270	54.0	15.0-120	
Indeno(1,2,3-cd)pyrene	0.0500	0.0404	80.8	49.0-122	
Isophorone	0.0500	0.0279	55.8	36.0-120	
1-Methylnaphthalene	0.0500	0.0283	56.6	33.0-120	
2-Methylnaphthalene	0.0500	0.0275	55.0	33.0-120	
Naphthalene	0.0500	0.0282	56.4	27.0-120	
2-Nitroaniline	0.0500	0.0387	77.4	43.0-120	
3-Nitroaniline	0.0500	0.0384	76.8	38.0-120	

Laboratory Control Sample (LCS)

(LCS) R3645546-1 04/23/21 01:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Nitroaniline	0.0500	0.0427	85.4	18.0-160	
Nitrobenzene	0.0500	0.0267	53.4	27.0-120	
n-Nitrosodiphenylamine	0.0500	0.0364	72.8	47.0-120	
n-Nitrosodi-n-propylamine	0.0500	0.0290	58.0	31.0-120	
Phenanthrene	0.0500	0.0384	76.8	46.0-120	
Benzylbutyl phthalate	0.0500	0.0387	77.4	43.0-121	
Bis(2-ethylhexyl)phthalate	0.0500	0.0372	74.4	43.0-122	
Di-n-butyl phthalate	0.0500	0.0426	85.2	49.0-121	
Diethyl phthalate	0.0500	0.0401	80.2	48.0-122	
Dimethyl phthalate	0.0500	0.0386	77.2	48.0-120	
Di-n-octyl phthalate	0.0500	0.0370	74.0	42.0-125	
Pyrene	0.0500	0.0402	80.4	47.0-120	
1,2,4-Trichlorobenzene	0.0500	0.0286	57.2	24.0-120	
4-Chloro-3-methylphenol	0.0500	0.0283	56.6	40.0-120	
2-Chlorophenol	0.0500	0.0268	53.6	25.0-120	
2-Methylphenol	0.0500	0.0233	46.6	28.0-120	
3&4-Methyl Phenol	0.0500	0.0248	49.6	31.0-120	
2,4-Dichlorophenol	0.0500	0.0288	57.6	36.0-120	
2,4-Dimethylphenol	0.0500	0.0273	54.6	33.0-120	
4,6-Dinitro-2-methylphenol	0.0500	0.0402	80.4	38.0-138	
2,4-Dinitrophenol	0.0500	0.0370	74.0	10.0-120	
2-Nitrophenol	0.0500	0.0288	57.6	31.0-120	
4-Nitrophenol	0.0500	0.0162	32.4	10.0-120	
Pentachlorophenol	0.0500	0.0416	83.2	23.0-120	
Phenol	0.0500	0.0120	24.0	10.0-120	
2,4,5-Trichlorophenol	0.0500	0.0356	71.2	44.0-120	
2,4,6-Trichlorophenol	0.0500	0.0334	66.8	42.0-120	
(S) Nitrobenzene-d5			*43.6*	*10.0-127*	
(S) 2-Fluorobiphenyl			*67.3*	*10.0-130*	
(S) p-Terphenyl-d14			*74.4*	*10.0-128*	
(S) Phenol-d5			*23.3*	*10.0-120*	
(S) 2-Fluorophenol			*34.9*	*10.0-120*	
(S) 2,4,6-Tribromophenol			*81.5*	*10.0-155*	

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/23/21 06:02 • (MS) R3645546-4 04/23/21 06:24 • (MSD) R3645546-5 04/23/21 06:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0463	U	0.0262	0.0228	56.6	49.2	1	28.0-120			13.9	25
Acenaphthylene	0.0463	U	0.0278	0.0239	60.0	51.6	1	31.0-121			15.1	25
Acetophenone	0.0463	U	0.0307	0.0260	66.3	56.2	1	20.0-120			16.6	35
Anthracene	0.0463	U	0.0339	0.0302	73.2	65.2	1	36.0-120			11.5	23
Atrazine	0.0463	U	0.0441	0.0422	95.2	91.1	1	39.0-130			4.40	23
Benzaldehyde	0.0463	U	0.0531	0.0470	115	102	1	10.0-160			12.2	40
Benzo(a)anthracene	0.0463	U	0.0357	0.0332	77.1	71.7	1	39.0-120			7.26	23
Benzo(b)fluoranthene	0.0463	U	0.0325	0.0303	70.2	65.4	1	37.0-120			7.01	23
Benzo(k)fluoranthene	0.0463	U	0.0339	0.0312	73.2	67.4	1	37.0-120			8.29	26
Benzo(g,h,i)perylene	0.0463	U	0.0302	0.0277	65.2	59.8	1	37.0-123			8.64	25
Benzo(a)pyrene	0.0463	U	0.0342	0.0314	73.9	67.8	1	37.0-120			8.54	24
Biphenyl	0.0463	U	0.0263	0.0228	56.8	49.2	1	29.0-120			14.3	33
Bis(2-chlorethoxy)methane	0.0463	U	0.0238	0.0209	51.4	45.1	1	17.0-120			13.0	31
Bis(2-chloroethyl)ether	0.0463	U	0.0258	0.0222	55.7	47.9	1	14.0-120			15.0	33
2,2-Oxybis(1-Chloropropane)	0.0463	U	0.0244	0.0209	52.7	45.1	1	18.0-120			15.5	34
4-Bromophenyl-phenylether	0.0463	U	0.0334	0.0300	72.1	64.8	1	37.0-120			10.7	24
Caprolactam	0.0463	U	0.0156	0.0141	33.7	30.5	1	10.0-120			10.1	40
Carbazole	0.0463	U	0.0388	0.0356	83.8	76.9	1	38.0-127			8.60	21
4-Chloroaniline	0.0463	U	0.0230	0.0207	49.7	44.7	1	10.0-120			10.5	31
2-Chloronaphthalene	0.0463	U	0.0264	0.0232	57.0	50.1	1	29.0-120			12.9	28
4-Chlorophenyl-phenylether	0.0463	U	0.0312	0.0278	67.4	60.0	1	36.0-120			11.5	23
Chrysene	0.0463	U	0.0329	0.0305	71.1	65.9	1	38.0-120			7.57	23
Dibenz(a,h)anthracene	0.0463	U	0.0319	0.0295	68.9	63.7	1	36.0-121			7.82	24
Dibenzofuran	0.0463	U	0.0298	0.0265	64.4	57.2	1	32.0-120			11.7	26
3,3-Dichlorobenzidine	0.0926	U	0.0731	0.0742	78.9	80.1	1	10.0-134			1.49	30
2,4-Dinitrotoluene	0.0463	U	0.0388	0.0364	83.8	78.6	1	39.0-125			6.38	25
2,6-Dinitrotoluene	0.0463	U	0.0336	0.0308	72.6	66.5	1	36.0-120			8.70	27
Fluoranthene	0.0463	U	0.0387	0.0350	83.6	75.6	1	41.0-121			10.0	22
Fluorene	0.0463	U	0.0311	0.0277	67.2	59.8	1	37.0-120			11.6	24
Hexachlorobenzene	0.0463	U	0.0333	0.0295	71.9	63.7	1	35.0-122			12.1	24
Hexachloro-1,3-butadiene	0.0463	U	0.0231	0.0203	49.9	43.8	1	12.0-120			12.9	34
Hexachlorocyclopentadiene	0.0463	U	0.0171	0.0150	36.9	32.4	1	10.0-120			13.1	33
Hexachloroethane	0.0463	U	0.0244	0.0209	52.7	45.1	1	10.0-120			15.5	40
Indeno(1,2,3-cd)pyrene	0.0463	U	0.0304	0.0279	65.7	60.3	1	38.0-125			8.58	24
Isophorone	0.0463	U	0.0254	0.0219	54.9	47.3	1	21.0-120			14.8	27
1-Methylnaphthalene	0.0463	U	0.0250	0.0210	54.0	45.4	1	11.0-120			17.4	27
2-Methylnaphthalene	0.0463	U	0.0241	0.0201	52.1	43.4	1	17.0-120			18.1	28
Naphthalene	0.0463	U	0.0245	0.0212	52.9	45.8	1	10.0-120			14.4	31
2-Nitroaniline	0.0463	U	0.0356	0.0323	76.9	69.8	1	33.0-120			9.72	27
3-Nitroaniline	0.0463	U	0.0343	0.0325	74.1	70.2	1	20.0-120			5.39	27

L1340101-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340101-17 04/23/21 06:02 • (MS) R3645546-4 04/23/21 06:24 • (MSD) R3645546-5 04/23/21 06:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0463	U	0.0393	0.0373	84.9	80.6	1	10.0-160			5.22	26
Nitrobenzene	0.0463	U	0.0239	0.0205	51.6	44.3	1	12.0-120			15.3	30
n-Nitrosodiphenylamine	0.0463	U	0.0315	0.0287	68.0	62.0	1	37.0-120			9.30	24
n-Nitrosodi-n-propylamine	0.0463	U	0.0264	0.0224	57.0	48.4	1	16.0-120			16.4	30
Phenanthrene	0.0463	U	0.0335	0.0304	72.4	65.7	1	33.0-120			9.70	22
Benzylbutyl phthalate	0.0463	U	0.0351	0.0325	75.8	70.2	1	34.0-126			7.69	24
Bis(2-ethylhexyl)phthalate	0.0463	U	0.0297	0.0274	64.1	59.2	1	33.0-126			8.06	25
Di-n-butyl phthalate	0.0463	U	0.0397	0.0353	85.7	76.2	1	35.0-128			11.7	23
Diethyl phthalate	0.0463	U	0.0372	0.0340	80.3	73.4	1	39.0-125			8.99	24
Dimethyl phthalate	0.0463	U	0.0353	0.0318	76.2	68.7	1	37.0-120			10.4	24
Di-n-octyl phthalate	0.0463	U	0.0302	0.0275	65.2	59.4	1	25.0-135			9.36	26
Pyrene	0.0463	U	0.0348	0.0330	75.2	71.3	1	39.0-120			5.31	22
1,2,4-Trichlorobenzene	0.0463	U	0.0249	0.0213	53.8	46.0	1	15.0-120			15.6	31
4-Chloro-3-methylphenol	0.0463	U	0.0268	0.0229	57.9	49.5	1	26.0-120			15.7	27
2-Chlorophenol	0.0463	U	0.0232	0.0194	50.1	41.9	1	18.0-120			17.8	34
2-Methylphenol	0.0463	U	0.0206	0.0177	44.5	38.2	1	10.0-120			15.1	30
3&4-Methyl Phenol	0.0463	U	0.0218	0.0187	47.1	40.4	1	10.0-120			15.3	36
2,4-Dichlorophenol	0.0463	U	0.0255	0.0217	55.1	46.9	1	19.0-120			16.1	27
2,4-Dimethylphenol	0.0463	U	0.0243	0.0207	52.5	44.7	1	15.0-120			16.0	28
4,6-Dinitro-2-methylphenol	0.0463	U	0.0356	0.0318	76.9	68.7	1	10.0-144			11.3	39
2,4-Dinitrophenol	0.0463	U	0.0359	0.0318	77.5	68.7	1	10.0-120			12.1	40
2-Nitrophenol	0.0463	U	0.0259	0.0224	55.9	48.4	1	20.0-120			14.5	30
4-Nitrophenol	0.0463	U	0.0150	0.0131	32.4	28.3	1	10.0-120			13.5	40
Pentachlorophenol	0.0463	U	0.0373	0.0331	80.6	71.5	1	10.0-128			11.9	37
Phenol	0.0463	U	0.00992	0.00864	21.4	18.7	1	10.0-120			13.8	40
2,4,5-Trichlorophenol	0.0463	U	0.0309	0.0265	66.7	57.2	1	33.0-120			15.3	31
2,4,6-Trichlorophenol	0.0463	U	0.0290	0.0252	62.6	54.4	1	26.0-120			14.0	31
(S) Nitrobenzene-d5					*44.8*	*36.5*		*10.0-127*				
(S) 2-Fluorobiphenyl					*59.8*	*53.1*		*10.0-130*				
(S) p-Terphenyl-d14					*66.8*	*62.9*		*10.0-128*				
(S) Phenol-d5					*21.6*	*18.5*		*10.0-120*				
(S) 2-Fluorophenol					*31.4*	*26.9*		*10.0-120*				
(S) 2,4,6-Tribromophenol					*76.2*	*67.6*		*10.0-155*				

L1340467-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340467-02 04/23/21 07:27 • (MS) R3645546-6 04/23/21 07:48 • (MSD) R3645546-7 04/23/21 08:09

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0476	U	0.0148	0.0307	31.1	63.8	1	28.0-120		J3	69.9	25
Acenaphthylene	0.0476	U	0.0157	0.0325	33.0	67.6	1	31.0-121		J3	69.7	25
Acetophenone	0.0476	U	0.0194	0.0353	40.8	73.4	1	20.0-120		J3	58.1	35
Anthracene	0.0476	U	0.0212	0.0367	44.5	76.3	1	36.0-120		J3	53.5	23
Atrazine	0.0476	U	0.0301	0.0454	63.2	94.4	1	39.0-130		J3	40.5	23
Benzaldehyde	0.0476	U	0.0324	0.0618	68.1	128	1	10.0-160		J3	62.4	40
Benzo(a)anthracene	0.0476	U	0.0266	0.0405	55.9	84.2	1	39.0-120		J3	41.4	23
Benzo(b)fluoranthene	0.0476	U	0.0256	0.0380	53.8	79.0	1	37.0-120		J3	39.0	23
Benzo(k)fluoranthene	0.0476	U	0.0260	0.0397	54.6	82.5	1	37.0-120		J3	41.7	26
Benzo(g,h,i)perylene	0.0476	U	0.0236	0.0364	49.6	75.7	1	37.0-123		J3	42.7	25
Benzo(a)pyrene	0.0476	U	0.0263	0.0403	55.3	83.8	1	37.0-120		J3	42.0	24
Biphenyl	0.0476	U	0.0150	0.0320	31.5	66.5	1	29.0-120		J3	72.3	33
Bis(2-chlorethoxy)methane	0.0476	U	0.0165	0.0277	34.7	57.6	1	17.0-120		J3	50.7	31
Bis(2-chloroethyl)ether	0.0476	U	0.0163	0.0298	34.2	62.0	1	14.0-120		J3	58.6	33
2,2-Oxybis(1-Chloropropane)	0.0476	U	0.0140	0.0281	29.4	58.4	1	18.0-120		J3	67.0	34
4-Bromophenyl-phenylether	0.0476	U	0.0199	0.0380	41.8	79.0	1	37.0-120		J3	62.5	24
Caprolactam	0.0476	U	0.0104	0.0161	21.8	33.5	1	10.0-120		J3	43.0	40
Carbazole	0.0476	U	0.0260	0.0393	54.6	81.7	1	38.0-127		J3	40.7	21
4-Chloroaniline	0.0476	U	0.0115	0.0239	24.2	49.7	1	10.0-120		J3	70.1	31
2-Chloronaphthalene	0.0476	U	0.0150	0.0316	31.5	65.7	1	29.0-120		J3	71.2	28
4-Chlorophenyl-phenylether	0.0476	U	0.0180	0.0369	37.8	76.7	1	36.0-120		J3	68.9	23
Chrysene	0.0476	U	0.0247	0.0368	51.9	76.5	1	38.0-120		J3	39.3	23
Dibenz(a,h)anthracene	0.0476	U	0.0252	0.0388	52.9	80.7	1	36.0-121		J3	42.5	24
Dibenzofuran	0.0476	U	0.0171	0.0351	35.9	73.0	1	32.0-120		J3	69.0	26
3,3-Dichlorobenzidine	0.0952	U	0.0538	0.0827	56.5	86.0	1	10.0-134		J3	42.3	30
2,4-Dinitrotoluene	0.0476	U	0.0247	0.0402	51.9	83.6	1	39.0-125		J3	47.8	25
2,6-Dinitrotoluene	0.0476	U	0.0209	0.0363	43.9	75.5	1	36.0-120		J3	53.8	27
Fluoranthene	0.0476	U	0.0260	0.0410	54.6	85.2	1	41.0-121		J3	44.8	22
Fluorene	0.0476	U	0.0178	0.0358	37.4	74.4	1	37.0-120		J3	67.2	24
Hexachlorobenzene	0.0476	U	0.0205	0.0380	43.1	79.0	1	35.0-122		J3	59.8	24
Hexachloro-1,3-butadiene	0.0476	U	0.0140	0.0285	29.4	59.3	1	12.0-120		J3	68.2	34
Hexachlorocyclopentadiene	0.0476	U	0.0106	0.0243	22.3	50.5	1	10.0-120		J3	78.5	33
Hexachloroethane	0.0476	U	0.0128	0.0270	26.9	56.1	1	10.0-120		J3	71.4	40
Indeno(1,2,3-cd)pyrene	0.0476	U	0.0238	0.0366	50.0	76.1	1	38.0-125		J3	42.4	24
Isophorone	0.0476	U	0.0165	0.0285	34.7	59.3	1	21.0-120		J3	53.3	27
1-Methylnaphthalene	0.0476	U	0.0143	0.0290	30.0	60.3	1	11.0-120		J3	67.9	27
2-Methylnaphthalene	0.0476	U	0.0137	0.0278	28.8	57.8	1	17.0-120		J3	68.0	28
Naphthalene	0.0476	U	0.0142	0.0281	29.8	58.4	1	10.0-120		J3	65.7	31
2-Nitroaniline	0.0476	U	0.0229	0.0392	48.1	81.5	1	33.0-120		J3	52.5	27
3-Nitroaniline	0.0476	U	0.0225	0.0377	47.3	78.4	1	20.0-120		J3	50.5	27

L1340467-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340467-02 04/23/21 07:27 • (MS) R3645546-6 04/23/21 07:48 • (MSD) R3645546-7 04/23/21 08:09

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0476	U	0.0257	0.0411	54.0	85.4	1	10.0-160		J3	46.1	26
Nitrobenzene	0.0476	U	0.0147	0.0269	30.9	55.9	1	12.0-120		J3	58.7	30
n-Nitrosodiphenylamine	0.0476	U	0.0205	0.0355	43.1	73.8	1	37.0-120		J3	53.6	24
n-Nitrosodi-n-propylamine	0.0476	U	0.0162	0.0297	34.0	61.7	1	16.0-120		J3	58.8	30
Phenanthrene	0.0476	U	0.0209	0.0365	43.9	75.9	1	33.0-120		J3	54.4	22
Benzylbutyl phthalate	0.0476	U	0.0242	0.0378	50.8	78.6	1	34.0-126		J3	43.9	24
Bis(2-ethylhexyl)phthalate	0.0476	U	0.0231	0.0362	48.5	75.3	1	33.0-126		J3	44.2	25
Di-n-butyl phthalate	0.0476	U	0.0266	0.0407	55.9	84.6	1	35.0-128		J3	41.9	23
Diethyl phthalate	0.0476	U	0.0241	0.0384	50.6	79.8	1	39.0-125		J3	45.8	24
Dimethyl phthalate	0.0476	U	0.0220	0.0375	46.2	78.0	1	37.0-120		J3	52.1	24
Di-n-octyl phthalate	0.0476	U	0.0225	0.0365	47.3	75.9	1	25.0-135		J3	47.5	26
Pyrene	0.0476	U	0.0251	0.0386	52.7	80.2	1	39.0-120		J3	42.4	22
1,2,4-Trichlorobenzene	0.0476	U	0.0145	0.0289	30.5	60.1	1	15.0-120		J3	66.4	31
4-Chloro-3-methylphenol	0.0476	U	0.00841	0.0300	17.7	62.4	1	26.0-120	J6	J3	112	27
2-Chlorophenol	0.0476	U	0.00134	0.0279	2.82	58.0	1	18.0-120	J6	J3	182	34
2-Methylphenol	0.0476	U	0.00924	0.0255	19.4	53.0	1	10.0-120		J3	93.6	30
3&4-Methyl Phenol	0.0476	U	0.00754	0.0267	15.8	55.5	1	10.0-120		J3	112	36
2,4-Dichlorophenol	0.0476	U	0.00159	0.0295	3.34	61.3	1	19.0-120	J6	J3	180	27
2,4-Dimethylphenol	0.0476	U	0.0157	0.0281	33.0	58.4	1	15.0-120		J3	56.6	28
4,6-Dinitro-2-methylphenol	0.0476	U	0.00183	0.0384	3.84	79.8	1	10.0-144	J6	J3	182	39
2,4-Dinitrophenol	0.0476	U	U	0.0376	0.000	78.2	1	10.0-120	J6	J3	200	40
2-Nitrophenol	0.0476	U	0.000774	0.0295	1.63	61.3	1	20.0-120	J6	J3	190	30
4-Nitrophenol	0.0476	U	U	0.0168	0.000	34.9	1	10.0-120	J6	J3	200	40
Pentachlorophenol	0.0476	U	0.000503	0.0392	1.06	81.5	1	10.0-128	J6	J3	195	37
Phenol	0.0476	U	U	0.0136	0.000	28.3	1	10.0-120	J6	J3	200	40
2,4,5-Trichlorophenol	0.0476	U	0.000954	0.0345	2.00	71.7	1	33.0-120	J6	J3	189	31
2,4,6-Trichlorophenol	0.0476	U	0.000605	0.0324	1.27	67.4	1	26.0-120	J6	J3	193	31
(S) Nitrobenzene-d5					*24.3*	*47.9*		*10.0-127*				
(S) 2-Fluorobiphenyl					*32.5*	*70.9*		*10.0-130*				
(S) p-Terphenyl-d14					*49.1*	*74.6*		*10.0-128*				
(S) Phenol-d5					*1.79*	*25.6*		*10.0-120*	J2			
(S) 2-Fluorophenol					*0.579*	*36.9*		*10.0-120*	J2			
(S) 2,4,6-Tribromophenol					*2.12*	*81.8*		*10.0-155*	J2			

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.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(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.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

GLOSSARY OF TERMS

Qualifier	Description
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	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 [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

* 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 Analytical.

TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trcsolutions.com

Report to: **Julie Speer**

Email To: **jspeer@trccompanies.com;** aoliuri@trccompanies.com

Project Description: **Lovington Lea Refinery**

City/State Collected: **Lovington, NM**

Phone: **512-684-3170**
Fax:

Client Project # **330769.0000.0000**

Lab Project # **TRCATX-LOVINGTON NAV**

Collected by (print): **Scott Ude/HMI Team**

Site/Facility ID #

P.O. #

Collected by (signature): Scott Ude

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 3

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1340101

1112

Acctnum: TRCATX

Template: T133248

Prelogin: P835023

TSR: 526

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs (8260) - Select List	LL SVOCs (8270) - TCL + 1-MNP	Total Metals (7470) - Hg	Dissolved Metals (6020)-Select List -LF	Anions (9056) - Cl, F, SO4	Nitrate/Nitrite (353.2)	TDS (2540 C-2011)	Alkalinity (2320 B-2011)	TPH (8015) - GRO/DRO		Remarks	Sample # (lab only)
MW-1	Grab	GW		4/15/21	1225	7	X		X	X	X	X						-01
MW-2	Grab	GW			1100	5	X	X										-02
MW-3	Grab	GW			1125	2					X	X						-03
MW-6	Grab	GW			1325	7	X		X	X	X	X						-04
MW-8	Grab	GW			1035 (6)	5	X				X	X	X					-05
MW-11R	Grab	GW			1105	8	X	X	X	X			X	X				-06
MW-12R2	Grab	GW			1055	9	X	X	X	X	X	X	X	X				-07
MW-13R	Grab	GW			1025	7	X		X	X	X	X	X					-08
MW-15	Grab	GW			1255	4			X	X	X	X	X	X				-09
MW-17R	Grab	GW			1105	9	X	X	X	X	X	X	X	X				-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Use 8270TX for SVOCs.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No (HCl / MeoH) TBR
Scott Ude	4/15/21	1410		NA
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 2.7-.3=2.4 KO AG 2317 B HCl
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/16/21 Time: 0930

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (ok)

TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Billing Information:
Accounts Payable
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apinvoiceapproval@trcsolutions.com

Pres Chk

Report to: **Julie Speer**

Email To: **jspeer@trccompanies.com;** aoliuri@trccompanies.com

Project Description: **Lovington Lea Refinery**

City/State Collected: **Lovington, NM**

Phone: **512-684-3170**
Fax:

Client Project # **330769.0000.0000**

Lab Project # **TRCATX-LOVINGTON NAV**

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Site/Facility ID #

P.O. #

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Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 2 of 3

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Mount Juliet, TN 37122
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Phone: 800-767-5859
Fax: 615-758-5859

L # 1340101

Table #

Acctnum: **TRCATX**
Template: **T133248**
Prelogin: **P835023**
TSR: **526**
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs (8260) - Select List	LL SVOCs (8270) - TCL + 1-MNP	Total Metals (7470) - Hg	Dissolved Metals (6020)-Select List -LF	Anions (9056) - Cl, F, SO4	Nitrate/Nitrite (353.2)	TDS (2540 C-2011)	Alkalinity (2320 B-2011)	TPH (8015) - GRO/DRO	Remarks	Sample # (lab only)
~~MW-19~~ ~~X~~ SU	~~Grab~~	~~GW~~		4/15/21		2					X	X	X	X		NOT sampled; Dry	
MW-25 ~~X~~ SU	Grab	GW			1155	9	X	X	X	X	X	X	X	X			-11
MW-27	Grab	GW			1310	3	X										-12
MW-28	Grab	GW			1240	2					X	X		X			-13
MW-29	Grab	GW			1220	5	X		X	X							-14
MW-30	Grab	GW			1200	9	X	X	X	X	X	X	X	X			-15
~~MW-31~~	~~Grab~~	~~GW~~				~~13~~	X	X	X	X	X	X	X	X	X	No sample (LNAPL)	
MW-32	Grab	GW		4/15/21	1030	13	X	X	X	X	X	X	X	X	X		-16
MW-33	Grab	GW			1140	33	X	X	X	X	X	X	X	X	X	MS/MSD provided	-17
WW-North	Grab	GW			1050	13	X	X	X	X	X	X	X	X	X		-18

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Use 8270TX for SVOCs.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
Scott Ude	4/15/21	1410		x2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 2.7-.3=2.4 40 AG3 2 3 1+2 TB HCl	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/16/21 Time: 0930	Hold: Condition: NCF / OK

TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

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Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 3 of 3

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 134101

Table #

Acctnum: **TRCATX**
Template: **T133248**
Prelogin: **P835023**
TSR: **526**
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs (8260) - Select List	LL SVOCs (8270) - TCL + 1-MNP	Total Metals (7470) - Hg	Dissolved Metals (6020)-Select List -LF	Anions (9056) - Cl, F, SO4	Nitrate/Nitrite (353.2)	TDS (2540 C-2011)	Alkalinity (2320 B-2011)	TPH (8015) - GRO/DRO		Remarks	Sample # (lab only)
WW-South	Grab	GW		4/15/21	1135	13	X	X	X	X	X	X	X	X	X			-19
WW-East	Grab	GW			1215	13	X	X	X	X	X	X	X	X	X			-20
DUP-01	Grab	GW			1000	13	X	X	X	X	X	X	X	X	X			-21
DUP-02	Grab	GW			1000	13	X	X	X	X	X	X	X	X	X			-22
DUP-03	Grab	GW			1200	13	X	X	X	X	X	X	X	X	X			-23
EB-01	Grab	GW			1215	13	X	X	X	X	X	X	X	X	X			-24
EB-02	Grab	GW			1215	9	X	X	X	X	X	X	X	X				-25
Trip Blank-01	Grab	GW			—	1	X											-26
Trip Blank-02	Grab	GW			—	1	X											-27
	Grab	GW																

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Use 8270TX for SVOCs.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: (Yes) No HCL / MeoH TBR	If preservation required by Login: Date/Time
Scott Ude	4/15/21	1410		✗2	HCl
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 2.7+.3=2.4 KP A3231+2TB	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/16/21 Time: 0930	Hold: Condition: NCF / OK

L1340101 Cooler Tracking/Temps	
FedEx Tracking #	Temp Received At in C:
9517 5769 8834	0.3+0.3=0.6(A3 PM)
9517 5769 8845	0.1+0.3=0.4(A3 PM)
8417 5769 8856	0.4+0.1=0.5(A2 BB)
9517 5769 8867	2.7+0.3=2.4(A7 KI)
9517 5769 8878	0.1+0.3=0.4(A3 PM)

ANALYTICAL REPORT

November 18, 2021

Revised Report

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

TRC Solutions - Austin, TX

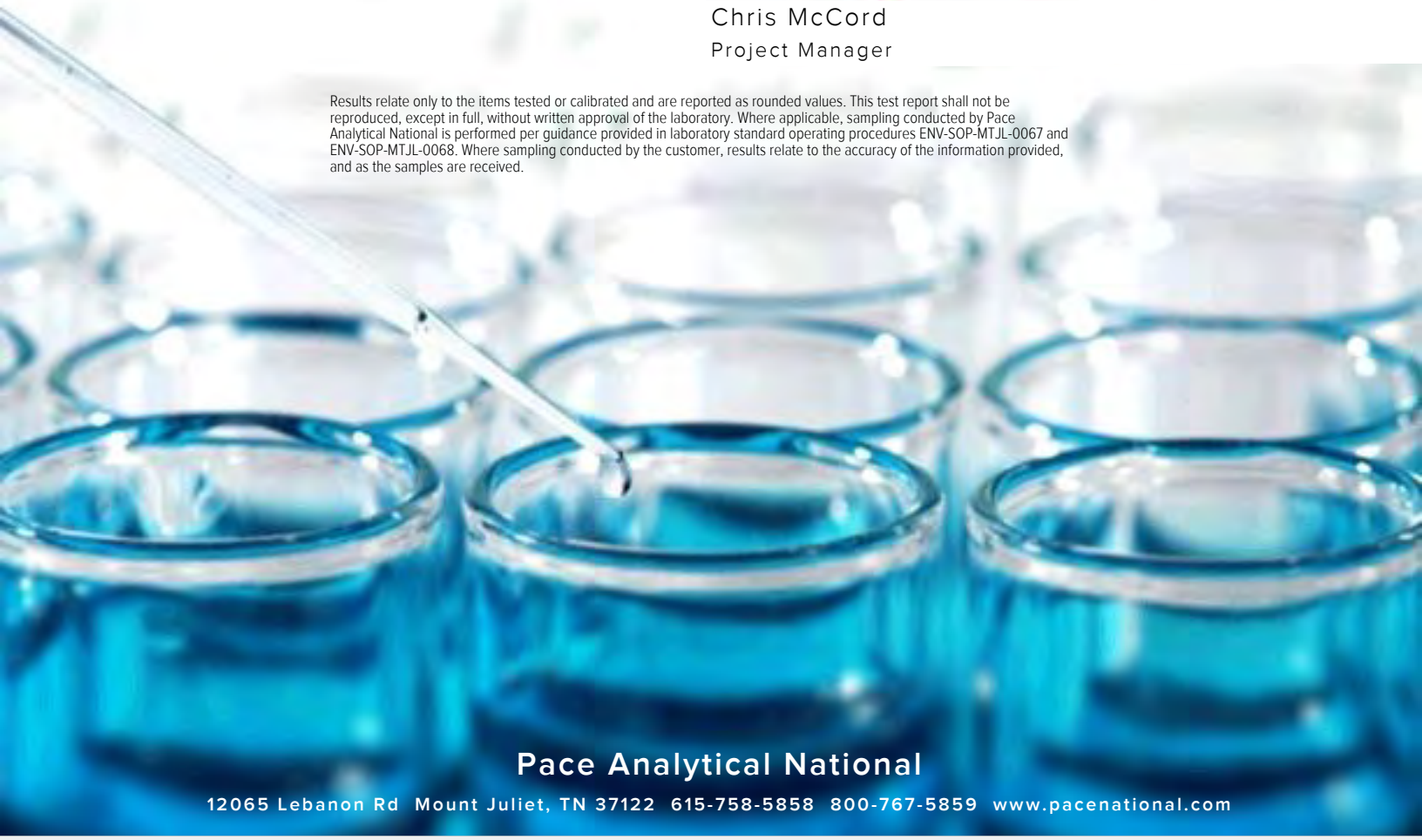
Sample Delivery Group:	L1379618
Samples Received:	07/16/2021
Project Number:	425919.0000.0000
Description:	Lovington Lea Refinery

Report To: Julie Speer
505 E. Huntland Drive, Suite 250
Austin, TX 78752

Entire Report Reviewed By:

Chris McCord
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.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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Released to Imaging: 7/20/2022 10:39:48 AM

WW-NORTH L1379618-01 GW

Collected by: Bryan Bayles | Collected date/time: 07/15/21 10:55 | Received date/time: 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1708123	1	07/20/21 01:17	07/21/21 15:32	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1708105	1	07/21/21 07:38	07/21/21 07:38	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1712523	1	07/29/21 01:17	07/29/21 01:17	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1708111	1	07/23/21 19:01	07/23/21 19:01	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1708111	5	07/23/21 19:17	07/23/21 19:17	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1707532	1	07/20/21 10:42	07/20/21 15:17	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1709904	1	07/25/21 12:43	07/25/21 19:31	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1709961	1	07/22/21 19:19	07/22/21 23:40	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1707499	1	07/19/21 08:18	07/19/21 08:18	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1707816	1	07/19/21 20:08	07/19/21 20:08	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1711251	1	07/26/21 16:42	07/29/21 19:04	WCR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1709606	1	07/21/21 23:48	07/22/21 17:00	TMM	Mt. Juliet, TN

WW-SOUTH L1379618-02 GW

Collected by: Bryan Bayles | Collected date/time: 07/15/21 09:30 | Received date/time: 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1708123	1	07/20/21 01:17	07/21/21 15:32	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1708105	1	07/21/21 07:44	07/21/21 07:44	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1712523	1	07/29/21 01:20	07/29/21 01:20	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1708111	1	07/23/21 19:34	07/23/21 19:34	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1708111	5	07/23/21 19:50	07/23/21 19:50	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1707532	1	07/20/21 10:42	07/20/21 15:19	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1709904	1	07/25/21 12:43	07/25/21 19:34	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1709961	1	07/22/21 19:19	07/22/21 23:44	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1707499	1	07/19/21 08:40	07/19/21 08:40	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1707816	1	07/19/21 20:29	07/19/21 20:29	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1711251	1	07/26/21 16:42	07/29/21 19:24	WCR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1709606	1	07/21/21 23:48	07/22/21 17:23	TMM	Mt. Juliet, TN

WW-EAST L1379618-03 GW

Collected by: Bryan Bayles | Collected date/time: 07/15/21 11:40 | Received date/time: 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1708123	1	07/20/21 01:17	07/21/21 15:32	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1708105	1	07/21/21 07:55	07/21/21 07:55	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1712523	1	07/29/21 01:21	07/29/21 01:21	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1708111	1	07/23/21 20:07	07/23/21 20:07	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1708111	5	07/23/21 20:23	07/23/21 20:23	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1707532	1	07/20/21 10:42	07/20/21 15:21	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1709904	1	07/25/21 12:43	07/25/21 19:36	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1709961	1	07/22/21 19:19	07/22/21 23:47	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1708011	1	07/20/21 06:37	07/20/21 06:37	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1707858	1	07/19/21 16:55	07/19/21 16:55	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1711251	1	07/26/21 16:42	07/29/21 19:44	WCR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1709606	1	07/21/21 23:48	07/22/21 17:46	TMM	Mt. Juliet, TN

DUP-01 L1379618-04 GW

Collected by: Bryan Bayles
Collected date/time: 07/15/21 10:00
Received date/time: 07/16/21 08:50

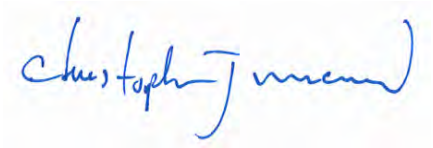
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1708123	1	07/20/21 01:17	07/21/21 15:32	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1708105	1	07/21/21 08:00	07/21/21 08:00	ARD	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1712523	5	07/29/21 01:23	07/29/21 01:23	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1708111	1	07/23/21 21:12	07/23/21 21:12	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1708111	5	07/23/21 21:29	07/23/21 21:29	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1707532	1	07/20/21 10:42	07/20/21 15:23	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1709904	1	07/25/21 12:43	07/25/21 19:39	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1709961	1	07/22/21 19:19	07/22/21 23:58	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1707499	1	07/19/21 09:23	07/19/21 09:23	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1707858	1	07/19/21 17:14	07/19/21 17:14	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1711251	1	07/26/21 16:42	07/29/21 20:04	WCR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1709606	1	07/21/21 23:48	07/22/21 18:09	TMM	Mt. Juliet, TN

TRIP BLANK L1379618-05 GW

Collected by: Bryan Bayles
Collected date/time: 07/15/21 00:00
Received date/time: 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1707858	1	07/19/21 14:21	07/19/21 14:21	DWR	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. 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.



Chris McCord
Project Manager

Report Revision History

Level II Report - Version 1: 07/30/21 14:14

Project Narrative

Revised to report OS information on a MS/MSD.

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	541		10.0	1	07/21/2021 15:32	WG1708123

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	182		8.45	20.0	1	07/21/2021 07:38	WG1708105

Sample Narrative:

L1379618-01 WG1708105: Endpoint pH 4.5

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.15		0.0500	0.100	1	07/29/2021 01:17	WG1712523

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	114		1.90	5.00	5	07/23/2021 19:17	WG1708111
Fluoride	0.802		0.0640	0.150	1	07/23/2021 19:01	WG1708111
Sulfate	77.8		0.594	5.00	1	07/23/2021 19:01	WG1708111

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	07/20/2021 15:17	WG1707532

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.137	J	0.0200	0.200	1	07/25/2021 19:31	WG1709904

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	07/22/2021 23:40	WG1709961
Arsenic,Dissolved	0.00518		0.000180	0.00200	1	07/22/2021 23:40	WG1709961
Barium,Dissolved	0.102		0.000381	0.00200	1	07/22/2021 23:40	WG1709961
Cadmium,Dissolved	U		0.000150	0.00100	1	07/22/2021 23:40	WG1709961
Chromium,Dissolved	0.00219		0.00124	0.00200	1	07/22/2021 23:40	WG1709961
Copper,Dissolved	0.00672	B	0.00151	0.00500	1	07/22/2021 23:40	WG1709961
Cobalt,Dissolved	0.0000724	J	0.0000596	0.00200	1	07/22/2021 23:40	WG1709961
Iron,Dissolved	U		0.0281	0.100	1	07/22/2021 23:40	WG1709961
Lead,Dissolved	U		0.000849	0.00200	1	07/22/2021 23:40	WG1709961
Manganese,Dissolved	0.00522	B	0.000704	0.00500	1	07/22/2021 23:40	WG1709961
Molybdenum,Dissolved	0.00282	J	0.000348	0.00500	1	07/22/2021 23:40	WG1709961
Nickel,Dissolved	0.00227	B	0.000816	0.00200	1	07/22/2021 23:40	WG1709961
Selenium,Dissolved	0.00332		0.000300	0.00200	1	07/22/2021 23:40	WG1709961
Silver,Dissolved	U		0.0000700	0.00200	1	07/22/2021 23:40	WG1709961
Uranium,Dissolved	0.00151	J	0.0000700	0.0200	1	07/22/2021 23:40	WG1709961
Zinc,Dissolved	0.0140	B J	0.00302	0.0250	1	07/22/2021 23:40	WG1709961

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/19/2021 08:18	WG1707499
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*07/19/2021 08:18*	WG1707499

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	07/19/2021 20:08	WG1707816
Benzene	U		0.0000941	0.00100	1	07/19/2021 20:08	WG1707816
Bromodichloromethane	U		0.000136	0.00100	1	07/19/2021 20:08	WG1707816
Bromoform	U		0.000129	0.00100	1	07/19/2021 20:08	WG1707816
Bromomethane	U		0.000605	0.00500	1	07/19/2021 20:08	WG1707816
n-Butylbenzene	U		0.000157	0.00100	1	07/19/2021 20:08	WG1707816
sec-Butylbenzene	U		0.000125	0.00100	1	07/19/2021 20:08	WG1707816
tert-Butylbenzene	U		0.000127	0.00100	1	07/19/2021 20:08	WG1707816
Carbon disulfide	U		0.0000962	0.00100	1	07/19/2021 20:08	WG1707816
Carbon tetrachloride	U		0.000128	0.00100	1	07/19/2021 20:08	WG1707816
Chlorobenzene	U		0.000116	0.00100	1	07/19/2021 20:08	WG1707816
Chlorodibromomethane	U		0.000140	0.00100	1	07/19/2021 20:08	WG1707816
Chloroethane	U		0.000192	0.00500	1	07/19/2021 20:08	WG1707816
Chloroform	U		0.000111	0.00500	1	07/19/2021 20:08	WG1707816
Chloromethane	U		0.000960	0.00250	1	07/19/2021 20:08	WG1707816
1,2-Dibromoethane	U		0.000126	0.00100	1	07/19/2021 20:08	WG1707816
1,1-Dichloroethane	U		0.000100	0.00100	1	07/19/2021 20:08	WG1707816
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/19/2021 20:08	WG1707816
1,1-Dichloroethene	U		0.000188	0.00100	1	07/19/2021 20:08	WG1707816
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/19/2021 20:08	WG1707816
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/19/2021 20:08	WG1707816
1,2-Dichloropropane	U		0.000149	0.00100	1	07/19/2021 20:08	WG1707816
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	07/19/2021 20:08	WG1707816
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	07/19/2021 20:08	WG1707816
Ethylbenzene	U		0.000137	0.00100	1	07/19/2021 20:08	WG1707816
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/19/2021 20:08	WG1707816
2-Hexanone	U		0.000787	0.0100	1	07/19/2021 20:08	WG1707816
Isopropylbenzene	U		0.000105	0.00100	1	07/19/2021 20:08	WG1707816
p-Isopropyltoluene	U		0.000120	0.00100	1	07/19/2021 20:08	WG1707816
2-Butanone (MEK)	U		0.00119	0.0100	1	07/19/2021 20:08	WG1707816
Methylene Chloride	U		0.000430	0.00500	1	07/19/2021 20:08	WG1707816
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/19/2021 20:08	WG1707816
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/19/2021 20:08	WG1707816
Naphthalene	U		0.00100	0.00500	1	07/19/2021 20:08	WG1707816
n-Propylbenzene	U		0.0000993	0.00100	1	07/19/2021 20:08	WG1707816
Styrene	U		0.000118	0.00100	1	07/19/2021 20:08	WG1707816
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/19/2021 20:08	WG1707816
Tetrachloroethene	U		0.000300	0.00100	1	07/19/2021 20:08	WG1707816
Toluene	U		0.000278	0.00100	1	07/19/2021 20:08	WG1707816
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/19/2021 20:08	WG1707816
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/19/2021 20:08	WG1707816
Trichloroethene	U		0.000190	0.00100	1	07/19/2021 20:08	WG1707816
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/19/2021 20:08	WG1707816
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/19/2021 20:08	WG1707816
Vinyl chloride	U		0.000234	0.00100	1	07/19/2021 20:08	WG1707816
Xylenes, Total	U		0.000174	0.00300	1	07/19/2021 20:08	WG1707816
(S) Toluene-d8	*97.6*			*80.0-120*		*07/19/2021 20:08*	WG1707816
(S) 4-Bromofluorobenzene	*81.5*			*77.0-126*		*07/19/2021 20:08*	WG1707816
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/19/2021 20:08*	WG1707816

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0368	J	0.0247	0.100	1	07/29/2021 19:04	WG1711251
(S) o-Terphenyl	*92.1*			*31.0-160*		*07/29/2021 19:04*	WG1711251

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	07/22/2021 17:00	WG1709606
Acenaphthylene	U		0.0000921	0.00100	1	07/22/2021 17:00	WG1709606
Acetophenone	U		0.000208	0.0100	1	07/22/2021 17:00	WG1709606
Anthracene	U		0.0000804	0.00100	1	07/22/2021 17:00	WG1709606
Atrazine	U		0.000255	0.0100	1	07/22/2021 17:00	WG1709606
Benzo(a)anthracene	U		0.000199	0.00100	1	07/22/2021 17:00	WG1709606
Benzaldehyde	U	J4	0.00169	0.0100	1	07/22/2021 17:00	WG1709606
Benzo(b)fluoranthene	U		0.000130	0.00100	1	07/22/2021 17:00	WG1709606
Benzo(k)fluoranthene	U		0.000120	0.00100	1	07/22/2021 17:00	WG1709606
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	07/22/2021 17:00	WG1709606
Benzo(a)pyrene	U		0.0000381	0.000200	1	07/22/2021 17:00	WG1709606
Biphenyl	U		0.000790	0.0100	1	07/22/2021 17:00	WG1709606
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	07/22/2021 17:00	WG1709606
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	07/22/2021 17:00	WG1709606
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	07/22/2021 17:00	WG1709606
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	07/22/2021 17:00	WG1709606
2-Chloronaphthalene	U		0.0000648	0.00100	1	07/22/2021 17:00	WG1709606
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	07/22/2021 17:00	WG1709606
Caprolactam	U		0.000309	0.0100	1	07/22/2021 17:00	WG1709606
Carbazole	U		0.000111	0.0100	1	07/22/2021 17:00	WG1709606
Chrysene	U		0.000130	0.00100	1	07/22/2021 17:00	WG1709606
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	07/22/2021 17:00	WG1709606
Dibenzofuran	U		0.0000970	0.0100	1	07/22/2021 17:00	WG1709606
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	07/22/2021 17:00	WG1709606
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	07/22/2021 17:00	WG1709606
2,6-Dinitrotoluene	U		0.000250	0.0100	1	07/22/2021 17:00	WG1709606
Fluoranthene	0.000108	J	0.000102	0.00100	1	07/22/2021 17:00	WG1709606
Fluorene	U		0.0000844	0.00100	1	07/22/2021 17:00	WG1709606
Hexachlorobenzene	U		0.0000755	0.00100	1	07/22/2021 17:00	WG1709606
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	07/22/2021 17:00	WG1709606
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	07/22/2021 17:00	WG1709606
Hexachloroethane	U		0.000127	0.0100	1	07/22/2021 17:00	WG1709606
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	07/22/2021 17:00	WG1709606
Isophorone	U		0.000143	0.0100	1	07/22/2021 17:00	WG1709606
1-Methylnaphthalene	U		0.0000790	0.00100	1	07/22/2021 17:00	WG1709606
2-Methylnaphthalene	U		0.000117	0.00100	1	07/22/2021 17:00	WG1709606
Naphthalene	0.000169	J	0.000159	0.00100	1	07/22/2021 17:00	WG1709606
Nitrobenzene	U		0.000297	0.0100	1	07/22/2021 17:00	WG1709606
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	07/22/2021 17:00	WG1709606
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	07/22/2021 17:00	WG1709606
Phenanthrene	0.000302	J	0.000112	0.00100	1	07/22/2021 17:00	WG1709606
Benzylbutyl phthalate	U		0.000765	0.00300	1	07/22/2021 17:00	WG1709606
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	07/22/2021 17:00	WG1709606
Di-n-butyl phthalate	U		0.000453	0.00300	1	07/22/2021 17:00	WG1709606
Diethyl phthalate	U		0.000287	0.00300	1	07/22/2021 17:00	WG1709606
Dimethyl phthalate	U		0.000260	0.00300	1	07/22/2021 17:00	WG1709606
Di-n-octyl phthalate	U		0.000932	0.00300	1	07/22/2021 17:00	WG1709606
Pyrene	U		0.000107	0.00100	1	07/22/2021 17:00	WG1709606
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	07/22/2021 17:00	WG1709606
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	07/22/2021 17:00	WG1709606

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	1	07/22/2021 17:00	WG1709606
2,4-Dichlorophenol	U		0.000102	0.0100	1	07/22/2021 17:00	WG1709606
2,4-Dimethylphenol	U		0.0000636	0.0100	1	07/22/2021 17:00	WG1709606
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	07/22/2021 17:00	WG1709606
2,4-Dinitrophenol	U		0.00593	0.0100	1	07/22/2021 17:00	WG1709606
2-Nitrophenol	U		0.000117	0.0100	1	07/22/2021 17:00	WG1709606
2-Nitroaniline	U		0.000102	0.0100	1	07/22/2021 17:00	WG1709606
2-Methylphenol	U		0.0000929	0.0100	1	07/22/2021 17:00	WG1709606
3&4-Methyl Phenol	U		0.000168	0.0100	1	07/22/2021 17:00	WG1709606
3-Nitroaniline	U		0.0000869	0.0100	1	07/22/2021 17:00	WG1709606
4-Chloroaniline	U		0.000234	0.0100	1	07/22/2021 17:00	WG1709606
4-Nitroaniline	U		0.0000910	0.0100	1	07/22/2021 17:00	WG1709606
4-Nitrophenol	U		0.000143	0.0100	1	07/22/2021 17:00	WG1709606
Pentachlorophenol	U		0.000313	0.0100	1	07/22/2021 17:00	WG1709606
Phenol	U		0.00433	0.0100	1	07/22/2021 17:00	WG1709606
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	07/22/2021 17:00	WG1709606
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	07/22/2021 17:00	WG1709606
(S) 2-Fluorophenol	*37.0*			*10.0-120*		*07/22/2021 17:00*	WG1709606
(S) Phenol-d5	*25.1*			*10.0-120*		*07/22/2021 17:00*	WG1709606
(S) Nitrobenzene-d5	*82.9*			*10.0-127*		*07/22/2021 17:00*	WG1709606
(S) 2-Fluorobiphenyl	*74.9*			*10.0-130*		*07/22/2021 17:00*	WG1709606
(S) 2,4,6-Tribromophenol	*67.0*			*10.0-155*		*07/22/2021 17:00*	WG1709606
(S) p-Terphenyl-d14	*66.5*			*10.0-128*		*07/22/2021 17:00*	WG1709606

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1010		20.0	1	07/21/2021 15:32	WG1708123

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	197		8.45	20.0	1	07/21/2021 07:44	WG1708105

Sample Narrative:
L1379618-02 WG1708105: Endpoint pH 4.5

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.11		0.0500	0.100	1	07/29/2021 01:20	WG1712523

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	267		1.90	5.00	5	07/23/2021 19:50	WG1708111
Fluoride	0.700		0.0640	0.150	1	07/23/2021 19:34	WG1708111
Sulfate	99.1		0.594	5.00	1	07/23/2021 19:34	WG1708111

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	0.000102	J	0.000100	0.000200	1	07/20/2021 15:19	WG1707532

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.173	J	0.0200	0.200	1	07/25/2021 19:34	WG1709904

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	07/22/2021 23:44	WG1709961
Arsenic,Dissolved	0.00407		0.000180	0.00200	1	07/22/2021 23:44	WG1709961
Barium,Dissolved	0.106		0.000381	0.00200	1	07/22/2021 23:44	WG1709961
Cadmium,Dissolved	U		0.000150	0.00100	1	07/22/2021 23:44	WG1709961
Chromium,Dissolved	0.00151	J	0.00124	0.00200	1	07/22/2021 23:44	WG1709961
Copper,Dissolved	0.00206	B J	0.00151	0.00500	1	07/22/2021 23:44	WG1709961
Cobalt,Dissolved	U		0.0000596	0.00200	1	07/22/2021 23:44	WG1709961
Iron,Dissolved	U		0.0281	0.100	1	07/22/2021 23:44	WG1709961
Lead,Dissolved	U		0.000849	0.00200	1	07/22/2021 23:44	WG1709961
Manganese,Dissolved	0.00275	B J	0.000704	0.00500	1	07/22/2021 23:44	WG1709961
Molybdenum,Dissolved	0.00227	J	0.000348	0.00500	1	07/22/2021 23:44	WG1709961
Nickel,Dissolved	0.00113	B J	0.000816	0.00200	1	07/22/2021 23:44	WG1709961
Selenium,Dissolved	0.00313		0.000300	0.00200	1	07/22/2021 23:44	WG1709961
Silver,Dissolved	U		0.0000700	0.00200	1	07/22/2021 23:44	WG1709961
Uranium,Dissolved	0.00212	J	0.0000700	0.0200	1	07/22/2021 23:44	WG1709961
Zinc,Dissolved	0.0163	B J	0.00302	0.0250	1	07/22/2021 23:44	WG1709961

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/19/2021 08:40	WG1707499
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*07/19/2021 08:40*	WG1707499

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	07/19/2021 20:29	WG1707816
Benzene	0.000491	J	0.0000941	0.00100	1	07/19/2021 20:29	WG1707816
Bromodichloromethane	U		0.000136	0.00100	1	07/19/2021 20:29	WG1707816
Bromoform	U		0.000129	0.00100	1	07/19/2021 20:29	WG1707816
Bromomethane	U		0.000605	0.00500	1	07/19/2021 20:29	WG1707816
n-Butylbenzene	U		0.000157	0.00100	1	07/19/2021 20:29	WG1707816
sec-Butylbenzene	U		0.000125	0.00100	1	07/19/2021 20:29	WG1707816
tert-Butylbenzene	U		0.000127	0.00100	1	07/19/2021 20:29	WG1707816
Carbon disulfide	U		0.0000962	0.00100	1	07/19/2021 20:29	WG1707816
Carbon tetrachloride	0.000259	J	0.000128	0.00100	1	07/19/2021 20:29	WG1707816
Chlorobenzene	U		0.000116	0.00100	1	07/19/2021 20:29	WG1707816
Chlorodibromomethane	U		0.000140	0.00100	1	07/19/2021 20:29	WG1707816
Chloroethane	U		0.000192	0.00500	1	07/19/2021 20:29	WG1707816
Chloroform	0.000805	J	0.000111	0.00500	1	07/19/2021 20:29	WG1707816
Chloromethane	U		0.000960	0.00250	1	07/19/2021 20:29	WG1707816
1,2-Dibromoethane	U		0.000126	0.00100	1	07/19/2021 20:29	WG1707816
1,1-Dichloroethane	U		0.000100	0.00100	1	07/19/2021 20:29	WG1707816
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/19/2021 20:29	WG1707816
1,1-Dichloroethene	U		0.000188	0.00100	1	07/19/2021 20:29	WG1707816
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/19/2021 20:29	WG1707816
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/19/2021 20:29	WG1707816
1,2-Dichloropropane	U		0.000149	0.00100	1	07/19/2021 20:29	WG1707816
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	07/19/2021 20:29	WG1707816
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	07/19/2021 20:29	WG1707816
Ethylbenzene	U		0.000137	0.00100	1	07/19/2021 20:29	WG1707816
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/19/2021 20:29	WG1707816
2-Hexanone	U		0.000787	0.0100	1	07/19/2021 20:29	WG1707816
Isopropylbenzene	U		0.000105	0.00100	1	07/19/2021 20:29	WG1707816
p-Isopropyltoluene	U		0.000120	0.00100	1	07/19/2021 20:29	WG1707816
2-Butanone (MEK)	U		0.00119	0.0100	1	07/19/2021 20:29	WG1707816
Methylene Chloride	U		0.000430	0.00500	1	07/19/2021 20:29	WG1707816
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/19/2021 20:29	WG1707816
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/19/2021 20:29	WG1707816
Naphthalene	U		0.00100	0.00500	1	07/19/2021 20:29	WG1707816
n-Propylbenzene	U		0.0000993	0.00100	1	07/19/2021 20:29	WG1707816
Styrene	U		0.000118	0.00100	1	07/19/2021 20:29	WG1707816
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/19/2021 20:29	WG1707816
Tetrachloroethene	U		0.000300	0.00100	1	07/19/2021 20:29	WG1707816
Toluene	U		0.000278	0.00100	1	07/19/2021 20:29	WG1707816
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/19/2021 20:29	WG1707816
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/19/2021 20:29	WG1707816
Trichloroethene	U		0.000190	0.00100	1	07/19/2021 20:29	WG1707816
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/19/2021 20:29	WG1707816
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/19/2021 20:29	WG1707816
Vinyl chloride	U		0.000234	0.00100	1	07/19/2021 20:29	WG1707816
Xylenes, Total	U		0.000174	0.00300	1	07/19/2021 20:29	WG1707816
(S) Toluene-d8	*98.2*			*80.0-120*		*07/19/2021 20:29*	WG1707816
(S) 4-Bromofluorobenzene	*78.4*			*77.0-126*		*07/19/2021 20:29*	WG1707816
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*07/19/2021 20:29*	WG1707816

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0625	J	0.0247	0.100	1	07/29/2021 19:24	WG1711251
(S) o-Terphenyl	*82.1*			*31.0-160*		*07/29/2021 19:24*	WG1711251

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	07/22/2021 17:23	WG1709606
Acenaphthylene	U		0.0000921	0.00100	1	07/22/2021 17:23	WG1709606
Acetophenone	U		0.000208	0.0100	1	07/22/2021 17:23	WG1709606
Anthracene	U		0.0000804	0.00100	1	07/22/2021 17:23	WG1709606
Atrazine	U		0.000255	0.0100	1	07/22/2021 17:23	WG1709606
Benzo(a)anthracene	U		0.000199	0.00100	1	07/22/2021 17:23	WG1709606
Benzaldehyde	U	J4	0.00169	0.0100	1	07/22/2021 17:23	WG1709606
Benzo(b)fluoranthene	U		0.000130	0.00100	1	07/22/2021 17:23	WG1709606
Benzo(k)fluoranthene	U		0.000120	0.00100	1	07/22/2021 17:23	WG1709606
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	07/22/2021 17:23	WG1709606
Benzo(a)pyrene	U		0.0000381	0.000200	1	07/22/2021 17:23	WG1709606
Biphenyl	U		0.000790	0.0100	1	07/22/2021 17:23	WG1709606
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	07/22/2021 17:23	WG1709606
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	07/22/2021 17:23	WG1709606
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	07/22/2021 17:23	WG1709606
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	07/22/2021 17:23	WG1709606
2-Chloronaphthalene	U		0.0000648	0.00100	1	07/22/2021 17:23	WG1709606
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	07/22/2021 17:23	WG1709606
Caprolactam	U		0.000309	0.0100	1	07/22/2021 17:23	WG1709606
Carbazole	U		0.000111	0.0100	1	07/22/2021 17:23	WG1709606
Chrysene	U		0.000130	0.00100	1	07/22/2021 17:23	WG1709606
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	07/22/2021 17:23	WG1709606
Dibenzofuran	U		0.0000970	0.0100	1	07/22/2021 17:23	WG1709606
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	07/22/2021 17:23	WG1709606
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	07/22/2021 17:23	WG1709606
2,6-Dinitrotoluene	U		0.000250	0.0100	1	07/22/2021 17:23	WG1709606
Fluoranthene	U		0.000102	0.00100	1	07/22/2021 17:23	WG1709606
Fluorene	U		0.0000844	0.00100	1	07/22/2021 17:23	WG1709606
Hexachlorobenzene	U		0.0000755	0.00100	1	07/22/2021 17:23	WG1709606
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	07/22/2021 17:23	WG1709606
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	07/22/2021 17:23	WG1709606
Hexachloroethane	U		0.000127	0.0100	1	07/22/2021 17:23	WG1709606
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	07/22/2021 17:23	WG1709606
Isophorone	U		0.000143	0.0100	1	07/22/2021 17:23	WG1709606
1-Methylnaphthalene	U		0.0000790	0.00100	1	07/22/2021 17:23	WG1709606
2-Methylnaphthalene	U		0.000117	0.00100	1	07/22/2021 17:23	WG1709606
Naphthalene	U		0.000159	0.00100	1	07/22/2021 17:23	WG1709606
Nitrobenzene	U		0.000297	0.0100	1	07/22/2021 17:23	WG1709606
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	07/22/2021 17:23	WG1709606
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	07/22/2021 17:23	WG1709606
Phenanthrene	U		0.000112	0.00100	1	07/22/2021 17:23	WG1709606
Benzylbutyl phthalate	U		0.000765	0.00300	1	07/22/2021 17:23	WG1709606
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	07/22/2021 17:23	WG1709606
Di-n-butyl phthalate	U		0.000453	0.00300	1	07/22/2021 17:23	WG1709606
Diethyl phthalate	U		0.000287	0.00300	1	07/22/2021 17:23	WG1709606
Dimethyl phthalate	U		0.000260	0.00300	1	07/22/2021 17:23	WG1709606
Di-n-octyl phthalate	U		0.000932	0.00300	1	07/22/2021 17:23	WG1709606
Pyrene	U		0.000107	0.00100	1	07/22/2021 17:23	WG1709606
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	07/22/2021 17:23	WG1709606
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	07/22/2021 17:23	WG1709606

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	1	07/22/2021 17:23	WG1709606
2,4-Dichlorophenol	U		0.000102	0.0100	1	07/22/2021 17:23	WG1709606
2,4-Dimethylphenol	U		0.0000636	0.0100	1	07/22/2021 17:23	WG1709606
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	07/22/2021 17:23	WG1709606
2,4-Dinitrophenol	U		0.00593	0.0100	1	07/22/2021 17:23	WG1709606
2-Nitrophenol	U		0.000117	0.0100	1	07/22/2021 17:23	WG1709606
2-Nitroaniline	U		0.000102	0.0100	1	07/22/2021 17:23	WG1709606
2-Methylphenol	U		0.0000929	0.0100	1	07/22/2021 17:23	WG1709606
3&4-Methyl Phenol	U		0.000168	0.0100	1	07/22/2021 17:23	WG1709606
3-Nitroaniline	U		0.0000869	0.0100	1	07/22/2021 17:23	WG1709606
4-Chloroaniline	U		0.000234	0.0100	1	07/22/2021 17:23	WG1709606
4-Nitroaniline	U		0.0000910	0.0100	1	07/22/2021 17:23	WG1709606
4-Nitrophenol	U		0.000143	0.0100	1	07/22/2021 17:23	WG1709606
Pentachlorophenol	U		0.000313	0.0100	1	07/22/2021 17:23	WG1709606
Phenol	U		0.00433	0.0100	1	07/22/2021 17:23	WG1709606
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	07/22/2021 17:23	WG1709606
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	07/22/2021 17:23	WG1709606
(S) 2-Fluorophenol	*39.2*			*10.0-120*		*07/22/2021 17:23*	WG1709606
(S) Phenol-d5	*28.2*			*10.0-120*		*07/22/2021 17:23*	WG1709606
(S) Nitrobenzene-d5	*82.9*			*10.0-127*		*07/22/2021 17:23*	WG1709606
(S) 2-Fluorobiphenyl	*72.9*			*10.0-130*		*07/22/2021 17:23*	WG1709606
(S) 2,4,6-Tribromophenol	*63.0*			*10.0-155*		*07/22/2021 17:23*	WG1709606
(S) p-Terphenyl-d14	*66.9*			*10.0-128*		*07/22/2021 17:23*	WG1709606

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	563		10.0	1	07/21/2021 15:32	WG1708123

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	179		8.45	20.0	1	07/21/2021 07:55	WG1708105

Sample Narrative:
L1379618-03 WG1708105: Endpoint pH 4.5

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.08		0.0500	0.100	1	07/29/2021 01:21	WG1712523

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	112		1.90	5.00	5	07/23/2021 20:23	WG1708111
Fluoride	0.906		0.0640	0.150	1	07/23/2021 20:07	WG1708111
Sulfate	86.7		0.594	5.00	1	07/23/2021 20:07	WG1708111

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	07/20/2021 15:21	WG1707532

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.129	J	0.0200	0.200	1	07/25/2021 19:36	WG1709904

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	07/22/2021 23:47	WG1709961
Arsenic,Dissolved	0.00481		0.000180	0.00200	1	07/22/2021 23:47	WG1709961
Barium,Dissolved	0.0870		0.000381	0.00200	1	07/22/2021 23:47	WG1709961
Cadmium,Dissolved	U		0.000150	0.00100	1	07/22/2021 23:47	WG1709961
Chromium,Dissolved	0.00511		0.00124	0.00200	1	07/22/2021 23:47	WG1709961
Copper,Dissolved	0.00159	B J	0.00151	0.00500	1	07/22/2021 23:47	WG1709961
Cobalt,Dissolved	0.0000821	J	0.0000596	0.00200	1	07/22/2021 23:47	WG1709961
Iron,Dissolved	U		0.0281	0.100	1	07/22/2021 23:47	WG1709961
Lead,Dissolved	U		0.000849	0.00200	1	07/22/2021 23:47	WG1709961
Manganese,Dissolved	0.00152	B J	0.000704	0.00500	1	07/22/2021 23:47	WG1709961
Molybdenum,Dissolved	0.00263	J	0.000348	0.00500	1	07/22/2021 23:47	WG1709961
Nickel,Dissolved	0.000916	B J	0.000816	0.00200	1	07/22/2021 23:47	WG1709961
Selenium,Dissolved	0.00404		0.000300	0.00200	1	07/22/2021 23:47	WG1709961
Silver,Dissolved	U		0.0000700	0.00200	1	07/22/2021 23:47	WG1709961
Uranium,Dissolved	0.00170	J	0.0000700	0.0200	1	07/22/2021 23:47	WG1709961
Zinc,Dissolved	0.0101	B J	0.00302	0.0250	1	07/22/2021 23:47	WG1709961

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/20/2021 06:37	WG1708011
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*07/20/2021 06:37*	WG1708011

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J3	0.0113	0.0500	1	07/19/2021 16:55	WG1707858
Benzene	U		0.0000941	0.00100	1	07/19/2021 16:55	WG1707858
Bromodichloromethane	U		0.000136	0.00100	1	07/19/2021 16:55	WG1707858
Bromoform	U		0.000129	0.00100	1	07/19/2021 16:55	WG1707858
Bromomethane	U		0.000605	0.00500	1	07/19/2021 16:55	WG1707858
n-Butylbenzene	U		0.000157	0.00100	1	07/19/2021 16:55	WG1707858
sec-Butylbenzene	U		0.000125	0.00100	1	07/19/2021 16:55	WG1707858
tert-Butylbenzene	U		0.000127	0.00100	1	07/19/2021 16:55	WG1707858
Carbon disulfide	U		0.0000962	0.00100	1	07/19/2021 16:55	WG1707858
Carbon tetrachloride	U		0.000128	0.00100	1	07/19/2021 16:55	WG1707858
Chlorobenzene	U		0.000116	0.00100	1	07/19/2021 16:55	WG1707858
Chlorodibromomethane	U		0.000140	0.00100	1	07/19/2021 16:55	WG1707858
Chloroethane	U		0.000192	0.00500	1	07/19/2021 16:55	WG1707858
Chloroform	U		0.000111	0.00500	1	07/19/2021 16:55	WG1707858
Chloromethane	U		0.000960	0.00250	1	07/19/2021 16:55	WG1707858
1,2-Dibromoethane	U		0.000126	0.00100	1	07/19/2021 16:55	WG1707858
1,1-Dichloroethane	U		0.000100	0.00100	1	07/19/2021 16:55	WG1707858
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/19/2021 16:55	WG1707858
1,1-Dichloroethene	U		0.000188	0.00100	1	07/19/2021 16:55	WG1707858
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/19/2021 16:55	WG1707858
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/19/2021 16:55	WG1707858
1,2-Dichloropropane	U		0.000149	0.00100	1	07/19/2021 16:55	WG1707858
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	07/19/2021 16:55	WG1707858
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	07/19/2021 16:55	WG1707858
Ethylbenzene	U		0.000137	0.00100	1	07/19/2021 16:55	WG1707858
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/19/2021 16:55	WG1707858
2-Hexanone	U		0.000787	0.0100	1	07/19/2021 16:55	WG1707858
Isopropylbenzene	U		0.000105	0.00100	1	07/19/2021 16:55	WG1707858
p-Isopropyltoluene	U		0.000120	0.00100	1	07/19/2021 16:55	WG1707858
2-Butanone (MEK)	U		0.00119	0.0100	1	07/19/2021 16:55	WG1707858
Methylene Chloride	U		0.000430	0.00500	1	07/19/2021 16:55	WG1707858
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/19/2021 16:55	WG1707858
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/19/2021 16:55	WG1707858
Naphthalene	U		0.00100	0.00500	1	07/19/2021 16:55	WG1707858
n-Propylbenzene	U		0.0000993	0.00100	1	07/19/2021 16:55	WG1707858
Styrene	U		0.000118	0.00100	1	07/19/2021 16:55	WG1707858
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/19/2021 16:55	WG1707858
Tetrachloroethene	U		0.000300	0.00100	1	07/19/2021 16:55	WG1707858
Toluene	U		0.000278	0.00100	1	07/19/2021 16:55	WG1707858
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/19/2021 16:55	WG1707858
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/19/2021 16:55	WG1707858
Trichloroethene	U		0.000190	0.00100	1	07/19/2021 16:55	WG1707858
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/19/2021 16:55	WG1707858
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/19/2021 16:55	WG1707858
Vinyl chloride	U		0.000234	0.00100	1	07/19/2021 16:55	WG1707858
Xylenes, Total	U		0.000174	0.00300	1	07/19/2021 16:55	WG1707858
(S) Toluene-d8	*111*			*80.0-120*		*07/19/2021 16:55*	WG1707858
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*07/19/2021 16:55*	WG1707858
(S) 1,2-Dichloroethane-d4	*77.8*			*70.0-130*		*07/19/2021 16:55*	WG1707858

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	1	07/29/2021 19:44	WG1711251
(S) o-Terphenyl	*88.9*			*31.0-160*		*07/29/2021 19:44*	WG1711251

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	07/22/2021 17:46	WG1709606
Acenaphthylene	U		0.0000921	0.00100	1	07/22/2021 17:46	WG1709606
Acetophenone	U		0.000208	0.0100	1	07/22/2021 17:46	WG1709606
Anthracene	U		0.0000804	0.00100	1	07/22/2021 17:46	WG1709606
Atrazine	U		0.000255	0.0100	1	07/22/2021 17:46	WG1709606
Benzo(a)anthracene	U		0.000199	0.00100	1	07/22/2021 17:46	WG1709606
Benzaldehyde	U	J4	0.00169	0.0100	1	07/22/2021 17:46	WG1709606
Benzo(b)fluoranthene	U		0.000130	0.00100	1	07/22/2021 17:46	WG1709606
Benzo(k)fluoranthene	U		0.000120	0.00100	1	07/22/2021 17:46	WG1709606
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	07/22/2021 17:46	WG1709606
Benzo(a)pyrene	U		0.0000381	0.000200	1	07/22/2021 17:46	WG1709606
Biphenyl	U		0.000790	0.0100	1	07/22/2021 17:46	WG1709606
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	07/22/2021 17:46	WG1709606
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	07/22/2021 17:46	WG1709606
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	07/22/2021 17:46	WG1709606
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	07/22/2021 17:46	WG1709606
2-Chloronaphthalene	U		0.0000648	0.00100	1	07/22/2021 17:46	WG1709606
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	07/22/2021 17:46	WG1709606
Caprolactam	U		0.000309	0.0100	1	07/22/2021 17:46	WG1709606
Carbazole	U		0.000111	0.0100	1	07/22/2021 17:46	WG1709606
Chrysene	U		0.000130	0.00100	1	07/22/2021 17:46	WG1709606
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	07/22/2021 17:46	WG1709606
Dibenzofuran	U		0.0000970	0.0100	1	07/22/2021 17:46	WG1709606
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	07/22/2021 17:46	WG1709606
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	07/22/2021 17:46	WG1709606
2,6-Dinitrotoluene	U		0.000250	0.0100	1	07/22/2021 17:46	WG1709606
Fluoranthene	U		0.000102	0.00100	1	07/22/2021 17:46	WG1709606
Fluorene	U		0.0000844	0.00100	1	07/22/2021 17:46	WG1709606
Hexachlorobenzene	U		0.0000755	0.00100	1	07/22/2021 17:46	WG1709606
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	07/22/2021 17:46	WG1709606
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	07/22/2021 17:46	WG1709606
Hexachloroethane	U		0.000127	0.0100	1	07/22/2021 17:46	WG1709606
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	07/22/2021 17:46	WG1709606
Isophorone	U		0.000143	0.0100	1	07/22/2021 17:46	WG1709606
1-Methylnaphthalene	U		0.0000790	0.00100	1	07/22/2021 17:46	WG1709606
2-Methylnaphthalene	U		0.000117	0.00100	1	07/22/2021 17:46	WG1709606
Naphthalene	U		0.000159	0.00100	1	07/22/2021 17:46	WG1709606
Nitrobenzene	U		0.000297	0.0100	1	07/22/2021 17:46	WG1709606
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	07/22/2021 17:46	WG1709606
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	07/22/2021 17:46	WG1709606
Phenanthrene	U		0.000112	0.00100	1	07/22/2021 17:46	WG1709606
Benzylbutyl phthalate	U		0.000765	0.00300	1	07/22/2021 17:46	WG1709606
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	07/22/2021 17:46	WG1709606
Di-n-butyl phthalate	U		0.000453	0.00300	1	07/22/2021 17:46	WG1709606
Diethyl phthalate	U		0.000287	0.00300	1	07/22/2021 17:46	WG1709606
Dimethyl phthalate	U		0.000260	0.00300	1	07/22/2021 17:46	WG1709606
Di-n-octyl phthalate	U		0.000932	0.00300	1	07/22/2021 17:46	WG1709606
Pyrene	U		0.000107	0.00100	1	07/22/2021 17:46	WG1709606
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	07/22/2021 17:46	WG1709606
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	07/22/2021 17:46	WG1709606

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	1	07/22/2021 17:46	WG1709606
2,4-Dichlorophenol	U		0.000102	0.0100	1	07/22/2021 17:46	WG1709606
2,4-Dimethylphenol	U		0.0000636	0.0100	1	07/22/2021 17:46	WG1709606
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	07/22/2021 17:46	WG1709606
2,4-Dinitrophenol	U		0.00593	0.0100	1	07/22/2021 17:46	WG1709606
2-Nitrophenol	U		0.000117	0.0100	1	07/22/2021 17:46	WG1709606
2-Nitroaniline	U		0.000102	0.0100	1	07/22/2021 17:46	WG1709606
2-Methylphenol	U		0.0000929	0.0100	1	07/22/2021 17:46	WG1709606
3&4-Methyl Phenol	U		0.000168	0.0100	1	07/22/2021 17:46	WG1709606
3-Nitroaniline	U		0.0000869	0.0100	1	07/22/2021 17:46	WG1709606
4-Chloroaniline	U		0.000234	0.0100	1	07/22/2021 17:46	WG1709606
4-Nitroaniline	U		0.0000910	0.0100	1	07/22/2021 17:46	WG1709606
4-Nitrophenol	U		0.000143	0.0100	1	07/22/2021 17:46	WG1709606
Pentachlorophenol	U		0.000313	0.0100	1	07/22/2021 17:46	WG1709606
Phenol	U		0.00433	0.0100	1	07/22/2021 17:46	WG1709606
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	07/22/2021 17:46	WG1709606
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	07/22/2021 17:46	WG1709606
(S) 2-Fluorophenol	*41.0*			*10.0-120*		*07/22/2021 17:46*	WG1709606
(S) Phenol-d5	*27.7*			*10.0-120*		*07/22/2021 17:46*	WG1709606
(S) Nitrobenzene-d5	*80.4*			*10.0-127*		*07/22/2021 17:46*	WG1709606
(S) 2-Fluorobiphenyl	*74.6*			*10.0-130*		*07/22/2021 17:46*	WG1709606
(S) 2,4,6-Tribromophenol	*63.5*			*10.0-155*		*07/22/2021 17:46*	WG1709606
(S) p-Terphenyl-d14	*66.5*			*10.0-128*		*07/22/2021 17:46*	WG1709606

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1020		20.0	1	07/21/2021 15:32	WG1708123

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Alkalinity	192		8.45	20.0	1	07/21/2021 08:00	WG1708105

Sample Narrative:

L1379618-04 WG1708105: Endpoint pH 4.5

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	3.04		0.250	0.500	5	07/29/2021 01:23	WG1712523

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	266		1.90	5.00	5	07/23/2021 21:29	WG1708111
Fluoride	0.677		0.0640	0.150	1	07/23/2021 21:12	WG1708111
Sulfate	95.3		0.594	5.00	1	07/23/2021 21:12	WG1708111

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	07/20/2021 15:23	WG1707532

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.179	J	0.0200	0.200	1	07/25/2021 19:39	WG1709904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	07/22/2021 23:58	WG1709961
Arsenic,Dissolved	0.00394		0.000180	0.00200	1	07/22/2021 23:58	WG1709961
Barium,Dissolved	0.107		0.000381	0.00200	1	07/22/2021 23:58	WG1709961
Cadmium,Dissolved	U		0.000150	0.00100	1	07/22/2021 23:58	WG1709961
Chromium,Dissolved	0.00161	J	0.00124	0.00200	1	07/22/2021 23:58	WG1709961
Copper,Dissolved	0.00186	B J	0.00151	0.00500	1	07/22/2021 23:58	WG1709961
Cobalt,Dissolved	0.0000875	J	0.0000596	0.00200	1	07/22/2021 23:58	WG1709961
Iron,Dissolved	U		0.0281	0.100	1	07/22/2021 23:58	WG1709961
Lead,Dissolved	0.00118	J	0.000849	0.00200	1	07/22/2021 23:58	WG1709961
Manganese,Dissolved	0.00411	B J	0.000704	0.00500	1	07/22/2021 23:58	WG1709961
Molybdenum,Dissolved	0.00213	J	0.000348	0.00500	1	07/22/2021 23:58	WG1709961
Nickel,Dissolved	0.00117	B J	0.000816	0.00200	1	07/22/2021 23:58	WG1709961
Selenium,Dissolved	0.00316		0.000300	0.00200	1	07/22/2021 23:58	WG1709961
Silver,Dissolved	U		0.0000700	0.00200	1	07/22/2021 23:58	WG1709961
Uranium,Dissolved	0.00202	J	0.0000700	0.0200	1	07/22/2021 23:58	WG1709961
Zinc,Dissolved	0.0175	B J	0.00302	0.0250	1	07/22/2021 23:58	WG1709961

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/19/2021 09:23	WG1707499
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*07/19/2021 09:23*	WG1707499

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J3	0.0113	0.0500	1	07/19/2021 17:14	WG1707858
Benzene	0.000437	J	0.0000941	0.00100	1	07/19/2021 17:14	WG1707858
Bromodichloromethane	U		0.000136	0.00100	1	07/19/2021 17:14	WG1707858
Bromoform	U		0.000129	0.00100	1	07/19/2021 17:14	WG1707858
Bromomethane	U		0.000605	0.00500	1	07/19/2021 17:14	WG1707858
n-Butylbenzene	U		0.000157	0.00100	1	07/19/2021 17:14	WG1707858
sec-Butylbenzene	U		0.000125	0.00100	1	07/19/2021 17:14	WG1707858
tert-Butylbenzene	U		0.000127	0.00100	1	07/19/2021 17:14	WG1707858
Carbon disulfide	U		0.0000962	0.00100	1	07/19/2021 17:14	WG1707858
Carbon tetrachloride	0.000264	J	0.000128	0.00100	1	07/19/2021 17:14	WG1707858
Chlorobenzene	U		0.000116	0.00100	1	07/19/2021 17:14	WG1707858
Chlorodibromomethane	U		0.000140	0.00100	1	07/19/2021 17:14	WG1707858
Chloroethane	U		0.000192	0.00500	1	07/19/2021 17:14	WG1707858
Chloroform	0.000883	J	0.000111	0.00500	1	07/19/2021 17:14	WG1707858
Chloromethane	U		0.000960	0.00250	1	07/19/2021 17:14	WG1707858
1,2-Dibromoethane	U		0.000126	0.00100	1	07/19/2021 17:14	WG1707858
1,1-Dichloroethane	U		0.000100	0.00100	1	07/19/2021 17:14	WG1707858
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/19/2021 17:14	WG1707858
1,1-Dichloroethene	U		0.000188	0.00100	1	07/19/2021 17:14	WG1707858
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/19/2021 17:14	WG1707858
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/19/2021 17:14	WG1707858
1,2-Dichloropropane	U		0.000149	0.00100	1	07/19/2021 17:14	WG1707858
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	07/19/2021 17:14	WG1707858
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	07/19/2021 17:14	WG1707858
Ethylbenzene	U		0.000137	0.00100	1	07/19/2021 17:14	WG1707858
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/19/2021 17:14	WG1707858
2-Hexanone	U		0.000787	0.0100	1	07/19/2021 17:14	WG1707858
Isopropylbenzene	U		0.000105	0.00100	1	07/19/2021 17:14	WG1707858
p-Isopropyltoluene	U		0.000120	0.00100	1	07/19/2021 17:14	WG1707858
2-Butanone (MEK)	U		0.00119	0.0100	1	07/19/2021 17:14	WG1707858
Methylene Chloride	U		0.000430	0.00500	1	07/19/2021 17:14	WG1707858
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/19/2021 17:14	WG1707858
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/19/2021 17:14	WG1707858
Naphthalene	U		0.00100	0.00500	1	07/19/2021 17:14	WG1707858
n-Propylbenzene	U		0.0000993	0.00100	1	07/19/2021 17:14	WG1707858
Styrene	U		0.000118	0.00100	1	07/19/2021 17:14	WG1707858
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/19/2021 17:14	WG1707858
Tetrachloroethene	U		0.000300	0.00100	1	07/19/2021 17:14	WG1707858
Toluene	U		0.000278	0.00100	1	07/19/2021 17:14	WG1707858
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/19/2021 17:14	WG1707858
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/19/2021 17:14	WG1707858
Trichloroethene	U		0.000190	0.00100	1	07/19/2021 17:14	WG1707858
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/19/2021 17:14	WG1707858
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/19/2021 17:14	WG1707858
Vinyl chloride	U		0.000234	0.00100	1	07/19/2021 17:14	WG1707858
Xylenes, Total	U		0.000174	0.00300	1	07/19/2021 17:14	WG1707858
(S) Toluene-d8	*105*			*80.0-120*		*07/19/2021 17:14*	WG1707858
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*07/19/2021 17:14*	WG1707858
(S) 1,2-Dichloroethane-d4	*80.9*			*70.0-130*		*07/19/2021 17:14*	WG1707858

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0510	J	0.0247	0.100	1	07/29/2021 20:04	WG1711251
(S) o-Terphenyl	*87.4*			*31.0-160*		*07/29/2021 20:04*	WG1711251

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	07/22/2021 18:09	WG1709606
Acenaphthylene	U		0.0000921	0.00100	1	07/22/2021 18:09	WG1709606
Acetophenone	U		0.000208	0.0100	1	07/22/2021 18:09	WG1709606
Anthracene	U		0.0000804	0.00100	1	07/22/2021 18:09	WG1709606
Atrazine	U		0.000255	0.0100	1	07/22/2021 18:09	WG1709606
Benzo(a)anthracene	U		0.000199	0.00100	1	07/22/2021 18:09	WG1709606
Benzaldehyde	U	J4	0.00169	0.0100	1	07/22/2021 18:09	WG1709606
Benzo(b)fluoranthene	U		0.000130	0.00100	1	07/22/2021 18:09	WG1709606
Benzo(k)fluoranthene	U		0.000120	0.00100	1	07/22/2021 18:09	WG1709606
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	07/22/2021 18:09	WG1709606
Benzo(a)pyrene	U		0.0000381	0.000200	1	07/22/2021 18:09	WG1709606
Biphenyl	U		0.000790	0.0100	1	07/22/2021 18:09	WG1709606
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	07/22/2021 18:09	WG1709606
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	07/22/2021 18:09	WG1709606
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	07/22/2021 18:09	WG1709606
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	07/22/2021 18:09	WG1709606
2-Chloronaphthalene	U		0.0000648	0.00100	1	07/22/2021 18:09	WG1709606
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	07/22/2021 18:09	WG1709606
Caprolactam	U		0.000309	0.0100	1	07/22/2021 18:09	WG1709606
Carbazole	U		0.000111	0.0100	1	07/22/2021 18:09	WG1709606
Chrysene	U		0.000130	0.00100	1	07/22/2021 18:09	WG1709606
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	07/22/2021 18:09	WG1709606
Dibenzofuran	U		0.0000970	0.0100	1	07/22/2021 18:09	WG1709606
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	07/22/2021 18:09	WG1709606
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	07/22/2021 18:09	WG1709606
2,6-Dinitrotoluene	U		0.000250	0.0100	1	07/22/2021 18:09	WG1709606
Fluoranthene	U		0.000102	0.00100	1	07/22/2021 18:09	WG1709606
Fluorene	U		0.0000844	0.00100	1	07/22/2021 18:09	WG1709606
Hexachlorobenzene	U		0.0000755	0.00100	1	07/22/2021 18:09	WG1709606
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	07/22/2021 18:09	WG1709606
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	07/22/2021 18:09	WG1709606
Hexachloroethane	U		0.000127	0.0100	1	07/22/2021 18:09	WG1709606
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	07/22/2021 18:09	WG1709606
Isophorone	U		0.000143	0.0100	1	07/22/2021 18:09	WG1709606
1-Methylnaphthalene	U		0.0000790	0.00100	1	07/22/2021 18:09	WG1709606
2-Methylnaphthalene	U		0.000117	0.00100	1	07/22/2021 18:09	WG1709606
Naphthalene	U		0.000159	0.00100	1	07/22/2021 18:09	WG1709606
Nitrobenzene	U		0.000297	0.0100	1	07/22/2021 18:09	WG1709606
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	07/22/2021 18:09	WG1709606
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	07/22/2021 18:09	WG1709606
Phenanthrene	U		0.000112	0.00100	1	07/22/2021 18:09	WG1709606
Benzylbutyl phthalate	U		0.000765	0.00300	1	07/22/2021 18:09	WG1709606
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	07/22/2021 18:09	WG1709606
Di-n-butyl phthalate	U		0.000453	0.00300	1	07/22/2021 18:09	WG1709606
Diethyl phthalate	U		0.000287	0.00300	1	07/22/2021 18:09	WG1709606
Dimethyl phthalate	U		0.000260	0.00300	1	07/22/2021 18:09	WG1709606
Di-n-octyl phthalate	U		0.000932	0.00300	1	07/22/2021 18:09	WG1709606
Pyrene	U		0.000107	0.00100	1	07/22/2021 18:09	WG1709606
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	07/22/2021 18:09	WG1709606
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	07/22/2021 18:09	WG1709606

DUP-01
Collected date/time: 07/15/21 10:00
L1379618

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	1	07/22/2021 18:09	WG1709606
2,4-Dichlorophenol	U		0.000102	0.0100	1	07/22/2021 18:09	WG1709606
2,4-Dimethylphenol	U		0.0000636	0.0100	1	07/22/2021 18:09	WG1709606
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	07/22/2021 18:09	WG1709606
2,4-Dinitrophenol	U		0.00593	0.0100	1	07/22/2021 18:09	WG1709606
2-Nitrophenol	U		0.000117	0.0100	1	07/22/2021 18:09	WG1709606
2-Nitroaniline	U		0.000102	0.0100	1	07/22/2021 18:09	WG1709606
2-Methylphenol	U		0.0000929	0.0100	1	07/22/2021 18:09	WG1709606
3&4-Methyl Phenol	U		0.000168	0.0100	1	07/22/2021 18:09	WG1709606
3-Nitroaniline	U		0.0000869	0.0100	1	07/22/2021 18:09	WG1709606
4-Chloroaniline	U		0.000234	0.0100	1	07/22/2021 18:09	WG1709606
4-Nitroaniline	U		0.0000910	0.0100	1	07/22/2021 18:09	WG1709606
4-Nitrophenol	U		0.000143	0.0100	1	07/22/2021 18:09	WG1709606
Pentachlorophenol	U		0.000313	0.0100	1	07/22/2021 18:09	WG1709606
Phenol	U		0.00433	0.0100	1	07/22/2021 18:09	WG1709606
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	07/22/2021 18:09	WG1709606
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	07/22/2021 18:09	WG1709606
(S) 2-Fluorophenol	*32.4*			*10.0-120*		*07/22/2021 18:09*	WG1709606
(S) Phenol-d5	*23.5*			*10.0-120*		*07/22/2021 18:09*	WG1709606
(S) Nitrobenzene-d5	*74.6*			*10.0-127*		*07/22/2021 18:09*	WG1709606
(S) 2-Fluorobiphenyl	*69.0*			*10.0-130*		*07/22/2021 18:09*	WG1709606
(S) 2,4,6-Tribromophenol	*63.5*			*10.0-155*		*07/22/2021 18:09*	WG1709606
(S) p-Terphenyl-d14	*64.3*			*10.0-128*		*07/22/2021 18:09*	WG1709606

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

TRIP BLANK
Collected date/time: 07/15/21 00:00
L1379618

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J3	0.0113	0.0500	1	07/19/2021 14:21	WG1707858
Benzene	U		0.0000941	0.00100	1	07/19/2021 14:21	WG1707858
Bromodichloromethane	U		0.000136	0.00100	1	07/19/2021 14:21	WG1707858
Bromoform	U		0.000129	0.00100	1	07/19/2021 14:21	WG1707858
Bromomethane	U		0.000605	0.00500	1	07/19/2021 14:21	WG1707858
n-Butylbenzene	U		0.000157	0.00100	1	07/19/2021 14:21	WG1707858
sec-Butylbenzene	U		0.000125	0.00100	1	07/19/2021 14:21	WG1707858
tert-Butylbenzene	U		0.000127	0.00100	1	07/19/2021 14:21	WG1707858
Carbon disulfide	0.000102	J	0.0000962	0.00100	1	07/19/2021 14:21	WG1707858
Carbon tetrachloride	U		0.000128	0.00100	1	07/19/2021 14:21	WG1707858
Chlorobenzene	U		0.000116	0.00100	1	07/19/2021 14:21	WG1707858
Chlorodibromomethane	U		0.000140	0.00100	1	07/19/2021 14:21	WG1707858
Chloroethane	U		0.000192	0.00500	1	07/19/2021 14:21	WG1707858
Chloroform	U		0.000111	0.00500	1	07/19/2021 14:21	WG1707858
Chloromethane	U		0.000960	0.00250	1	07/19/2021 14:21	WG1707858
1,2-Dibromoethane	U		0.000126	0.00100	1	07/19/2021 14:21	WG1707858
1,1-Dichloroethane	U		0.000100	0.00100	1	07/19/2021 14:21	WG1707858
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/19/2021 14:21	WG1707858
1,1-Dichloroethene	U		0.000188	0.00100	1	07/19/2021 14:21	WG1707858
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/19/2021 14:21	WG1707858
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/19/2021 14:21	WG1707858
1,2-Dichloropropane	U		0.000149	0.00100	1	07/19/2021 14:21	WG1707858
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	07/19/2021 14:21	WG1707858
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	07/19/2021 14:21	WG1707858
Ethylbenzene	U		0.000137	0.00100	1	07/19/2021 14:21	WG1707858
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/19/2021 14:21	WG1707858
2-Hexanone	U		0.000787	0.0100	1	07/19/2021 14:21	WG1707858
Isopropylbenzene	U		0.000105	0.00100	1	07/19/2021 14:21	WG1707858
p-Isopropyltoluene	U		0.000120	0.00100	1	07/19/2021 14:21	WG1707858
2-Butanone (MEK)	U		0.00119	0.0100	1	07/19/2021 14:21	WG1707858
Methylene Chloride	U		0.000430	0.00500	1	07/19/2021 14:21	WG1707858
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/19/2021 14:21	WG1707858
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/19/2021 14:21	WG1707858
Naphthalene	U		0.00100	0.00500	1	07/19/2021 14:21	WG1707858
n-Propylbenzene	U		0.0000993	0.00100	1	07/19/2021 14:21	WG1707858
Styrene	U		0.000118	0.00100	1	07/19/2021 14:21	WG1707858
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/19/2021 14:21	WG1707858
Tetrachloroethene	U		0.000300	0.00100	1	07/19/2021 14:21	WG1707858
Toluene	U		0.000278	0.00100	1	07/19/2021 14:21	WG1707858
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/19/2021 14:21	WG1707858
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/19/2021 14:21	WG1707858
Trichloroethene	U		0.000190	0.00100	1	07/19/2021 14:21	WG1707858
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/19/2021 14:21	WG1707858
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/19/2021 14:21	WG1707858
Vinyl chloride	U		0.000234	0.00100	1	07/19/2021 14:21	WG1707858
Xylenes, Total	0.000207	J	0.000174	0.00300	1	07/19/2021 14:21	WG1707858
(S) Toluene-d8	*105*			*80.0-120*		*07/19/2021 14:21*	WG1707858
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*07/19/2021 14:21*	WG1707858
(S) 1,2-Dichloroethane-d4	*81.6*			*70.0-130*		*07/19/2021 14:21*	WG1707858

Method Blank (MB)

(MB) R3683357-1 07/21/21 15:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1379618-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1379618-02 07/21/21 15:32 • (DUP) R3683357-3 07/21/21 15:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1010	1020	1	0.591		5

L1379618-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1379618-04 07/21/21 15:32 • (DUP) R3683357-4 07/21/21 15:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1020	1030	1	1.37		5

Laboratory Control Sample (LCS)

(LCS) R3683357-2 07/21/21 15:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	9520	108	77.4-123	

Method Blank (MB)

(MB) R3681922-1 07/21/21 06:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity	U		8.45	20.0

Sample Narrative:
BLANK: Endpoint pH 4.5

L1379604-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1379604-01 07/21/21 06:23 • (DUP) R3681922-2 07/21/21 06:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	348	342	1	1.74		20

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

L1379604-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1379604-09 07/21/21 07:05 • (DUP) R3681922-4 07/21/21 07:11

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	190	184	1	2.78		20

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

Laboratory Control Sample (LCS)

(LCS) R3681922-3 07/21/21 06:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100	102	102	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3685101-1 07/29/21 00:44

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1374344-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1374344-01 07/29/21 00:52 • (DUP) R3685101-5 07/29/21 00:53

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.356	0.345	1	3.14		20

L1379618-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1379618-01 07/29/21 01:17 • (DUP) R3685101-7 07/29/21 01:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	3.15	3.15	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3685101-2 07/29/21 00:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.74	110	90.0-110	

L1372390-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1372390-01 07/29/21 00:47 • (MS) R3685101-3 07/29/21 00:48 • (MSD) R3685101-4 07/29/21 00:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	0.586	3.51	3.48	117	116	1	90.0-110	J5	J5	0.858	20

L1379166-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1379166-01 07/29/21 01:10 • (MS) R3685101-6 07/29/21 01:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	0.414	3.58	127	1	90.0-110	J5

Method Blank (MB)

(MB) R3683783-1 07/23/21 13:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1379617-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1379617-02 07/23/21 16:00 • (DUP) R3683783-5 07/23/21 16:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	20.5	20.5	1	0.0551		15
Fluoride	0.149	0.150	1	0.735		15
Sulfate	6.24	6.23	1	0.104		15

L1379677-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1379677-02 07/23/21 22:51 • (DUP) R3683783-6 07/23/21 23:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	35.6	35.2	1	1.19		15
Fluoride	0.0857	0.0870	1	1.51	J	15
Sulfate	0.631	0.614	1	2.65	J	15

Laboratory Control Sample (LCS)

(LCS) R3683783-2 07/23/21 13:54

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.1	100	80.0-120	
Fluoride	8.00	8.30	104	80.0-120	
Sulfate	40.0	40.4	101	80.0-120	

Received by OCD: 4/18/2022 4:17:12 PM

L1379617-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379617-01 07/23/21 15:12 • (MS) R3683783-3 07/23/21 15:28 • (MSD) R3683783-4 07/23/21 15:44

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	41.3	92.1	91.7	102	101	1	80.0-120			0.512	15
Fluoride	5.00	0.126	5.22	5.20	102	101	1	80.0-120			0.495	15
Sulfate	50.0	17.1	69.7	69.4	105	105	1	80.0-120			0.456	15

L1379677-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1379677-02 07/23/21 22:51 • (MS) R3683783-7 07/23/21 23:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	35.6	85.9	101	1	80.0-120	
Fluoride	5.00	0.0857	5.20	102	1	80.0-120	
Sulfate	50.0	0.631	51.3	101	1	80.0-120	

Released to Imaging: 7/20/2022 10:39:48 AM

Method Blank (MB)

(MB) R3681803-1 07/20/21 14:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3681803-5 07/20/21 17:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.00300	0.00295	98.2	80.0-120	

L1379783-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379783-04 07/20/21 15:07 • (MS) R3681803-2 07/20/21 15:09 • (MSD) R3681803-3 07/20/21 15:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	0.000243	0.00409	0.00417	128	131	1	75.0-125	J5	J5	1.91	20

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

Method Blank (MB)

(MB) R3683720-1 07/25/21 18:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R3683720-2 07/25/21 18:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron,Dissolved	1.00	0.931	93.1	80.0-120	

L1379602-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379602-02 07/25/21 18:30 • (MS) R3683720-4 07/25/21 18:35 • (MSD) R3683720-5 07/25/21 18:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron,Dissolved	1.00	U	0.952	0.963	95.2	96.3	1	75.0-125			1.14	20

Method Blank (MB)

(MB) R3683061-1 07/22/21 22:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0185	0.100
Arsenic,Dissolved	U		0.000180	0.00200
Barium,Dissolved	0.000823	J	0.000381	0.00200
Cadmium,Dissolved	U		0.000150	0.00100
Chromium,Dissolved	U		0.00124	0.00200
Copper,Dissolved	0.00170	J	0.00151	0.00500
Cobalt,Dissolved	U		0.0000596	0.00200
Iron,Dissolved	U		0.0281	0.100
Lead,Dissolved	U		0.000849	0.00200
Manganese,Dissolved	0.00342	J	0.000704	0.00500
Molybdenum,Dissolved	U		0.000348	0.00500
Nickel,Dissolved	0.00105	J	0.000816	0.00200
Selenium,Dissolved	U		0.000300	0.00200
Silver,Dissolved	U		0.0000700	0.00200
Uranium,Dissolved	U		0.0000700	0.0200
Zinc,Dissolved	0.00705	J	0.00302	0.0250

Laboratory Control Sample (LCS)

(LCS) R3683061-2 07/22/21 22:26

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	5.00	4.81	96.1	80.0-120	
Arsenic,Dissolved	0.0500	0.0465	93.0	80.0-120	
Barium,Dissolved	0.0500	0.0472	94.3	80.0-120	
Cadmium,Dissolved	0.0500	0.0509	102	80.0-120	
Chromium,Dissolved	0.0500	0.0490	98.0	80.0-120	
Copper,Dissolved	0.0500	0.0441	88.3	80.0-120	
Cobalt,Dissolved	0.0500	0.0492	98.4	80.0-120	
Iron,Dissolved	5.00	4.76	95.1	80.0-120	
Lead,Dissolved	0.0500	0.0465	93.1	80.0-120	
Manganese,Dissolved	0.0500	0.0515	103	80.0-120	
Molybdenum,Dissolved	0.0500	0.0478	95.6	80.0-120	
Nickel,Dissolved	0.0500	0.0492	98.4	80.0-120	
Selenium,Dissolved	0.0500	0.0486	97.1	80.0-120	
Silver,Dissolved	0.0500	0.0513	103	80.0-120	
Uranium,Dissolved	0.0500	0.0455	90.9	80.0-120	
Zinc,Dissolved	0.500	0.481	96.2	80.0-120	

L1371343-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1371343-01 07/22/21 22:29 • (MS) R3683061-4 07/22/21 22:36 • (MSD) R3683061-5 07/22/21 22:40

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	5.00	0.0304	4.69	4.68	93.2	92.9	1	75.0-125			0.230	20
Arsenic,Dissolved	0.0500	0.000476	0.0474	0.0471	93.9	93.2	1	75.0-125			0.643	20
Barium,Dissolved	0.0500	0.0320	0.0793	0.0788	94.7	93.5	1	75.0-125			0.714	20
Cadmium,Dissolved	0.0500	U	0.0514	0.0509	103	102	1	75.0-125			0.866	20
Chromium,Dissolved	0.0500	U	0.0491	0.0481	98.2	96.2	1	75.0-125			2.15	20
Copper,Dissolved	0.0500	0.00369	0.0467	0.0466	86.0	85.8	1	75.0-125			0.225	20
Cobalt,Dissolved	0.0500	0.0000744	0.0492	0.0490	98.2	97.9	1	75.0-125			0.379	20
Iron,Dissolved	5.00	0.0454	4.82	4.86	95.4	96.3	1	75.0-125			0.917	20
Lead,Dissolved	0.0500	0.00114	0.0459	0.0448	89.6	87.4	1	75.0-125			2.43	20
Manganese,Dissolved	0.0500	0.0124	0.0674	0.0749	110	125	1	75.0-125			10.7	20
Molybdenum,Dissolved	0.0500	0.00178	0.0509	0.0511	98.3	98.7	1	75.0-125			0.424	20
Nickel,Dissolved	0.0500	0.00233	0.0500	0.0493	95.4	93.9	1	75.0-125			1.53	20
Selenium,Dissolved	0.0500	U	0.0496	0.0496	99.3	99.2	1	75.0-125			0.0688	20
Silver,Dissolved	0.0500	U	0.0510	0.0503	102	101	1	75.0-125			1.35	20
Uranium,Dissolved	0.0500	0.0000963	0.0458	0.0446	91.4	89.0	1	75.0-125			2.59	20
Zinc,Dissolved	0.500	0.0238	0.503	0.496	95.8	94.4	1	75.0-125			1.40	20

Method Blank (MB)

(MB) R3681256-3 07/19/21 03:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	0.0568	J	0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	*99.8*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3681256-2 07/19/21 01:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.81	87.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*78.0-120*	

Method Blank (MB)

(MB) R3684049-3 07/20/21 05:14

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3684049-2 07/20/21 04:13

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.85	88.2	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*78.0-120*	

Received by OCD: 4/18/2022 4:17:12 PM

Method Blank (MB)

(MB) R3684014-3 07/19/21 12:40

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
1,2-Dibromoethane	U		0.000126	0.00100
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
2-Hexanone	U		0.000787	0.0100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100

Released to Imaging: 7/20/2022 10:39:48 AM

Method Blank (MB)

(MB) R3684014-3 07/19/21 12:40

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*97.9*			*80.0-120*
(S) 4-Bromofluorobenzene	*82.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*

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

(LCS) R3684014-1 07/19/21 11:38 • (LCSD) R3684014-2 07/19/21 11:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0307	0.0372	123	149	19.0-160			19.1	27
Benzene	0.00500	0.00516	0.00507	103	101	70.0-123			1.76	20
Bromodichloromethane	0.00500	0.00507	0.00499	101	99.8	75.0-120			1.59	20
Bromoform	0.00500	0.00475	0.00480	95.0	96.0	68.0-132			1.05	20
Bromomethane	0.00500	0.00372	0.00366	74.4	73.2	10.0-160			1.63	25
n-Butylbenzene	0.00500	0.00450	0.00454	90.0	90.8	73.0-125			0.885	20
sec-Butylbenzene	0.00500	0.00458	0.00458	91.6	91.6	75.0-125			0.000	20
tert-Butylbenzene	0.00500	0.00513	0.00518	103	104	76.0-124			0.970	20
Carbon disulfide	0.00500	0.00497	0.00478	99.4	95.6	61.0-128			3.90	20
Carbon tetrachloride	0.00500	0.00468	0.00441	93.6	88.2	68.0-126			5.94	20
Chlorobenzene	0.00500	0.00469	0.00474	93.8	94.8	80.0-121			1.06	20
Chlorodibromomethane	0.00500	0.00486	0.00485	97.2	97.0	77.0-125			0.206	20
Chloroethane	0.00500	0.00427	0.00416	85.4	83.2	47.0-150			2.61	20
Chloroform	0.00500	0.00506	0.00489	101	97.8	73.0-120			3.42	20
Chloromethane	0.00500	0.00474	0.00474	94.8	94.8	41.0-142			0.000	20
1,2-Dibromoethane	0.00500	0.00490	0.00487	98.0	97.4	80.0-122			0.614	20
1,1-Dichloroethane	0.00500	0.00534	0.00534	107	107	70.0-126			0.000	20
1,2-Dichloroethane	0.00500	0.00495	0.00492	99.0	98.4	70.0-128			0.608	20
1,1-Dichloroethene	0.00500	0.00547	0.00536	109	107	71.0-124			2.03	20
cis-1,2-Dichloroethene	0.00500	0.00514	0.00521	103	104	73.0-120			1.35	20
trans-1,2-Dichloroethene	0.00500	0.00468	0.00475	93.6	95.0	73.0-120			1.48	20
1,2-Dichloropropane	0.00500	0.00562	0.00555	112	111	77.0-125			1.25	20
cis-1,3-Dichloropropene	0.00500	0.00561	0.00546	112	109	80.0-123			2.71	20
trans-1,3-Dichloropropene	0.00500	0.00577	0.00575	115	115	78.0-124			0.347	20

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

(LCS) R3684014-1 07/19/21 11:38 • (LCSD) R3684014-2 07/19/21 11:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.00500	0.00464	0.00466	92.8	93.2	79.0-123			0.430	20
Hexachloro-1,3-butadiene	0.00500	0.00515	0.00527	103	105	54.0-138			2.30	20
2-Hexanone	0.0250	0.0245	0.0242	98.0	96.8	67.0-149			1.23	20
Isopropylbenzene	0.00500	0.00443	0.00435	88.6	87.0	76.0-127			1.82	20
p-Isopropyltoluene	0.00500	0.00472	0.00478	94.4	95.6	76.0-125			1.26	20
2-Butanone (MEK)	0.0250	0.0331	0.0340	132	136	44.0-160			2.68	20
Methylene Chloride	0.00500	0.00471	0.00474	94.2	94.8	67.0-120			0.635	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0319	0.0309	128	124	68.0-142			3.18	20
Methyl tert-butyl ether	0.00500	0.00556	0.00530	111	106	68.0-125			4.79	20
Naphthalene	0.00500	0.00411	0.00410	82.2	82.0	54.0-135			0.244	20
n-Propylbenzene	0.00500	0.00479	0.00485	95.8	97.0	77.0-124			1.24	20
Styrene	0.00500	0.00473	0.00460	94.6	92.0	73.0-130			2.79	20
1,1,2,2-Tetrachloroethane	0.00500	0.00586	0.00567	117	113	65.0-130			3.30	20
Tetrachloroethene	0.00500	0.00491	0.00488	98.2	97.6	72.0-132			0.613	20
Toluene	0.00500	0.00474	0.00477	94.8	95.4	79.0-120			0.631	20
1,1,1-Trichloroethane	0.00500	0.00538	0.00535	108	107	73.0-124			0.559	20
1,1,2-Trichloroethane	0.00500	0.00529	0.00514	106	103	80.0-120			2.88	20
Trichloroethene	0.00500	0.00503	0.00483	101	96.6	78.0-124			4.06	20
1,2,4-Trimethylbenzene	0.00500	0.00489	0.00483	97.8	96.6	76.0-121			1.23	20
1,3,5-Trimethylbenzene	0.00500	0.00495	0.00482	99.0	96.4	76.0-122			2.66	20
Vinyl chloride	0.00500	0.00480	0.00467	96.0	93.4	67.0-131			2.75	20
Xylenes, Total	0.0150	0.0137	0.0140	91.3	93.3	79.0-123			2.17	20
(S) Toluene-d8				*94.7*	*94.9*	*80.0-120*				
(S) 4-Bromofluorobenzene				*82.3*	*81.8*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*101*	*102*	*70.0-130*				

Received by OCD: 4/18/2022 4:17:12 PM

Method Blank (MB)

(MB) R3683932-3 07/19/21 12:01

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
1,2-Dibromoethane	U		0.000126	0.00100
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
2-Hexanone	U		0.000787	0.0100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100

Released to Imaging: 7/20/2022 10:39:48 AM

Method Blank (MB)

(MB) R3683932-3 07/19/21 12:01

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*109*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*80.3*			*70.0-130*

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

(LCS) R3683932-1 07/19/21 11:03 • (LCSD) R3683932-2 07/19/21 11:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0140	0.0208	56.0	83.2	19.0-160		J3	39.1	27
Benzene	0.00500	0.00458	0.00483	91.6	96.6	70.0-123			5.31	20
Bromodichloromethane	0.00500	0.00456	0.00467	91.2	93.4	75.0-120			2.38	20
Bromoform	0.00500	0.00487	0.00511	97.4	102	68.0-132			4.81	20
Bromomethane	0.00500	0.00438	0.00424	87.6	84.8	10.0-160			3.25	25
n-Butylbenzene	0.00500	0.00396	0.00429	79.2	85.8	73.0-125			8.00	20
sec-Butylbenzene	0.00500	0.00454	0.00441	90.8	88.2	75.0-125			2.91	20
tert-Butylbenzene	0.00500	0.00452	0.00455	90.4	91.0	76.0-124			0.662	20
Carbon disulfide	0.00500	0.00447	0.00458	89.4	91.6	61.0-128			2.43	20
Carbon tetrachloride	0.00500	0.00450	0.00473	90.0	94.6	68.0-126			4.98	20
Chlorobenzene	0.00500	0.00518	0.00541	104	108	80.0-121			4.34	20
Chlorodibromomethane	0.00500	0.00519	0.00539	104	108	77.0-125			3.78	20
Chloroethane	0.00500	0.00446	0.00466	89.2	93.2	47.0-150			4.39	20
Chloroform	0.00500	0.00421	0.00464	84.2	92.8	73.0-120			9.72	20
Chloromethane	0.00500	0.00377	0.00393	75.4	78.6	41.0-142			4.16	20
1,2-Dibromoethane	0.00500	0.00508	0.00538	102	108	80.0-122			5.74	20
1,1-Dichloroethane	0.00500	0.00441	0.00466	88.2	93.2	70.0-126			5.51	20
1,2-Dichloroethane	0.00500	0.00414	0.00433	82.8	86.6	70.0-128			4.49	20
1,1-Dichloroethene	0.00500	0.00412	0.00452	82.4	90.4	71.0-124			9.26	20
cis-1,2-Dichloroethene	0.00500	0.00485	0.00547	97.0	109	73.0-120			12.0	20
trans-1,2-Dichloroethene	0.00500	0.00470	0.00495	94.0	99.0	73.0-120			5.18	20
1,2-Dichloropropane	0.00500	0.00480	0.00507	96.0	101	77.0-125			5.47	20
cis-1,3-Dichloropropene	0.00500	0.00423	0.00464	84.6	92.8	80.0-123			9.24	20
trans-1,3-Dichloropropene	0.00500	0.00457	0.00467	91.4	93.4	78.0-124			2.16	20

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

(LCS) R3683932-1 07/19/21 11:03 • (LCSD) R3683932-2 07/19/21 11:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.00500	0.00502	0.00534	100	107	79.0-123			6.18	20
Hexachloro-1,3-butadiene	0.00500	0.00392	0.00439	78.4	87.8	54.0-138			11.3	20
2-Hexanone	0.0250	0.0227	0.0236	90.8	94.4	67.0-149			3.89	20
Isopropylbenzene	0.00500	0.00502	0.00530	100	106	76.0-127			5.43	20
p-Isopropyltoluene	0.00500	0.00449	0.00455	89.8	91.0	76.0-125			1.33	20
2-Butanone (MEK)	0.0250	0.0208	0.0208	83.2	83.2	44.0-160			0.000	20
Methylene Chloride	0.00500	0.00492	0.00523	98.4	105	67.0-120			6.11	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0202	0.0211	80.8	84.4	68.0-142			4.36	20
Methyl tert-butyl ether	0.00500	0.00410	0.00412	82.0	82.4	68.0-125			0.487	20
Naphthalene	0.00500	0.00367	0.00432	73.4	86.4	54.0-135			16.3	20
n-Propylbenzene	0.00500	0.00438	0.00443	87.6	88.6	77.0-124			1.14	20
Styrene	0.00500	0.00497	0.00523	99.4	105	73.0-130			5.10	20
1,1,2,2-Tetrachloroethane	0.00500	0.00442	0.00449	88.4	89.8	65.0-130			1.57	20
Tetrachloroethene	0.00500	0.00569	0.00619	114	124	72.0-132			8.42	20
Toluene	0.00500	0.00498	0.00521	99.6	104	79.0-120			4.51	20
1,1,1-Trichloroethane	0.00500	0.00453	0.00466	90.6	93.2	73.0-124			2.83	20
1,1,2-Trichloroethane	0.00500	0.00522	0.00524	104	105	80.0-120			0.382	20
Trichloroethene	0.00500	0.00530	0.00579	106	116	78.0-124			8.84	20
1,2,4-Trimethylbenzene	0.00500	0.00424	0.00438	84.8	87.6	76.0-121			3.25	20
1,3,5-Trimethylbenzene	0.00500	0.00432	0.00442	86.4	88.4	76.0-122			2.29	20
Vinyl chloride	0.00500	0.00478	0.00505	95.6	101	67.0-131			5.49	20
Xylenes, Total	0.0150	0.0151	0.0161	101	107	79.0-123			6.41	20
(S) Toluene-d8				*108*	*106*	*80.0-120*				
(S) 4-Bromofluorobenzene				*101*	*104*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*82.0*	*82.6*	*70.0-130*				

L1379683-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379683-05 07/19/21 19:48 • (MS) R3683932-4 07/19/21 20:45 • (MSD) R3683932-5 07/19/21 21:04

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	U	0.0196	0.0194	78.4	77.6	1	10.0-160			1.03	35
Benzene	0.00500	U	0.00528	0.00426	106	85.2	1	17.0-158			21.4	27
Bromodichloromethane	0.00500	U	0.00541	0.00448	108	89.6	1	31.0-150			18.8	27
Bromoform	0.00500	U	0.00590	0.00530	118	106	1	29.0-150			10.7	29
Bromomethane	0.00500	U	0.00382	0.00314	76.4	62.8	1	10.0-160			19.5	38
n-Butylbenzene	0.00500	U	0.00481	0.00363	96.2	72.6	1	31.0-150			28.0	30
sec-Butylbenzene	0.00500	U	0.00531	0.00410	106	82.0	1	33.0-155			25.7	29
tert-Butylbenzene	0.00500	U	0.00528	0.00418	106	83.6	1	34.0-153			23.3	28

L1379683-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379683-05 07/19/21 19:48 • (MS) R3683932-4 07/19/21 20:45 • (MSD) R3683932-5 07/19/21 21:04

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	0.00500	U	0.00379	0.00303	75.8	60.6	1	10.0-156			22.3	28
Carbon tetrachloride	0.00500	U	0.00576	0.00442	115	88.4	1	23.0-159			26.3	28
Chlorobenzene	0.00500	U	0.00592	0.00485	118	97.0	1	33.0-152			19.9	27
Chlorodibromomethane	0.00500	U	0.00611	0.00535	122	107	1	37.0-149			13.3	27
Chloroethane	0.00500	U	0.00435	0.00342	87.0	68.4	1	10.0-160			23.9	30
Chloroform	0.00500	0.000223	0.00548	0.00444	105	84.3	1	29.0-154			21.0	28
Chloromethane	0.00500	U	0.00346	0.00272	69.2	54.4	1	10.0-160			23.9	29
1,2-Dibromoethane	0.00500	U	0.00587	0.00539	117	108	1	34.0-147			8.53	27
1,1-Dichloroethane	0.00500	0.000392	0.00558	0.00466	104	85.4	1	25.0-158			18.0	27
1,2-Dichloroethane	0.00500	U	0.00484	0.00407	96.8	81.4	1	29.0-151			17.3	27
1,1-Dichloroethene	0.00500	0.00208	0.00689	0.00601	96.2	78.6	1	11.0-160			13.6	29
cis-1,2-Dichloroethene	0.00500	0.240	0.225	0.245	0.000	100	1	10.0-160	E V	E	8.51	27
trans-1,2-Dichloroethene	0.00500	0.0213	0.0253	0.0261	80.0	96.0	1	17.0-153			3.11	27
1,2-Dichloropropane	0.00500	U	0.00543	0.00456	109	91.2	1	30.0-156			17.4	27
cis-1,3-Dichloropropene	0.00500	U	0.00500	0.00428	100	85.6	1	34.0-149			15.5	28
trans-1,3-Dichloropropene	0.00500	U	0.00499	0.00464	99.8	92.8	1	32.0-149			7.27	28
Ethylbenzene	0.00500	U	0.00585	0.00461	117	92.2	1	30.0-155			23.7	27
Hexachloro-1,3-butadiene	0.00500	U	0.00487	0.00357	97.4	71.4	1	20.0-154			30.8	34
2-Hexanone	0.0250	U	0.0266	0.0277	106	111	1	21.0-160			4.05	29
Isopropylbenzene	0.00500	U	0.00600	0.00461	120	92.2	1	28.0-157			26.2	27
p-Isopropyltoluene	0.00500	U	0.00522	0.00403	104	80.6	1	30.0-154			25.7	29
2-Butanone (MEK)	0.0250	U	0.0223	0.0224	89.2	89.6	1	10.0-160			0.447	32
Methylene Chloride	0.00500	U	0.00520	0.00471	104	94.2	1	23.0-144			9.89	28
4-Methyl-2-pentanone (MIBK)	0.0250	U	0.0231	0.0231	92.4	92.4	1	29.0-160			0.000	29
Methyl tert-butyl ether	0.00500	U	0.00464	0.00423	92.8	84.6	1	28.0-150			9.24	29
Naphthalene	0.00500	U	0.00450	0.00411	90.0	82.2	1	12.0-156			9.06	35
n-Propylbenzene	0.00500	U	0.00507	0.00389	101	77.8	1	31.0-154			26.3	28
Styrene	0.00500	U	0.00576	0.00480	115	96.0	1	33.0-155			18.2	28
1,1,2,2-Tetrachloroethane	0.00500	U	0.00535	0.00516	107	103	1	33.0-150			3.62	28
Tetrachloroethene	0.00500	0.000859	0.00735	0.00626	130	108	1	10.0-160			16.0	27
Toluene	0.00500	U	0.00568	0.00463	114	92.6	1	26.0-154			20.4	28
1,1,1-Trichloroethane	0.00500	U	0.00560	0.00426	112	85.2	1	23.0-160			27.2	28
1,1,2-Trichloroethane	0.00500	U	0.00594	0.00532	119	106	1	35.0-147			11.0	27
Trichloroethene	0.00500	0.846	0.796	0.855	0.000	180	1	10.0-160	E V	E V	7.15	25
1,2,4-Trimethylbenzene	0.00500	U	0.00494	0.00376	98.8	75.2	1	26.0-154		J3	27.1	27
1,3,5-Trimethylbenzene	0.00500	U	0.00500	0.00386	100	77.2	1	28.0-153			25.7	27
Vinyl chloride	0.00500	0.000445	0.00495	0.00402	90.1	71.5	1	10.0-160			20.7	27
Xylenes, Total	0.0150	U	0.0179	0.0143	119	95.3	1	29.0-154			22.4	28
(S) Toluene-d8					*108*	*107*		*80.0-120*				
(S) 4-Bromofluorobenzene					*102*	*101*		*77.0-126*				

L1379683-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379683-05 07/19/21 19:48 • (MS) R3683932-4 07/19/21 20:45 • (MSD) R3683932-5 07/19/21 21:04

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) 1,2-Dichloroethane-d4					*81.8*	*83.3*		*70.0-130*				

Method Blank (MB)

(MB) R3684283-1 07/27/21 07:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	*81.5*			*31.0-160*

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

(LCS) R3684283-2 07/27/21 08:05 • (LCSD) R3684283-3 07/27/21 08:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	1.63	1.60	109	107	50.0-150			1.86	20
(S) o-Terphenyl				*91.0*	*89.5*	*31.0-160*				

Method Blank (MB)

(MB) R3682993-3 07/22/21 15:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

Method Blank (MB)

(MB) R3682993-3 07/22/21 15:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*78.6*			*10.0-127*
(S) 2-Fluorobiphenyl	*71.5*			*10.0-130*
(S) p-Terphenyl-d14	*66.4*			*10.0-128*
(S) Phenol-d5	*25.7*			*10.0-120*
(S) 2-Fluorophenol	*37.0*			*10.0-120*
(S) 2,4,6-Tribromophenol	*62.0*			*10.0-155*

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

(LCS) R3682993-1 07/22/21 15:01 • (LCSD) R3682993-2 07/22/21 15:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	0.0372	0.0365	74.4	73.0	41.0-120			1.90	22
Acenaphthylene	0.0500	0.0407	0.0392	81.4	78.4	43.0-120			3.75	22
Acetophenone	0.0500	0.0405	0.0389	81.0	77.8	29.0-120			4.03	28
Anthracene	0.0500	0.0406	0.0376	81.2	75.2	45.0-120			7.67	20
Atrazine	0.0500	0.0476	0.0457	95.2	91.4	39.0-141			4.07	20
Benzaldehyde	0.0500	0.0912	0.0858	182	172	10.0-160	J4	J4	6.10	40
Benzo(a)anthracene	0.0500	0.0443	0.0431	88.6	86.2	47.0-120			2.75	20
Benzo(b)fluoranthene	0.0500	0.0428	0.0417	85.6	83.4	46.0-120			2.60	20
Benzo(k)fluoranthene	0.0500	0.0424	0.0403	84.8	80.6	46.0-120			5.08	21
Benzo(g,h,i)perylene	0.0500	0.0441	0.0427	88.2	85.4	48.0-121			3.23	20
Benzo(a)pyrene	0.0500	0.0430	0.0419	86.0	83.8	47.0-120			2.59	20
Biphenyl	0.0500	0.0387	0.0370	77.4	74.0	38.0-120			4.49	27
Bis(2-chlorethoxy)methane	0.0500	0.0339	0.0341	67.8	68.2	33.0-120			0.588	24
Bis(2-chloroethyl)ether	0.0500	0.0369	0.0343	73.8	68.6	23.0-120			7.30	33
2,2-Oxybis(1-Chloropropane)	0.0500	0.0352	0.0334	70.4	66.8	28.0-120			5.25	31
4-Bromophenyl-phenylether	0.0500	0.0405	0.0381	81.0	76.2	45.0-120			6.11	20
Caprolactam	0.0500	0.0136	0.0137	27.2	27.4	10.0-120			0.733	26
Carbazole	0.0500	0.0439	0.0415	87.8	83.0	51.0-122			5.62	20
4-Chloroaniline	0.0500	0.0372	0.0353	74.4	70.6	25.0-120			5.24	25
2-Chloronaphthalene	0.0500	0.0380	0.0369	76.0	73.8	37.0-120			2.94	25
4-Chlorophenyl-phenylether	0.0500	0.0404	0.0386	80.8	77.2	44.0-120			4.56	20
Chrysene	0.0500	0.0412	0.0401	82.4	80.2	48.0-120			2.71	20
Dibenz(a,h)anthracene	0.0500	0.0440	0.0425	88.0	85.0	47.0-120			3.47	20
Dibenzofuran	0.0500	0.0407	0.0391	81.4	78.2	44.0-120			4.01	22
3,3-Dichlorobenzidine	0.100	0.0945	0.0933	94.5	93.3	44.0-120			1.28	20
2,4-Dinitrotoluene	0.0500	0.0468	0.0454	93.6	90.8	49.0-124			3.04	20
2,6-Dinitrotoluene	0.0500	0.0425	0.0405	85.0	81.0	46.0-120			4.82	21
Fluoranthene	0.0500	0.0452	0.0428	90.4	85.6	51.0-120			5.45	20
Fluorene	0.0500	0.0403	0.0398	80.6	79.6	47.0-120			1.25	20
Hexachlorobenzene	0.0500	0.0395	0.0369	79.0	73.8	44.0-120			6.81	20
Hexachloro-1,3-butadiene	0.0500	0.0372	0.0370	74.4	74.0	19.0-120			0.539	32
Hexachlorocyclopentadiene	0.0500	0.0283	0.0271	56.6	54.2	15.0-120			4.33	31
Hexachloroethane	0.0500	0.0365	0.0370	73.0	74.0	15.0-120			1.36	37
Indeno(1,2,3-cd)pyrene	0.0500	0.0472	0.0451	94.4	90.2	49.0-122			4.55	20
Isophorone	0.0500	0.0393	0.0384	78.6	76.8	36.0-120			2.32	23
1-Methylnaphthalene	0.0500	0.0346	0.0336	69.2	67.2	33.0-120			2.93	24
2-Methylnaphthalene	0.0500	0.0325	0.0322	65.0	64.4	33.0-120			0.927	25
Naphthalene	0.0500	0.0328	0.0315	65.6	63.0	27.0-120			4.04	27
2-Nitroaniline	0.0500	0.0435	0.0403	87.0	80.6	43.0-120			7.64	22
3-Nitroaniline	0.0500	0.0385	0.0370	77.0	74.0	38.0-120			3.97	21

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

(LCS) R3682993-1 07/22/21 15:01 • (LCSD) R3682993-2 07/22/21 15:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0500	0.0461	0.0444	92.2	88.8	18.0-160			3.76	21
Nitrobenzene	0.0500	0.0401	0.0388	80.2	77.6	27.0-120			3.30	29
n-Nitrosodiphenylamine	0.0500	0.0395	0.0369	79.0	73.8	47.0-120			6.81	20
n-Nitrosodi-n-propylamine	0.0500	0.0420	0.0400	84.0	80.0	31.0-120			4.88	28
Phenanthrene	0.0500	0.0396	0.0375	79.2	75.0	46.0-120			5.45	20
Benzylbutyl phthalate	0.0500	0.0448	0.0434	89.6	86.8	43.0-121			3.17	20
Bis(2-ethylhexyl)phthalate	0.0500	0.0426	0.0412	85.2	82.4	43.0-122			3.34	20
Di-n-butyl phthalate	0.0500	0.0470	0.0436	94.0	87.2	49.0-121			7.51	20
Diethyl phthalate	0.0500	0.0442	0.0420	88.4	84.0	48.0-122			5.10	20
Dimethyl phthalate	0.0500	0.0416	0.0398	83.2	79.6	48.0-120			4.42	20
Di-n-octyl phthalate	0.0500	0.0477	0.0457	95.4	91.4	42.0-125			4.28	20
Pyrene	0.0500	0.0425	0.0408	85.0	81.6	47.0-120			4.08	20
1,2,4-Trichlorobenzene	0.0500	0.0353	0.0339	70.6	67.8	24.0-120			4.05	29
4-Chloro-3-methylphenol	0.0500	0.0374	0.0368	74.8	73.6	40.0-120			1.62	21
2-Chlorophenol	0.0500	0.0335	0.0325	67.0	65.0	25.0-120			3.03	35
2-Methylphenol	0.0500	0.0303	0.0285	60.6	57.0	28.0-120			6.12	29
3&4-Methyl Phenol	0.0500	0.0320	0.0307	64.0	61.4	31.0-120			4.15	30
2,4-Dichlorophenol	0.0500	0.0364	0.0354	72.8	70.8	36.0-120			2.79	26
2,4-Dimethylphenol	0.0500	0.0380	0.0364	76.0	72.8	33.0-120			4.30	26
4,6-Dinitro-2-methylphenol	0.0500	0.0488	0.0468	97.6	93.6	38.0-138			4.18	25
2,4-Dinitrophenol	0.0500	0.0430	0.0416	86.0	83.2	10.0-120			3.31	39
2-Nitrophenol	0.0500	0.0382	0.0373	76.4	74.6	31.0-120			2.38	29
4-Nitrophenol	0.0500	0.0167	0.0148	33.4	29.6	10.0-120			12.1	33
Pentachlorophenol	0.0500	0.0379	0.0354	75.8	70.8	23.0-120			6.82	25
Phenol	0.0500	0.0177	0.0172	35.4	34.4	10.0-120			2.87	36
2,4,5-Trichlorophenol	0.0500	0.0442	0.0413	88.4	82.6	44.0-120			6.78	22
2,4,6-Trichlorophenol	0.0500	0.0397	0.0387	79.4	77.4	42.0-120			2.55	23
(S) Nitrobenzene-d5				*75.6*	*74.2*	*10.0-127*				
(S) 2-Fluorobiphenyl				*77.2*	*74.8*	*10.0-130*				
(S) p-Terphenyl-d14				*69.8*	*67.0*	*10.0-128*				
(S) Phenol-d5				*29.3*	*27.3*	*10.0-120*				
(S) 2-Fluorophenol				*44.0*	*40.4*	*10.0-120*				
(S) 2,4,6-Tribromophenol				*77.0*	*67.5*	*10.0-155*				

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.
U	Not detected at the Reporting Limit (or MDL where applicable).
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
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	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 [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

* 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 Analytical.

Company Name/Address:
TRC Solutions - Austin, TX
505 E. Huntland Drive, Suite 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095

Pres Chk

Report to: **Julie Speer**

Email To: jspeer@trccompanies.com;aeljuri@trccompanie

Project Description: **Lovington Lea Refinery**

City/State Collected: Lovington, NM

Please Circle: PT MT CT ET

Phone: **512-684-3176**

Client Project # **377274.0000.0000.**

Lab Project # **TRCATX-LOVINGTON NAV**

Collected by (print): Bryan Bayles + HMI Team

Site/Facility ID #

P.O. # **165094**

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8270TX 100ml Amb NoPres	DROLVI 40mlAmb-HCl-BT	GRO 40mlAmb HCl	HG 250mlHDPE-HNO3 <2	NAVAJOMETALSDISS 250mlHDPE-NoPres (Lab to Filter)	NO2NO3 250mlHDPE-H2SO4 <2	V8260 40mlAmb-HCl	V8260-TripBlank 40mlAmb-HCl-Blk	WetChem 500mlHDPE-NoPres		Remarks	Sample # (lab only)
WW-NORTH		GW		7/15/21	1055	13	X	X	X	X	X	X	X		X			-01
WW-SOUTH		GW			930	13	X	X	X	X	X	X	X		X			02
WW-EAST		GW			1140	13	X	X	X	X	X	X	X		X			03
DUP-01		GW			1000	13	X	X	X	X	X	X	X		X			04
TRIP BLANK -01		GW			—	1								X				05

Chain of Custody Page 1 of 1

Pace Analytical®

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1379618

1080

Acctnum: **TRCATX**
Template: **T118335**
Prelogin: **P856410**
PM: **526 - Chris McCord**
PB:
Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: WetChem = ALK,CHLORIDE,FLUORIDE,SULFATE,TDS.
Lab filter NAVAJOMETALSDISS.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __UPS ✓FedEx __Courier _____

Tracking # 511744377204 9883 0084 3392

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: ✓Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Bryan Bayles	7/15/21	1245		Acceptable
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.3+0.3=3.6 °C Bottles Received: 62
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Jasmine Juqua	Date: 7/16/21 Time: 850

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

ANALYTICAL REPORT

February 21, 2022

Revised Report

TRC Solutions - Austin, TX

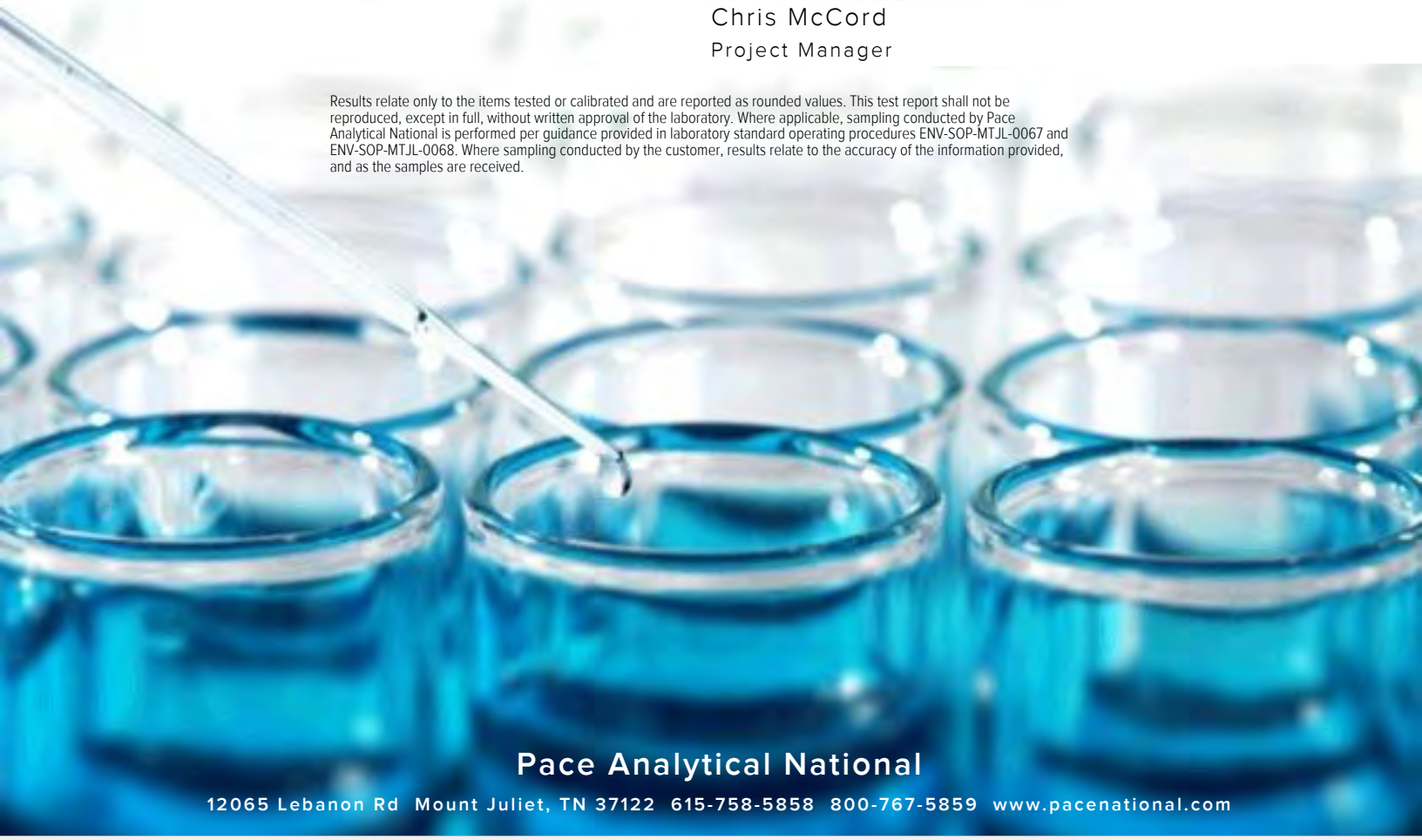
Sample Delivery Group:	L1404888
Samples Received:	09/17/2021
Project Number:	425919.0000.0000.
Description:	Lovington Lea Refinery

Report To: Julie Speer
505 E. Huntland Drive, Suite 250
Austin, TX 78752

Entire Report Reviewed By:

Chris McCord
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.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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MW-1 L1404888-01 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 08:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745608	1	09/27/21 15:03	09/27/21 15:03	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 01:37	09/23/21 01:37	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:01	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:30	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 09:08	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:09	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/19/21 23:46	09/19/21 23:46	BMB	Mt. Juliet, TN

MW-2 L1404888-02 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:10 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745608	1	09/27/21 15:05	09/27/21 15:05	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 02:10	09/23/21 02:10	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 02:26	09/23/21 02:26	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:03	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:32	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 09:22	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:12	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 00:04	09/20/21 00:04	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1743791	1	09/21/21 16:37	09/22/21 13:22	TMM	Mt. Juliet, TN

MW-3 L1404888-03 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 11:25 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG1745608	1	09/27/21 15:06	09/27/21 15:06	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 02:42	09/23/21 02:42	ELN	Mt. Juliet, TN

MW-4 L1404888-04 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 12:05 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 16:41	09/27/21 16:41	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 02:59	09/23/21 02:59	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 03:15	09/23/21 03:15	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:05	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:35	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 09:25	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:16	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 00:23	09/20/21 00:23	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1743791	1	09/21/21 16:37	09/22/21 13:44	TMM	Mt. Juliet, TN

MW-5 L1404888-05 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:30 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744126	1	09/22/21 18:13	09/22/21 18:13	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 16:43	09/27/21 16:43	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 03:32	09/23/21 03:32	ELN	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:07	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:38	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 09:29	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 12:41	09/25/21 12:41	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 00:42	09/20/21 00:42	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 00:15	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1743791	1	09/21/21 16:37	09/22/21 14:05	TMM	Mt. Juliet, TN

MW-6 L1404888-06 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:30 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 16:47	09/27/21 16:47	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 04:21	09/23/21 04:21	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 05:29	09/25/21 05:29	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:09	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:46	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 09:32	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:19	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 01:01	09/20/21 01:01	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1743791	1	09/21/21 16:37	09/22/21 14:27	TMM	Mt. Juliet, TN

MW-8 L1404888-07 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 08:15 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	5	09/27/21 16:48	09/27/21 16:48	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 04:37	09/23/21 04:37	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 04:54	09/23/21 04:54	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 07:08	09/25/21 07:08	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:15	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:48	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:14	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:22	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 01:37	09/20/21 01:37	BMB	Mt. Juliet, TN

MW-9 L1404888-08 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 08:55 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 16:53	09/27/21 16:53	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 05:10	09/23/21 05:10	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 05:26	09/23/21 05:26	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 07:24	09/25/21 07:24	ST	Mt. Juliet, TN

MW-10 L1404888-09 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:15 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 16:55	09/27/21 16:55	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 05:43	09/23/21 05:43	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 07:41	09/25/21 07:41	ST	Mt. Juliet, TN

MW-11R L1404888-10 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:05 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744126	1	09/22/21 18:34	09/22/21 18:34	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 16:56	09/27/21 16:56	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 06:48	09/23/21 06:48	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 07:38	09/23/21 07:38	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 07:57	09/25/21 07:57	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:17	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:51	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:18	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 01:56	09/20/21 01:56	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1743791	1	09/21/21 16:37	09/22/21 14:48	TMM	Mt. Juliet, TN

MW-12R2 L1404888-11 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:40 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744126	1	09/22/21 18:39	09/22/21 18:39	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 16:57	09/27/21 16:57	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 07:54	09/23/21 07:54	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 08:13	09/25/21 08:13	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:19	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:54	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:21	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:25	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 02:15	09/20/21 02:15	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 12:26	TMM	Mt. Juliet, TN

MW-13R L1404888-12 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:15 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	2	09/27/21 16:58	09/27/21 16:58	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 08:27	09/23/21 08:27	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 08:30	09/25/21 08:30	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:21	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:57	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:24	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 02:34	09/20/21 02:34	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 12:47	TMM	Mt. Juliet, TN

MW-14R L1404888-13 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 11:20 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	2	09/27/21 17:00	09/27/21 17:00	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 08:43	09/23/21 08:43	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 09:00	09/23/21 09:00	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 08:46	09/25/21 08:46	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:23	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:59	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:28	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 02:53	09/20/21 02:53	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 13:08	TMM	Mt. Juliet, TN

MW-15R L1404888-14 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 11:10 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744126	1	09/22/21 18:42	09/22/21 18:42	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 17:01	09/27/21 17:01	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 09:33	09/23/21 09:33	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 09:03	09/25/21 09:03	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 16:25	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:02	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:31	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:28	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 03:12	09/20/21 03:12	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 13:29	TMM	Mt. Juliet, TN

MW-16R L1404888-15 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 08:25 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 17:02	09/27/21 17:02	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 09:49	09/23/21 09:49	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 09:19	09/25/21 09:19	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742867	1	09/22/21 10:30	09/22/21 15:38	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:05	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:35	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:32	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 03:30	09/20/21 03:30	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 13:50	TMM	Mt. Juliet, TN

MW-17R L1404888-16 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:45 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:19	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:08	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:38	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:35	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 03:49	09/20/21 03:49	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 14:11	TMM	Mt. Juliet, TN

MW-18R L1404888-17 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:05 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 17:04	09/27/21 17:04	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 10:55	09/23/21 10:55	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 09:35	09/25/21 09:35	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:21	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:10	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:42	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:44	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 04:08	09/20/21 04:08	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 14:32	TMM	Mt. Juliet, TN

MW-19R L1404888-18 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:10 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744126	1	09/22/21 18:45	09/22/21 18:45	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 17:05	09/27/21 17:05	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 11:11	09/23/21 11:11	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 11:27	09/23/21 11:27	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 10:25	09/25/21 10:25	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:23	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:18	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:56	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 04:27	09/20/21 04:27	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 14:53	TMM	Mt. Juliet, TN

MW-20R L1404888-19 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	5	09/27/21 17:10	09/27/21 17:10	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 11:44	09/23/21 11:44	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 12:00	09/23/21 12:00	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 10:41	09/25/21 10:41	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:25	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:21	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 10:59	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:48	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 04:46	09/20/21 04:46	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 17:44	TMM	Mt. Juliet, TN

MW-21 L1404888-20 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 12:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 13:02	09/25/21 13:02	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 07:09	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 15:14	TMM	Mt. Juliet, TN

MW-22 L1404888-21 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:40 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 17:11	09/27/21 17:11	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 12:17	09/23/21 12:17	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 10:57	09/25/21 10:57	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:27	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:24	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 11:02	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 13:24	09/25/21 13:24	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 05:05	09/20/21 05:05	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	2	09/26/21 06:45	09/27/21 01:58	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 18:05	TMM	Mt. Juliet, TN

MW-23R L1404888-22 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:55 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 17:13	09/27/21 17:13	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	1	09/23/21 13:06	09/23/21 13:06	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744856	5	09/23/21 13:22	09/23/21 13:22	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746176	1	09/25/21 11:14	09/25/21 11:14	ST	Mt. Juliet, TN

MW-24R L1404888-23 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 11:45 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 11:28	09/23/21 11:28	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 17:15	09/27/21 17:15	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/23/21 20:26	09/23/21 20:26	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:33	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:26	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 11:06	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:51	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 05:24	09/20/21 05:24	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 15:36	TMM	Mt. Juliet, TN

MW-26R L1404888-24 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:25 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG1745610	5	09/27/21 17:18	09/27/21 17:18	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/23/21 20:57	09/23/21 20:57	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/23/21 21:13	09/23/21 21:13	ST	Mt. Juliet, TN

MW-27 L1404888-25 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:20 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 05:43	09/20/21 05:43	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 15:57	TMM	Mt. Juliet, TN

MW-28 L1404888-26 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 11:15 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 11:32	09/23/21 11:32	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745610	1	09/27/21 17:19	09/27/21 17:19	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/23/21 21:29	09/23/21 21:29	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/23/21 21:45	09/23/21 21:45	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:35	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 11:29	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 11:09	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 14:54	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742804	1	09/20/21 06:02	09/20/21 06:02	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 16:18	TMM	Mt. Juliet, TN

MW-29 L1404888-27 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 11:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745251	1	09/23/21 11:54	09/23/21 12:57	BRG	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	5	09/28/21 11:58	09/28/21 11:58	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/23/21 22:01	09/23/21 22:01	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/23/21 22:17	09/23/21 22:17	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:37	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 03:51	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744466	1	09/22/21 20:17	09/24/21 11:13	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 00:56	09/20/21 00:56	JAH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 16:40	TMM	Mt. Juliet, TN

MW-30 L1404888-28 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 11:38	09/23/21 11:38	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	5	09/28/21 12:00	09/28/21 12:00	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/23/21 23:04	09/23/21 23:04	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:39	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 03:54	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744734	1	09/22/21 18:42	09/23/21 01:15	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 01:15	09/20/21 01:15	JAH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 17:01	TMM	Mt. Juliet, TN

MW-32 L1404888-29 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 08:50 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 11:42	09/23/21 11:42	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	5	09/28/21 12:01	09/28/21 12:01	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/23/21 23:20	09/23/21 23:20	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/24/21 06:46	09/24/21 06:46	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:40	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 03:57	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744734	1	09/22/21 18:42	09/23/21 01:19	JPD	Mt. Juliet, TN

MW-32 L1404888-29 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 08:50 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 13:45	09/25/21 13:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 01:34	09/20/21 01:34	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 02:24	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744270	1	09/22/21 22:07	09/23/21 17:22	TMM	Mt. Juliet, TN

MW-33 L1404888-30 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 11:48	09/23/21 11:48	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:02	09/28/21 12:02	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/23/21 23:52	09/23/21 23:52	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:13	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744918	1	09/23/21 00:35	09/24/21 10:19	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744734	1	09/22/21 18:42	09/23/21 00:49	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 14:07	09/25/21 14:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 01:54	09/20/21 01:54	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 00:41	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 13:13	TMM	Mt. Juliet, TN

WW-NORTH L1404888-31 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 11:55	09/23/21 11:55	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:06	09/28/21 12:06	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 00:40	09/24/21 00:40	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/24/21 00:56	09/24/21 00:56	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:42	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:00	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 22:51	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/24/21 08:57	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 14:28	09/25/21 14:28	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 02:13	09/20/21 02:13	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 02:50	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 14:59	TMM	Mt. Juliet, TN

WW-SOUTH L1404888-32 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:05 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 11:59	09/23/21 11:59	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:11	09/28/21 12:11	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 01:12	09/24/21 01:12	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/24/21 01:28	09/24/21 01:28	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:44	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:07	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 22:55	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/24/21 09:01	JPD	Mt. Juliet, TN

WW-SOUTH L1404888-32 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:05 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 14:50	09/25/21 14:50	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 02:32	09/20/21 02:32	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 03:16	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 15:42	TMM	Mt. Juliet, TN

WW-EAST L1404888-33 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:55 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 12:04	09/23/21 12:04	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:12	09/28/21 12:12	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 02:16	09/24/21 02:16	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/24/21 02:32	09/24/21 02:32	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:50	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:10	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 22:58	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/24/21 09:04	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 15:12	09/25/21 15:12	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 02:51	09/20/21 02:51	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 03:41	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 10:01	TMM	Mt. Juliet, TN

DUP-01 L1404888-34 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 12:15	09/23/21 12:15	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:14	09/28/21 12:14	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 02:47	09/24/21 02:47	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/24/21 03:03	09/24/21 03:03	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:52	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:13	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 23:02	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/24/21 09:07	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 15:33	09/25/21 15:33	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 03:10	09/20/21 03:10	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 04:07	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 10:22	TMM	Mt. Juliet, TN

DUP-02 L1404888-35 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 12:19	09/23/21 12:19	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:15	09/28/21 12:15	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 03:19	09/24/21 03:19	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/24/21 07:18	09/24/21 07:18	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 13:54	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:16	CCE	Mt. Juliet, TN

DUP-02 L1404888-35 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 10:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 23:05	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 15:55	09/25/21 15:55	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 03:30	09/20/21 03:30	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	2	09/26/21 06:45	09/27/21 04:33	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/24/21 18:53	AMG	Mt. Juliet, TN

DUP-03 L1404888-36 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 11:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 12:25	09/23/21 12:25	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:18	09/28/21 12:18	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 03:35	09/24/21 03:35	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 14:00	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:18	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 23:08	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 16:16	09/25/21 16:16	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 03:49	09/20/21 03:49	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 04:59	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 10:43	TMM	Mt. Juliet, TN

DUP-04 L1404888-37 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:00 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745409	1	09/23/21 14:35	09/23/21 18:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	2	09/28/21 12:19	09/28/21 12:19	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 03:51	09/24/21 03:51	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	5	09/24/21 04:07	09/24/21 04:07	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 14:02	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:21	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 23:12	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 04:09	09/20/21 04:09	JAH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 14:38	TMM	Mt. Juliet, TN

EB-01 L1404888-38 GW

Collected by: Scott Ude/HMI Team | Collected date/time: 09/16/21 09:50 | Received date/time: 09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 12:28	09/23/21 12:28	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:20	09/28/21 12:20	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 04:23	09/24/21 04:23	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 14:04	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:24	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 23:15	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1745736	1	09/25/21 16:38	09/25/21 16:38	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 04:28	09/20/21 04:28	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1746172	1	09/26/21 06:45	09/27/21 05:25	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 15:20	TMM	Mt. Juliet, TN

SAMPLE SUMMARY

EB-02 L1404888-39 GW

Collected by	Collected date/time	Received date/time
Scott Ude/HMI Team	09/16/21 09:20	09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744934	1	09/22/21 22:19	09/22/21 23:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1744127	1	09/23/21 12:34	09/23/21 12:34	AMH	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1745611	1	09/28/21 12:21	09/28/21 12:21	JER	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1744857	1	09/24/21 05:27	09/24/21 05:27	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742872	1	09/24/21 09:50	09/24/21 14:06	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1744919	1	09/23/21 02:41	09/24/21 04:27	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744922	1	09/22/21 23:32	09/23/21 23:19	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 04:47	09/20/21 04:47	JAH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1744588	1	09/22/21 22:12	09/23/21 11:05	TMM	Mt. Juliet, TN

TRIP BLANK-01 L1404888-40 GW

Collected by	Collected date/time	Received date/time
Scott Ude/HMI Team	09/16/21 00:00	09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 00:17	09/20/21 00:17	JAH	Mt. Juliet, TN

TRIP BLANK-02 L1404888-41 GW

Collected by	Collected date/time	Received date/time
Scott Ude/HMI Team	09/16/21 00:00	09/17/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1742806	1	09/20/21 00:37	09/20/21 00:37	JAH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. 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.



Chris McCord
Project Manager

Report Revision History

Level II Report - Version 1: 10/07/21 16:22

Project Narrative

2/18/22: Revised to include missing QC data for Fluoride in WG1744856.

Sample Delivery Group (SDG) Narrative

An aliquot for analysis was taken from the original container received due to the level of sediment present in the sample. Rinsing of the original sample container for inclusion in the sample extraction was not performed.

Lab Sample ID	Project Sample ID	Method
L1404888-16	MW-17R	8270C
L1404888-17	MW-18R	8270C
L1404888-19	MW-20R	8270C
L1404888-20	MW-21	8270C
L1404888-21	MW-22	8270C
L1404888-25	MW-27	8270C
L1404888-26	MW-28	8270C
L1404888-27	MW-29	8270C
L1404888-29	MW-32	8270C

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1404888-30	MW-33	8015D/GRO

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	438		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	3.80		0.0500	0.100	1	09/27/2021 15:03	WG1745608

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	52.4		0.379	1.00	1	09/23/2021 01:37	WG1744856
Fluoride	0.914		0.0640	0.150	1	09/23/2021 01:37	WG1744856
Sulfate	73.6		0.594	5.00	1	09/23/2021 01:37	WG1744856

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/22/2021 16:01	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.168	J	0.0200	0.200	1	09/24/2021 10:30	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 09:08	WG1744466
Arsenic,Dissolved	0.00520		0.000180	0.00200	1	09/24/2021 09:08	WG1744466
Barium,Dissolved	0.151		0.000381	0.00200	1	09/24/2021 09:08	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 09:08	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 09:08	WG1744466
Copper,Dissolved	U		0.00151	0.00500	1	09/24/2021 09:08	WG1744466
Cobalt,Dissolved	0.0000677	J	0.0000596	0.00200	1	09/24/2021 09:08	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 09:08	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 09:08	WG1744466
Manganese,Dissolved	0.00101	J	0.000704	0.00500	1	09/24/2021 09:08	WG1744466
Molybdenum,Dissolved	0.00272	J	0.000348	0.00500	1	09/24/2021 09:08	WG1744466
Nickel,Dissolved	U		0.000816	0.00200	1	09/24/2021 09:08	WG1744466
Selenium,Dissolved	0.00210		0.000300	0.00200	1	09/24/2021 14:09	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 09:08	WG1744466
Uranium,Dissolved	0.00175	J	0.0000700	0.0200	1	09/24/2021 09:08	WG1744466
Zinc,Dissolved	0.00603	J	0.00302	0.0250	1	09/24/2021 09:08	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/19/2021 23:46	WG1742804
Benzene	0.000102	J	0.0000941	0.00100	1	09/19/2021 23:46	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/19/2021 23:46	WG1742804
Bromoform	U		0.000129	0.00100	1	09/19/2021 23:46	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/19/2021 23:46	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/19/2021 23:46	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/19/2021 23:46	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/19/2021 23:46	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/19/2021 23:46	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/19/2021 23:46	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/19/2021 23:46	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/19/2021 23:46	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/19/2021 23:46	WG1742804
Chloroform	0.000560	J	0.000111	0.00500	1	09/19/2021 23:46	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/19/2021 23:46	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/19/2021 23:46	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/19/2021 23:46	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/19/2021 23:46	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/19/2021 23:46	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/19/2021 23:46	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/19/2021 23:46	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/19/2021 23:46	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/19/2021 23:46	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/19/2021 23:46	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/19/2021 23:46	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/19/2021 23:46	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/19/2021 23:46	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/19/2021 23:46	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/19/2021 23:46	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/19/2021 23:46	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/19/2021 23:46	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/19/2021 23:46	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/19/2021 23:46	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/19/2021 23:46	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/19/2021 23:46	WG1742804
Styrene	U		0.000118	0.00100	1	09/19/2021 23:46	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/19/2021 23:46	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/19/2021 23:46	WG1742804
Toluene	U		0.000278	0.00100	1	09/19/2021 23:46	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/19/2021 23:46	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/19/2021 23:46	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/19/2021 23:46	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/19/2021 23:46	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/19/2021 23:46	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/19/2021 23:46	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/19/2021 23:46	WG1742804
(S) Toluene-d8	*106*			*80.0-120*		*09/19/2021 23:46*	WG1742804
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*09/19/2021 23:46*	WG1742804
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*09/19/2021 23:46*	WG1742804

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	606		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	2.77		0.0500	0.100	1	09/27/2021 15:05	WG1745608

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	122		1.90	5.00	5	09/23/2021 02:26	WG1744856
Fluoride	0.936		0.0640	0.150	1	09/23/2021 02:10	WG1744856
Sulfate	82.3		0.594	5.00	1	09/23/2021 02:10	WG1744856

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/22/2021 16:03	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.190	J	0.0200	0.200	1	09/24/2021 10:32	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 09:22	WG1744466
Arsenic,Dissolved	0.00410		0.000180	0.00200	1	09/24/2021 09:22	WG1744466
Barium,Dissolved	0.0717		0.000381	0.00200	1	09/24/2021 09:22	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 09:22	WG1744466
Chromium,Dissolved	0.00131	J	0.00124	0.00200	1	09/24/2021 09:22	WG1744466
Copper,Dissolved	0.00496	B J	0.00151	0.00500	1	09/24/2021 09:22	WG1744466
Cobalt,Dissolved	0.0000770	J	0.0000596	0.00200	1	09/24/2021 09:22	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 09:22	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 09:22	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 09:22	WG1744466
Molybdenum,Dissolved	0.00342	J	0.000348	0.00500	1	09/24/2021 09:22	WG1744466
Nickel,Dissolved	0.000979	J	0.000816	0.00200	1	09/24/2021 09:22	WG1744466
Selenium,Dissolved	0.00166	J	0.000300	0.00200	1	09/24/2021 14:12	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 09:22	WG1744466
Uranium,Dissolved	0.00298	J	0.0000700	0.0200	1	09/24/2021 09:22	WG1744466
Zinc,Dissolved	0.0391		0.00302	0.0250	1	09/24/2021 09:22	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 00:04	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 00:04	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 00:04	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 00:04	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 00:04	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 00:04	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 00:04	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 00:04	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 00:04	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 00:04	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 00:04	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 00:04	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 00:04	WG1742804
Chloroform	0.000706	J	0.000111	0.00500	1	09/20/2021 00:04	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 00:04	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 00:04	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 00:04	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 00:04	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 00:04	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 00:04	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 00:04	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 00:04	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 00:04	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 00:04	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 00:04	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 00:04	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 00:04	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 00:04	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 00:04	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 00:04	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 00:04	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 00:04	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 00:04	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 00:04	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 00:04	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 00:04	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 00:04	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 00:04	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 00:04	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 00:04	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 00:04	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 00:04	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 00:04	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 00:04	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 00:04	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 00:04	WG1742804
(S) Toluene-d8	*108*			*80.0-120*		*09/20/2021 00:04*	WG1742804
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*09/20/2021 00:04*	WG1742804
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*09/20/2021 00:04*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/22/2021 13:22	WG1743791
Acenaphthylene	U		0.0000921	0.00100	1	09/22/2021 13:22	WG1743791
Acetophenone	U		0.000208	0.0100	1	09/22/2021 13:22	WG1743791
Anthracene	U		0.0000804	0.00100	1	09/22/2021 13:22	WG1743791
Atrazine	U		0.000255	0.0100	1	09/22/2021 13:22	WG1743791
Benzo(a)anthracene	U		0.000199	0.00100	1	09/22/2021 13:22	WG1743791
Benzaldehyde	U	J4	0.00169	0.0100	1	09/22/2021 13:22	WG1743791
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/22/2021 13:22	WG1743791
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/22/2021 13:22	WG1743791

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/22/2021 13:22	WG1743791
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/22/2021 13:22	WG1743791
Biphenyl	U		0.000790	0.0100	1	09/22/2021 13:22	WG1743791
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/22/2021 13:22	WG1743791
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/22/2021 13:22	WG1743791
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/22/2021 13:22	WG1743791
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/22/2021 13:22	WG1743791
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/22/2021 13:22	WG1743791
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/22/2021 13:22	WG1743791
Caprolactam	U		0.000309	0.0100	1	09/22/2021 13:22	WG1743791
Carbazole	U		0.000111	0.0100	1	09/22/2021 13:22	WG1743791
Chrysene	U		0.000130	0.00100	1	09/22/2021 13:22	WG1743791
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/22/2021 13:22	WG1743791
Dibenzofuran	U		0.0000970	0.0100	1	09/22/2021 13:22	WG1743791
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/22/2021 13:22	WG1743791
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/22/2021 13:22	WG1743791
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/22/2021 13:22	WG1743791
Fluoranthene	U		0.000102	0.00100	1	09/22/2021 13:22	WG1743791
Fluorene	U		0.0000844	0.00100	1	09/22/2021 13:22	WG1743791
Hexachlorobenzene	U		0.0000755	0.00100	1	09/22/2021 13:22	WG1743791
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/22/2021 13:22	WG1743791
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/22/2021 13:22	WG1743791
Hexachloroethane	U		0.000127	0.0100	1	09/22/2021 13:22	WG1743791
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/22/2021 13:22	WG1743791
Isophorone	U		0.000143	0.0100	1	09/22/2021 13:22	WG1743791
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/22/2021 13:22	WG1743791
2-Methylnaphthalene	U		0.000117	0.00100	1	09/22/2021 13:22	WG1743791
Naphthalene	U		0.000159	0.00100	1	09/22/2021 13:22	WG1743791
Nitrobenzene	U		0.000297	0.0100	1	09/22/2021 13:22	WG1743791
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/22/2021 13:22	WG1743791
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/22/2021 13:22	WG1743791
Phenanthrene	U		0.000112	0.00100	1	09/22/2021 13:22	WG1743791
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/22/2021 13:22	WG1743791
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/22/2021 13:22	WG1743791
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/22/2021 13:22	WG1743791
Diethyl phthalate	U		0.000287	0.00300	1	09/22/2021 13:22	WG1743791
Dimethyl phthalate	U		0.000260	0.00300	1	09/22/2021 13:22	WG1743791
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/22/2021 13:22	WG1743791
Pyrene	U		0.000107	0.00100	1	09/22/2021 13:22	WG1743791
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/22/2021 13:22	WG1743791
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/22/2021 13:22	WG1743791
2-Chlorophenol	U		0.000133	0.0100	1	09/22/2021 13:22	WG1743791
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/22/2021 13:22	WG1743791
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/22/2021 13:22	WG1743791
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/22/2021 13:22	WG1743791
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/22/2021 13:22	WG1743791
2-Nitrophenol	U		0.000117	0.0100	1	09/22/2021 13:22	WG1743791
2-Nitroaniline	U		0.000102	0.0100	1	09/22/2021 13:22	WG1743791
2-Methylphenol	U		0.0000929	0.0100	1	09/22/2021 13:22	WG1743791
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/22/2021 13:22	WG1743791
3-Nitroaniline	U		0.0000869	0.0100	1	09/22/2021 13:22	WG1743791
4-Chloroaniline	U		0.000234	0.0100	1	09/22/2021 13:22	WG1743791
4-Nitroaniline	U		0.0000910	0.0100	1	09/22/2021 13:22	WG1743791
4-Nitrophenol	U		0.000143	0.0100	1	09/22/2021 13:22	WG1743791
Pentachlorophenol	U		0.000313	0.0100	1	09/22/2021 13:22	WG1743791
Phenol	U		0.00433	0.0100	1	09/22/2021 13:22	WG1743791

MW-2
Collected date/time: 09/16/21 10:10
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/22/2021 13:22	WG1743791
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/22/2021 13:22	WG1743791
(S) 2-Fluorophenol	*27.0*			*10.0-120*		*09/22/2021 13:22*	WG1743791
(S) Phenol-d5	*19.8*			*10.0-120*		*09/22/2021 13:22*	WG1743791
(S) Nitrobenzene-d5	*40.7*			*10.0-127*		*09/22/2021 13:22*	WG1743791
(S) 2-Fluorobiphenyl	*35.5*			*10.0-130*		*09/22/2021 13:22*	WG1743791
(S) 2,4,6-Tribromophenol	*54.5*			*10.0-155*		*09/22/2021 13:22*	WG1743791
(S) p-Terphenyl-d14	*47.3*			*10.0-128*		*09/22/2021 13:22*	WG1743791

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	1.81		0.0500	0.100	1	09/27/2021 15:06	WG1745608

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	29.1		0.379	1.00	1	09/23/2021 02:42	WG1744856
Fluoride	0.326		0.0640	0.150	1	09/23/2021 02:42	WG1744856
Sulfate	80.1		0.594	5.00	1	09/23/2021 02:42	WG1744856

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	629		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.84		0.0500	0.100	1	09/27/2021 16:41	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	138		1.90	5.00	5	09/23/2021 03:15	WG1744856
Fluoride	0.857		0.0640	0.150	1	09/23/2021 02:59	WG1744856
Sulfate	55.8		0.594	5.00	1	09/23/2021 02:59	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/22/2021 16:05	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.170	J	0.0200	0.200	1	09/24/2021 10:35	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.163		0.0185	0.100	1	09/24/2021 09:25	WG1744466
Arsenic,Dissolved	0.00427		0.000180	0.00200	1	09/24/2021 09:25	WG1744466
Barium,Dissolved	0.118		0.000381	0.00200	1	09/24/2021 09:25	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 09:25	WG1744466
Chromium,Dissolved	0.00167	J	0.00124	0.00200	1	09/24/2021 09:25	WG1744466
Copper,Dissolved	0.00195	B J	0.00151	0.00500	1	09/24/2021 09:25	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 09:25	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 09:25	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 09:25	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 09:25	WG1744466
Molybdenum,Dissolved	0.00255	J	0.000348	0.00500	1	09/24/2021 09:25	WG1744466
Nickel,Dissolved	U		0.000816	0.00200	1	09/24/2021 09:25	WG1744466
Selenium,Dissolved	0.00171	J	0.000300	0.00200	1	09/24/2021 14:16	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 09:25	WG1744466
Uranium,Dissolved	0.00177	J	0.0000700	0.0200	1	09/24/2021 09:25	WG1744466
Zinc,Dissolved	0.0334		0.00302	0.0250	1	09/24/2021 09:25	WG1744466

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 00:23	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 00:23	WG1742804
Bromodichloromethane	0.000627	J	0.000136	0.00100	1	09/20/2021 00:23	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 00:23	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 00:23	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 00:23	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 00:23	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 00:23	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 00:23	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 00:23	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 00:23	WG1742804
Chlorodibromomethane	0.000408	J	0.000140	0.00100	1	09/20/2021 00:23	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 00:23	WG1742804
Chloroform	0.00664		0.000111	0.00500	1	09/20/2021 00:23	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 00:23	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 00:23	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 00:23	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 00:23	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 00:23	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 00:23	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 00:23	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 00:23	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 00:23	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 00:23	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 00:23	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 00:23	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 00:23	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 00:23	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 00:23	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 00:23	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 00:23	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 00:23	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 00:23	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 00:23	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 00:23	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 00:23	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 00:23	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 00:23	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 00:23	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 00:23	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 00:23	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 00:23	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 00:23	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 00:23	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 00:23	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 00:23	WG1742804
(S) Toluene-d8	*107*			*80.0-120*		*09/20/2021 00:23*	WG1742804
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*09/20/2021 00:23*	WG1742804
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/20/2021 00:23*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/22/2021 13:44	WG1743791
Acenaphthylene	U		0.0000921	0.00100	1	09/22/2021 13:44	WG1743791
Acetophenone	U		0.000208	0.0100	1	09/22/2021 13:44	WG1743791
Anthracene	U		0.0000804	0.00100	1	09/22/2021 13:44	WG1743791
Atrazine	U		0.000255	0.0100	1	09/22/2021 13:44	WG1743791
Benzo(a)anthracene	U		0.000199	0.00100	1	09/22/2021 13:44	WG1743791
Benzaldehyde	U	J4	0.00169	0.0100	1	09/22/2021 13:44	WG1743791
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/22/2021 13:44	WG1743791
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/22/2021 13:44	WG1743791

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/22/2021 13:44	WG1743791
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/22/2021 13:44	WG1743791
Biphenyl	U		0.000790	0.0100	1	09/22/2021 13:44	WG1743791
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/22/2021 13:44	WG1743791
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/22/2021 13:44	WG1743791
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/22/2021 13:44	WG1743791
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/22/2021 13:44	WG1743791
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/22/2021 13:44	WG1743791
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/22/2021 13:44	WG1743791
Caprolactam	U		0.000309	0.0100	1	09/22/2021 13:44	WG1743791
Carbazole	U		0.000111	0.0100	1	09/22/2021 13:44	WG1743791
Chrysene	U		0.000130	0.00100	1	09/22/2021 13:44	WG1743791
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/22/2021 13:44	WG1743791
Dibenzofuran	U		0.0000970	0.0100	1	09/22/2021 13:44	WG1743791
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/22/2021 13:44	WG1743791
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/22/2021 13:44	WG1743791
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/22/2021 13:44	WG1743791
Fluoranthene	U		0.000102	0.00100	1	09/22/2021 13:44	WG1743791
Fluorene	U		0.0000844	0.00100	1	09/22/2021 13:44	WG1743791
Hexachlorobenzene	U		0.0000755	0.00100	1	09/22/2021 13:44	WG1743791
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/22/2021 13:44	WG1743791
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/22/2021 13:44	WG1743791
Hexachloroethane	U		0.000127	0.0100	1	09/22/2021 13:44	WG1743791
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/22/2021 13:44	WG1743791
Isophorone	U		0.000143	0.0100	1	09/22/2021 13:44	WG1743791
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/22/2021 13:44	WG1743791
2-Methylnaphthalene	U		0.000117	0.00100	1	09/22/2021 13:44	WG1743791
Naphthalene	U		0.000159	0.00100	1	09/22/2021 13:44	WG1743791
Nitrobenzene	U		0.000297	0.0100	1	09/22/2021 13:44	WG1743791
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/22/2021 13:44	WG1743791
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/22/2021 13:44	WG1743791
Phenanthrene	U		0.000112	0.00100	1	09/22/2021 13:44	WG1743791
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/22/2021 13:44	WG1743791
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/22/2021 13:44	WG1743791
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/22/2021 13:44	WG1743791
Diethyl phthalate	U		0.000287	0.00300	1	09/22/2021 13:44	WG1743791
Dimethyl phthalate	U		0.000260	0.00300	1	09/22/2021 13:44	WG1743791
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/22/2021 13:44	WG1743791
Pyrene	U		0.000107	0.00100	1	09/22/2021 13:44	WG1743791
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/22/2021 13:44	WG1743791
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/22/2021 13:44	WG1743791
2-Chlorophenol	U		0.000133	0.0100	1	09/22/2021 13:44	WG1743791
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/22/2021 13:44	WG1743791
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/22/2021 13:44	WG1743791
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/22/2021 13:44	WG1743791
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/22/2021 13:44	WG1743791
2-Nitrophenol	U		0.000117	0.0100	1	09/22/2021 13:44	WG1743791
2-Nitroaniline	U		0.000102	0.0100	1	09/22/2021 13:44	WG1743791
2-Methylphenol	U		0.0000929	0.0100	1	09/22/2021 13:44	WG1743791
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/22/2021 13:44	WG1743791
3-Nitroaniline	U		0.0000869	0.0100	1	09/22/2021 13:44	WG1743791
4-Chloroaniline	U		0.000234	0.0100	1	09/22/2021 13:44	WG1743791
4-Nitroaniline	U		0.0000910	0.0100	1	09/22/2021 13:44	WG1743791
4-Nitrophenol	U		0.000143	0.0100	1	09/22/2021 13:44	WG1743791
Pentachlorophenol	U		0.000313	0.0100	1	09/22/2021 13:44	WG1743791
Phenol	U		0.00433	0.0100	1	09/22/2021 13:44	WG1743791

MW-4
Collected date/time: 09/16/21 12:05
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/22/2021 13:44	WG1743791
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/22/2021 13:44	WG1743791
(S) 2-Fluorophenol	*38.8*			*10.0-120*		*09/22/2021 13:44*	WG1743791
(S) Phenol-d5	*26.2*			*10.0-120*		*09/22/2021 13:44*	WG1743791
(S) Nitrobenzene-d5	*59.1*			*10.0-127*		*09/22/2021 13:44*	WG1743791
(S) 2-Fluorobiphenyl	*65.4*			*10.0-130*		*09/22/2021 13:44*	WG1743791
(S) 2,4,6-Tribromophenol	*60.5*			*10.0-155*		*09/22/2021 13:44*	WG1743791
(S) p-Terphenyl-d14	*58.9*			*10.0-128*		*09/22/2021 13:44*	WG1743791

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	415		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	332		8.45	20.0	1	09/22/2021 18:13	WG1744126

Sample Narrative:

L1404888-05 WG1744126: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.40		0.0500	0.100	1	09/27/2021 16:43	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	28.0		0.379	1.00	1	09/23/2021 03:32	WG1744856
Fluoride	1.03		0.0640	0.150	1	09/23/2021 03:32	WG1744856
Sulfate	22.2		0.594	5.00	1	09/23/2021 03:32	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/22/2021 16:07	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.0740	J	0.0200	0.200	1	09/24/2021 10:38	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 09:29	WG1744466
Arsenic,Dissolved	0.00120	J	0.000180	0.00200	1	09/24/2021 09:29	WG1744466
Barium,Dissolved	0.118		0.000381	0.00200	1	09/24/2021 09:29	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 09:29	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 09:29	WG1744466
Copper,Dissolved	0.00311	B J	0.00151	0.00500	1	09/24/2021 09:29	WG1744466
Cobalt,Dissolved	0.000325	J	0.0000596	0.00200	1	09/24/2021 09:29	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 09:29	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 09:29	WG1744466
Manganese,Dissolved	0.00886		0.000704	0.00500	1	09/24/2021 09:29	WG1744466
Molybdenum,Dissolved	0.00201	J	0.000348	0.00500	1	09/24/2021 09:29	WG1744466
Nickel,Dissolved	0.00154	J	0.000816	0.00200	1	09/24/2021 09:29	WG1744466
Selenium,Dissolved	0.000738	J	0.000300	0.00200	1	09/24/2021 09:29	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 09:29	WG1744466
Uranium,Dissolved	0.00234	J	0.0000700	0.0200	1	09/24/2021 09:29	WG1744466
Zinc,Dissolved	0.559		0.00302	0.0250	1	09/24/2021 09:29	WG1744466

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 12:41	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*09/25/2021 12:41*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 00:42	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 00:42	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 00:42	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 00:42	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 00:42	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 00:42	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 00:42	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 00:42	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 00:42	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 00:42	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 00:42	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 00:42	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 00:42	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 00:42	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 00:42	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 00:42	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 00:42	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 00:42	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 00:42	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 00:42	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 00:42	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 00:42	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 00:42	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 00:42	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 00:42	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 00:42	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 00:42	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 00:42	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 00:42	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 00:42	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 00:42	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 00:42	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 00:42	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 00:42	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 00:42	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 00:42	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 00:42	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 00:42	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 00:42	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 00:42	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 00:42	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 00:42	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 00:42	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 00:42	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 00:42	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 00:42	WG1742804
(S) Toluene-d8	*104*			*80.0-120*		*09/20/2021 00:42*	WG1742804
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*09/20/2021 00:42*	WG1742804
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/20/2021 00:42*	WG1742804

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) High Fraction	U		0.0247	0.100	1	09/27/2021 00:15	WG1746172
(S) o-Terphenyl	*84.7*			*31.0-160*		*09/27/2021 00:15*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acenaphthene	U		0.0000886	0.00100	1	09/22/2021 14:05	WG1743791
Acenaphthylene	U		0.0000921	0.00100	1	09/22/2021 14:05	WG1743791
Acetophenone	U		0.000208	0.0100	1	09/22/2021 14:05	WG1743791
Anthracene	U		0.0000804	0.00100	1	09/22/2021 14:05	WG1743791
Atrazine	U		0.000255	0.0100	1	09/22/2021 14:05	WG1743791
Benzo(a)anthracene	U		0.000199	0.00100	1	09/22/2021 14:05	WG1743791
Benzaldehyde	U	J4	0.00169	0.0100	1	09/22/2021 14:05	WG1743791
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/22/2021 14:05	WG1743791
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/22/2021 14:05	WG1743791
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/22/2021 14:05	WG1743791
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/22/2021 14:05	WG1743791
Biphenyl	U		0.000790	0.0100	1	09/22/2021 14:05	WG1743791
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/22/2021 14:05	WG1743791
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/22/2021 14:05	WG1743791
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/22/2021 14:05	WG1743791
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/22/2021 14:05	WG1743791
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/22/2021 14:05	WG1743791
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/22/2021 14:05	WG1743791
Caprolactam	U		0.000309	0.0100	1	09/22/2021 14:05	WG1743791
Carbazole	U		0.000111	0.0100	1	09/22/2021 14:05	WG1743791
Chrysene	U		0.000130	0.00100	1	09/22/2021 14:05	WG1743791
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/22/2021 14:05	WG1743791
Dibenzofuran	U		0.0000970	0.0100	1	09/22/2021 14:05	WG1743791
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/22/2021 14:05	WG1743791
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/22/2021 14:05	WG1743791
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/22/2021 14:05	WG1743791
Fluoranthene	U		0.000102	0.00100	1	09/22/2021 14:05	WG1743791
Fluorene	U		0.0000844	0.00100	1	09/22/2021 14:05	WG1743791
Hexachlorobenzene	U		0.0000755	0.00100	1	09/22/2021 14:05	WG1743791
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/22/2021 14:05	WG1743791
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/22/2021 14:05	WG1743791
Hexachloroethane	U		0.000127	0.0100	1	09/22/2021 14:05	WG1743791
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/22/2021 14:05	WG1743791
Isophorone	U		0.000143	0.0100	1	09/22/2021 14:05	WG1743791
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/22/2021 14:05	WG1743791
2-Methylnaphthalene	U		0.000117	0.00100	1	09/22/2021 14:05	WG1743791
Naphthalene	U		0.000159	0.00100	1	09/22/2021 14:05	WG1743791
Nitrobenzene	U		0.000297	0.0100	1	09/22/2021 14:05	WG1743791
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/22/2021 14:05	WG1743791
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/22/2021 14:05	WG1743791
Phenanthrene	U		0.000112	0.00100	1	09/22/2021 14:05	WG1743791
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/22/2021 14:05	WG1743791
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/22/2021 14:05	WG1743791
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/22/2021 14:05	WG1743791
Diethyl phthalate	U		0.000287	0.00300	1	09/22/2021 14:05	WG1743791
Dimethyl phthalate	U		0.000260	0.00300	1	09/22/2021 14:05	WG1743791
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/22/2021 14:05	WG1743791
Pyrene	U		0.000107	0.00100	1	09/22/2021 14:05	WG1743791
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/22/2021 14:05	WG1743791
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/22/2021 14:05	WG1743791

MW-3
Collected date/time: 09/16/21 09:30
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	1	09/22/2021 14:05	WG1743791
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/22/2021 14:05	WG1743791
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/22/2021 14:05	WG1743791
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/22/2021 14:05	WG1743791
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/22/2021 14:05	WG1743791
2-Nitrophenol	U		0.000117	0.0100	1	09/22/2021 14:05	WG1743791
2-Nitroaniline	U		0.000102	0.0100	1	09/22/2021 14:05	WG1743791
2-Methylphenol	U		0.0000929	0.0100	1	09/22/2021 14:05	WG1743791
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/22/2021 14:05	WG1743791
3-Nitroaniline	U		0.0000869	0.0100	1	09/22/2021 14:05	WG1743791
4-Chloroaniline	U		0.000234	0.0100	1	09/22/2021 14:05	WG1743791
4-Nitroaniline	U		0.0000910	0.0100	1	09/22/2021 14:05	WG1743791
4-Nitrophenol	U		0.000143	0.0100	1	09/22/2021 14:05	WG1743791
Pentachlorophenol	U		0.000313	0.0100	1	09/22/2021 14:05	WG1743791
Phenol	U		0.00433	0.0100	1	09/22/2021 14:05	WG1743791
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/22/2021 14:05	WG1743791
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/22/2021 14:05	WG1743791
(S) 2-Fluorophenol	*36.1*			*10.0-120*		*09/22/2021 14:05*	WG1743791
(S) Phenol-d5	*25.3*			*10.0-120*		*09/22/2021 14:05*	WG1743791
(S) Nitrobenzene-d5	*59.4*			*10.0-127*		*09/22/2021 14:05*	WG1743791
(S) 2-Fluorobiphenyl	*66.3*			*10.0-130*		*09/22/2021 14:05*	WG1743791
(S) 2,4,6-Tribromophenol	*67.0*			*10.0-155*		*09/22/2021 14:05*	WG1743791
(S) p-Terphenyl-d14	*63.5*			*10.0-128*		*09/22/2021 14:05*	WG1743791

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	517		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	4.05		0.0500	0.100	1	09/27/2021 16:47	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	59.3		0.379	1.00	1	09/23/2021 04:21	WG1744856
Fluoride	0.840		0.0640	0.150	1	09/25/2021 05:29	WG1746176
Sulfate	78.3		0.594	5.00	1	09/23/2021 04:21	WG1744856

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/22/2021 16:09	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.170	J	0.0200	0.200	1	09/24/2021 10:46	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 09:32	WG1744466
Arsenic,Dissolved	0.00679		0.000180	0.00200	1	09/24/2021 09:32	WG1744466
Barium,Dissolved	0.158		0.000381	0.00200	1	09/24/2021 09:32	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 09:32	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 09:32	WG1744466
Copper,Dissolved	0.00312	B J	0.00151	0.00500	1	09/24/2021 09:32	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 09:32	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 09:32	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 09:32	WG1744466
Manganese,Dissolved	0.00171	J	0.000704	0.00500	1	09/24/2021 09:32	WG1744466
Molybdenum,Dissolved	0.00240	J	0.000348	0.00500	1	09/24/2021 09:32	WG1744466
Nickel,Dissolved	0.00875		0.000816	0.00200	1	09/24/2021 09:32	WG1744466
Selenium,Dissolved	0.00295		0.000300	0.00200	1	09/24/2021 14:19	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 09:32	WG1744466
Uranium,Dissolved	0.00425	J	0.0000700	0.0200	1	09/24/2021 09:32	WG1744466
Zinc,Dissolved	0.0732		0.00302	0.0250	1	09/24/2021 09:32	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 01:01	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 01:01	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 01:01	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 01:01	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 01:01	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 01:01	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 01:01	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 01:01	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 01:01	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 01:01	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 01:01	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 01:01	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 01:01	WG1742804
Chloroform	0.000274	J	0.000111	0.00500	1	09/20/2021 01:01	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 01:01	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 01:01	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 01:01	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 01:01	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 01:01	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 01:01	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 01:01	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 01:01	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 01:01	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 01:01	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 01:01	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 01:01	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 01:01	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 01:01	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 01:01	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 01:01	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 01:01	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 01:01	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 01:01	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 01:01	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 01:01	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 01:01	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 01:01	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 01:01	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 01:01	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 01:01	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 01:01	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 01:01	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 01:01	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 01:01	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 01:01	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 01:01	WG1742804
(S) Toluene-d8	*105*			*80.0-120*		*09/20/2021 01:01*	WG1742804
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*09/20/2021 01:01*	WG1742804
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/20/2021 01:01*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/22/2021 14:27	WG1743791
Acenaphthylene	U		0.0000921	0.00100	1	09/22/2021 14:27	WG1743791
Acetophenone	U		0.000208	0.0100	1	09/22/2021 14:27	WG1743791
Anthracene	U		0.0000804	0.00100	1	09/22/2021 14:27	WG1743791
Atrazine	U		0.000255	0.0100	1	09/22/2021 14:27	WG1743791
Benzo(a)anthracene	U		0.000199	0.00100	1	09/22/2021 14:27	WG1743791
Benzaldehyde	U	J4	0.00169	0.0100	1	09/22/2021 14:27	WG1743791
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/22/2021 14:27	WG1743791
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/22/2021 14:27	WG1743791

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/22/2021 14:27	WG1743791
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/22/2021 14:27	WG1743791
Biphenyl	U		0.000790	0.0100	1	09/22/2021 14:27	WG1743791
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/22/2021 14:27	WG1743791
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/22/2021 14:27	WG1743791
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/22/2021 14:27	WG1743791
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/22/2021 14:27	WG1743791
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/22/2021 14:27	WG1743791
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/22/2021 14:27	WG1743791
Caprolactam	U		0.000309	0.0100	1	09/22/2021 14:27	WG1743791
Carbazole	U		0.000111	0.0100	1	09/22/2021 14:27	WG1743791
Chrysene	U		0.000130	0.00100	1	09/22/2021 14:27	WG1743791
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/22/2021 14:27	WG1743791
Dibenzofuran	U		0.0000970	0.0100	1	09/22/2021 14:27	WG1743791
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/22/2021 14:27	WG1743791
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/22/2021 14:27	WG1743791
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/22/2021 14:27	WG1743791
Fluoranthene	U		0.000102	0.00100	1	09/22/2021 14:27	WG1743791
Fluorene	U		0.0000844	0.00100	1	09/22/2021 14:27	WG1743791
Hexachlorobenzene	U		0.0000755	0.00100	1	09/22/2021 14:27	WG1743791
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/22/2021 14:27	WG1743791
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/22/2021 14:27	WG1743791
Hexachloroethane	U		0.000127	0.0100	1	09/22/2021 14:27	WG1743791
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/22/2021 14:27	WG1743791
Isophorone	U		0.000143	0.0100	1	09/22/2021 14:27	WG1743791
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/22/2021 14:27	WG1743791
2-Methylnaphthalene	U		0.000117	0.00100	1	09/22/2021 14:27	WG1743791
Naphthalene	U		0.000159	0.00100	1	09/22/2021 14:27	WG1743791
Nitrobenzene	U		0.000297	0.0100	1	09/22/2021 14:27	WG1743791
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/22/2021 14:27	WG1743791
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/22/2021 14:27	WG1743791
Phenanthrene	U		0.000112	0.00100	1	09/22/2021 14:27	WG1743791
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/22/2021 14:27	WG1743791
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/22/2021 14:27	WG1743791
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/22/2021 14:27	WG1743791
Diethyl phthalate	U		0.000287	0.00300	1	09/22/2021 14:27	WG1743791
Dimethyl phthalate	U		0.000260	0.00300	1	09/22/2021 14:27	WG1743791
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/22/2021 14:27	WG1743791
Pyrene	U		0.000107	0.00100	1	09/22/2021 14:27	WG1743791
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/22/2021 14:27	WG1743791
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/22/2021 14:27	WG1743791
2-Chlorophenol	U		0.000133	0.0100	1	09/22/2021 14:27	WG1743791
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/22/2021 14:27	WG1743791
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/22/2021 14:27	WG1743791
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/22/2021 14:27	WG1743791
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/22/2021 14:27	WG1743791
2-Nitrophenol	U		0.000117	0.0100	1	09/22/2021 14:27	WG1743791
2-Nitroaniline	U		0.000102	0.0100	1	09/22/2021 14:27	WG1743791
2-Methylphenol	U		0.0000929	0.0100	1	09/22/2021 14:27	WG1743791
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/22/2021 14:27	WG1743791
3-Nitroaniline	U		0.0000869	0.0100	1	09/22/2021 14:27	WG1743791
4-Chloroaniline	U		0.000234	0.0100	1	09/22/2021 14:27	WG1743791
4-Nitroaniline	U		0.0000910	0.0100	1	09/22/2021 14:27	WG1743791
4-Nitrophenol	U		0.000143	0.0100	1	09/22/2021 14:27	WG1743791
Pentachlorophenol	U		0.000313	0.0100	1	09/22/2021 14:27	WG1743791
Phenol	U		0.00433	0.0100	1	09/22/2021 14:27	WG1743791

MW-6
Collected date/time: 09/16/21 09:30
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/22/2021 14:27	WG1743791
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/22/2021 14:27	WG1743791
(S) 2-Fluorophenol	*44.1*			*10.0-120*		*09/22/2021 14:27*	WG1743791
(S) Phenol-d5	*30.3*			*10.0-120*		*09/22/2021 14:27*	WG1743791
(S) Nitrobenzene-d5	*63.5*			*10.0-127*		*09/22/2021 14:27*	WG1743791
(S) 2-Fluorobiphenyl	*72.2*			*10.0-130*		*09/22/2021 14:27*	WG1743791
(S) 2,4,6-Tribromophenol	*71.5*			*10.0-155*		*09/22/2021 14:27*	WG1743791
(S) p-Terphenyl-d14	*66.1*			*10.0-128*		*09/22/2021 14:27*	WG1743791

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	863		13.3	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	7.95		0.250	0.500	5	09/27/2021 16:48	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	168		1.90	5.00	5	09/23/2021 04:54	WG1744856
Fluoride	0.620		0.0640	0.150	1	09/25/2021 07:08	WG1746176
Sulfate	76.1		0.594	5.00	1	09/23/2021 04:37	WG1744856

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/22/2021 16:15	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.217		0.0200	0.200	1	09/24/2021 10:48	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:14	WG1744466
Arsenic,Dissolved	0.00722		0.000180	0.00200	1	09/24/2021 10:14	WG1744466
Barium,Dissolved	0.203		0.000381	0.00200	1	09/24/2021 10:14	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:14	WG1744466
Chromium,Dissolved	0.00130	J	0.00124	0.00200	1	09/24/2021 10:14	WG1744466
Copper,Dissolved	0.00588	B	0.00151	0.00500	1	09/24/2021 10:14	WG1744466
Cobalt,Dissolved	0.000116	J	0.0000596	0.00200	1	09/24/2021 10:14	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:14	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:14	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 10:14	WG1744466
Molybdenum,Dissolved	0.00137	J	0.000348	0.00500	1	09/24/2021 10:14	WG1744466
Nickel,Dissolved	0.00366		0.000816	0.00200	1	09/24/2021 10:14	WG1744466
Selenium,Dissolved	0.00185	J	0.000300	0.00200	1	09/24/2021 14:22	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:14	WG1744466
Uranium,Dissolved	0.00680	J	0.0000700	0.0200	1	09/24/2021 10:14	WG1744466
Zinc,Dissolved	0.0235	J	0.00302	0.0250	1	09/24/2021 10:14	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 01:37	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 01:37	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 01:37	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 01:37	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 01:37	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 01:37	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 01:37	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 01:37	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 01:37	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 01:37	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 01:37	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 01:37	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 01:37	WG1742804
Chloroform	0.000183	J	0.000111	0.00500	1	09/20/2021 01:37	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 01:37	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 01:37	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 01:37	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 01:37	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 01:37	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 01:37	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 01:37	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 01:37	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 01:37	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 01:37	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 01:37	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 01:37	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 01:37	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 01:37	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 01:37	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 01:37	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 01:37	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 01:37	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 01:37	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 01:37	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 01:37	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 01:37	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 01:37	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 01:37	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 01:37	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 01:37	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 01:37	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 01:37	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 01:37	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 01:37	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 01:37	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 01:37	WG1742804
(S) Toluene-d8	*106*			*80.0-120*		*09/20/2021 01:37*	WG1742804
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*09/20/2021 01:37*	WG1742804
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/20/2021 01:37*	WG1742804

MW-9
Collected date/time: 09/16/21 08:55
L1404888

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	3.41		0.0500	0.100	1	09/27/2021 16:53	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	123		1.90	5.00	5	09/23/2021 05:26	WG1744856
Fluoride	0.366		0.0640	0.150	1	09/25/2021 07:24	WG1746176
Sulfate	78.6		0.594	5.00	1	09/23/2021 05:10	WG1744856

MW-10
Collected date/time: 09/16/21 10:15
L1404888

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	2.20		0.0500	0.100	1	09/27/2021 16:55	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	30.3		0.379	1.00	1	09/23/2021 05:43	WG1744856
Fluoride	0.902		0.0640	0.150	1	09/25/2021 07:41	WG1746176
Sulfate	65.8		0.594	5.00	1	09/23/2021 05:43	WG1744856

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1270		20.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	357		8.45	20.0	1	09/22/2021 18:34	WG1744126

Sample Narrative:

L1404888-10 WG1744126: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.87		0.0500	0.100	1	09/27/2021 16:56	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	321		1.90	5.00	5	09/23/2021 07:38	WG1744856
Fluoride	0.455		0.0640	0.150	1	09/25/2021 07:57	WG1746176
Sulfate	93.8		0.594	5.00	1	09/23/2021 06:48	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/22/2021 16:17	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.296		0.0200	0.200	1	09/24/2021 10:51	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:18	WG1744466
Arsenic,Dissolved	0.00254		0.000180	0.00200	1	09/24/2021 10:18	WG1744466
Barium,Dissolved	0.198		0.000381	0.00200	1	09/24/2021 10:18	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:18	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 10:18	WG1744466
Copper,Dissolved	0.0326		0.00151	0.00500	1	09/24/2021 10:18	WG1744466
Cobalt,Dissolved	0.000246	J	0.0000596	0.00200	1	09/24/2021 10:18	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:18	WG1744466
Lead,Dissolved	0.00151	J	0.000849	0.00200	1	09/24/2021 10:18	WG1744466
Manganese,Dissolved	0.0343		0.000704	0.00500	1	09/24/2021 10:18	WG1744466
Molybdenum,Dissolved	0.00138	J	0.000348	0.00500	1	09/24/2021 10:18	WG1744466
Nickel,Dissolved	0.00174	J	0.000816	0.00200	1	09/24/2021 10:18	WG1744466
Selenium,Dissolved	0.00141	J	0.000300	0.00200	1	09/24/2021 10:18	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:18	WG1744466
Uranium,Dissolved	0.00720	J	0.0000700	0.0200	1	09/24/2021 10:18	WG1744466
Zinc,Dissolved	0.0562		0.00302	0.0250	1	09/24/2021 10:18	WG1744466

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 01:56	WG1742804
Benzene	0.000157	J	0.0000941	0.00100	1	09/20/2021 01:56	WG1742804
Bromodichloromethane	0.000192	J	0.000136	0.00100	1	09/20/2021 01:56	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 01:56	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 01:56	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 01:56	WG1742804
sec-Butylbenzene	0.000154	J	0.000125	0.00100	1	09/20/2021 01:56	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 01:56	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 01:56	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 01:56	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 01:56	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 01:56	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 01:56	WG1742804
Chloroform	0.000916	J	0.000111	0.00500	1	09/20/2021 01:56	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 01:56	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 01:56	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 01:56	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 01:56	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 01:56	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 01:56	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 01:56	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 01:56	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 01:56	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 01:56	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 01:56	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 01:56	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 01:56	WG1742804
Isopropylbenzene	0.000346	J	0.000105	0.00100	1	09/20/2021 01:56	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 01:56	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 01:56	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 01:56	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 01:56	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 01:56	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 01:56	WG1742804
n-Propylbenzene	0.000109	J	0.0000993	0.00100	1	09/20/2021 01:56	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 01:56	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 01:56	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 01:56	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 01:56	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 01:56	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 01:56	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 01:56	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 01:56	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 01:56	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 01:56	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 01:56	WG1742804
(S) Toluene-d8	*105*			*80.0-120*		*09/20/2021 01:56*	WG1742804
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*09/20/2021 01:56*	WG1742804
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*09/20/2021 01:56*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/22/2021 14:48	WG1743791
Acenaphthylene	U		0.0000921	0.00100	1	09/22/2021 14:48	WG1743791
Acetophenone	U		0.000208	0.0100	1	09/22/2021 14:48	WG1743791
Anthracene	U		0.0000804	0.00100	1	09/22/2021 14:48	WG1743791
Atrazine	U		0.000255	0.0100	1	09/22/2021 14:48	WG1743791
Benzo(a)anthracene	U		0.000199	0.00100	1	09/22/2021 14:48	WG1743791
Benzaldehyde	U	J4	0.00169	0.0100	1	09/22/2021 14:48	WG1743791
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/22/2021 14:48	WG1743791
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/22/2021 14:48	WG1743791
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/22/2021 14:48	WG1743791
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/22/2021 14:48	WG1743791
Biphenyl	U		0.000790	0.0100	1	09/22/2021 14:48	WG1743791
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/22/2021 14:48	WG1743791
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/22/2021 14:48	WG1743791
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/22/2021 14:48	WG1743791
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/22/2021 14:48	WG1743791
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/22/2021 14:48	WG1743791
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/22/2021 14:48	WG1743791
Caprolactam	U		0.000309	0.0100	1	09/22/2021 14:48	WG1743791
Carbazole	U		0.000111	0.0100	1	09/22/2021 14:48	WG1743791
Chrysene	U		0.000130	0.00100	1	09/22/2021 14:48	WG1743791
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/22/2021 14:48	WG1743791
Dibenzofuran	U		0.0000970	0.0100	1	09/22/2021 14:48	WG1743791
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/22/2021 14:48	WG1743791
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/22/2021 14:48	WG1743791
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/22/2021 14:48	WG1743791
Fluoranthene	U		0.000102	0.00100	1	09/22/2021 14:48	WG1743791
Fluorene	U		0.0000844	0.00100	1	09/22/2021 14:48	WG1743791
Hexachlorobenzene	U		0.0000755	0.00100	1	09/22/2021 14:48	WG1743791
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/22/2021 14:48	WG1743791
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/22/2021 14:48	WG1743791
Hexachloroethane	U		0.000127	0.0100	1	09/22/2021 14:48	WG1743791
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/22/2021 14:48	WG1743791
Isophorone	U		0.000143	0.0100	1	09/22/2021 14:48	WG1743791
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/22/2021 14:48	WG1743791
2-Methylnaphthalene	U		0.000117	0.00100	1	09/22/2021 14:48	WG1743791
Naphthalene	U		0.000159	0.00100	1	09/22/2021 14:48	WG1743791
Nitrobenzene	U		0.000297	0.0100	1	09/22/2021 14:48	WG1743791
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/22/2021 14:48	WG1743791
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/22/2021 14:48	WG1743791
Phenanthrene	U		0.000112	0.00100	1	09/22/2021 14:48	WG1743791
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/22/2021 14:48	WG1743791
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/22/2021 14:48	WG1743791
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/22/2021 14:48	WG1743791
Diethyl phthalate	U		0.000287	0.00300	1	09/22/2021 14:48	WG1743791
Dimethyl phthalate	U		0.000260	0.00300	1	09/22/2021 14:48	WG1743791
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/22/2021 14:48	WG1743791
Pyrene	U		0.000107	0.00100	1	09/22/2021 14:48	WG1743791
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/22/2021 14:48	WG1743791
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/22/2021 14:48	WG1743791
2-Chlorophenol	U		0.000133	0.0100	1	09/22/2021 14:48	WG1743791
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/22/2021 14:48	WG1743791
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/22/2021 14:48	WG1743791
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/22/2021 14:48	WG1743791
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/22/2021 14:48	WG1743791
2-Nitrophenol	U		0.000117	0.0100	1	09/22/2021 14:48	WG1743791

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/22/2021 14:48	WG1743791
2-Methylphenol	U		0.0000929	0.0100	1	09/22/2021 14:48	WG1743791
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/22/2021 14:48	WG1743791
3-Nitroaniline	U		0.0000869	0.0100	1	09/22/2021 14:48	WG1743791
4-Chloroaniline	U		0.000234	0.0100	1	09/22/2021 14:48	WG1743791
4-Nitroaniline	U		0.0000910	0.0100	1	09/22/2021 14:48	WG1743791
4-Nitrophenol	U		0.000143	0.0100	1	09/22/2021 14:48	WG1743791
Pentachlorophenol	U		0.000313	0.0100	1	09/22/2021 14:48	WG1743791
Phenol	U		0.00433	0.0100	1	09/22/2021 14:48	WG1743791
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/22/2021 14:48	WG1743791
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/22/2021 14:48	WG1743791
(S) 2-Fluorophenol	*32.4*			*10.0-120*		*09/22/2021 14:48*	WG1743791
(S) Phenol-d5	*23.3*			*10.0-120*		*09/22/2021 14:48*	WG1743791
(S) Nitrobenzene-d5	*58.6*			*10.0-127*		*09/22/2021 14:48*	WG1743791
(S) 2-Fluorobiphenyl	*63.5*			*10.0-130*		*09/22/2021 14:48*	WG1743791
(S) 2,4,6-Tribromophenol	*62.5*			*10.0-155*		*09/22/2021 14:48*	WG1743791
(S) p-Terphenyl-d14	*59.1*			*10.0-128*		*09/22/2021 14:48*	WG1743791

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	496		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	189		8.45	20.0	1	09/22/2021 18:39	WG1744126

Sample Narrative:

L1404888-11 WG1744126: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	4.11		0.0500	0.100	1	09/27/2021 16:57	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	92.3		0.379	1.00	1	09/23/2021 07:54	WG1744856
Fluoride	0.881		0.0640	0.150	1	09/25/2021 08:13	WG1746176
Sulfate	62.6		0.594	5.00	1	09/23/2021 07:54	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/22/2021 16:19	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.193	J	0.0200	0.200	1	09/24/2021 10:54	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:21	WG1744466
Arsenic,Dissolved	0.00406		0.000180	0.00200	1	09/24/2021 10:21	WG1744466
Barium,Dissolved	0.110		0.000381	0.00200	1	09/24/2021 10:21	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:21	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 10:21	WG1744466
Copper,Dissolved	U		0.00151	0.00500	1	09/24/2021 10:21	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 10:21	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:21	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:21	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 10:21	WG1744466
Molybdenum,Dissolved	0.00408	J	0.000348	0.00500	1	09/24/2021 10:21	WG1744466
Nickel,Dissolved	0.00409		0.000816	0.00200	1	09/24/2021 10:21	WG1744466
Selenium,Dissolved	0.00212		0.000300	0.00200	1	09/24/2021 14:25	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:21	WG1744466
Uranium,Dissolved	0.00181	J	0.0000700	0.0200	1	09/24/2021 10:21	WG1744466
Zinc,Dissolved	0.0171	J	0.00302	0.0250	1	09/24/2021 10:21	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 02:15	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 02:15	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 02:15	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 02:15	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 02:15	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 02:15	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 02:15	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 02:15	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 02:15	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 02:15	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 02:15	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 02:15	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 02:15	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 02:15	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 02:15	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 02:15	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 02:15	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 02:15	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 02:15	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 02:15	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 02:15	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 02:15	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 02:15	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 02:15	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 02:15	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 02:15	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 02:15	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 02:15	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 02:15	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 02:15	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 02:15	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 02:15	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 02:15	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 02:15	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 02:15	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 02:15	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 02:15	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 02:15	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 02:15	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 02:15	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 02:15	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 02:15	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 02:15	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 02:15	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 02:15	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 02:15	WG1742804
(S) Toluene-d8	*104*			*80.0-120*		*09/20/2021 02:15*	WG1742804
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*09/20/2021 02:15*	WG1742804
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/20/2021 02:15*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 12:26	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 12:26	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 12:26	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 12:26	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 12:26	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 12:26	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 12:26	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 12:26	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 12:26	WG1744270
Benzo(g,h,i)perylene	0.000147	J	0.000121	0.00100	1	09/23/2021 12:26	WG1744270
Benzo(a)pyrene	0.000168	J	0.0000381	0.000200	1	09/23/2021 12:26	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 12:26	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 12:26	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 12:26	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 12:26	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 12:26	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 12:26	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 12:26	WG1744270
Caprolactam	U		0.000309	0.0100	1	09/23/2021 12:26	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 12:26	WG1744270
Chrysene	0.000174	J	0.000130	0.00100	1	09/23/2021 12:26	WG1744270
Dibenz(a,h)anthracene	0.000131	J	0.0000644	0.000200	1	09/23/2021 12:26	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 12:26	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 12:26	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 12:26	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 12:26	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 12:26	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 12:26	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 12:26	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 12:26	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 12:26	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 12:26	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 12:26	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 12:26	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 12:26	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 12:26	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 12:26	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 12:26	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 12:26	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 12:26	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 12:26	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 12:26	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 12:26	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 12:26	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 12:26	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 12:26	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 12:26	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 12:26	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 12:26	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 12:26	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 12:26	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 12:26	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 12:26	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 12:26	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 12:26	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 12:26	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 12:26	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 12:26	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 12:26	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 12:26	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 12:26	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 12:26	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 12:26	WG1744270
Pentachlorophenol	0.000671	J	0.000313	0.0100	1	09/23/2021 12:26	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 12:26	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 12:26	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 12:26	WG1744270
(S) 2-Fluorophenol	*34.9*			*10.0-120*		*09/23/2021 12:26*	WG1744270
(S) Phenol-d5	*25.5*			*10.0-120*		*09/23/2021 12:26*	WG1744270
(S) Nitrobenzene-d5	*54.3*			*10.0-127*		*09/23/2021 12:26*	WG1744270
(S) 2-Fluorobiphenyl	*64.3*			*10.0-130*		*09/23/2021 12:26*	WG1744270
(S) 2,4,6-Tribromophenol	*67.5*			*10.0-155*		*09/23/2021 12:26*	WG1744270
(S) p-Terphenyl-d14	*54.5*			*10.0-128*		*09/23/2021 12:26*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1320		20.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	5.72		0.100	0.200	2	09/27/2021 16:58	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	285		1.90	5.00	5	09/23/2021 08:27	WG1744856
Fluoride	0.368		0.0640	0.150	1	09/25/2021 08:30	WG1746176
Sulfate	160		2.97	25.0	5	09/23/2021 08:27	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/22/2021 16:21	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.240		0.0200	0.200	1	09/24/2021 10:57	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:24	WG1744466
Arsenic,Dissolved	0.00265		0.000180	0.00200	1	09/24/2021 10:24	WG1744466
Barium,Dissolved	0.104		0.000381	0.00200	1	09/24/2021 10:24	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:24	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 10:24	WG1744466
Copper,Dissolved	0.00757	B	0.00151	0.00500	1	09/24/2021 10:24	WG1744466
Cobalt,Dissolved	0.000438	J	0.0000596	0.00200	1	09/24/2021 10:24	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:24	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:24	WG1744466
Manganese,Dissolved	0.0155		0.000704	0.00500	1	09/24/2021 10:24	WG1744466
Molybdenum,Dissolved	0.000681	J	0.000348	0.00500	1	09/24/2021 10:24	WG1744466
Nickel,Dissolved	0.00401		0.000816	0.00200	1	09/24/2021 10:24	WG1744466
Selenium,Dissolved	0.000929	J	0.000300	0.00200	1	09/24/2021 10:24	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:24	WG1744466
Uranium,Dissolved	0.0119	J	0.0000700	0.0200	1	09/24/2021 10:24	WG1744466
Zinc,Dissolved	0.00987	J	0.00302	0.0250	1	09/24/2021 10:24	WG1744466

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 02:34	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 02:34	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 02:34	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 02:34	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 02:34	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 02:34	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 02:34	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 02:34	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 02:34	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 02:34	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 02:34	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 02:34	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 02:34	WG1742804
Chloroform	0.000239	J	0.000111	0.00500	1	09/20/2021 02:34	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 02:34	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 02:34	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 02:34	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 02:34	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 02:34	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 02:34	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 02:34	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 02:34	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 02:34	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 02:34	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 02:34	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 02:34	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 02:34	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 02:34	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 02:34	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 02:34	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 02:34	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 02:34	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 02:34	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 02:34	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 02:34	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 02:34	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 02:34	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 02:34	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 02:34	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 02:34	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 02:34	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 02:34	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 02:34	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 02:34	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 02:34	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 02:34	WG1742804
(S) Toluene-d8	*103*			*80.0-120*		*09/20/2021 02:34*	WG1742804
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*09/20/2021 02:34*	WG1742804
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*09/20/2021 02:34*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 12:47	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 12:47	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 12:47	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 12:47	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 12:47	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 12:47	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 12:47	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 12:47	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 12:47	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 12:47	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 12:47	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 12:47	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 12:47	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 12:47	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 12:47	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 12:47	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 12:47	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 12:47	WG1744270
Caprolactam	U		0.000309	0.0100	1	09/23/2021 12:47	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 12:47	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 12:47	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 12:47	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 12:47	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 12:47	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 12:47	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 12:47	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 12:47	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 12:47	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 12:47	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 12:47	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 12:47	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 12:47	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 12:47	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 12:47	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 12:47	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 12:47	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 12:47	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 12:47	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 12:47	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 12:47	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 12:47	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 12:47	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 12:47	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 12:47	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 12:47	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 12:47	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 12:47	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 12:47	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 12:47	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 12:47	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 12:47	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 12:47	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 12:47	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 12:47	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 12:47	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 12:47	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 12:47	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 12:47	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 12:47	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 12:47	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 12:47	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 12:47	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 12:47	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 12:47	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 12:47	WG1744270

MW-13R
Collected date/time: 09/16/21 10:15
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 12:47	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 12:47	WG1744270
(S) 2-Fluorophenol	*30.0*			*10.0-120*		*09/23/2021 12:47*	WG1744270
(S) Phenol-d5	*23.5*			*10.0-120*		*09/23/2021 12:47*	WG1744270
(S) Nitrobenzene-d5	*55.6*			*10.0-127*		*09/23/2021 12:47*	WG1744270
(S) 2-Fluorobiphenyl	*64.5*			*10.0-130*		*09/23/2021 12:47*	WG1744270
(S) 2,4,6-Tribromophenol	*62.0*			*10.0-155*		*09/23/2021 12:47*	WG1744270
(S) p-Terphenyl-d14	*58.2*			*10.0-128*		*09/23/2021 12:47*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1440		20.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	5.20		0.100	0.200	2	09/27/2021 17:00	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	394		1.90	5.00	5	09/23/2021 09:00	WG1744856
Fluoride	0.723		0.0640	0.150	1	09/25/2021 08:46	WG1746176
Sulfate	50.6		0.594	5.00	1	09/23/2021 08:43	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/22/2021 16:23	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.208		0.0200	0.200	1	09/24/2021 10:59	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:28	WG1744466
Arsenic,Dissolved	0.00250		0.000180	0.00200	1	09/24/2021 10:28	WG1744466
Barium,Dissolved	0.250		0.000381	0.00200	1	09/24/2021 10:28	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:28	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 10:28	WG1744466
Copper,Dissolved	U		0.00151	0.00500	1	09/24/2021 10:28	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 10:28	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:28	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:28	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 10:28	WG1744466
Molybdenum,Dissolved	0.00221	J	0.000348	0.00500	1	09/24/2021 10:28	WG1744466
Nickel,Dissolved	U		0.000816	0.00200	1	09/24/2021 10:28	WG1744466
Selenium,Dissolved	0.00178	J	0.000300	0.00200	1	09/24/2021 10:28	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:28	WG1744466
Uranium,Dissolved	0.00653	J	0.0000700	0.0200	1	09/24/2021 10:28	WG1744466
Zinc,Dissolved	0.00738	J	0.00302	0.0250	1	09/24/2021 10:28	WG1744466

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 02:53	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 02:53	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 02:53	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 02:53	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 02:53	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 02:53	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 02:53	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 02:53	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 02:53	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 02:53	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 02:53	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 02:53	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 02:53	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 02:53	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 02:53	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 02:53	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 02:53	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 02:53	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 02:53	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 02:53	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 02:53	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 02:53	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 02:53	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 02:53	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 02:53	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 02:53	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 02:53	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 02:53	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 02:53	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 02:53	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 02:53	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 02:53	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 02:53	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 02:53	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 02:53	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 02:53	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 02:53	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 02:53	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 02:53	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 02:53	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 02:53	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 02:53	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 02:53	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 02:53	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 02:53	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 02:53	WG1742804
(S) Toluene-d8	*101*			*80.0-120*		*09/20/2021 02:53*	WG1742804
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*09/20/2021 02:53*	WG1742804
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*09/20/2021 02:53*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 13:08	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 13:08	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 13:08	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 13:08	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 13:08	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 13:08	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 13:08	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 13:08	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 13:08	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 13:08	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 13:08	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 13:08	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 13:08	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 13:08	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 13:08	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 13:08	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 13:08	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 13:08	WG1744270
Caprolactam	U		0.000309	0.0100	1	09/23/2021 13:08	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 13:08	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 13:08	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 13:08	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 13:08	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 13:08	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 13:08	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 13:08	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 13:08	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 13:08	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 13:08	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 13:08	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 13:08	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 13:08	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 13:08	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 13:08	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 13:08	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 13:08	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 13:08	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 13:08	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 13:08	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 13:08	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 13:08	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 13:08	WG1744270
Bis(2-ethylhexyl)phthalate	0.0107		0.000895	0.00300	1	09/23/2021 13:08	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 13:08	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 13:08	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 13:08	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 13:08	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 13:08	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 13:08	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 13:08	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 13:08	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 13:08	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 13:08	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 13:08	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 13:08	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 13:08	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 13:08	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 13:08	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 13:08	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 13:08	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 13:08	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 13:08	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 13:08	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 13:08	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 13:08	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 13:08	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 13:08	WG1744270
(S) 2-Fluorophenol	*35.0*			*10.0-120*		*09/23/2021 13:08*	WG1744270
(S) Phenol-d5	*25.1*			*10.0-120*		*09/23/2021 13:08*	WG1744270
(S) Nitrobenzene-d5	*55.2*			*10.0-127*		*09/23/2021 13:08*	WG1744270
(S) 2-Fluorobiphenyl	*62.0*			*10.0-130*		*09/23/2021 13:08*	WG1744270
(S) 2,4,6-Tribromophenol	*64.0*			*10.0-155*		*09/23/2021 13:08*	WG1744270
(S) p-Terphenyl-d14	*58.4*			*10.0-128*		*09/23/2021 13:08*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1080		20.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	167		8.45	20.0	1	09/22/2021 18:42	WG1744126

Sample Narrative:

L1404888-14 WG1744126: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.56		0.0500	0.100	1	09/27/2021 17:01	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	363		1.90	5.00	5	09/23/2021 09:33	WG1744856
Fluoride	0.776		0.0640	0.150	1	09/25/2021 09:03	WG1746176
Sulfate	102		2.97	25.0	5	09/23/2021 09:33	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/22/2021 16:25	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.190	J	0.0200	0.200	1	09/24/2021 11:02	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:31	WG1744466
Arsenic,Dissolved	0.00391		0.000180	0.00200	1	09/24/2021 10:31	WG1744466
Barium,Dissolved	0.154		0.000381	0.00200	1	09/24/2021 10:31	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:31	WG1744466
Chromium,Dissolved	0.00864		0.00124	0.00200	1	09/24/2021 10:31	WG1744466
Copper,Dissolved	0.00425	B J	0.00151	0.00500	1	09/24/2021 10:31	WG1744466
Cobalt,Dissolved	0.000137	J	0.0000596	0.00200	1	09/24/2021 10:31	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:31	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:31	WG1744466
Manganese,Dissolved	0.00653		0.000704	0.00500	1	09/24/2021 10:31	WG1744466
Molybdenum,Dissolved	0.00864		0.000348	0.00500	1	09/24/2021 10:31	WG1744466
Nickel,Dissolved	0.00497		0.000816	0.00200	1	09/24/2021 10:31	WG1744466
Selenium,Dissolved	0.00244		0.000300	0.00200	1	09/24/2021 14:28	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:31	WG1744466
Uranium,Dissolved	0.00252	J	0.0000700	0.0200	1	09/24/2021 10:31	WG1744466
Zinc,Dissolved	0.0312		0.00302	0.0250	1	09/24/2021 10:31	WG1744466

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 03:12	WG1742804
Benzene	0.000105	J	0.0000941	0.00100	1	09/20/2021 03:12	WG1742804
Bromodichloromethane	0.00277		0.000136	0.00100	1	09/20/2021 03:12	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 03:12	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 03:12	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 03:12	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 03:12	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 03:12	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 03:12	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 03:12	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 03:12	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 03:12	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 03:12	WG1742804
Chloroform	0.0120		0.000111	0.00500	1	09/20/2021 03:12	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 03:12	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 03:12	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 03:12	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 03:12	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 03:12	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 03:12	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 03:12	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 03:12	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 03:12	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 03:12	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 03:12	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 03:12	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 03:12	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 03:12	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 03:12	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 03:12	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 03:12	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 03:12	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 03:12	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 03:12	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 03:12	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 03:12	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 03:12	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 03:12	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 03:12	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 03:12	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 03:12	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 03:12	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 03:12	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 03:12	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 03:12	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 03:12	WG1742804
(S) Toluene-d8	*98.1*			*80.0-120*		*09/20/2021 03:12*	WG1742804
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*09/20/2021 03:12*	WG1742804
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*09/20/2021 03:12*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 13:29	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 13:29	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 13:29	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 13:29	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 13:29	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 13:29	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 13:29	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 13:29	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 13:29	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 13:29	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 13:29	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 13:29	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 13:29	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 13:29	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 13:29	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 13:29	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 13:29	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 13:29	WG1744270
Caprolactam	U		0.000309	0.0100	1	09/23/2021 13:29	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 13:29	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 13:29	WG1744270
Dibenz(a,h)anthracene	0.0000654	J	0.0000644	0.000200	1	09/23/2021 13:29	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 13:29	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 13:29	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 13:29	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 13:29	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 13:29	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 13:29	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 13:29	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 13:29	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 13:29	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 13:29	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 13:29	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 13:29	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 13:29	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 13:29	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 13:29	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 13:29	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 13:29	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 13:29	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 13:29	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 13:29	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 13:29	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 13:29	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 13:29	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 13:29	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 13:29	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 13:29	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 13:29	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 13:29	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 13:29	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 13:29	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 13:29	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 13:29	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 13:29	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 13:29	WG1744270

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

MW-15R
Collected date/time: 09/16/21 11:10
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 13:29	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 13:29	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 13:29	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 13:29	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 13:29	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 13:29	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 13:29	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 13:29	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 13:29	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 13:29	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 13:29	WG1744270
(S) 2-Fluorophenol	*42.2*			*10.0-120*		*09/23/2021 13:29*	WG1744270
(S) Phenol-d5	*30.3*			*10.0-120*		*09/23/2021 13:29*	WG1744270
(S) Nitrobenzene-d5	*60.4*			*10.0-127*		*09/23/2021 13:29*	WG1744270
(S) 2-Fluorobiphenyl	*67.8*			*10.0-130*		*09/23/2021 13:29*	WG1744270
(S) 2,4,6-Tribromophenol	*69.0*			*10.0-155*		*09/23/2021 13:29*	WG1744270
(S) p-Terphenyl-d14	*61.9*			*10.0-128*		*09/23/2021 13:29*	WG1744270

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	443		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	2.95		0.0500	0.100	1	09/27/2021 17:02	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	41.9		0.379	1.00	1	09/23/2021 09:49	WG1744856
Fluoride	0.805		0.0640	0.150	1	09/25/2021 09:19	WG1746176
Sulfate	68.2		0.594	5.00	1	09/23/2021 09:49	WG1744856

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/22/2021 15:38	WG1742867

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.167	J	0.0200	0.200	1	09/24/2021 11:05	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:35	WG1744466
Arsenic,Dissolved	0.00459		0.000180	0.00200	1	09/24/2021 10:35	WG1744466
Barium,Dissolved	0.105		0.000381	0.00200	1	09/24/2021 10:35	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:35	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 10:35	WG1744466
Copper,Dissolved	0.00299	B J	0.00151	0.00500	1	09/24/2021 10:35	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 10:35	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:35	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:35	WG1744466
Manganese,Dissolved	0.000862	J	0.000704	0.00500	1	09/24/2021 10:35	WG1744466
Molybdenum,Dissolved	0.00290	J	0.000348	0.00500	1	09/24/2021 10:35	WG1744466
Nickel,Dissolved	0.00190	J	0.000816	0.00200	1	09/24/2021 10:35	WG1744466
Selenium,Dissolved	0.00257		0.000300	0.00200	1	09/24/2021 14:32	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:35	WG1744466
Uranium,Dissolved	0.00301	J	0.0000700	0.0200	1	09/24/2021 10:35	WG1744466
Zinc,Dissolved	0.0297		0.00302	0.0250	1	09/24/2021 10:35	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 03:30	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 03:30	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 03:30	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 03:30	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 03:30	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 03:30	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 03:30	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 03:30	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 03:30	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 03:30	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 03:30	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 03:30	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 03:30	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 03:30	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 03:30	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 03:30	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 03:30	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 03:30	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 03:30	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 03:30	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 03:30	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 03:30	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 03:30	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 03:30	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 03:30	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 03:30	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 03:30	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 03:30	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 03:30	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 03:30	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 03:30	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 03:30	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 03:30	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 03:30	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 03:30	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 03:30	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 03:30	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 03:30	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 03:30	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 03:30	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 03:30	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 03:30	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 03:30	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 03:30	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 03:30	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 03:30	WG1742804
(S) Toluene-d8	*101*			*80.0-120*		*09/20/2021 03:30*	WG1742804
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*09/20/2021 03:30*	WG1742804
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*09/20/2021 03:30*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 13:50	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 13:50	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 13:50	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 13:50	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 13:50	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 13:50	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 13:50	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 13:50	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 13:50	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 13:50	WG1744270
Benzo(a)pyrene	0.0000433	J	0.0000381	0.000200	1	09/23/2021 13:50	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 13:50	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 13:50	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 13:50	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 13:50	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 13:50	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 13:50	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 13:50	WG1744270
Caprolactam	0.0115		0.000309	0.0100	1	09/23/2021 13:50	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 13:50	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 13:50	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 13:50	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 13:50	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 13:50	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 13:50	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 13:50	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 13:50	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 13:50	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 13:50	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 13:50	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 13:50	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 13:50	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 13:50	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 13:50	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 13:50	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 13:50	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 13:50	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 13:50	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 13:50	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 13:50	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 13:50	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 13:50	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 13:50	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 13:50	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 13:50	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 13:50	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 13:50	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 13:50	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 13:50	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 13:50	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 13:50	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 13:50	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 13:50	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 13:50	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 13:50	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 13:50	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 13:50	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 13:50	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 13:50	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 13:50	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 13:50	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 13:50	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 13:50	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 13:50	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 13:50	WG1744270

MW-10R
Collected date/time: 09/16/21 08:25
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 13:50	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 13:50	WG1744270
(S) 2-Fluorophenol	*35.5*			*10.0-120*		*09/23/2021 13:50*	WG1744270
(S) Phenol-d5	*24.6*			*10.0-120*		*09/23/2021 13:50*	WG1744270
(S) Nitrobenzene-d5	*49.3*			*10.0-127*		*09/23/2021 13:50*	WG1744270
(S) 2-Fluorobiphenyl	*56.9*			*10.0-130*		*09/23/2021 13:50*	WG1744270
(S) 2,4,6-Tribromophenol	*64.5*			*10.0-155*		*09/23/2021 13:50*	WG1744270
(S) p-Terphenyl-d14	*57.5*			*10.0-128*		*09/23/2021 13:50*	WG1744270

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:19	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.147	J	0.0200	0.200	1	09/24/2021 11:08	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:38	WG1744466
Arsenic,Dissolved	0.00347		0.000180	0.00200	1	09/24/2021 10:38	WG1744466
Barium,Dissolved	0.115		0.000381	0.00200	1	09/24/2021 10:38	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:38	WG1744466
Chromium,Dissolved	0.00165	J	0.00124	0.00200	1	09/24/2021 10:38	WG1744466
Copper,Dissolved	0.00159	B J	0.00151	0.00500	1	09/24/2021 10:38	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 10:38	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:38	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:38	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 10:38	WG1744466
Molybdenum,Dissolved	0.00169	J	0.000348	0.00500	1	09/24/2021 10:38	WG1744466
Nickel,Dissolved	0.000903	J	0.000816	0.00200	1	09/24/2021 10:38	WG1744466
Selenium,Dissolved	0.00185	J	0.000300	0.00200	1	09/24/2021 14:35	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:38	WG1744466
Uranium,Dissolved	0.00217	J	0.0000700	0.0200	1	09/24/2021 10:38	WG1744466
Zinc,Dissolved	0.00895	J	0.00302	0.0250	1	09/24/2021 10:38	WG1744466

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 03:49	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 03:49	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 03:49	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 03:49	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 03:49	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 03:49	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 03:49	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 03:49	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 03:49	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 03:49	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 03:49	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 03:49	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 03:49	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 03:49	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 03:49	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 03:49	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 03:49	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 03:49	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 03:49	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 03:49	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 03:49	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 03:49	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 03:49	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 03:49	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 03:49	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 03:49	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 03:49	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 03:49	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 03:49	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 03:49	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 03:49	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 03:49	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 03:49	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 03:49	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 03:49	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 03:49	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 03:49	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 03:49	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 03:49	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 03:49	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 03:49	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 03:49	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 03:49	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 03:49	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 03:49	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 03:49	WG1742804
(S) Toluene-d8	*102*			*80.0-120*		*09/20/2021 03:49*	WG1742804
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*09/20/2021 03:49*	WG1742804
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*09/20/2021 03:49*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 14:11	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 14:11	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 14:11	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 14:11	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 14:11	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 14:11	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 14:11	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 14:11	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 14:11	WG1744270
Benzo(g,h,i)perylene	0.000142	J	0.000121	0.00100	1	09/23/2021 14:11	WG1744270
Benzo(a)pyrene	0.0000914	J	0.0000381	0.000200	1	09/23/2021 14:11	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 14:11	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 14:11	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 14:11	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 14:11	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 14:11	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 14:11	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 14:11	WG1744270
Caprolactam	0.00285	J	0.000309	0.0100	1	09/23/2021 14:11	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 14:11	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 14:11	WG1744270
Dibenz(a,h)anthracene	0.000114	J	0.0000644	0.000200	1	09/23/2021 14:11	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 14:11	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 14:11	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 14:11	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 14:11	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 14:11	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Fluorene	U		0.0000844	0.00100	1	09/23/2021 14:11	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 14:11	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 14:11	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 14:11	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 14:11	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 14:11	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 14:11	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 14:11	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 14:11	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 14:11	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 14:11	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 14:11	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 14:11	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 14:11	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 14:11	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 14:11	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 14:11	WG1744270
Diethyl phthalate	0.00444		0.000287	0.00300	1	09/23/2021 14:11	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 14:11	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 14:11	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 14:11	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 14:11	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 14:11	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 14:11	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 14:11	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 14:11	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 14:11	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 14:11	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 14:11	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 14:11	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 14:11	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 14:11	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 14:11	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 14:11	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 14:11	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 14:11	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 14:11	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 14:11	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 14:11	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 14:11	WG1744270
(S) 2-Fluorophenol	*38.2*			*10.0-120*		*09/23/2021 14:11*	WG1744270
(S) Phenol-d5	*27.3*			*10.0-120*		*09/23/2021 14:11*	WG1744270
(S) Nitrobenzene-d5	*54.8*			*10.0-127*		*09/23/2021 14:11*	WG1744270
(S) 2-Fluorobiphenyl	*64.0*			*10.0-130*		*09/23/2021 14:11*	WG1744270
(S) 2,4,6-Tribromophenol	*70.0*			*10.0-155*		*09/23/2021 14:11*	WG1744270
(S) p-Terphenyl-d14	*58.6*			*10.0-128*		*09/23/2021 14:11*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	653		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	3.32		0.0500	0.100	1	09/27/2021 17:04	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	138		1.90	5.00	5	09/23/2021 10:55	WG1744856
Fluoride	0.677		0.0640	0.150	1	09/25/2021 09:35	WG1746176
Sulfate	96.5		2.97	25.0	5	09/23/2021 10:55	WG1744856

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/24/2021 13:21	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.122	J	0.0200	0.200	1	09/24/2021 11:10	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:42	WG1744466
Arsenic,Dissolved	0.00409		0.000180	0.00200	1	09/24/2021 10:42	WG1744466
Barium,Dissolved	0.105		0.000381	0.00200	1	09/24/2021 10:42	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:42	WG1744466
Chromium,Dissolved	0.00139	J	0.00124	0.00200	1	09/24/2021 10:42	WG1744466
Copper,Dissolved	0.00238	B J	0.00151	0.00500	1	09/24/2021 10:42	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 10:42	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:42	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:42	WG1744466
Manganese,Dissolved	0.00166	J	0.000704	0.00500	1	09/24/2021 10:42	WG1744466
Molybdenum,Dissolved	0.00448	J	0.000348	0.00500	1	09/24/2021 10:42	WG1744466
Nickel,Dissolved	U		0.000816	0.00200	1	09/24/2021 10:42	WG1744466
Selenium,Dissolved	0.00455		0.000300	0.00200	1	09/24/2021 14:44	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:42	WG1744466
Uranium,Dissolved	0.00269	J	0.0000700	0.0200	1	09/24/2021 10:42	WG1744466
Zinc,Dissolved	0.00553	J	0.00302	0.0250	1	09/24/2021 10:42	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 04:08	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 04:08	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 04:08	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 04:08	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 04:08	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 04:08	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 04:08	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 04:08	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 04:08	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 04:08	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 04:08	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 04:08	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 04:08	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 04:08	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 04:08	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 04:08	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 04:08	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 04:08	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 04:08	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 04:08	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 04:08	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 04:08	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 04:08	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 04:08	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 04:08	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 04:08	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 04:08	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 04:08	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 04:08	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 04:08	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 04:08	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 04:08	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 04:08	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 04:08	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 04:08	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 04:08	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 04:08	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 04:08	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 04:08	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 04:08	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 04:08	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 04:08	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 04:08	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 04:08	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 04:08	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 04:08	WG1742804
(S) Toluene-d8	*98.1*			*80.0-120*		*09/20/2021 04:08*	WG1742804
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*09/20/2021 04:08*	WG1742804
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*09/20/2021 04:08*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 14:32	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 14:32	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 14:32	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 14:32	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 14:32	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 14:32	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 14:32	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 14:32	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 14:32	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 14:32	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 14:32	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 14:32	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 14:32	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 14:32	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 14:32	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 14:32	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 14:32	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 14:32	WG1744270
Caprolactam	0.00196	J	0.000309	0.0100	1	09/23/2021 14:32	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 14:32	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 14:32	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 14:32	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 14:32	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 14:32	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 14:32	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 14:32	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 14:32	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 14:32	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 14:32	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 14:32	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 14:32	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 14:32	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 14:32	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 14:32	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 14:32	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 14:32	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 14:32	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 14:32	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 14:32	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 14:32	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 14:32	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 14:32	WG1744270
Bis(2-ethylhexyl)phthalate	0.00185	J	0.000895	0.00300	1	09/23/2021 14:32	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 14:32	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 14:32	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 14:32	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 14:32	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 14:32	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 14:32	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 14:32	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 14:32	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 14:32	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 14:32	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 14:32	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 14:32	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 14:32	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 14:32	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 14:32	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 14:32	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 14:32	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 14:32	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 14:32	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 14:32	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 14:32	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 14:32	WG1744270

MW-10R
Collected date/time: 09/16/21 09:05
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 14:32	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 14:32	WG1744270
(S) 2-Fluorophenol	*31.6*			*10.0-120*		*09/23/2021 14:32*	WG1744270
(S) Phenol-d5	*23.1*			*10.0-120*		*09/23/2021 14:32*	WG1744270
(S) Nitrobenzene-d5	*51.6*			*10.0-127*		*09/23/2021 14:32*	WG1744270
(S) 2-Fluorobiphenyl	*59.6*			*10.0-130*		*09/23/2021 14:32*	WG1744270
(S) 2,4,6-Tribromophenol	*67.0*			*10.0-155*		*09/23/2021 14:32*	WG1744270
(S) p-Terphenyl-d14	*45.5*			*10.0-128*		*09/23/2021 14:32*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1060		13.3	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	180		8.45	20.0	1	09/22/2021 18:45	WG1744126

Sample Narrative:

L1404888-18 WG1744126: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.37		0.0500	0.100	1	09/27/2021 17:05	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	297		1.90	5.00	5	09/23/2021 11:27	WG1744856
Fluoride	0.643		0.0640	0.150	1	09/25/2021 10:25	WG1746176
Sulfate	65.2		0.594	5.00	1	09/23/2021 11:11	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:23	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.166	J	0.0200	0.200	1	09/24/2021 11:18	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.0302	J	0.0185	0.100	1	09/24/2021 10:56	WG1744466
Arsenic,Dissolved	0.00316		0.000180	0.00200	1	09/24/2021 10:56	WG1744466
Barium,Dissolved	0.112		0.000381	0.00200	1	09/24/2021 10:56	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:56	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 10:56	WG1744466
Copper,Dissolved	0.00355	B J	0.00151	0.00500	1	09/24/2021 10:56	WG1744466
Cobalt,Dissolved	0.000518	J	0.0000596	0.00200	1	09/24/2021 10:56	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:56	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:56	WG1744466
Manganese,Dissolved	0.0160		0.000704	0.00500	1	09/24/2021 10:56	WG1744466
Molybdenum,Dissolved	0.00424	J	0.000348	0.00500	1	09/24/2021 10:56	WG1744466
Nickel,Dissolved	0.0142		0.000816	0.00200	1	09/24/2021 10:56	WG1744466
Selenium,Dissolved	0.00150	J	0.000300	0.00200	1	09/24/2021 10:56	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:56	WG1744466
Uranium,Dissolved	0.00244	J	0.0000700	0.0200	1	09/24/2021 10:56	WG1744466
Zinc,Dissolved	0.0329		0.00302	0.0250	1	09/24/2021 10:56	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 04:27	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 04:27	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 04:27	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 04:27	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 04:27	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 04:27	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 04:27	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 04:27	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 04:27	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 04:27	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 04:27	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 04:27	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 04:27	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 04:27	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 04:27	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 04:27	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 04:27	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 04:27	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 04:27	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 04:27	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 04:27	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 04:27	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 04:27	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 04:27	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 04:27	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 04:27	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 04:27	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 04:27	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 04:27	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 04:27	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 04:27	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 04:27	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 04:27	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 04:27	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 04:27	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 04:27	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 04:27	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 04:27	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 04:27	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 04:27	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 04:27	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 04:27	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 04:27	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 04:27	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 04:27	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 04:27	WG1742804
(S) Toluene-d8	*99.2*			*80.0-120*		*09/20/2021 04:27*	WG1742804
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*09/20/2021 04:27*	WG1742804
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*		*09/20/2021 04:27*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 14:53	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 14:53	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 14:53	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 14:53	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 14:53	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 14:53	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 14:53	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 14:53	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 14:53	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 14:53	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 14:53	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 14:53	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 14:53	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 14:53	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 14:53	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 14:53	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 14:53	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 14:53	WG1744270
Caprolactam	0.00184	J	0.000309	0.0100	1	09/23/2021 14:53	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 14:53	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 14:53	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 14:53	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 14:53	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 14:53	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 14:53	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 14:53	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 14:53	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 14:53	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 14:53	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 14:53	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 14:53	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 14:53	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 14:53	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 14:53	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 14:53	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 14:53	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 14:53	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 14:53	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 14:53	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 14:53	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 14:53	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 14:53	WG1744270
Bis(2-ethylhexyl)phthalate	0.00166	J	0.000895	0.00300	1	09/23/2021 14:53	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 14:53	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 14:53	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 14:53	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 14:53	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 14:53	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 14:53	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 14:53	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 14:53	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 14:53	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 14:53	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 14:53	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 14:53	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 14:53	WG1744270

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

MW-10R
Collected date/time: 09/16/21 09:10
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 14:53	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 14:53	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 14:53	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 14:53	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 14:53	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 14:53	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 14:53	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 14:53	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 14:53	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 14:53	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 14:53	WG1744270
(S) 2-Fluorophenol	*30.9*			*10.0-120*		*09/23/2021 14:53*	WG1744270
(S) Phenol-d5	*23.6*			*10.0-120*		*09/23/2021 14:53*	WG1744270
(S) Nitrobenzene-d5	*48.6*			*10.0-127*		*09/23/2021 14:53*	WG1744270
(S) 2-Fluorobiphenyl	*58.0*			*10.0-130*		*09/23/2021 14:53*	WG1744270
(S) 2,4,6-Tribromophenol	*67.0*			*10.0-155*		*09/23/2021 14:53*	WG1744270
(S) p-Terphenyl-d14	*51.9*			*10.0-128*		*09/23/2021 14:53*	WG1744270

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	688		10.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	11.7		0.250	0.500	5	09/27/2021 17:10	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	114		1.90	5.00	5	09/23/2021 12:00	WG1744856
Fluoride	0.724		0.0640	0.150	1	09/25/2021 10:41	WG1746176
Sulfate	73.7		0.594	5.00	1	09/23/2021 11:44	WG1744856

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:25	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.195	J	0.0200	0.200	1	09/24/2021 11:21	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 10:59	WG1744466
Arsenic,Dissolved	0.00322		0.000180	0.00200	1	09/24/2021 10:59	WG1744466
Barium,Dissolved	0.114		0.000381	0.00200	1	09/24/2021 10:59	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 10:59	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 10:59	WG1744466
Copper,Dissolved	0.00401	B J	0.00151	0.00500	1	09/24/2021 10:59	WG1744466
Cobalt,Dissolved	0.000467	J	0.0000596	0.00200	1	09/24/2021 10:59	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 10:59	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 10:59	WG1744466
Manganese,Dissolved	0.0109		0.000704	0.00500	1	09/24/2021 10:59	WG1744466
Molybdenum,Dissolved	0.0242		0.000348	0.00500	1	09/24/2021 10:59	WG1744466
Nickel,Dissolved	0.00560		0.000816	0.00200	1	09/24/2021 10:59	WG1744466
Selenium,Dissolved	0.00167	J	0.000300	0.00200	1	09/24/2021 14:48	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 10:59	WG1744466
Uranium,Dissolved	0.00303	J	0.0000700	0.0200	1	09/24/2021 10:59	WG1744466
Zinc,Dissolved	0.0399		0.00302	0.0250	1	09/24/2021 10:59	WG1744466

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 04:46	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 04:46	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 04:46	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 04:46	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 04:46	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 04:46	WG1742804

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 04:46	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 04:46	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 04:46	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 04:46	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 04:46	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 04:46	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 04:46	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 04:46	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 04:46	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 04:46	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 04:46	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 04:46	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 04:46	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 04:46	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 04:46	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 04:46	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 04:46	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 04:46	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 04:46	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 04:46	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 04:46	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 04:46	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 04:46	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 04:46	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 04:46	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 04:46	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 04:46	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 04:46	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 04:46	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 04:46	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 04:46	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 04:46	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 04:46	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 04:46	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 04:46	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 04:46	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 04:46	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 04:46	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 04:46	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 04:46	WG1742804
(S) Toluene-d8	*99.4*			*80.0-120*		*09/20/2021 04:46*	WG1742804
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*09/20/2021 04:46*	WG1742804
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*		*09/20/2021 04:46*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 17:44	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 17:44	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 17:44	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 17:44	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 17:44	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 17:44	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 17:44	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 17:44	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 17:44	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 17:44	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 17:44	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 17:44	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 17:44	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 17:44	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 17:44	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 17:44	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 17:44	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 17:44	WG1744270
Caprolactam	0.00180	J	0.000309	0.0100	1	09/23/2021 17:44	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 17:44	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 17:44	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 17:44	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 17:44	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 17:44	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 17:44	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 17:44	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 17:44	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 17:44	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 17:44	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 17:44	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 17:44	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 17:44	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 17:44	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 17:44	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 17:44	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 17:44	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 17:44	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 17:44	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 17:44	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 17:44	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 17:44	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 17:44	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 17:44	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 17:44	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 17:44	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 17:44	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 17:44	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 17:44	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 17:44	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 17:44	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 17:44	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 17:44	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 17:44	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 17:44	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 17:44	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 17:44	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 17:44	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 17:44	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 17:44	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 17:44	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 17:44	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 17:44	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 17:44	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 17:44	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 17:44	WG1744270

MW-20R
Collected date/time: 09/16/21 10:00
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 17:44	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 17:44	WG1744270
(S) 2-Fluorophenol	*34.1*			*10.0-120*		*09/23/2021 17:44*	WG1744270
(S) Phenol-d5	*25.1*			*10.0-120*		*09/23/2021 17:44*	WG1744270
(S) Nitrobenzene-d5	*52.9*			*10.0-127*		*09/23/2021 17:44*	WG1744270
(S) 2-Fluorobiphenyl	*61.7*			*10.0-130*		*09/23/2021 17:44*	WG1744270
(S) 2,4,6-Tribromophenol	*69.5*			*10.0-155*		*09/23/2021 17:44*	WG1744270
(S) p-Terphenyl-d14	*59.0*			*10.0-128*		*09/23/2021 17:44*	WG1744270

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 13:02	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*110*			*78.0-120*		*09/25/2021 13:02*	WG1745736

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.312		0.0247	0.100	1	09/27/2021 07:09	WG1746172
(S) o-Terphenyl	*109*			*31.0-160*		*09/27/2021 07:09*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 15:14	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 15:14	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 15:14	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 15:14	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 15:14	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 15:14	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 15:14	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 15:14	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 15:14	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 15:14	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 15:14	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 15:14	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 15:14	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 15:14	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 15:14	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 15:14	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 15:14	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 15:14	WG1744270
Caprolactam	0.00355	J	0.000309	0.0100	1	09/23/2021 15:14	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 15:14	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 15:14	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 15:14	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 15:14	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 15:14	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 15:14	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 15:14	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 15:14	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 15:14	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 15:14	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 15:14	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 15:14	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 15:14	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 15:14	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 15:14	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 15:14	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 15:14	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 15:14	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 15:14	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 15:14	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 15:14	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 15:14	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 15:14	WG1744270

MW-21
Collected date/time: 09/16/21 12:00
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 15:14	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 15:14	WG1744270
Diethyl phthalate	0.000891	J	0.000287	0.00300	1	09/23/2021 15:14	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 15:14	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 15:14	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 15:14	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 15:14	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 15:14	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 15:14	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 15:14	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 15:14	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 15:14	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 15:14	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 15:14	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 15:14	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 15:14	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 15:14	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 15:14	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 15:14	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 15:14	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 15:14	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 15:14	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 15:14	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 15:14	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 15:14	WG1744270
(S) 2-Fluorophenol	*37.8*			*10.0-120*		*09/23/2021 15:14*	WG1744270
(S) Phenol-d5	*28.1*			*10.0-120*		*09/23/2021 15:14*	WG1744270
(S) Nitrobenzene-d5	*56.5*			*10.0-127*		*09/23/2021 15:14*	WG1744270
(S) 2-Fluorobiphenyl	*67.9*			*10.0-130*		*09/23/2021 15:14*	WG1744270
(S) 2,4,6-Tribromophenol	*76.0*			*10.0-155*		*09/23/2021 15:14*	WG1744270
(S) p-Terphenyl-d14	*57.8*			*10.0-128*		*09/23/2021 15:14*	WG1744270

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	659		13.3	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	3.58		0.0500	0.100	1	09/27/2021 17:11	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	53.8		0.379	1.00	1	09/23/2021 12:17	WG1744856
Fluoride	0.742		0.0640	0.150	1	09/25/2021 10:57	WG1746176
Sulfate	58.4		0.594	5.00	1	09/23/2021 12:17	WG1744856

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/24/2021 13:27	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.205		0.0200	0.200	1	09/24/2021 11:24	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	0.0236	J	0.0185	0.100	1	09/24/2021 11:02	WG1744466
Arsenic,Dissolved	0.00209		0.000180	0.00200	1	09/24/2021 11:02	WG1744466
Barium,Dissolved	0.103		0.000381	0.00200	1	09/24/2021 11:02	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 11:02	WG1744466
Chromium,Dissolved	0.00865		0.00124	0.00200	1	09/24/2021 11:02	WG1744466
Copper,Dissolved	0.00392	B J	0.00151	0.00500	1	09/24/2021 11:02	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 11:02	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 11:02	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 11:02	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 11:02	WG1744466
Molybdenum,Dissolved	0.00330	J	0.000348	0.00500	1	09/24/2021 11:02	WG1744466
Nickel,Dissolved	0.00983		0.000816	0.00200	1	09/24/2021 11:02	WG1744466
Selenium,Dissolved	U		0.000300	0.00200	1	09/24/2021 11:02	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 11:02	WG1744466
Uranium,Dissolved	0.00889	J	0.0000700	0.0200	1	09/24/2021 11:02	WG1744466
Zinc,Dissolved	0.0140	J	0.00302	0.0250	1	09/24/2021 11:02	WG1744466

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 13:24	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*110*			*78.0-120*		*09/25/2021 13:24*	WG1745736

MW-22
Collected date/time: 09/16/21 10:40
L1404888

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 05:05	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 05:05	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 05:05	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 05:05	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 05:05	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 05:05	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 05:05	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 05:05	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 05:05	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 05:05	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 05:05	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 05:05	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 05:05	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 05:05	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 05:05	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 05:05	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 05:05	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 05:05	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 05:05	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 05:05	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 05:05	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 05:05	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 05:05	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 05:05	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 05:05	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 05:05	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 05:05	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 05:05	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 05:05	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 05:05	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 05:05	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 05:05	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 05:05	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 05:05	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 05:05	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 05:05	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 05:05	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 05:05	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 05:05	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 05:05	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 05:05	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 05:05	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 05:05	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 05:05	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 05:05	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 05:05	WG1742804
(S) Toluene-d8	*96.1*			*80.0-120*		*09/20/2021 05:05*	WG1742804
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*09/20/2021 05:05*	WG1742804
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*09/20/2021 05:05*	WG1742804

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.179	J	0.0494	0.200	2	09/27/2021 01:58	WG1746172
(S) o-Terphenyl	*115*			*31.0-160*		*09/27/2021 01:58*	WG1746172

Sample Narrative:

L1404888-21 WG1746172: Dilution due to matrix impact during extraction procedure

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 18:05	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 18:05	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 18:05	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 18:05	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 18:05	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 18:05	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 18:05	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 18:05	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 18:05	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 18:05	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 18:05	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 18:05	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 18:05	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 18:05	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 18:05	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 18:05	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 18:05	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 18:05	WG1744270
Caprolactam	U		0.000309	0.0100	1	09/23/2021 18:05	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 18:05	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 18:05	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 18:05	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 18:05	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 18:05	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 18:05	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 18:05	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 18:05	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 18:05	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 18:05	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 18:05	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 18:05	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 18:05	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 18:05	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 18:05	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 18:05	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 18:05	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 18:05	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 18:05	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 18:05	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 18:05	WG1744270
Phenanthrene	0.000142	J	0.000112	0.00100	1	09/23/2021 18:05	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 18:05	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 18:05	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 18:05	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 18:05	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 18:05	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 18:05	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Pyrene	U		0.000107	0.00100	1	09/23/2021 18:05	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 18:05	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 18:05	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 18:05	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 18:05	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 18:05	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 18:05	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 18:05	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 18:05	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 18:05	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 18:05	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 18:05	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 18:05	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 18:05	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 18:05	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 18:05	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 18:05	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 18:05	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 18:05	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 18:05	WG1744270
(S) 2-Fluorophenol	*33.9*			*10.0-120*		*09/23/2021 18:05*	WG1744270
(S) Phenol-d5	*25.3*			*10.0-120*		*09/23/2021 18:05*	WG1744270
(S) Nitrobenzene-d5	*46.4*			*10.0-127*		*09/23/2021 18:05*	WG1744270
(S) 2-Fluorobiphenyl	*56.6*			*10.0-130*		*09/23/2021 18:05*	WG1744270
(S) 2,4,6-Tribromophenol	*64.0*			*10.0-155*		*09/23/2021 18:05*	WG1744270
(S) p-Terphenyl-d14	*61.1*			*10.0-128*		*09/23/2021 18:05*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	793		13.3	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.85		0.0500	0.100	1	09/27/2021 17:13	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	176		1.90	5.00	5	09/23/2021 13:22	WG1744856
Fluoride	1.01		0.0640	0.150	1	09/25/2021 11:14	WG1746176
Sulfate	100		0.594	5.00	1	09/23/2021 13:06	WG1744856

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	455		10.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	157		8.45	20.0	1	09/23/2021 11:28	WG1744127

Sample Narrative:

L1404888-23 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.51		0.0500	0.100	1	09/27/2021 17:15	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	80.8		0.379	1.00	1	09/23/2021 20:26	WG1744857
Fluoride	2.79		0.0640	0.150	1	09/23/2021 20:26	WG1744857
Sulfate	72.8		0.594	5.00	1	09/23/2021 20:26	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:33	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.132	J	0.0200	0.200	1	09/24/2021 11:26	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.0434	J	0.0185	0.100	1	09/24/2021 11:06	WG1744466
Arsenic,Dissolved	0.00479		0.000180	0.00200	1	09/24/2021 11:06	WG1744466
Barium,Dissolved	0.0812		0.000381	0.00200	1	09/24/2021 11:06	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 11:06	WG1744466
Chromium,Dissolved	0.0224		0.00124	0.00200	1	09/24/2021 11:06	WG1744466
Copper,Dissolved	0.00269	B J	0.00151	0.00500	1	09/24/2021 11:06	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 11:06	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 11:06	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 11:06	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 11:06	WG1744466
Molybdenum,Dissolved	0.00939		0.000348	0.00500	1	09/24/2021 11:06	WG1744466
Nickel,Dissolved	0.00426		0.000816	0.00200	1	09/24/2021 11:06	WG1744466
Selenium,Dissolved	0.00235		0.000300	0.00200	1	09/24/2021 14:51	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 11:06	WG1744466
Uranium,Dissolved	0.00226	J	0.0000700	0.0200	1	09/24/2021 11:06	WG1744466
Zinc,Dissolved	0.0110	J	0.00302	0.0250	1	09/24/2021 11:06	WG1744466

MW-24R
Collected date/time: 09/16/21 11:45
L1404888

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 05:24	WG1742804
Benzene	0.000725	J	0.0000941	0.00100	1	09/20/2021 05:24	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 05:24	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 05:24	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 05:24	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 05:24	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 05:24	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 05:24	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 05:24	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 05:24	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 05:24	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 05:24	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 05:24	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 05:24	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 05:24	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 05:24	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 05:24	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 05:24	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 05:24	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 05:24	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 05:24	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 05:24	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 05:24	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 05:24	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 05:24	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 05:24	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 05:24	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 05:24	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 05:24	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 05:24	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 05:24	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 05:24	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 05:24	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 05:24	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 05:24	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 05:24	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 05:24	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 05:24	WG1742804
Toluene	0.000828	J	0.000278	0.00100	1	09/20/2021 05:24	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 05:24	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 05:24	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 05:24	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 05:24	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 05:24	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 05:24	WG1742804
Xylenes, Total	0.000194	J	0.000174	0.00300	1	09/20/2021 05:24	WG1742804
(S) Toluene-d8	*102*			*80.0-120*		*09/20/2021 05:24*	WG1742804
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*09/20/2021 05:24*	WG1742804
(S) 1,2-Dichloroethane-d4	*124*			*70.0-130*		*09/20/2021 05:24*	WG1742804

MW-24R
Collected date/time: 09/16/21 11:45
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 15:36	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 15:36	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 15:36	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 15:36	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 15:36	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 15:36	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 15:36	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 15:36	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 15:36	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 15:36	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 15:36	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 15:36	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 15:36	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 15:36	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 15:36	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 15:36	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 15:36	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 15:36	WG1744270
Caprolactam	0.00106	J	0.000309	0.0100	1	09/23/2021 15:36	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 15:36	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 15:36	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 15:36	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 15:36	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 15:36	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 15:36	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 15:36	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 15:36	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 15:36	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 15:36	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 15:36	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 15:36	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 15:36	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 15:36	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 15:36	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 15:36	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 15:36	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 15:36	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 15:36	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 15:36	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 15:36	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 15:36	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 15:36	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 15:36	WG1744270
Di-n-butyl phthalate	0.00117	J	0.000453	0.00300	1	09/23/2021 15:36	WG1744270
Diethyl phthalate	0.00118	J	0.000287	0.00300	1	09/23/2021 15:36	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 15:36	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 15:36	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 15:36	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 15:36	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 15:36	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 15:36	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 15:36	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 15:36	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 15:36	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 15:36	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 15:36	WG1744270

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

MW-24R
Collected date/time: 09/16/21 11:45
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 15:36	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 15:36	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 15:36	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 15:36	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 15:36	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 15:36	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 15:36	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 15:36	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 15:36	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 15:36	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 15:36	WG1744270
(S) 2-Fluorophenol	*35.6*			*10.0-120*		*09/23/2021 15:36*	WG1744270
(S) Phenol-d5	*26.4*			*10.0-120*		*09/23/2021 15:36*	WG1744270
(S) Nitrobenzene-d5	*54.0*			*10.0-127*		*09/23/2021 15:36*	WG1744270
(S) 2-Fluorobiphenyl	*61.5*			*10.0-130*		*09/23/2021 15:36*	WG1744270
(S) 2,4,6-Tribromophenol	*71.0*			*10.0-155*		*09/23/2021 15:36*	WG1744270
(S) p-Terphenyl-d14	*61.1*			*10.0-128*		*09/23/2021 15:36*	WG1744270

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

MW-20R
Collected date/time: 09/16/21 09:25
L1404888

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	11.6		0.250	0.500	5	09/27/2021 17:18	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	329		1.90	5.00	5	09/23/2021 21:13	WG1744857
Fluoride	0.429		0.0640	0.150	1	09/23/2021 20:57	WG1744857
Sulfate	161		2.97	25.0	5	09/23/2021 21:13	WG1744857

MW-27
Collected date/time: 09/16/21 10:20
L1404888

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 05:43	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 05:43	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 05:43	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 05:43	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 05:43	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 05:43	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 05:43	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 05:43	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 05:43	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 05:43	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 05:43	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 05:43	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 05:43	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 05:43	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 05:43	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 05:43	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 05:43	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 05:43	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 05:43	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 05:43	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 05:43	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 05:43	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 05:43	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 05:43	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 05:43	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 05:43	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 05:43	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 05:43	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 05:43	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 05:43	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 05:43	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 05:43	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 05:43	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 05:43	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 05:43	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 05:43	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 05:43	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 05:43	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 05:43	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 05:43	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 05:43	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 05:43	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 05:43	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 05:43	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 05:43	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 05:43	WG1742804
(S) Toluene-d8	*99.1*			*80.0-120*		*09/20/2021 05:43*	WG1742804
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*09/20/2021 05:43*	WG1742804
(S) 1,2-Dichloroethane-d4	*126*			*70.0-130*		*09/20/2021 05:43*	WG1742804

MW-27
Collected date/time: 09/16/21 10:20
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 15:57	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 15:57	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 15:57	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 15:57	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 15:57	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 15:57	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 15:57	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 15:57	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 15:57	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 15:57	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 15:57	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 15:57	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 15:57	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 15:57	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 15:57	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 15:57	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 15:57	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 15:57	WG1744270
Caprolactam	0.00116	J	0.000309	0.0100	1	09/23/2021 15:57	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 15:57	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 15:57	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 15:57	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 15:57	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 15:57	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 15:57	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 15:57	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 15:57	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 15:57	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 15:57	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 15:57	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 15:57	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 15:57	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 15:57	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 15:57	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 15:57	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 15:57	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 15:57	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 15:57	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 15:57	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 15:57	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 15:57	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 15:57	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 15:57	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 15:57	WG1744270
Diethyl phthalate	0.00148	J	0.000287	0.00300	1	09/23/2021 15:57	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 15:57	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 15:57	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 15:57	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 15:57	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 15:57	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 15:57	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 15:57	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 15:57	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 15:57	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 15:57	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 15:57	WG1744270

MW-27
Collected date/time: 09/16/21 10:20
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 15:57	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 15:57	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 15:57	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 15:57	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 15:57	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 15:57	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 15:57	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 15:57	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 15:57	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 15:57	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 15:57	WG1744270
(S) 2-Fluorophenol	*33.4*			*10.0-120*		*09/23/2021 15:57*	WG1744270
(S) Phenol-d5	*26.2*			*10.0-120*		*09/23/2021 15:57*	WG1744270
(S) Nitrobenzene-d5	*51.3*			*10.0-127*		*09/23/2021 15:57*	WG1744270
(S) 2-Fluorobiphenyl	*55.4*			*10.0-130*		*09/23/2021 15:57*	WG1744270
(S) 2,4,6-Tribromophenol	*62.0*			*10.0-155*		*09/23/2021 15:57*	WG1744270
(S) p-Terphenyl-d14	*47.2*			*10.0-128*		*09/23/2021 15:57*	WG1744270

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	639		10.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	189		8.45	20.0	1	09/23/2021 11:32	WG1744127

Sample Narrative:

L1404888-26 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	4.12		0.0500	0.100	1	09/27/2021 17:19	WG1745610

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	141		1.90	5.00	5	09/23/2021 21:45	WG1744857
Fluoride	1.86		0.0640	0.150	1	09/23/2021 21:29	WG1744857
Sulfate	79.2		0.594	5.00	1	09/23/2021 21:29	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:35	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.166	J	0.0200	0.200	1	09/24/2021 11:29	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.0243	J	0.0185	0.100	1	09/24/2021 11:09	WG1744466
Arsenic,Dissolved	0.00393		0.000180	0.00200	1	09/24/2021 11:09	WG1744466
Barium,Dissolved	0.105		0.000381	0.00200	1	09/24/2021 11:09	WG1744466
Cadmium,Dissolved	U		0.000150	0.00100	1	09/24/2021 11:09	WG1744466
Chromium,Dissolved	U		0.00124	0.00200	1	09/24/2021 11:09	WG1744466
Copper,Dissolved	0.00567	B	0.00151	0.00500	1	09/24/2021 11:09	WG1744466
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/24/2021 11:09	WG1744466
Iron,Dissolved	0.0285	J	0.0281	0.100	1	09/24/2021 11:09	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 11:09	WG1744466
Manganese,Dissolved	U		0.000704	0.00500	1	09/24/2021 11:09	WG1744466
Molybdenum,Dissolved	0.00195	J	0.000348	0.00500	1	09/24/2021 11:09	WG1744466
Nickel,Dissolved	U		0.000816	0.00200	1	09/24/2021 11:09	WG1744466
Selenium,Dissolved	0.00243		0.000300	0.00200	1	09/24/2021 14:54	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 11:09	WG1744466
Uranium,Dissolved	0.00254	J	0.0000700	0.0200	1	09/24/2021 11:09	WG1744466
Zinc,Dissolved	0.00556	J	0.00302	0.0250	1	09/24/2021 11:09	WG1744466

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 06:02	WG1742804
Benzene	U		0.0000941	0.00100	1	09/20/2021 06:02	WG1742804
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 06:02	WG1742804
Bromoform	U		0.000129	0.00100	1	09/20/2021 06:02	WG1742804
Bromomethane	U		0.000605	0.00500	1	09/20/2021 06:02	WG1742804
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 06:02	WG1742804
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 06:02	WG1742804
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 06:02	WG1742804
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 06:02	WG1742804
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 06:02	WG1742804
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 06:02	WG1742804
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 06:02	WG1742804
Chloroethane	U		0.000192	0.00500	1	09/20/2021 06:02	WG1742804
Chloroform	U		0.000111	0.00500	1	09/20/2021 06:02	WG1742804
Chloromethane	U		0.000960	0.00250	1	09/20/2021 06:02	WG1742804
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 06:02	WG1742804
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 06:02	WG1742804
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 06:02	WG1742804
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 06:02	WG1742804
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 06:02	WG1742804
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 06:02	WG1742804
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 06:02	WG1742804
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 06:02	WG1742804
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 06:02	WG1742804
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 06:02	WG1742804
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 06:02	WG1742804
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 06:02	WG1742804
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 06:02	WG1742804
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 06:02	WG1742804
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 06:02	WG1742804
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 06:02	WG1742804
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 06:02	WG1742804
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 06:02	WG1742804
Naphthalene	U		0.00100	0.00500	1	09/20/2021 06:02	WG1742804
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 06:02	WG1742804
Styrene	U		0.000118	0.00100	1	09/20/2021 06:02	WG1742804
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 06:02	WG1742804
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 06:02	WG1742804
Toluene	U		0.000278	0.00100	1	09/20/2021 06:02	WG1742804
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 06:02	WG1742804
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 06:02	WG1742804
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 06:02	WG1742804
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 06:02	WG1742804
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 06:02	WG1742804
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 06:02	WG1742804
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 06:02	WG1742804
(S) Toluene-d8	*96.3*			*80.0-120*		*09/20/2021 06:02*	WG1742804
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*09/20/2021 06:02*	WG1742804
(S) 1,2-Dichloroethane-d4	*126*			*70.0-130*		*09/20/2021 06:02*	WG1742804

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 16:18	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 16:18	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 16:18	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 16:18	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 16:18	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 16:18	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 16:18	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 16:18	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 16:18	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 16:18	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 16:18	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 16:18	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 16:18	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 16:18	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 16:18	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 16:18	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 16:18	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 16:18	WG1744270
Caprolactam	0.00460	J	0.000309	0.0100	1	09/23/2021 16:18	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 16:18	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 16:18	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 16:18	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 16:18	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 16:18	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 16:18	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 16:18	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 16:18	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 16:18	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 16:18	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 16:18	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 16:18	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 16:18	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 16:18	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 16:18	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 16:18	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 16:18	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 16:18	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 16:18	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 16:18	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 16:18	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 16:18	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 16:18	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 16:18	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 16:18	WG1744270
Diethyl phthalate	0.000723	J	0.000287	0.00300	1	09/23/2021 16:18	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 16:18	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 16:18	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 16:18	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 16:18	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 16:18	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 16:18	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 16:18	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 16:18	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 16:18	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 16:18	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 16:18	WG1744270

MW-28
Collected date/time: 09/16/21 11:15
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 16:18	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 16:18	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 16:18	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 16:18	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 16:18	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 16:18	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 16:18	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 16:18	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 16:18	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 16:18	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 16:18	WG1744270
(S) 2-Fluorophenol	*34.7*			*10.0-120*		*09/23/2021 16:18*	WG1744270
(S) Phenol-d5	*26.2*			*10.0-120*		*09/23/2021 16:18*	WG1744270
(S) Nitrobenzene-d5	*48.6*			*10.0-127*		*09/23/2021 16:18*	WG1744270
(S) 2-Fluorobiphenyl	*56.4*			*10.0-130*		*09/23/2021 16:18*	WG1744270
(S) 2,4,6-Tribromophenol	*68.0*			*10.0-155*		*09/23/2021 16:18*	WG1744270
(S) p-Terphenyl-d14	*58.4*			*10.0-128*		*09/23/2021 16:18*	WG1744270

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	827		13.3	1	09/23/2021 12:57	WG1745251

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	6.40		0.250	0.500	5	09/28/2021 11:58	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	187		1.90	5.00	5	09/23/2021 22:17	WG1744857
Fluoride	0.672		0.0640	0.150	1	09/23/2021 22:01	WG1744857
Sulfate	76.8		0.594	5.00	1	09/23/2021 22:01	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:37	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.188	J	0.0200	0.200	1	09/24/2021 03:51	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/24/2021 11:13	WG1744466
Arsenic,Dissolved	0.00464		0.000180	0.00200	1	09/24/2021 11:13	WG1744466
Barium,Dissolved	0.133		0.000381	0.00200	1	09/24/2021 11:13	WG1744466
Cadmium,Dissolved	0.000543	J	0.000150	0.00100	1	09/24/2021 11:13	WG1744466
Chromium,Dissolved	0.00141	J	0.00124	0.00200	1	09/24/2021 11:13	WG1744466
Copper,Dissolved	0.00757	B	0.00151	0.00500	1	09/24/2021 11:13	WG1744466
Cobalt,Dissolved	0.0000838	J	0.0000596	0.00200	1	09/24/2021 11:13	WG1744466
Iron,Dissolved	U		0.0281	0.100	1	09/24/2021 11:13	WG1744466
Lead,Dissolved	U		0.000849	0.00200	1	09/24/2021 11:13	WG1744466
Manganese,Dissolved	0.00807		0.000704	0.00500	1	09/24/2021 11:13	WG1744466
Molybdenum,Dissolved	0.00263	J	0.000348	0.00500	1	09/24/2021 11:13	WG1744466
Nickel,Dissolved	0.00309		0.000816	0.00200	1	09/24/2021 11:13	WG1744466
Selenium,Dissolved	0.00137	J	0.000300	0.00200	1	09/24/2021 11:13	WG1744466
Silver,Dissolved	U		0.0000700	0.00200	1	09/24/2021 11:13	WG1744466
Uranium,Dissolved	0.00361	J	0.0000700	0.0200	1	09/24/2021 11:13	WG1744466
Zinc,Dissolved	0.0788		0.00302	0.0250	1	09/24/2021 11:13	WG1744466

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 00:56	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 00:56	WG1742806
Bromodichloromethane	0.000959	J	0.000136	0.00100	1	09/20/2021 00:56	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 00:56	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 00:56	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 00:56	WG1742806

MW-29
Collected date/time: 09/16/21 11:00
L1404888

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 00:56	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 00:56	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 00:56	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 00:56	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 00:56	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 00:56	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 00:56	WG1742806
Chloroform	0.00276	J	0.000111	0.00500	1	09/20/2021 00:56	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 00:56	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 00:56	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 00:56	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 00:56	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 00:56	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 00:56	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 00:56	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 00:56	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 00:56	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 00:56	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 00:56	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 00:56	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 00:56	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 00:56	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 00:56	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 00:56	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 00:56	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 00:56	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 00:56	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 00:56	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 00:56	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 00:56	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 00:56	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 00:56	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 00:56	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 00:56	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 00:56	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 00:56	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 00:56	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 00:56	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 00:56	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 00:56	WG1742806
(S) Toluene-d8	*104*			*80.0-120*		*09/20/2021 00:56*	WG1742806
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*09/20/2021 00:56*	WG1742806
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*09/20/2021 00:56*	WG1742806

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 16:40	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 16:40	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 16:40	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 16:40	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 16:40	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 16:40	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 16:40	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 16:40	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 16:40	WG1744270

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 16:40	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 16:40	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 16:40	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 16:40	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 16:40	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 16:40	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 16:40	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 16:40	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 16:40	WG1744270
Caprolactam	0.00439	J	0.000309	0.0100	1	09/23/2021 16:40	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 16:40	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 16:40	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 16:40	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 16:40	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 16:40	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 16:40	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 16:40	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 16:40	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 16:40	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 16:40	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 16:40	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 16:40	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 16:40	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 16:40	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 16:40	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 16:40	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 16:40	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 16:40	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 16:40	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 16:40	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 16:40	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 16:40	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 16:40	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 16:40	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 16:40	WG1744270
Diethyl phthalate	0.000597	J	0.000287	0.00300	1	09/23/2021 16:40	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 16:40	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 16:40	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 16:40	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 16:40	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 16:40	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 16:40	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 16:40	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 16:40	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 16:40	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 16:40	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 16:40	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 16:40	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 16:40	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 16:40	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 16:40	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 16:40	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 16:40	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 16:40	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 16:40	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 16:40	WG1744270

MW-29
Collected date/time: 09/16/21 11:00
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 16:40	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 16:40	WG1744270
(S) 2-Fluorophenol	*30.7*			*10.0-120*		*09/23/2021 16:40*	WG1744270
(S) Phenol-d5	*23.3*			*10.0-120*		*09/23/2021 16:40*	WG1744270
(S) Nitrobenzene-d5	*38.0*			*10.0-127*		*09/23/2021 16:40*	WG1744270
(S) 2-Fluorobiphenyl	*46.1*			*10.0-130*		*09/23/2021 16:40*	WG1744270
(S) 2,4,6-Tribromophenol	*50.5*			*10.0-155*		*09/23/2021 16:40*	WG1744270
(S) p-Terphenyl-d14	*46.3*			*10.0-128*		*09/23/2021 16:40*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	539		10.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Alkalinity	193		8.45	20.0	1	09/23/2021 11:38	WG1744127

Sample Narrative:

L1404888-28 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	3.57		0.250	0.500	5	09/28/2021 12:00	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	95.4		0.379	1.00	1	09/23/2021 23:04	WG1744857
Fluoride	0.990		0.0640	0.150	1	09/23/2021 23:04	WG1744857
Sulfate	62.7		0.594	5.00	1	09/23/2021 23:04	WG1744857

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/24/2021 13:39	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.177	J	0.0200	0.200	1	09/24/2021 03:54	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 01:15	WG1744734
Arsenic,Dissolved	0.00428		0.000180	0.00200	1	09/23/2021 01:15	WG1744734
Barium,Dissolved	0.0914		0.000381	0.00200	1	09/23/2021 01:15	WG1744734
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 01:15	WG1744734
Chromium,Dissolved	0.0166		0.00124	0.00200	1	09/23/2021 01:15	WG1744734
Copper,Dissolved	U		0.00151	0.00500	1	09/23/2021 01:15	WG1744734
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/23/2021 01:15	WG1744734
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 01:15	WG1744734
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 01:15	WG1744734
Manganese,Dissolved	U		0.000704	0.00500	1	09/23/2021 01:15	WG1744734
Molybdenum,Dissolved	0.00228	J	0.000348	0.00500	1	09/23/2021 01:15	WG1744734
Nickel,Dissolved	0.00194	J	0.000816	0.00200	1	09/23/2021 01:15	WG1744734
Selenium,Dissolved	0.00199	J	0.000300	0.00200	1	09/23/2021 01:15	WG1744734
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 01:15	WG1744734
Uranium,Dissolved	0.00203	J	0.0000700	0.0200	1	09/23/2021 01:15	WG1744734
Zinc,Dissolved	0.0118	J	0.00302	0.0250	1	09/23/2021 01:15	WG1744734

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 01:15	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 01:15	WG1742806
Bromodichloromethane	0.00780		0.000136	0.00100	1	09/20/2021 01:15	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 01:15	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 01:15	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 01:15	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 01:15	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 01:15	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 01:15	WG1742806
Carbon tetrachloride	0.000307	J	0.000128	0.00100	1	09/20/2021 01:15	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 01:15	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 01:15	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 01:15	WG1742806
Chloroform	0.0282		0.000111	0.00500	1	09/20/2021 01:15	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 01:15	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 01:15	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 01:15	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 01:15	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 01:15	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 01:15	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 01:15	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 01:15	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 01:15	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 01:15	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 01:15	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 01:15	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 01:15	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 01:15	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 01:15	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 01:15	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 01:15	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 01:15	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 01:15	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 01:15	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 01:15	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 01:15	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 01:15	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 01:15	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 01:15	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 01:15	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 01:15	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 01:15	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 01:15	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 01:15	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 01:15	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 01:15	WG1742806
(S) Toluene-d8	*105*			*80.0-120*		*09/20/2021 01:15*	WG1742806
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*09/20/2021 01:15*	WG1742806
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*09/20/2021 01:15*	WG1742806

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 17:01	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 17:01	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 17:01	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 17:01	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 17:01	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 17:01	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 17:01	WG1744270
Benzo(b)fluoranthene	0.000149	J	0.000130	0.00100	1	09/23/2021 17:01	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 17:01	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 17:01	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 17:01	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 17:01	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 17:01	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 17:01	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 17:01	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 17:01	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 17:01	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 17:01	WG1744270
Caprolactam	0.000967	J	0.000309	0.0100	1	09/23/2021 17:01	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 17:01	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 17:01	WG1744270
Dibenz(a,h)anthracene	0.0000850	J	0.0000644	0.000200	1	09/23/2021 17:01	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 17:01	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 17:01	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 17:01	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 17:01	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 17:01	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 17:01	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 17:01	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 17:01	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 17:01	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 17:01	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 17:01	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 17:01	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 17:01	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 17:01	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 17:01	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 17:01	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 17:01	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 17:01	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 17:01	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 17:01	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 17:01	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 17:01	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 17:01	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 17:01	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 17:01	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 17:01	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 17:01	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 17:01	WG1744270
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 17:01	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 17:01	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 17:01	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 17:01	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 17:01	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 17:01	WG1744270

MW-30
Collected date/time: 09/16/21 09:00
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 17:01	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 17:01	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 17:01	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 17:01	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 17:01	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 17:01	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 17:01	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 17:01	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 17:01	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 17:01	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 17:01	WG1744270
(S) 2-Fluorophenol	*34.2*			*10.0-120*		*09/23/2021 17:01*	WG1744270
(S) Phenol-d5	*25.1*			*10.0-120*		*09/23/2021 17:01*	WG1744270
(S) Nitrobenzene-d5	*55.6*			*10.0-127*		*09/23/2021 17:01*	WG1744270
(S) 2-Fluorobiphenyl	*64.0*			*10.0-130*		*09/23/2021 17:01*	WG1744270
(S) 2,4,6-Tribromophenol	*69.0*			*10.0-155*		*09/23/2021 17:01*	WG1744270
(S) p-Terphenyl-d14	*63.9*			*10.0-128*		*09/23/2021 17:01*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	728		13.3	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	485		8.45	20.0	1	09/23/2021 11:42	WG1744127

Sample Narrative:

L1404888-29 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.56		0.250	0.500	5	09/28/2021 12:01	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	57.0		0.379	1.00	1	09/23/2021 23:20	WG1744857
Fluoride	0.247		0.0640	0.150	1	09/23/2021 23:20	WG1744857
Sulfate	142		2.97	25.0	5	09/24/2021 06:46	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:40	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.170	J	0.0200	0.200	1	09/24/2021 03:57	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 01:19	WG1744734
Arsenic,Dissolved	0.00416		0.000180	0.00200	1	09/23/2021 01:19	WG1744734
Barium,Dissolved	0.380		0.000381	0.00200	1	09/23/2021 01:19	WG1744734
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 01:19	WG1744734
Chromium,Dissolved	U		0.00124	0.00200	1	09/23/2021 01:19	WG1744734
Copper,Dissolved	0.00386	J	0.00151	0.00500	1	09/23/2021 01:19	WG1744734
Cobalt,Dissolved	0.000141	J	0.0000596	0.00200	1	09/23/2021 01:19	WG1744734
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 01:19	WG1744734
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 01:19	WG1744734
Manganese,Dissolved	0.0402		0.000704	0.00500	1	09/23/2021 01:19	WG1744734
Molybdenum,Dissolved	0.00714		0.000348	0.00500	1	09/23/2021 01:19	WG1744734
Nickel,Dissolved	0.00418		0.000816	0.00200	1	09/23/2021 01:19	WG1744734
Selenium,Dissolved	0.000943	J	0.000300	0.00200	1	09/23/2021 01:19	WG1744734
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 01:19	WG1744734
Uranium,Dissolved	0.00547	J	0.0000700	0.0200	1	09/23/2021 01:19	WG1744734
Zinc,Dissolved	0.0196	J	0.00302	0.0250	1	09/23/2021 01:19	WG1744734

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 13:45	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*110*			*78.0-120*		*09/25/2021 13:45*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 01:34	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 01:34	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 01:34	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 01:34	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 01:34	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 01:34	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 01:34	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 01:34	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 01:34	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 01:34	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 01:34	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 01:34	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 01:34	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 01:34	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 01:34	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 01:34	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 01:34	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 01:34	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 01:34	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 01:34	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 01:34	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 01:34	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 01:34	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 01:34	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 01:34	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 01:34	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 01:34	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 01:34	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 01:34	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 01:34	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 01:34	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 01:34	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 01:34	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 01:34	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 01:34	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 01:34	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 01:34	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 01:34	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 01:34	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 01:34	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 01:34	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 01:34	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 01:34	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 01:34	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 01:34	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 01:34	WG1742806
(S) Toluene-d8	*104*			*80.0-120*		*09/20/2021 01:34*	WG1742806
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*09/20/2021 01:34*	WG1742806
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*09/20/2021 01:34*	WG1742806

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.178		0.0247	0.100	1	09/27/2021 02:24	WG1746172
(S) o-Terphenyl	*75.3*			*31.0-160*		*09/27/2021 02:24*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 17:22	WG1744270
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 17:22	WG1744270
Acetophenone	U		0.000208	0.0100	1	09/23/2021 17:22	WG1744270
Anthracene	U		0.0000804	0.00100	1	09/23/2021 17:22	WG1744270
Atrazine	U		0.000255	0.0100	1	09/23/2021 17:22	WG1744270
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 17:22	WG1744270
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 17:22	WG1744270
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 17:22	WG1744270
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 17:22	WG1744270
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 17:22	WG1744270
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 17:22	WG1744270
Biphenyl	U		0.000790	0.0100	1	09/23/2021 17:22	WG1744270
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 17:22	WG1744270
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 17:22	WG1744270
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 17:22	WG1744270
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 17:22	WG1744270
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 17:22	WG1744270
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 17:22	WG1744270
Caprolactam	U		0.000309	0.0100	1	09/23/2021 17:22	WG1744270
Carbazole	U		0.000111	0.0100	1	09/23/2021 17:22	WG1744270
Chrysene	U		0.000130	0.00100	1	09/23/2021 17:22	WG1744270
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 17:22	WG1744270
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 17:22	WG1744270
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 17:22	WG1744270
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 17:22	WG1744270
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 17:22	WG1744270
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 17:22	WG1744270
Fluorene	U		0.0000844	0.00100	1	09/23/2021 17:22	WG1744270
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 17:22	WG1744270
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 17:22	WG1744270
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 17:22	WG1744270
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 17:22	WG1744270
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 17:22	WG1744270
Isophorone	U		0.000143	0.0100	1	09/23/2021 17:22	WG1744270
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 17:22	WG1744270
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 17:22	WG1744270
Naphthalene	U		0.000159	0.00100	1	09/23/2021 17:22	WG1744270
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 17:22	WG1744270
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 17:22	WG1744270
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 17:22	WG1744270
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 17:22	WG1744270
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 17:22	WG1744270
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 17:22	WG1744270
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 17:22	WG1744270
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 17:22	WG1744270
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 17:22	WG1744270
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 17:22	WG1744270
Pyrene	U		0.000107	0.00100	1	09/23/2021 17:22	WG1744270
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 17:22	WG1744270
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 17:22	WG1744270

MW-32
Collected date/time: 09/16/21 08:50
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 17:22	WG1744270
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 17:22	WG1744270
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 17:22	WG1744270
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 17:22	WG1744270
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 17:22	WG1744270
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 17:22	WG1744270
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 17:22	WG1744270
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 17:22	WG1744270
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 17:22	WG1744270
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 17:22	WG1744270
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 17:22	WG1744270
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 17:22	WG1744270
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 17:22	WG1744270
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 17:22	WG1744270
Phenol	U		0.00433	0.0100	1	09/23/2021 17:22	WG1744270
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 17:22	WG1744270
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 17:22	WG1744270
(S) 2-Fluorophenol	*35.0*			*10.0-120*		*09/23/2021 17:22*	WG1744270
(S) Phenol-d5	*25.2*			*10.0-120*		*09/23/2021 17:22*	WG1744270
(S) Nitrobenzene-d5	*52.7*			*10.0-127*		*09/23/2021 17:22*	WG1744270
(S) 2-Fluorobiphenyl	*59.4*			*10.0-130*		*09/23/2021 17:22*	WG1744270
(S) 2,4,6-Tribromophenol	*62.0*			*10.0-155*		*09/23/2021 17:22*	WG1744270
(S) p-Terphenyl-d14	*61.6*			*10.0-128*		*09/23/2021 17:22*	WG1744270

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1130		20.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	961		8.45	20.0	1	09/23/2021 11:48	WG1744127

Sample Narrative:

L1404888-30 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.0500	0.100	1	09/28/2021 12:02	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	56.3		0.379	1.00	1	09/23/2021 23:52	WG1744857
Fluoride	0.640		0.0640	0.150	1	09/23/2021 23:52	WG1744857
Sulfate	11.5		0.594	5.00	1	09/23/2021 23:52	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:13	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.168	J	0.0200	0.200	1	09/24/2021 10:19	WG1744918

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 00:49	WG1744734
Arsenic,Dissolved	0.00293		0.000180	0.00200	1	09/23/2021 00:49	WG1744734
Barium,Dissolved	0.409		0.000381	0.00200	1	09/23/2021 00:49	WG1744734
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 00:49	WG1744734
Chromium,Dissolved	U		0.00124	0.00200	1	09/23/2021 00:49	WG1744734
Copper,Dissolved	U		0.00151	0.00500	1	09/23/2021 00:49	WG1744734
Cobalt,Dissolved	0.0000660	J	0.0000596	0.00200	1	09/23/2021 00:49	WG1744734
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 00:49	WG1744734
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 00:49	WG1744734
Manganese,Dissolved	0.621		0.000704	0.00500	1	09/23/2021 00:49	WG1744734
Molybdenum,Dissolved	0.00267	J	0.000348	0.00500	1	09/23/2021 00:49	WG1744734
Nickel,Dissolved	0.00157	J	0.000816	0.00200	1	09/23/2021 00:49	WG1744734
Selenium,Dissolved	0.000473	J	0.000300	0.00200	1	09/23/2021 00:49	WG1744734
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 00:49	WG1744734
Uranium,Dissolved	0.0314		0.0000700	0.0200	1	09/23/2021 00:49	WG1744734
Zinc,Dissolved	U		0.00302	0.0250	1	09/23/2021 00:49	WG1744734

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0464	J	0.0314	0.100	1	09/25/2021 14:07	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*108*			*78.0-120*		*09/25/2021 14:07*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4 J5	0.0113	0.0500	1	09/20/2021 01:54	WG1742806
Benzene	0.000313	J	0.0000941	0.00100	1	09/20/2021 01:54	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 01:54	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 01:54	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 01:54	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 01:54	WG1742806
sec-Butylbenzene	0.000147	J	0.000125	0.00100	1	09/20/2021 01:54	WG1742806
tert-Butylbenzene	0.000249	J	0.000127	0.00100	1	09/20/2021 01:54	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 01:54	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 01:54	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 01:54	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 01:54	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 01:54	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 01:54	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 01:54	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 01:54	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 01:54	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 01:54	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 01:54	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 01:54	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 01:54	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 01:54	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 01:54	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 01:54	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 01:54	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 01:54	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 01:54	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 01:54	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 01:54	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 01:54	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 01:54	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 01:54	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 01:54	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 01:54	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 01:54	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 01:54	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 01:54	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 01:54	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 01:54	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 01:54	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 01:54	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 01:54	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 01:54	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 01:54	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 01:54	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 01:54	WG1742806
(S) Toluene-d8	*102*			*80.0-120*		*09/20/2021 01:54*	WG1742806
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*09/20/2021 01:54*	WG1742806
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*09/20/2021 01:54*	WG1742806

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0765	J	0.0247	0.100	1	09/27/2021 00:41	WG1746172
(S) o-Terphenyl	*105*			*31.0-160*		*09/27/2021 00:41*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U	J3	0.0000886	0.00100	1	09/23/2021 13:13	WG1744588
Acenaphthylene	U	J3	0.0000921	0.00100	1	09/23/2021 13:13	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 13:13	WG1744588
Anthracene	U	J3	0.0000804	0.00100	1	09/23/2021 13:13	WG1744588
Atrazine	U	J3	0.000255	0.0100	1	09/23/2021 13:13	WG1744588
Benzo(a)anthracene	U	J3	0.000199	0.00100	1	09/23/2021 13:13	WG1744588
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 13:13	WG1744588
Benzo(b)fluoranthene	U	J3	0.000130	0.00100	1	09/23/2021 13:13	WG1744588
Benzo(k)fluoranthene	U	J3	0.000120	0.00100	1	09/23/2021 13:13	WG1744588
Benzo(g,h,i)perylene	U	J3	0.000121	0.00100	1	09/23/2021 13:13	WG1744588
Benzo(a)pyrene	U	J3	0.0000381	0.000200	1	09/23/2021 13:13	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 13:13	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 13:13	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 13:13	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 13:13	WG1744588
4-Bromophenyl-phenylether	U	J3	0.0000877	0.0100	1	09/23/2021 13:13	WG1744588
2-Chloronaphthalene	U	J3	0.0000648	0.00100	1	09/23/2021 13:13	WG1744588
4-Chlorophenyl-phenylether	U	J3	0.0000926	0.0100	1	09/23/2021 13:13	WG1744588
Caprolactam	U		0.000309	0.0100	1	09/23/2021 13:13	WG1744588
Carbazole	U	J3	0.000111	0.0100	1	09/23/2021 13:13	WG1744588
Chrysene	U	J3	0.000130	0.00100	1	09/23/2021 13:13	WG1744588
Dibenz(a,h)anthracene	U	J3	0.0000644	0.000200	1	09/23/2021 13:13	WG1744588
Dibenzofuran	U	J3	0.0000970	0.0100	1	09/23/2021 13:13	WG1744588
3,3-Dichlorobenzidine	U	J3	0.000212	0.0100	1	09/23/2021 13:13	WG1744588
2,4-Dinitrotoluene	U	J3	0.0000983	0.0100	1	09/23/2021 13:13	WG1744588
2,6-Dinitrotoluene	U	J3	0.000250	0.0100	1	09/23/2021 13:13	WG1744588
Fluoranthene	U	J3	0.000102	0.00100	1	09/23/2021 13:13	WG1744588
Fluorene	U	J3	0.0000844	0.00100	1	09/23/2021 13:13	WG1744588
Hexachlorobenzene	U	J3	0.0000755	0.00100	1	09/23/2021 13:13	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 13:13	WG1744588
Hexachlorocyclopentadiene	U	J3	0.0000598	0.0100	1	09/23/2021 13:13	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 13:13	WG1744588
Indeno(1,2,3-cd)pyrene	U	J3	0.000279	0.00100	1	09/23/2021 13:13	WG1744588
Isophorone	U	J3	0.000143	0.0100	1	09/23/2021 13:13	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 13:13	WG1744588
2-Methylnaphthalene	U	J3	0.000117	0.00100	1	09/23/2021 13:13	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/23/2021 13:13	WG1744588
Nitrobenzene	U	J3	0.000297	0.0100	1	09/23/2021 13:13	WG1744588
n-Nitrosodiphenylamine	U	J3	0.00237	0.0100	1	09/23/2021 13:13	WG1744588
n-Nitrosodi-n-propylamine	U	J3	0.000261	0.0100	1	09/23/2021 13:13	WG1744588
Phenanthrene	U	J3	0.000112	0.00100	1	09/23/2021 13:13	WG1744588
Benzylbutyl phthalate	U	J3	0.000765	0.00300	1	09/23/2021 13:13	WG1744588
Bis(2-ethylhexyl)phthalate	U	J3	0.000895	0.00300	1	09/23/2021 13:13	WG1744588
Di-n-butyl phthalate	U	J3	0.000453	0.00300	1	09/23/2021 13:13	WG1744588
Diethyl phthalate	U	J3	0.000287	0.00300	1	09/23/2021 13:13	WG1744588
Dimethyl phthalate	U	J3	0.000260	0.00300	1	09/23/2021 13:13	WG1744588
Di-n-octyl phthalate	U	J3	0.000932	0.00300	1	09/23/2021 13:13	WG1744588
Pyrene	U	J3	0.000107	0.00100	1	09/23/2021 13:13	WG1744588
1,2,4-Trichlorobenzene	U	J3	0.0000698	0.0100	1	09/23/2021 13:13	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 13:13	WG1744588

MW-33
Collected date/time: 09/16/21 10:00
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 13:13	WG1744588
2,4-Dichlorophenol	U	J3	0.000102	0.0100	1	09/23/2021 13:13	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 13:13	WG1744588
4,6-Dinitro-2-methylphenol	U	J3	0.00112	0.0100	1	09/23/2021 13:13	WG1744588
2,4-Dinitrophenol	U	J3	0.00593	0.0100	1	09/23/2021 13:13	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 13:13	WG1744588
2-Nitroaniline	U	J3	0.000102	0.0100	1	09/23/2021 13:13	WG1744588
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 13:13	WG1744588
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 13:13	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 13:13	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 13:13	WG1744588
4-Nitroaniline	U	J3	0.0000910	0.0100	1	09/23/2021 13:13	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 13:13	WG1744588
Pentachlorophenol	U	J3	0.000313	0.0100	1	09/23/2021 13:13	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 13:13	WG1744588
2,4,5-Trichlorophenol	U	J3	0.000109	0.0100	1	09/23/2021 13:13	WG1744588
2,4,6-Trichlorophenol	U	J3	0.000100	0.0100	1	09/23/2021 13:13	WG1744588
(S) 2-Fluorophenol	*39.0*			*10.0-120*		*09/23/2021 13:13*	WG1744588
(S) Phenol-d5	*26.5*			*10.0-120*		*09/23/2021 13:13*	WG1744588
(S) Nitrobenzene-d5	*67.7*			*10.0-127*		*09/23/2021 13:13*	WG1744588
(S) 2-Fluorobiphenyl	*64.9*			*10.0-130*		*09/23/2021 13:13*	WG1744588
(S) 2,4,6-Tribromophenol	*71.5*			*10.0-155*		*09/23/2021 13:13*	WG1744588
(S) p-Terphenyl-d14	*65.6*			*10.0-128*		*09/23/2021 13:13*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	580		10.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	179		8.45	20.0	1	09/23/2021 11:55	WG1744127

Sample Narrative:

L1404888-31 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.90		0.0500	0.100	1	09/28/2021 12:06	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	128		1.90	5.00	5	09/24/2021 00:56	WG1744857
Fluoride	0.771		0.0640	0.150	1	09/24/2021 00:40	WG1744857
Sulfate	78.0		0.594	5.00	1	09/24/2021 00:40	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:42	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.142	J	0.0200	0.200	1	09/24/2021 04:00	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 22:51	WG1744922
Arsenic,Dissolved	0.00522		0.000180	0.00200	1	09/23/2021 22:51	WG1744922
Barium,Dissolved	0.110		0.000381	0.00200	1	09/23/2021 22:51	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 22:51	WG1744922
Chromium,Dissolved	0.00205		0.00124	0.00200	1	09/23/2021 22:51	WG1744922
Copper,Dissolved	0.0439		0.00151	0.00500	1	09/23/2021 22:51	WG1744922
Cobalt,Dissolved	0.000107	J	0.0000596	0.00200	1	09/23/2021 22:51	WG1744922
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 22:51	WG1744922
Lead,Dissolved	0.00141	J	0.000849	0.00200	1	09/23/2021 22:51	WG1744922
Manganese,Dissolved	0.000928	J	0.000704	0.00500	1	09/23/2021 22:51	WG1744922
Molybdenum,Dissolved	0.00277	B J	0.000348	0.00500	1	09/23/2021 22:51	WG1744922
Nickel,Dissolved	0.00186	J	0.000816	0.00200	1	09/23/2021 22:51	WG1744922
Selenium,Dissolved	0.00373		0.000300	0.00200	1	09/24/2021 08:57	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 22:51	WG1744922
Uranium,Dissolved	0.00162	J	0.0000700	0.0200	1	09/23/2021 22:51	WG1744922
Zinc,Dissolved	0.0295		0.00302	0.0250	1	09/23/2021 22:51	WG1744922

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 14:28	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*09/25/2021 14:28*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 02:13	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 02:13	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 02:13	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 02:13	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 02:13	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 02:13	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 02:13	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 02:13	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 02:13	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 02:13	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 02:13	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 02:13	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 02:13	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 02:13	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 02:13	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 02:13	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 02:13	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 02:13	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 02:13	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 02:13	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 02:13	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 02:13	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 02:13	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 02:13	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 02:13	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 02:13	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 02:13	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 02:13	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 02:13	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 02:13	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 02:13	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 02:13	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 02:13	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 02:13	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 02:13	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 02:13	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 02:13	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 02:13	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 02:13	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 02:13	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 02:13	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 02:13	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 02:13	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 02:13	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 02:13	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 02:13	WG1742806
(S) Toluene-d8	*103*			*80.0-120*		*09/20/2021 02:13*	WG1742806
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*09/20/2021 02:13*	WG1742806
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*09/20/2021 02:13*	WG1742806

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	1	09/27/2021 02:50	WG1746172
(S) o-Terphenyl	*103*			*31.0-160*		*09/27/2021 02:50*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 14:59	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 14:59	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 14:59	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/23/2021 14:59	WG1744588
Atrazine	U		0.000255	0.0100	1	09/23/2021 14:59	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 14:59	WG1744588
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 14:59	WG1744588
Benzo(b)fluoranthene	0.000238	J	0.000130	0.00100	1	09/23/2021 14:59	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 14:59	WG1744588
Benzo(g,h,i)perylene	0.000140	J	0.000121	0.00100	1	09/23/2021 14:59	WG1744588
Benzo(a)pyrene	0.000147	J	0.0000381	0.000200	1	09/23/2021 14:59	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 14:59	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 14:59	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 14:59	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 14:59	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 14:59	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 14:59	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 14:59	WG1744588
Caprolactam	U		0.000309	0.0100	1	09/23/2021 14:59	WG1744588
Carbazole	U		0.000111	0.0100	1	09/23/2021 14:59	WG1744588
Chrysene	0.000145	J	0.000130	0.00100	1	09/23/2021 14:59	WG1744588
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 14:59	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 14:59	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 14:59	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 14:59	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 14:59	WG1744588
Fluoranthene	0.000132	J	0.000102	0.00100	1	09/23/2021 14:59	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/23/2021 14:59	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 14:59	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 14:59	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 14:59	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 14:59	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 14:59	WG1744588
Isophorone	U		0.000143	0.0100	1	09/23/2021 14:59	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 14:59	WG1744588
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 14:59	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/23/2021 14:59	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 14:59	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 14:59	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 14:59	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 14:59	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 14:59	WG1744588
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 14:59	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 14:59	WG1744588
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 14:59	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 14:59	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 14:59	WG1744588
Pyrene	0.000110	J	0.000107	0.00100	1	09/23/2021 14:59	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 14:59	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 14:59	WG1744588

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 14:59	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 14:59	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 14:59	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 14:59	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 14:59	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 14:59	WG1744588
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 14:59	WG1744588
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 14:59	WG1744588
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 14:59	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 14:59	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 14:59	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 14:59	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 14:59	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 14:59	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 14:59	WG1744588
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 14:59	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 14:59	WG1744588
(S) 2-Fluorophenol	*39.4*			*10.0-120*		*09/23/2021 14:59*	WG1744588
(S) Phenol-d5	*26.8*			*10.0-120*		*09/23/2021 14:59*	WG1744588
(S) Nitrobenzene-d5	*65.4*			*10.0-127*		*09/23/2021 14:59*	WG1744588
(S) 2-Fluorobiphenyl	*66.1*			*10.0-130*		*09/23/2021 14:59*	WG1744588
(S) 2,4,6-Tribromophenol	*73.0*			*10.0-155*		*09/23/2021 14:59*	WG1744588
(S) p-Terphenyl-d14	*66.2*			*10.0-128*		*09/23/2021 14:59*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1050		20.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	183		8.45	20.0	1	09/23/2021 11:59	WG1744127

Sample Narrative:

L1404888-32 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.32		0.0500	0.100	1	09/28/2021 12:11	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	315		1.90	5.00	5	09/24/2021 01:28	WG1744857
Fluoride	0.637		0.0640	0.150	1	09/24/2021 01:12	WG1744857
Sulfate	94.8		0.594	5.00	1	09/24/2021 01:12	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:44	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.188	J	0.0200	0.200	1	09/24/2021 04:07	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 22:55	WG1744922
Arsenic,Dissolved	0.00407		0.000180	0.00200	1	09/23/2021 22:55	WG1744922
Barium,Dissolved	0.110		0.000381	0.00200	1	09/23/2021 22:55	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 22:55	WG1744922
Chromium,Dissolved	0.00136	J	0.00124	0.00200	1	09/23/2021 22:55	WG1744922
Copper,Dissolved	0.00241	J	0.00151	0.00500	1	09/23/2021 22:55	WG1744922
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/23/2021 22:55	WG1744922
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 22:55	WG1744922
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 22:55	WG1744922
Manganese,Dissolved	0.00199	J	0.000704	0.00500	1	09/23/2021 22:55	WG1744922
Molybdenum,Dissolved	0.00202	B J	0.000348	0.00500	1	09/23/2021 22:55	WG1744922
Nickel,Dissolved	0.00133	J	0.000816	0.00200	1	09/23/2021 22:55	WG1744922
Selenium,Dissolved	0.00370		0.000300	0.00200	1	09/24/2021 09:01	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 22:55	WG1744922
Uranium,Dissolved	0.00222	J	0.0000700	0.0200	1	09/23/2021 22:55	WG1744922
Zinc,Dissolved	0.0155	J	0.00302	0.0250	1	09/23/2021 22:55	WG1744922

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 14:50	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*09/25/2021 14:50*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 02:32	WG1742806
Benzene	0.000345	J	0.0000941	0.00100	1	09/20/2021 02:32	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 02:32	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 02:32	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 02:32	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 02:32	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 02:32	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 02:32	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 02:32	WG1742806
Carbon tetrachloride	0.000243	J	0.000128	0.00100	1	09/20/2021 02:32	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 02:32	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 02:32	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 02:32	WG1742806
Chloroform	0.000827	J	0.000111	0.00500	1	09/20/2021 02:32	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 02:32	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 02:32	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 02:32	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 02:32	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 02:32	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 02:32	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 02:32	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 02:32	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 02:32	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 02:32	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 02:32	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 02:32	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 02:32	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 02:32	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 02:32	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 02:32	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 02:32	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 02:32	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 02:32	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 02:32	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 02:32	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 02:32	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 02:32	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 02:32	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 02:32	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 02:32	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 02:32	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 02:32	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 02:32	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 02:32	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 02:32	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 02:32	WG1742806
(S) Toluene-d8	*105*			*80.0-120*		*09/20/2021 02:32*	WG1742806
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*09/20/2021 02:32*	WG1742806
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*09/20/2021 02:32*	WG1742806

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	1	09/27/2021 03:16	WG1746172
(S) o-Terphenyl	*110*			*31.0-160*		*09/27/2021 03:16*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 15:42	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 15:42	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 15:42	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/23/2021 15:42	WG1744588
Atrazine	U		0.000255	0.0100	1	09/23/2021 15:42	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 15:42	WG1744588
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 15:42	WG1744588
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 15:42	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 15:42	WG1744588
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 15:42	WG1744588
Benzo(a)pyrene	0.0000763	J	0.0000381	0.000200	1	09/23/2021 15:42	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 15:42	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 15:42	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 15:42	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 15:42	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 15:42	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 15:42	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 15:42	WG1744588
Caprolactam	U		0.000309	0.0100	1	09/23/2021 15:42	WG1744588
Carbazole	U		0.000111	0.0100	1	09/23/2021 15:42	WG1744588
Chrysene	U		0.000130	0.00100	1	09/23/2021 15:42	WG1744588
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 15:42	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 15:42	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 15:42	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 15:42	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 15:42	WG1744588
Fluoranthene	0.000131	J	0.000102	0.00100	1	09/23/2021 15:42	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/23/2021 15:42	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 15:42	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 15:42	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 15:42	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 15:42	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 15:42	WG1744588
Isophorone	U		0.000143	0.0100	1	09/23/2021 15:42	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 15:42	WG1744588
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 15:42	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/23/2021 15:42	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 15:42	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 15:42	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 15:42	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 15:42	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 15:42	WG1744588
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 15:42	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 15:42	WG1744588
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 15:42	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 15:42	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 15:42	WG1744588
Pyrene	U		0.000107	0.00100	1	09/23/2021 15:42	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 15:42	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 15:42	WG1744588

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 15:42	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 15:42	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 15:42	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 15:42	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 15:42	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 15:42	WG1744588
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 15:42	WG1744588
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 15:42	WG1744588
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 15:42	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 15:42	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 15:42	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 15:42	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 15:42	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 15:42	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 15:42	WG1744588
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 15:42	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 15:42	WG1744588
(S) 2-Fluorophenol	*40.3*			*10.0-120*		*09/23/2021 15:42*	WG1744588
(S) Phenol-d5	*26.6*			*10.0-120*		*09/23/2021 15:42*	WG1744588
(S) Nitrobenzene-d5	*65.8*			*10.0-127*		*09/23/2021 15:42*	WG1744588
(S) 2-Fluorobiphenyl	*69.5*			*10.0-130*		*09/23/2021 15:42*	WG1744588
(S) 2,4,6-Tribromophenol	*75.0*			*10.0-155*		*09/23/2021 15:42*	WG1744588
(S) p-Terphenyl-d14	*69.6*			*10.0-128*		*09/23/2021 15:42*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	558		10.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	176		8.45	20.0	1	09/23/2021 12:04	WG1744127

Sample Narrative:

L1404888-33 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.90		0.0500	0.100	1	09/28/2021 12:12	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	116		1.90	5.00	5	09/24/2021 02:32	WG1744857
Fluoride	0.880		0.0640	0.150	1	09/24/2021 02:16	WG1744857
Sulfate	86.9		0.594	5.00	1	09/24/2021 02:16	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:50	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.150	J	0.0200	0.200	1	09/24/2021 04:10	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 22:58	WG1744922
Arsenic,Dissolved	0.00452		0.000180	0.00200	1	09/23/2021 22:58	WG1744922
Barium,Dissolved	0.0920		0.000381	0.00200	1	09/23/2021 22:58	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 22:58	WG1744922
Chromium,Dissolved	0.00342		0.00124	0.00200	1	09/23/2021 22:58	WG1744922
Copper,Dissolved	0.00303	J	0.00151	0.00500	1	09/23/2021 22:58	WG1744922
Cobalt,Dissolved	0.0000724	J	0.0000596	0.00200	1	09/23/2021 22:58	WG1744922
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 22:58	WG1744922
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 22:58	WG1744922
Manganese,Dissolved	0.00522		0.000704	0.00500	1	09/23/2021 22:58	WG1744922
Molybdenum,Dissolved	0.00257	B J	0.000348	0.00500	1	09/23/2021 22:58	WG1744922
Nickel,Dissolved	U		0.000816	0.00200	1	09/23/2021 22:58	WG1744922
Selenium,Dissolved	0.00403		0.000300	0.00200	1	09/24/2021 09:04	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 22:58	WG1744922
Uranium,Dissolved	0.00191	J	0.0000700	0.0200	1	09/23/2021 22:58	WG1744922
Zinc,Dissolved	0.0321		0.00302	0.0250	1	09/23/2021 22:58	WG1744922

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 15:12	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*09/25/2021 15:12*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 02:51	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 02:51	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 02:51	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 02:51	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 02:51	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 02:51	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 02:51	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 02:51	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 02:51	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 02:51	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 02:51	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 02:51	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 02:51	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 02:51	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 02:51	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 02:51	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 02:51	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 02:51	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 02:51	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 02:51	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 02:51	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 02:51	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 02:51	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 02:51	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 02:51	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 02:51	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 02:51	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 02:51	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 02:51	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 02:51	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 02:51	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 02:51	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 02:51	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 02:51	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 02:51	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 02:51	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 02:51	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 02:51	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 02:51	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 02:51	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 02:51	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 02:51	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 02:51	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 02:51	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 02:51	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 02:51	WG1742806
(S) Toluene-d8	*104*			*80.0-120*		*09/20/2021 02:51*	WG1742806
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*09/20/2021 02:51*	WG1742806
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*09/20/2021 02:51*	WG1742806

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	1	09/27/2021 03:41	WG1746172
(S) o-Terphenyl	*101*			*31.0-160*		*09/27/2021 03:41*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 10:01	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 10:01	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 10:01	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/23/2021 10:01	WG1744588
Atrazine	U		0.000255	0.0100	1	09/23/2021 10:01	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 10:01	WG1744588
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 10:01	WG1744588
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 10:01	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 10:01	WG1744588
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 10:01	WG1744588
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 10:01	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 10:01	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 10:01	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 10:01	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 10:01	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 10:01	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 10:01	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 10:01	WG1744588
Caprolactam	U		0.000309	0.0100	1	09/23/2021 10:01	WG1744588
Carbazole	U		0.000111	0.0100	1	09/23/2021 10:01	WG1744588
Chrysene	U		0.000130	0.00100	1	09/23/2021 10:01	WG1744588
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 10:01	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 10:01	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 10:01	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 10:01	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 10:01	WG1744588
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 10:01	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/23/2021 10:01	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 10:01	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 10:01	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 10:01	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 10:01	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 10:01	WG1744588
Isophorone	U		0.000143	0.0100	1	09/23/2021 10:01	WG1744588
1-Methylnaphthalene	0.000117	J	0.0000790	0.00100	1	09/23/2021 10:01	WG1744588
2-Methylnaphthalene	0.000171	J	0.000117	0.00100	1	09/23/2021 10:01	WG1744588
Naphthalene	0.000187	J	0.000159	0.00100	1	09/23/2021 10:01	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 10:01	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 10:01	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 10:01	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 10:01	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 10:01	WG1744588
Bis(2-ethylhexyl)phthalate	0.00619		0.000895	0.00300	1	09/23/2021 10:01	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 10:01	WG1744588
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 10:01	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 10:01	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 10:01	WG1744588
Pyrene	U		0.000107	0.00100	1	09/23/2021 10:01	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 10:01	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 10:01	WG1744588

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 10:01	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 10:01	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 10:01	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 10:01	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 10:01	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 10:01	WG1744588
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 10:01	WG1744588
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 10:01	WG1744588
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 10:01	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 10:01	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 10:01	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 10:01	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 10:01	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 10:01	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 10:01	WG1744588
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 10:01	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 10:01	WG1744588
(S) 2-Fluorophenol	*39.4*			*10.0-120*		*09/23/2021 10:01*	WG1744588
(S) Phenol-d5	*25.1*			*10.0-120*		*09/23/2021 10:01*	WG1744588
(S) Nitrobenzene-d5	*62.9*			*10.0-127*		*09/23/2021 10:01*	WG1744588
(S) 2-Fluorobiphenyl	*65.8*			*10.0-130*		*09/23/2021 10:01*	WG1744588
(S) 2,4,6-Tribromophenol	*74.0*			*10.0-155*		*09/23/2021 10:01*	WG1744588
(S) p-Terphenyl-d14	*68.5*			*10.0-128*		*09/23/2021 10:01*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	990		20.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	184		8.45	20.0	1	09/23/2021 12:15	WG1744127

Sample Narrative:

L1404888-34 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.35		0.0500	0.100	1	09/28/2021 12:14	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	301		1.90	5.00	5	09/24/2021 03:03	WG1744857
Fluoride	0.628		0.0640	0.150	1	09/24/2021 02:47	WG1744857
Sulfate	90.9		0.594	5.00	1	09/24/2021 02:47	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:52	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.184	J	0.0200	0.200	1	09/24/2021 04:13	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 23:02	WG1744922
Arsenic,Dissolved	0.00387		0.000180	0.00200	1	09/23/2021 23:02	WG1744922
Barium,Dissolved	0.113		0.000381	0.00200	1	09/23/2021 23:02	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 23:02	WG1744922
Chromium,Dissolved	0.00177	J	0.00124	0.00200	1	09/23/2021 23:02	WG1744922
Copper,Dissolved	0.00294	J	0.00151	0.00500	1	09/23/2021 23:02	WG1744922
Cobalt,Dissolved	0.0000678	J	0.0000596	0.00200	1	09/23/2021 23:02	WG1744922
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 23:02	WG1744922
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 23:02	WG1744922
Manganese,Dissolved	0.00630		0.000704	0.00500	1	09/23/2021 23:02	WG1744922
Molybdenum,Dissolved	0.00207	B J	0.000348	0.00500	1	09/23/2021 23:02	WG1744922
Nickel,Dissolved	0.00101	J	0.000816	0.00200	1	09/23/2021 23:02	WG1744922
Selenium,Dissolved	0.00372		0.000300	0.00200	1	09/24/2021 09:07	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 23:02	WG1744922
Uranium,Dissolved	0.00217	J	0.0000700	0.0200	1	09/23/2021 23:02	WG1744922
Zinc,Dissolved	0.0246	J	0.00302	0.0250	1	09/23/2021 23:02	WG1744922

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 15:33	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*09/25/2021 15:33*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 03:10	WG1742806
Benzene	0.000304	J	0.0000941	0.00100	1	09/20/2021 03:10	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 03:10	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 03:10	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 03:10	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 03:10	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 03:10	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 03:10	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 03:10	WG1742806
Carbon tetrachloride	0.000221	J	0.000128	0.00100	1	09/20/2021 03:10	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 03:10	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 03:10	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 03:10	WG1742806
Chloroform	0.000767	J	0.000111	0.00500	1	09/20/2021 03:10	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 03:10	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 03:10	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 03:10	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 03:10	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 03:10	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 03:10	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 03:10	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 03:10	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 03:10	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 03:10	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 03:10	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 03:10	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 03:10	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 03:10	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 03:10	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 03:10	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 03:10	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 03:10	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 03:10	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 03:10	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 03:10	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 03:10	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 03:10	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 03:10	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 03:10	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 03:10	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 03:10	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 03:10	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 03:10	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 03:10	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 03:10	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 03:10	WG1742806
(S) Toluene-d8	*103*			*80.0-120*		*09/20/2021 03:10*	WG1742806
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*09/20/2021 03:10*	WG1742806
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*09/20/2021 03:10*	WG1742806

DUP-01
Collected date/time: 09/16/21 09:00
L1404888

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	1	09/27/2021 04:07	WG1746172
(S) o-Terphenyl	*101*			*31.0-160*		*09/27/2021 04:07*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 10:22	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 10:22	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 10:22	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/23/2021 10:22	WG1744588
Atrazine	U		0.000255	0.0100	1	09/23/2021 10:22	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 10:22	WG1744588
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 10:22	WG1744588
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 10:22	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 10:22	WG1744588
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 10:22	WG1744588
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 10:22	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 10:22	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 10:22	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 10:22	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 10:22	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 10:22	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 10:22	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 10:22	WG1744588
Caprolactam	U		0.000309	0.0100	1	09/23/2021 10:22	WG1744588
Carbazole	U		0.000111	0.0100	1	09/23/2021 10:22	WG1744588
Chrysene	U		0.000130	0.00100	1	09/23/2021 10:22	WG1744588
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 10:22	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 10:22	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 10:22	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 10:22	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 10:22	WG1744588
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 10:22	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/23/2021 10:22	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 10:22	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 10:22	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 10:22	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 10:22	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 10:22	WG1744588
Isophorone	U		0.000143	0.0100	1	09/23/2021 10:22	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 10:22	WG1744588
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 10:22	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/23/2021 10:22	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 10:22	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 10:22	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 10:22	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 10:22	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 10:22	WG1744588
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 10:22	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 10:22	WG1744588
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 10:22	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 10:22	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 10:22	WG1744588
Pyrene	U		0.000107	0.00100	1	09/23/2021 10:22	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 10:22	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 10:22	WG1744588

DUP-01
Collected date/time: 09/16/21 09:00
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 10:22	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 10:22	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 10:22	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 10:22	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 10:22	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 10:22	WG1744588
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 10:22	WG1744588
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 10:22	WG1744588
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 10:22	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 10:22	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 10:22	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 10:22	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 10:22	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 10:22	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 10:22	WG1744588
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 10:22	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 10:22	WG1744588
(S) 2-Fluorophenol	*38.6*			*10.0-120*		*09/23/2021 10:22*	WG1744588
(S) Phenol-d5	*25.4*			*10.0-120*		*09/23/2021 10:22*	WG1744588
(S) Nitrobenzene-d5	*63.2*			*10.0-127*		*09/23/2021 10:22*	WG1744588
(S) 2-Fluorobiphenyl	*66.0*			*10.0-130*		*09/23/2021 10:22*	WG1744588
(S) 2,4,6-Tribromophenol	*74.0*			*10.0-155*		*09/23/2021 10:22*	WG1744588
(S) p-Terphenyl-d14	*67.8*			*10.0-128*		*09/23/2021 10:22*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	740		13.3	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	465		8.45	20.0	1	09/23/2021 12:19	WG1744127

Sample Narrative:

L1404888-35 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.57		0.0500	0.100	1	09/28/2021 12:15	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	57.4		0.379	1.00	1	09/24/2021 03:19	WG1744857
Fluoride	0.245		0.0640	0.150	1	09/24/2021 03:19	WG1744857
Sulfate	150		2.97	25.0	5	09/24/2021 07:18	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 13:54	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.160	J	0.0200	0.200	1	09/24/2021 04:16	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 23:05	WG1744922
Arsenic,Dissolved	0.00404		0.000180	0.00200	1	09/23/2021 23:05	WG1744922
Barium,Dissolved	0.405		0.000381	0.00200	1	09/23/2021 23:05	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 23:05	WG1744922
Chromium,Dissolved	U		0.00124	0.00200	1	09/23/2021 23:05	WG1744922
Copper,Dissolved	0.00411	J	0.00151	0.00500	1	09/23/2021 23:05	WG1744922
Cobalt,Dissolved	0.000155	J	0.0000596	0.00200	1	09/23/2021 23:05	WG1744922
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 23:05	WG1744922
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 23:05	WG1744922
Manganese,Dissolved	0.0433		0.000704	0.00500	1	09/23/2021 23:05	WG1744922
Molybdenum,Dissolved	0.00725		0.000348	0.00500	1	09/23/2021 23:05	WG1744922
Nickel,Dissolved	0.00415		0.000816	0.00200	1	09/23/2021 23:05	WG1744922
Selenium,Dissolved	0.000731	J	0.000300	0.00200	1	09/23/2021 23:05	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 23:05	WG1744922
Uranium,Dissolved	0.00576	J	0.0000700	0.0200	1	09/23/2021 23:05	WG1744922
Zinc,Dissolved	0.0188	J	0.00302	0.0250	1	09/23/2021 23:05	WG1744922

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 15:55	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*110*			*78.0-120*		*09/25/2021 15:55*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 03:30	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 03:30	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 03:30	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 03:30	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 03:30	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 03:30	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 03:30	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 03:30	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 03:30	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 03:30	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 03:30	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 03:30	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 03:30	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 03:30	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 03:30	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 03:30	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 03:30	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 03:30	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 03:30	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 03:30	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 03:30	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 03:30	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 03:30	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 03:30	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 03:30	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 03:30	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 03:30	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 03:30	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 03:30	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 03:30	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 03:30	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 03:30	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 03:30	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 03:30	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 03:30	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 03:30	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 03:30	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 03:30	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 03:30	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 03:30	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 03:30	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 03:30	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 03:30	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 03:30	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 03:30	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 03:30	WG1742806
(S) Toluene-d8	*103*			*80.0-120*		*09/20/2021 03:30*	WG1742806
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*09/20/2021 03:30*	WG1742806
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*09/20/2021 03:30*	WG1742806

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.182	J	0.0494	0.200	2	09/27/2021 04:33	WG1746172
(S) o-Terphenyl	*81.6*			*31.0-160*		*09/27/2021 04:33*	WG1746172

Sample Narrative:

L1404888-35 WG1746172: Dilution due to matrix impact during extraction procedure

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/24/2021 18:53	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/24/2021 18:53	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/24/2021 18:53	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/24/2021 18:53	WG1744588
Atrazine	U		0.000255	0.0100	1	09/24/2021 18:53	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/24/2021 18:53	WG1744588
Benzaldehyde	U		0.00169	0.0100	1	09/24/2021 18:53	WG1744588
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/24/2021 18:53	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/24/2021 18:53	WG1744588
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/24/2021 18:53	WG1744588
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/24/2021 18:53	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/24/2021 18:53	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/24/2021 18:53	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/24/2021 18:53	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/24/2021 18:53	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/24/2021 18:53	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/24/2021 18:53	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/24/2021 18:53	WG1744588
Caprolactam	0.00579	J	0.000309	0.0100	1	09/24/2021 18:53	WG1744588
Carbazole	U		0.000111	0.0100	1	09/24/2021 18:53	WG1744588
Chrysene	U		0.000130	0.00100	1	09/24/2021 18:53	WG1744588
Dibenz(a,h)anthracene	0.0000707	J	0.0000644	0.000200	1	09/24/2021 18:53	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/24/2021 18:53	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/24/2021 18:53	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/24/2021 18:53	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/24/2021 18:53	WG1744588
Fluoranthene	U		0.000102	0.00100	1	09/24/2021 18:53	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/24/2021 18:53	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/24/2021 18:53	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/24/2021 18:53	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/24/2021 18:53	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/24/2021 18:53	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/24/2021 18:53	WG1744588
Isophorone	U		0.000143	0.0100	1	09/24/2021 18:53	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/24/2021 18:53	WG1744588
2-Methylnaphthalene	U		0.000117	0.00100	1	09/24/2021 18:53	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/24/2021 18:53	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/24/2021 18:53	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/24/2021 18:53	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/24/2021 18:53	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/24/2021 18:53	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/24/2021 18:53	WG1744588
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/24/2021 18:53	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/24/2021 18:53	WG1744588
Diethyl phthalate	U		0.000287	0.00300	1	09/24/2021 18:53	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/24/2021 18:53	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/24/2021 18:53	WG1744588

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Pyrene	U		0.000107	0.00100	1	09/24/2021 18:53	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/24/2021 18:53	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/24/2021 18:53	WG1744588
2-Chlorophenol	U		0.000133	0.0100	1	09/24/2021 18:53	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/24/2021 18:53	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/24/2021 18:53	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/24/2021 18:53	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/24/2021 18:53	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/24/2021 18:53	WG1744588
2-Nitroaniline	U		0.000102	0.0100	1	09/24/2021 18:53	WG1744588
2-Methylphenol	0.000182	J	0.0000929	0.0100	1	09/24/2021 18:53	WG1744588
3&4-Methyl Phenol	0.000208	J	0.000168	0.0100	1	09/24/2021 18:53	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/24/2021 18:53	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/24/2021 18:53	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/24/2021 18:53	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/24/2021 18:53	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/24/2021 18:53	WG1744588
Phenol	U		0.00433	0.0100	1	09/24/2021 18:53	WG1744588
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/24/2021 18:53	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/24/2021 18:53	WG1744588
(S) 2-Fluorophenol	*33.1*			*10.0-120*		*09/24/2021 18:53*	WG1744588
(S) Phenol-d5	*24.2*			*10.0-120*		*09/24/2021 18:53*	WG1744588
(S) Nitrobenzene-d5	*49.4*			*10.0-127*		*09/24/2021 18:53*	WG1744588
(S) 2-Fluorobiphenyl	*56.4*			*10.0-130*		*09/24/2021 18:53*	WG1744588
(S) 2,4,6-Tribromophenol	*63.0*			*10.0-155*		*09/24/2021 18:53*	WG1744588
(S) p-Terphenyl-d14	*62.3*			*10.0-128*		*09/24/2021 18:53*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1130		20.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	941		8.45	20.0	1	09/23/2021 12:25	WG1744127

Sample Narrative:

L1404888-36 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.0500	0.100	1	09/28/2021 12:18	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	56.3		0.379	1.00	1	09/24/2021 03:35	WG1744857
Fluoride	0.639		0.0640	0.150	1	09/24/2021 03:35	WG1744857
Sulfate	11.7		0.594	5.00	1	09/24/2021 03:35	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 14:00	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	0.165	J	0.0200	0.200	1	09/24/2021 04:18	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.389		0.0185	0.100	1	09/23/2021 23:08	WG1744922
Arsenic,Dissolved	0.00297		0.000180	0.00200	1	09/23/2021 23:08	WG1744922
Barium,Dissolved	0.436		0.000381	0.00200	1	09/23/2021 23:08	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 23:08	WG1744922
Chromium,Dissolved	U		0.00124	0.00200	1	09/23/2021 23:08	WG1744922
Copper,Dissolved	U		0.00151	0.00500	1	09/23/2021 23:08	WG1744922
Cobalt,Dissolved	0.000123	J	0.0000596	0.00200	1	09/23/2021 23:08	WG1744922
Iron,Dissolved	0.263		0.0281	0.100	1	09/23/2021 23:08	WG1744922
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 23:08	WG1744922
Manganese,Dissolved	0.645		0.000704	0.00500	1	09/23/2021 23:08	WG1744922
Molybdenum,Dissolved	0.00266	B J	0.000348	0.00500	1	09/23/2021 23:08	WG1744922
Nickel,Dissolved	0.00234		0.000816	0.00200	1	09/23/2021 23:08	WG1744922
Selenium,Dissolved	U		0.000300	0.00200	1	09/23/2021 23:08	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 23:08	WG1744922
Uranium,Dissolved	0.0328		0.0000700	0.0200	1	09/23/2021 23:08	WG1744922
Zinc,Dissolved	U		0.00302	0.0250	1	09/23/2021 23:08	WG1744922

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0707	J	0.0314	0.100	1	09/25/2021 16:16	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*107*			*78.0-120*		*09/25/2021 16:16*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 03:49	WG1742806
Benzene	0.000284	J	0.0000941	0.00100	1	09/20/2021 03:49	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 03:49	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 03:49	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 03:49	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 03:49	WG1742806
sec-Butylbenzene	0.000135	J	0.000125	0.00100	1	09/20/2021 03:49	WG1742806
tert-Butylbenzene	0.000245	J	0.000127	0.00100	1	09/20/2021 03:49	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 03:49	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 03:49	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 03:49	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 03:49	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 03:49	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 03:49	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 03:49	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 03:49	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 03:49	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 03:49	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 03:49	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 03:49	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 03:49	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 03:49	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 03:49	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 03:49	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 03:49	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 03:49	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 03:49	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 03:49	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 03:49	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 03:49	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 03:49	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 03:49	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 03:49	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 03:49	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 03:49	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 03:49	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 03:49	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 03:49	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 03:49	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 03:49	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 03:49	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 03:49	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 03:49	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 03:49	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 03:49	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 03:49	WG1742806
(S) Toluene-d8	*103*			*80.0-120*		*09/20/2021 03:49*	WG1742806
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*09/20/2021 03:49*	WG1742806
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*09/20/2021 03:49*	WG1742806

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0786	J	0.0247	0.100	1	09/27/2021 04:59	WG1746172
(S) o-Terphenyl	*101*			*31.0-160*		*09/27/2021 04:59*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 10:43	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 10:43	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 10:43	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/23/2021 10:43	WG1744588
Atrazine	U		0.000255	0.0100	1	09/23/2021 10:43	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 10:43	WG1744588
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 10:43	WG1744588
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 10:43	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 10:43	WG1744588
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 10:43	WG1744588
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 10:43	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 10:43	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 10:43	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 10:43	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 10:43	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 10:43	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 10:43	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 10:43	WG1744588
Caprolactam	U		0.000309	0.0100	1	09/23/2021 10:43	WG1744588
Carbazole	U		0.000111	0.0100	1	09/23/2021 10:43	WG1744588
Chrysene	U		0.000130	0.00100	1	09/23/2021 10:43	WG1744588
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 10:43	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 10:43	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 10:43	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 10:43	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 10:43	WG1744588
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 10:43	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/23/2021 10:43	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 10:43	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 10:43	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 10:43	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 10:43	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 10:43	WG1744588
Isophorone	U		0.000143	0.0100	1	09/23/2021 10:43	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 10:43	WG1744588
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 10:43	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/23/2021 10:43	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 10:43	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 10:43	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 10:43	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 10:43	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 10:43	WG1744588
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 10:43	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 10:43	WG1744588
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 10:43	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 10:43	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 10:43	WG1744588
Pyrene	U		0.000107	0.00100	1	09/23/2021 10:43	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 10:43	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 10:43	WG1744588

DUP-09
Collected date/time: 09/16/21 11:00
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 10:43	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 10:43	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 10:43	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 10:43	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 10:43	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 10:43	WG1744588
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 10:43	WG1744588
2-Methylphenol	U		0.0000929	0.0100	1	09/23/2021 10:43	WG1744588
3&4-Methyl Phenol	U		0.000168	0.0100	1	09/23/2021 10:43	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 10:43	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 10:43	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 10:43	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 10:43	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 10:43	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 10:43	WG1744588
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 10:43	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 10:43	WG1744588
(S) 2-Fluorophenol	*41.5*			*10.0-120*		*09/23/2021 10:43*	WG1744588
(S) Phenol-d5	*28.2*			*10.0-120*		*09/23/2021 10:43*	WG1744588
(S) Nitrobenzene-d5	*72.2*			*10.0-127*		*09/23/2021 10:43*	WG1744588
(S) 2-Fluorobiphenyl	*69.0*			*10.0-130*		*09/23/2021 10:43*	WG1744588
(S) 2,4,6-Tribromophenol	*77.0*			*10.0-155*		*09/23/2021 10:43*	WG1744588
(S) p-Terphenyl-d14	*67.9*			*10.0-128*		*09/23/2021 10:43*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1240		20.0	1	09/23/2021 18:02	WG1745409

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Nitrate-Nitrite	5.76		0.100	0.200	2	09/28/2021 12:19	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	270		1.90	5.00	5	09/24/2021 04:07	WG1744857
Fluoride	0.372		0.0640	0.150	1	09/24/2021 03:51	WG1744857
Sulfate	154		2.97	25.0	5	09/24/2021 04:07	WG1744857

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.000100	0.000200	1	09/24/2021 14:02	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Boron,Dissolved	0.244		0.0200	0.200	1	09/24/2021 04:21	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 23:12	WG1744922
Arsenic,Dissolved	0.00271		0.000180	0.00200	1	09/23/2021 23:12	WG1744922
Barium,Dissolved	0.109		0.000381	0.00200	1	09/23/2021 23:12	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 23:12	WG1744922
Chromium,Dissolved	U		0.00124	0.00200	1	09/23/2021 23:12	WG1744922
Copper,Dissolved	0.00795		0.00151	0.00500	1	09/23/2021 23:12	WG1744922
Cobalt,Dissolved	0.000408	J	0.0000596	0.00200	1	09/23/2021 23:12	WG1744922
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 23:12	WG1744922
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 23:12	WG1744922
Manganese,Dissolved	0.0153		0.000704	0.00500	1	09/23/2021 23:12	WG1744922
Molybdenum,Dissolved	0.000737	B J	0.000348	0.00500	1	09/23/2021 23:12	WG1744922
Nickel,Dissolved	0.00429		0.000816	0.00200	1	09/23/2021 23:12	WG1744922
Selenium,Dissolved	0.00104	J	0.000300	0.00200	1	09/23/2021 23:12	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 23:12	WG1744922
Uranium,Dissolved	0.0101	J	0.0000700	0.0200	1	09/23/2021 23:12	WG1744922
Zinc,Dissolved	0.00984	J	0.00302	0.0250	1	09/23/2021 23:12	WG1744922

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 04:09	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 04:09	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 04:09	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 04:09	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 04:09	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 04:09	WG1742806

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 04:09	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 04:09	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 04:09	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 04:09	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 04:09	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 04:09	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 04:09	WG1742806
Chloroform	0.000114	J	0.000111	0.00500	1	09/20/2021 04:09	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 04:09	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 04:09	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 04:09	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 04:09	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 04:09	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 04:09	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 04:09	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 04:09	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 04:09	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 04:09	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 04:09	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 04:09	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 04:09	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 04:09	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 04:09	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 04:09	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 04:09	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 04:09	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 04:09	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 04:09	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 04:09	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 04:09	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 04:09	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 04:09	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 04:09	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 04:09	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 04:09	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 04:09	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 04:09	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 04:09	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 04:09	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 04:09	WG1742806
(S) Toluene-d8	*101*			*80.0-120*		*09/20/2021 04:09*	WG1742806
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*09/20/2021 04:09*	WG1742806
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*09/20/2021 04:09*	WG1742806

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 14:38	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 14:38	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 14:38	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/23/2021 14:38	WG1744588
Atrazine	U		0.000255	0.0100	1	09/23/2021 14:38	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 14:38	WG1744588
Benzaldehyde	U		0.00169	0.0100	1	09/23/2021 14:38	WG1744588
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 14:38	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 14:38	WG1744588

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 14:38	WG1744588
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 14:38	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 14:38	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 14:38	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 14:38	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 14:38	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 14:38	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 14:38	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 14:38	WG1744588
Caprolactam	0.00138	J	0.000309	0.0100	1	09/23/2021 14:38	WG1744588
Carbazole	U		0.000111	0.0100	1	09/23/2021 14:38	WG1744588
Chrysene	U		0.000130	0.00100	1	09/23/2021 14:38	WG1744588
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 14:38	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 14:38	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 14:38	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 14:38	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 14:38	WG1744588
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 14:38	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/23/2021 14:38	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 14:38	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 14:38	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 14:38	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 14:38	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 14:38	WG1744588
Isophorone	U		0.000143	0.0100	1	09/23/2021 14:38	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 14:38	WG1744588
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 14:38	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/23/2021 14:38	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 14:38	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 14:38	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 14:38	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 14:38	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 14:38	WG1744588
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 14:38	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 14:38	WG1744588
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 14:38	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 14:38	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 14:38	WG1744588
Pyrene	U		0.000107	0.00100	1	09/23/2021 14:38	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 14:38	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 14:38	WG1744588
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 14:38	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 14:38	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 14:38	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 14:38	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 14:38	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 14:38	WG1744588
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 14:38	WG1744588
2-Methylphenol	0.000230	J	0.0000929	0.0100	1	09/23/2021 14:38	WG1744588
3&4-Methyl Phenol	0.000260	J	0.000168	0.0100	1	09/23/2021 14:38	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 14:38	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 14:38	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 14:38	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 14:38	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 14:38	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 14:38	WG1744588

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 14:38	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 14:38	WG1744588
(S) 2-Fluorophenol	*25.3*			*10.0-120*		*09/23/2021 14:38*	WG1744588
(S) Phenol-d5	*19.8*			*10.0-120*		*09/23/2021 14:38*	WG1744588
(S) Nitrobenzene-d5	*39.5*			*10.0-127*		*09/23/2021 14:38*	WG1744588
(S) 2-Fluorobiphenyl	*38.7*			*10.0-130*		*09/23/2021 14:38*	WG1744588
(S) 2,4,6-Tribromophenol	*57.5*			*10.0-155*		*09/23/2021 14:38*	WG1744588
(S) p-Terphenyl-d14	*54.6*			*10.0-128*		*09/23/2021 14:38*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	ND		10.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	U		8.45	20.0	1	09/23/2021 12:28	WG1744127

Sample Narrative:

L1404888-38 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.0500	0.100	1	09/28/2021 12:20	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	U		0.379	1.00	1	09/24/2021 04:23	WG1744857
Fluoride	U		0.0640	0.150	1	09/24/2021 04:23	WG1744857
Sulfate	U		0.594	5.00	1	09/24/2021 04:23	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 14:04	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	U		0.0200	0.200	1	09/24/2021 04:24	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0185	0.100	1	09/23/2021 23:15	WG1744922
Arsenic,Dissolved	U		0.000180	0.00200	1	09/23/2021 23:15	WG1744922
Barium,Dissolved	0.00104	J	0.000381	0.00200	1	09/23/2021 23:15	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 23:15	WG1744922
Chromium,Dissolved	U		0.00124	0.00200	1	09/23/2021 23:15	WG1744922
Copper,Dissolved	U		0.00151	0.00500	1	09/23/2021 23:15	WG1744922
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/23/2021 23:15	WG1744922
Iron,Dissolved	U		0.0281	0.100	1	09/23/2021 23:15	WG1744922
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 23:15	WG1744922
Manganese,Dissolved	U		0.000704	0.00500	1	09/23/2021 23:15	WG1744922
Molybdenum,Dissolved	U		0.000348	0.00500	1	09/23/2021 23:15	WG1744922
Nickel,Dissolved	U		0.000816	0.00200	1	09/23/2021 23:15	WG1744922
Selenium,Dissolved	U		0.000300	0.00200	1	09/23/2021 23:15	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 23:15	WG1744922
Uranium,Dissolved	U		0.0000700	0.0200	1	09/23/2021 23:15	WG1744922
Zinc,Dissolved	U		0.00302	0.0250	1	09/23/2021 23:15	WG1744922

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	09/25/2021 16:38	WG1745736
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*09/25/2021 16:38*	WG1745736

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 04:28	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 04:28	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 04:28	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 04:28	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 04:28	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 04:28	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 04:28	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 04:28	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 04:28	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 04:28	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 04:28	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 04:28	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 04:28	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 04:28	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 04:28	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 04:28	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 04:28	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 04:28	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 04:28	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 04:28	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 04:28	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 04:28	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 04:28	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 04:28	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 04:28	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 04:28	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 04:28	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 04:28	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 04:28	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 04:28	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 04:28	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 04:28	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 04:28	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 04:28	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 04:28	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 04:28	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 04:28	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 04:28	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 04:28	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 04:28	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 04:28	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 04:28	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 04:28	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 04:28	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 04:28	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 04:28	WG1742806
(S) Toluene-d8	*104*			*80.0-120*		*09/20/2021 04:28*	WG1742806
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*09/20/2021 04:28*	WG1742806
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*09/20/2021 04:28*	WG1742806

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	1	09/27/2021 05:25	WG1746172
(S) o-Terphenyl	*103*			*31.0-160*		*09/27/2021 05:25*	WG1746172

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 15:20	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 15:20	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 15:20	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/23/2021 15:20	WG1744588
Atrazine	U		0.000255	0.0100	1	09/23/2021 15:20	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 15:20	WG1744588
Benzaldehyde	0.00348	J	0.00169	0.0100	1	09/23/2021 15:20	WG1744588
Benzo(b)fluoranthene	0.000151	J	0.000130	0.00100	1	09/23/2021 15:20	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 15:20	WG1744588
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 15:20	WG1744588
Benzo(a)pyrene	0.0000981	J	0.0000381	0.000200	1	09/23/2021 15:20	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 15:20	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 15:20	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 15:20	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 15:20	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 15:20	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 15:20	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 15:20	WG1744588
Caprolactam	U		0.000309	0.0100	1	09/23/2021 15:20	WG1744588
Carbazole	U		0.000111	0.0100	1	09/23/2021 15:20	WG1744588
Chrysene	U		0.000130	0.00100	1	09/23/2021 15:20	WG1744588
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 15:20	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 15:20	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 15:20	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 15:20	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 15:20	WG1744588
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 15:20	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/23/2021 15:20	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 15:20	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 15:20	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 15:20	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 15:20	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 15:20	WG1744588
Isophorone	U		0.000143	0.0100	1	09/23/2021 15:20	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 15:20	WG1744588
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 15:20	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/23/2021 15:20	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 15:20	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 15:20	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 15:20	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 15:20	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 15:20	WG1744588
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 15:20	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 15:20	WG1744588
Diethyl phthalate	0.000800	J	0.000287	0.00300	1	09/23/2021 15:20	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 15:20	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 15:20	WG1744588
Pyrene	U		0.000107	0.00100	1	09/23/2021 15:20	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 15:20	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 15:20	WG1744588

LB-01
Collected date/time: 09/16/21 09:50
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 15:20	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 15:20	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 15:20	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 15:20	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 15:20	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 15:20	WG1744588
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 15:20	WG1744588
2-Methylphenol	0.000194	J	0.0000929	0.0100	1	09/23/2021 15:20	WG1744588
3&4-Methyl Phenol	0.000230	J	0.000168	0.0100	1	09/23/2021 15:20	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 15:20	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 15:20	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 15:20	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 15:20	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 15:20	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 15:20	WG1744588
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 15:20	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 15:20	WG1744588
(S) 2-Fluorophenol	*41.2*			*10.0-120*		*09/23/2021 15:20*	WG1744588
(S) Phenol-d5	*27.5*			*10.0-120*		*09/23/2021 15:20*	WG1744588
(S) Nitrobenzene-d5	*69.4*			*10.0-127*		*09/23/2021 15:20*	WG1744588
(S) 2-Fluorobiphenyl	*69.2*			*10.0-130*		*09/23/2021 15:20*	WG1744588
(S) 2,4,6-Tribromophenol	*78.0*			*10.0-155*		*09/23/2021 15:20*	WG1744588
(S) p-Terphenyl-d14	*68.3*			*10.0-128*		*09/23/2021 15:20*	WG1744588

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	ND		10.0	1	09/22/2021 23:32	WG1744934

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity	U		8.45	20.0	1	09/23/2021 12:34	WG1744127

Sample Narrative:

L1404888-39 WG1744127: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.0500	0.100	1	09/28/2021 12:21	WG1745611

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	U		0.379	1.00	1	09/24/2021 05:27	WG1744857
Fluoride	U		0.0640	0.150	1	09/24/2021 05:27	WG1744857
Sulfate	U		0.594	5.00	1	09/24/2021 05:27	WG1744857

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	09/24/2021 14:06	WG1742872

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron,Dissolved	U		0.0200	0.200	1	09/24/2021 04:27	WG1744919

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.129	B	0.0185	0.100	1	09/23/2021 23:19	WG1744922
Arsenic,Dissolved	U		0.000180	0.00200	1	09/23/2021 23:19	WG1744922
Barium,Dissolved	0.00113	J	0.000381	0.00200	1	09/23/2021 23:19	WG1744922
Cadmium,Dissolved	U		0.000150	0.00100	1	09/23/2021 23:19	WG1744922
Chromium,Dissolved	U		0.00124	0.00200	1	09/23/2021 23:19	WG1744922
Copper,Dissolved	U		0.00151	0.00500	1	09/23/2021 23:19	WG1744922
Cobalt,Dissolved	U		0.0000596	0.00200	1	09/23/2021 23:19	WG1744922
Iron,Dissolved	0.0538	J	0.0281	0.100	1	09/23/2021 23:19	WG1744922
Lead,Dissolved	U		0.000849	0.00200	1	09/23/2021 23:19	WG1744922
Manganese,Dissolved	U		0.000704	0.00500	1	09/23/2021 23:19	WG1744922
Molybdenum,Dissolved	U		0.000348	0.00500	1	09/23/2021 23:19	WG1744922
Nickel,Dissolved	U		0.000816	0.00200	1	09/23/2021 23:19	WG1744922
Selenium,Dissolved	U		0.000300	0.00200	1	09/23/2021 23:19	WG1744922
Silver,Dissolved	U		0.0000700	0.00200	1	09/23/2021 23:19	WG1744922
Uranium,Dissolved	U		0.0000700	0.0200	1	09/23/2021 23:19	WG1744922
Zinc,Dissolved	U		0.00302	0.0250	1	09/23/2021 23:19	WG1744922

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 04:47	WG1742806
Benzene	0.000117	J	0.0000941	0.00100	1	09/20/2021 04:47	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 04:47	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 04:47	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 04:47	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 04:47	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 04:47	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 04:47	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 04:47	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 04:47	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 04:47	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 04:47	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 04:47	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 04:47	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 04:47	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 04:47	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 04:47	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 04:47	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 04:47	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 04:47	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 04:47	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 04:47	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 04:47	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 04:47	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 04:47	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 04:47	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 04:47	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 04:47	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 04:47	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 04:47	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 04:47	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 04:47	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 04:47	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 04:47	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 04:47	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 04:47	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 04:47	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 04:47	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 04:47	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 04:47	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 04:47	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 04:47	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 04:47	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 04:47	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 04:47	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 04:47	WG1742806
(S) Toluene-d8	*102*			*80.0-120*		*09/20/2021 04:47*	WG1742806
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*09/20/2021 04:47*	WG1742806
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*09/20/2021 04:47*	WG1742806

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0000886	0.00100	1	09/23/2021 11:05	WG1744588
Acenaphthylene	U		0.0000921	0.00100	1	09/23/2021 11:05	WG1744588
Acetophenone	U		0.000208	0.0100	1	09/23/2021 11:05	WG1744588
Anthracene	U		0.0000804	0.00100	1	09/23/2021 11:05	WG1744588
Atrazine	U		0.000255	0.0100	1	09/23/2021 11:05	WG1744588
Benzo(a)anthracene	U		0.000199	0.00100	1	09/23/2021 11:05	WG1744588
Benzaldehyde	0.00823	J	0.00169	0.0100	1	09/23/2021 11:05	WG1744588
Benzo(b)fluoranthene	U		0.000130	0.00100	1	09/23/2021 11:05	WG1744588
Benzo(k)fluoranthene	U		0.000120	0.00100	1	09/23/2021 11:05	WG1744588
Benzo(g,h,i)perylene	U		0.000121	0.00100	1	09/23/2021 11:05	WG1744588
Benzo(a)pyrene	U		0.0000381	0.000200	1	09/23/2021 11:05	WG1744588
Biphenyl	U		0.000790	0.0100	1	09/23/2021 11:05	WG1744588
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	09/23/2021 11:05	WG1744588
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	09/23/2021 11:05	WG1744588
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	09/23/2021 11:05	WG1744588
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	09/23/2021 11:05	WG1744588
2-Chloronaphthalene	U		0.0000648	0.00100	1	09/23/2021 11:05	WG1744588
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	09/23/2021 11:05	WG1744588
Caprolactam	U		0.000309	0.0100	1	09/23/2021 11:05	WG1744588
Carbazole	U		0.000111	0.0100	1	09/23/2021 11:05	WG1744588
Chrysene	U		0.000130	0.00100	1	09/23/2021 11:05	WG1744588
Dibenz(a,h)anthracene	U		0.0000644	0.000200	1	09/23/2021 11:05	WG1744588
Dibenzofuran	U		0.0000970	0.0100	1	09/23/2021 11:05	WG1744588
3,3-Dichlorobenzidine	U		0.000212	0.0100	1	09/23/2021 11:05	WG1744588
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	09/23/2021 11:05	WG1744588
2,6-Dinitrotoluene	U		0.000250	0.0100	1	09/23/2021 11:05	WG1744588
Fluoranthene	U		0.000102	0.00100	1	09/23/2021 11:05	WG1744588
Fluorene	U		0.0000844	0.00100	1	09/23/2021 11:05	WG1744588
Hexachlorobenzene	U		0.0000755	0.00100	1	09/23/2021 11:05	WG1744588
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	09/23/2021 11:05	WG1744588
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	09/23/2021 11:05	WG1744588
Hexachloroethane	U		0.000127	0.0100	1	09/23/2021 11:05	WG1744588
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	09/23/2021 11:05	WG1744588
Isophorone	U		0.000143	0.0100	1	09/23/2021 11:05	WG1744588
1-Methylnaphthalene	U		0.0000790	0.00100	1	09/23/2021 11:05	WG1744588
2-Methylnaphthalene	U		0.000117	0.00100	1	09/23/2021 11:05	WG1744588
Naphthalene	U		0.000159	0.00100	1	09/23/2021 11:05	WG1744588
Nitrobenzene	U		0.000297	0.0100	1	09/23/2021 11:05	WG1744588
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	09/23/2021 11:05	WG1744588
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	09/23/2021 11:05	WG1744588
Phenanthrene	U		0.000112	0.00100	1	09/23/2021 11:05	WG1744588
Benzylbutyl phthalate	U		0.000765	0.00300	1	09/23/2021 11:05	WG1744588
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	09/23/2021 11:05	WG1744588
Di-n-butyl phthalate	U		0.000453	0.00300	1	09/23/2021 11:05	WG1744588
Diethyl phthalate	U		0.000287	0.00300	1	09/23/2021 11:05	WG1744588
Dimethyl phthalate	U		0.000260	0.00300	1	09/23/2021 11:05	WG1744588
Di-n-octyl phthalate	U		0.000932	0.00300	1	09/23/2021 11:05	WG1744588
Pyrene	U		0.000107	0.00100	1	09/23/2021 11:05	WG1744588
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	09/23/2021 11:05	WG1744588
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	09/23/2021 11:05	WG1744588
2-Chlorophenol	U		0.000133	0.0100	1	09/23/2021 11:05	WG1744588
2,4-Dichlorophenol	U		0.000102	0.0100	1	09/23/2021 11:05	WG1744588
2,4-Dimethylphenol	U		0.0000636	0.0100	1	09/23/2021 11:05	WG1744588
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	09/23/2021 11:05	WG1744588
2,4-Dinitrophenol	U		0.00593	0.0100	1	09/23/2021 11:05	WG1744588
2-Nitrophenol	U		0.000117	0.0100	1	09/23/2021 11:05	WG1744588

LB-02
Collected date/time: 09/16/21 09:20
L1404888

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2-Nitroaniline	U		0.000102	0.0100	1	09/23/2021 11:05	WG1744588
2-Methylphenol	0.000226	J	0.0000929	0.0100	1	09/23/2021 11:05	WG1744588
3&4-Methyl Phenol	0.000285	J	0.000168	0.0100	1	09/23/2021 11:05	WG1744588
3-Nitroaniline	U		0.0000869	0.0100	1	09/23/2021 11:05	WG1744588
4-Chloroaniline	U		0.000234	0.0100	1	09/23/2021 11:05	WG1744588
4-Nitroaniline	U		0.0000910	0.0100	1	09/23/2021 11:05	WG1744588
4-Nitrophenol	U		0.000143	0.0100	1	09/23/2021 11:05	WG1744588
Pentachlorophenol	U		0.000313	0.0100	1	09/23/2021 11:05	WG1744588
Phenol	U		0.00433	0.0100	1	09/23/2021 11:05	WG1744588
2,4,5-Trichlorophenol	U		0.000109	0.0100	1	09/23/2021 11:05	WG1744588
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	09/23/2021 11:05	WG1744588
(S) 2-Fluorophenol	*36.9*			*10.0-120*		*09/23/2021 11:05*	WG1744588
(S) Phenol-d5	*24.7*			*10.0-120*		*09/23/2021 11:05*	WG1744588
(S) Nitrobenzene-d5	*56.9*			*10.0-127*		*09/23/2021 11:05*	WG1744588
(S) 2-Fluorobiphenyl	*57.3*			*10.0-130*		*09/23/2021 11:05*	WG1744588
(S) 2,4,6-Tribromophenol	*69.0*			*10.0-155*		*09/23/2021 11:05*	WG1744588
(S) p-Terphenyl-d14	*66.5*			*10.0-128*		*09/23/2021 11:05*	WG1744588

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 00:17	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 00:17	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 00:17	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 00:17	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 00:17	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 00:17	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 00:17	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 00:17	WG1742806
Carbon disulfide	0.000133	J	0.0000962	0.00100	1	09/20/2021 00:17	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 00:17	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 00:17	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 00:17	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 00:17	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 00:17	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 00:17	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 00:17	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 00:17	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 00:17	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 00:17	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 00:17	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 00:17	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 00:17	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 00:17	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 00:17	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 00:17	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 00:17	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 00:17	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 00:17	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 00:17	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 00:17	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 00:17	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 00:17	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 00:17	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 00:17	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 00:17	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 00:17	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 00:17	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 00:17	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 00:17	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 00:17	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 00:17	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 00:17	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 00:17	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 00:17	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 00:17	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 00:17	WG1742806
(S) Toluene-d8	*104*			*80.0-120*		*09/20/2021 00:17*	WG1742806
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*09/20/2021 00:17*	WG1742806
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*09/20/2021 00:17*	WG1742806

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0113	0.0500	1	09/20/2021 00:37	WG1742806
Benzene	U		0.0000941	0.00100	1	09/20/2021 00:37	WG1742806
Bromodichloromethane	U		0.000136	0.00100	1	09/20/2021 00:37	WG1742806
Bromoform	U		0.000129	0.00100	1	09/20/2021 00:37	WG1742806
Bromomethane	U		0.000605	0.00500	1	09/20/2021 00:37	WG1742806
n-Butylbenzene	U		0.000157	0.00100	1	09/20/2021 00:37	WG1742806
sec-Butylbenzene	U		0.000125	0.00100	1	09/20/2021 00:37	WG1742806
tert-Butylbenzene	U		0.000127	0.00100	1	09/20/2021 00:37	WG1742806
Carbon disulfide	U		0.0000962	0.00100	1	09/20/2021 00:37	WG1742806
Carbon tetrachloride	U		0.000128	0.00100	1	09/20/2021 00:37	WG1742806
Chlorobenzene	U		0.000116	0.00100	1	09/20/2021 00:37	WG1742806
Chlorodibromomethane	U		0.000140	0.00100	1	09/20/2021 00:37	WG1742806
Chloroethane	U		0.000192	0.00500	1	09/20/2021 00:37	WG1742806
Chloroform	U		0.000111	0.00500	1	09/20/2021 00:37	WG1742806
Chloromethane	U		0.000960	0.00250	1	09/20/2021 00:37	WG1742806
1,2-Dibromoethane	U		0.000126	0.00100	1	09/20/2021 00:37	WG1742806
1,1-Dichloroethane	U		0.000100	0.00100	1	09/20/2021 00:37	WG1742806
1,2-Dichloroethane	U		0.0000819	0.00100	1	09/20/2021 00:37	WG1742806
1,1-Dichloroethene	U		0.000188	0.00100	1	09/20/2021 00:37	WG1742806
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	09/20/2021 00:37	WG1742806
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	09/20/2021 00:37	WG1742806
1,2-Dichloropropane	U		0.000149	0.00100	1	09/20/2021 00:37	WG1742806
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	09/20/2021 00:37	WG1742806
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	09/20/2021 00:37	WG1742806
Ethylbenzene	U		0.000137	0.00100	1	09/20/2021 00:37	WG1742806
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	09/20/2021 00:37	WG1742806
2-Hexanone	U		0.000787	0.0100	1	09/20/2021 00:37	WG1742806
Isopropylbenzene	U		0.000105	0.00100	1	09/20/2021 00:37	WG1742806
p-Isopropyltoluene	U		0.000120	0.00100	1	09/20/2021 00:37	WG1742806
2-Butanone (MEK)	U		0.00119	0.0100	1	09/20/2021 00:37	WG1742806
Methylene Chloride	U		0.000430	0.00500	1	09/20/2021 00:37	WG1742806
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	09/20/2021 00:37	WG1742806
Methyl tert-butyl ether	U		0.000101	0.00100	1	09/20/2021 00:37	WG1742806
Naphthalene	U	J4	0.00100	0.00500	1	09/20/2021 00:37	WG1742806
n-Propylbenzene	U		0.0000993	0.00100	1	09/20/2021 00:37	WG1742806
Styrene	U		0.000118	0.00100	1	09/20/2021 00:37	WG1742806
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	09/20/2021 00:37	WG1742806
Tetrachloroethene	U		0.000300	0.00100	1	09/20/2021 00:37	WG1742806
Toluene	U		0.000278	0.00100	1	09/20/2021 00:37	WG1742806
1,1,1-Trichloroethane	U		0.000149	0.00100	1	09/20/2021 00:37	WG1742806
1,1,2-Trichloroethane	U		0.000158	0.00100	1	09/20/2021 00:37	WG1742806
Trichloroethene	U		0.000190	0.00100	1	09/20/2021 00:37	WG1742806
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	09/20/2021 00:37	WG1742806
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	09/20/2021 00:37	WG1742806
Vinyl chloride	U		0.000234	0.00100	1	09/20/2021 00:37	WG1742806
Xylenes, Total	U		0.000174	0.00300	1	09/20/2021 00:37	WG1742806
(S) Toluene-d8	*104*			*80.0-120*		*09/20/2021 00:37*	WG1742806
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*09/20/2021 00:37*	WG1742806
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*09/20/2021 00:37*	WG1742806

Method Blank (MB)

(MB) R3708405-1 09/22/21 23:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1404888-30 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-30 09/22/21 23:32 • (DUP) R3708405-3 09/22/21 23:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1130	1130	1	0.177		5

L1404888-36 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-36 09/22/21 23:32 • (DUP) R3708405-4 09/22/21 23:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1130	1130	1	0.531		5

Laboratory Control Sample (LCS)

(LCS) R3708405-2 09/22/21 23:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	9380	107	77.4-123	

Method Blank (MB)

(MB) R3708589-1 09/23/21 12:57

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1404808-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1404808-01 09/23/21 12:57 • (DUP) R3708589-3 09/23/21 12:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	635	655	1	3.10		5

L1405702-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1405702-01 09/23/21 12:57 • (DUP) R3708589-4 09/23/21 12:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1910	2030	1	5.97	J3	5

Laboratory Control Sample (LCS)

(LCS) R3708589-2 09/23/21 12:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	9320	106	77.4-123	

Method Blank (MB)

(MB) R3708754-1 09/23/21 18:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1404888-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-10 09/23/21 18:02 • (DUP) R3708754-3 09/23/21 18:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1270	1260	1	0.948		5

L1404888-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-12 09/23/21 18:02 • (DUP) R3708754-4 09/23/21 18:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1320	1300	1	1.38		5

Laboratory Control Sample (LCS)

(LCS) R3708754-2 09/23/21 18:02

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	9520	108	77.4-123	

Method Blank (MB)

(MB) R3707519-2 09/22/21 17:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1404836-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1404836-06 09/22/21 17:17 • (DUP) R3707519-3 09/22/21 17:20

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	113	110	1	3.38		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1404888-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-05 09/22/21 18:13 • (DUP) R3707519-4 09/22/21 18:21

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	332	319	1	3.89		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3707519-1 09/22/21 17:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100	102	102	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3707876-2 09/23/21 11:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity	U		8.45	20.0

Sample Narrative:
BLANK: Endpoint pH 4.5

L1404888-30 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-30 09/23/21 11:48 • (DUP) R3707876-4 09/23/21 11:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	961	955	1	0.576		20

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

L1404954-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1404954-03 09/23/21 13:04 • (DUP) R3707876-6 09/23/21 13:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	204	204	1	0.0852		20

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

Laboratory Control Sample (LCS)

(LCS) R3707876-1 09/23/21 11:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100	99.6	99.6	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3709219-1 09/27/21 14:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1404780-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1404780-01 09/27/21 14:37 • (DUP) R3709219-3 09/27/21 14:38

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.145	0.162	1	11.1		20

L1404905-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1404905-04 09/27/21 15:07 • (DUP) R3709219-6 09/27/21 15:08

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3709219-2 09/27/21 14:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.66	106	90.0-110	

L1404780-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404780-02 09/27/21 14:39 • (MS) R3709219-4 09/27/21 14:40 • (MSD) R3709219-5 09/27/21 14:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	0.569	2.97	3.15	96.0	103	1	90.0-110			5.88	20

L1405176-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1405176-01 09/27/21 15:12 • (MS) R3709219-7 09/27/21 15:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	0.669	3.24	103	1	90.0-110	

Method Blank (MB)

(MB) R3709251-1 09/27/21 16:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1404888-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-04 09/27/21 16:41 • (DUP) R3709251-3 09/27/21 16:42

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	3.84	3.83	1	0.261		20

L1404888-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-22 09/27/21 17:13 • (DUP) R3709251-6 09/27/21 17:14

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	3.85	3.85	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3709251-2 09/27/21 16:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.63	105	90.0-110	

L1404888-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-05 09/27/21 16:43 • (MS) R3709251-4 09/27/21 16:44 • (MSD) R3709251-5 09/27/21 16:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	2.40	4.82	4.88	96.8	99.2	1	90.0-110			1.24	20

L1404888-23 Original Sample (OS) • Matrix Spike (MS)

(OS) L1404888-23 09/27/21 17:15 • (MS) R3709251-7 09/27/21 17:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	2.51	4.98	98.8	1	90.0-110	

Method Blank (MB)

(MB) R3709609-1 09/28/21 11:56

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1404888-35 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-35 09/28/21 12:15 • (DUP) R3709609-5 09/28/21 12:16

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	3.57	3.59	1	0.559		20

L1405132-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1405132-07 09/28/21 12:33 • (DUP) R3709609-6 09/28/21 12:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3709609-2 09/28/21 11:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.51	100	90.0-110	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/28/21 12:02 • (MS) R3709609-3 09/28/21 12:04 • (MSD) R3709609-4 09/28/21 12:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	U	2.47	2.53	98.8	101	1	90.0-110			2.40	20

L1405132-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1405132-08 09/28/21 12:35 • (MS) R3709609-7 09/28/21 12:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	0.113	2.71	104	1	90.0-110	

Method Blank (MB)

(MB) R3707906-1 09/23/21 01:04

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1404888-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-09 09/23/21 05:43 • (DUP) R3707906-3 09/23/21 05:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	30.3	30.2	1	0.160		15
Fluoride	0.917	0.916	1	0.0764		15
Sulfate	65.8	65.8	1	0.134		15

L1404888-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-21 09/23/21 12:17 • (DUP) R3707906-6 09/23/21 12:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	53.8	53.8	1	0.133		15
Fluoride	0.693	0.695	1	0.360		15
Sulfate	58.4	56.8	1	2.72		15

Laboratory Control Sample (LCS)

(LCS) R3707906-2 09/23/21 01:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.7	99.3	80.0-120	
Fluoride	8.00	8.60	108	80.0-120	
Sulfate	40.0	40.4	101	80.0-120	

L1404888-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-09 09/23/21 05:43 • (MS) R3707906-4 09/23/21 06:16 • (MSD) R3707906-5 09/23/21 06:32

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	30.3	78.9	78.9	97.2	97.3	1	80.0-120			0.0542	15
Fluoride	5.00	0.917	5.83	5.90	98.3	99.7	1	80.0-120			1.17	15
Sulfate	50.0	65.8	117	115	102	97.7	1	80.0-120	E	E	1.75	15

L1404888-21 Original Sample (OS) • Matrix Spike (MS)

(OS) L1404888-21 09/23/21 12:17 • (MS) R3707906-7 09/23/21 12:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	53.8	104	101	1	80.0-120	E
Fluoride	5.00	0.693	6.34	113	1	80.0-120	
Sulfate	50.0	58.4	110	102	1	80.0-120	E

Method Blank (MB)

(MB) R3709320-1 09/23/21 16:39

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1404888-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-29 09/23/21 23:20 • (DUP) R3709320-3 09/23/21 23:36

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	57.0	57.2	1	0.293		15
Fluoride	0.247	0.248	1	0.606		15

L1404888-38 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-38 09/24/21 04:23 • (DUP) R3709320-6 09/24/21 04:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	U	U	1	0.000		15
Fluoride	U	U	1	0.000		15
Sulfate	U	U	1	0.000		15

L1404888-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-29 09/24/21 06:46 • (DUP) R3709320-8 09/24/21 07:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	142	142	5	0.0919		15

Laboratory Control Sample (LCS)

(LCS) R3709320-2 09/23/21 16:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.7	99.3	80.0-120	
Fluoride	8.00	8.10	101	80.0-120	
Sulfate	40.0	40.1	100	80.0-120	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/23/21 23:52 • (MS) R3709320-4 09/24/21 00:08 • (MSD) R3709320-5 09/24/21 00:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	56.3	105	105	97.1	97.2	1	80.0-120	E	E	0.0767	15
Fluoride	5.00	0.640	5.61	5.62	99.3	99.7	1	80.0-120			0.326	15
Sulfate	50.0	11.5	61.2	61.3	99.4	99.4	1	80.0-120			0.0572	15

L1404888-39 Original Sample (OS) • Matrix Spike (MS)

(OS) L1404888-39 09/24/21 05:27 • (MS) R3709320-7 09/24/21 05:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	U	52.0	104	1	80.0-120	
Fluoride	5.00	U	5.26	105	1	80.0-120	
Sulfate	50.0	U	52.1	104	1	80.0-120	

Method Blank (MB)

(MB) R3709330-1 09/25/21 03:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Fluoride	U		0.0640	0.150

L1404888-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-06 09/25/21 05:29 • (DUP) R3709330-3 09/25/21 05:46

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	0.840	0.846	1	0.653		15

L1404888-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1404888-22 09/25/21 11:14 • (DUP) R3709330-6 09/25/21 11:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	1.01	1.02	1	0.747		15

Laboratory Control Sample (LCS)

(LCS) R3709330-2 09/25/21 04:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoride	8.00	8.24	103	80.0-120	

L1404888-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-06 09/25/21 05:29 • (MS) R3709330-4 09/25/21 06:02 • (MSD) R3709330-5 09/25/21 06:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5.00	0.840	6.11	6.08	105	105	1	80.0-120			0.486	15

L1404888-22 Original Sample (OS) • Matrix Spike (MS)

(OS) L1404888-22 09/25/21 11:14 • (MS) R3709330-7 09/25/21 11:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	5.00	1.01	6.26	105	1	80.0-120	

Received by OCD: 4/18/2022 4:17:12 PM

Method Blank (MB)

(MB) R3707508-1 09/22/21 15:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3707508-2 09/22/21 15:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.00300	0.00359	120	80.0-120	

L1404888-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-15 09/22/21 15:38 • (MS) R3707508-3 09/22/21 15:40 • (MSD) R3707508-4 09/22/21 15:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	U	0.00340	0.00341	113	114	1	75.0-125			0.452	20

Released to Imaging: 7/20/2022 10:39:48 AM

Method Blank (MB)

(MB) R3708480-1 09/24/21 13:09

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3708480-2 09/24/21 13:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.00300	0.00324	108	80.0-120	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/24/21 13:13 • (MS) R3708480-3 09/24/21 13:15 • (MSD) R3708480-4 09/24/21 13:17

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	U	0.00244	0.00233	81.3	77.6	1	75.0-125			4.72	20

Method Blank (MB)

(MB) R3708398-1 09/24/21 10:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R3708398-2 09/24/21 10:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron,Dissolved	1.00	0.979	97.9	80.0-120	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/24/21 10:19 • (MS) R3708398-4 09/24/21 10:24 • (MSD) R3708398-5 09/24/21 10:27

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron,Dissolved	1.00	0.168	1.15	1.16	97.9	99.2	1	75.0-125			1.12	20

Method Blank (MB)

(MB) R3708292-1 09/24/21 03:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R3708292-2 09/24/21 03:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron,Dissolved	1.00	0.986	98.6	80.0-120	

L1405189-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405189-01 09/24/21 03:41 • (MS) R3708292-4 09/24/21 03:46 • (MSD) R3708292-5 09/24/21 03:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron,Dissolved	1.00	0.0540	1.09	1.04	103	98.7	1	75.0-125			4.17	20

Method Blank (MB)

(MB) R3708347-1 09/24/21 09:01

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0185	0.100
Arsenic,Dissolved	U		0.000180	0.00200
Barium,Dissolved	U		0.000381	0.00200
Cadmium,Dissolved	U		0.000150	0.00100
Chromium,Dissolved	U		0.00124	0.00200
Copper,Dissolved	0.00320	J	0.00151	0.00500
Cobalt,Dissolved	U		0.0000596	0.00200
Iron,Dissolved	U		0.0281	0.100
Lead,Dissolved	U		0.000849	0.00200
Manganese,Dissolved	U		0.000704	0.00500
Molybdenum,Dissolved	U		0.000348	0.00500
Nickel,Dissolved	U		0.000816	0.00200
Selenium,Dissolved	U		0.000300	0.00200
Silver,Dissolved	U		0.0000700	0.00200
Uranium,Dissolved	U		0.0000700	0.0200
Zinc,Dissolved	U		0.00302	0.0250

Laboratory Control Sample (LCS)

(LCS) R3708347-2 09/24/21 09:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	5.00	4.82	96.5	80.0-120	
Arsenic,Dissolved	0.0500	0.0473	94.6	80.0-120	
Barium,Dissolved	0.0500	0.0457	91.4	80.0-120	
Cadmium,Dissolved	0.0500	0.0503	101	80.0-120	
Chromium,Dissolved	0.0500	0.0493	98.5	80.0-120	
Copper,Dissolved	0.0500	0.0483	96.5	80.0-120	
Cobalt,Dissolved	0.0500	0.0497	99.5	80.0-120	
Iron,Dissolved	5.00	4.81	96.3	80.0-120	
Lead,Dissolved	0.0500	0.0471	94.3	80.0-120	
Manganese,Dissolved	0.0500	0.0476	95.3	80.0-120	
Molybdenum,Dissolved	0.0500	0.0496	99.2	80.0-120	
Nickel,Dissolved	0.0500	0.0503	101	80.0-120	
Selenium,Dissolved	0.0500	0.0539	108	80.0-120	
Silver,Dissolved	0.0500	0.0491	98.2	80.0-120	
Uranium,Dissolved	0.0500	0.0478	95.5	80.0-120	
Zinc,Dissolved	0.500	0.469	93.8	80.0-120	

L1404888-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-01 09/24/21 09:08 • (MS) R3708347-4 09/24/21 09:15 • (MSD) R3708347-5 09/24/21 09:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	5.00	U	4.85	4.86	97.0	97.2	1	75.0-125			0.197	20
Arsenic,Dissolved	0.0500	0.00520	0.0517	0.0531	93.1	95.8	1	75.0-125			2.62	20
Barium,Dissolved	0.0500	0.151	0.194	0.192	85.4	81.2	1	75.0-125			1.09	20
Cadmium,Dissolved	0.0500	U	0.0493	0.0497	98.6	99.4	1	75.0-125			0.755	20
Chromium,Dissolved	0.0500	U	0.0489	0.0501	97.8	100	1	75.0-125			2.48	20
Copper,Dissolved	0.0500	U	0.0492	0.0472	98.3	94.4	1	75.0-125			4.08	20
Cobalt,Dissolved	0.0500	0.0000677	0.0485	0.0499	96.8	99.7	1	75.0-125			2.91	20
Iron,Dissolved	5.00	U	4.70	4.80	93.9	95.9	1	75.0-125			2.12	20
Lead,Dissolved	0.0500	U	0.0481	0.0485	96.2	97.1	1	75.0-125			0.900	20
Manganese,Dissolved	0.0500	0.00101	0.0476	0.0502	93.2	98.3	1	75.0-125			5.24	20
Molybdenum,Dissolved	0.0500	0.00272	0.0538	0.0523	102	99.2	1	75.0-125			2.84	20
Nickel,Dissolved	0.0500	U	0.0489	0.0503	97.7	101	1	75.0-125			2.89	20
Selenium,Dissolved	0.0500	0.00248	0.0596	0.0575	114	110	1	75.0-125			3.72	20
Silver,Dissolved	0.0500	U	0.0487	0.0497	97.5	99.5	1	75.0-125			2.02	20
Uranium,Dissolved	0.0500	0.00175	0.0521	0.0526	101	102	1	75.0-125			0.957	20
Zinc,Dissolved	0.500	0.00603	0.471	0.484	92.9	95.5	1	75.0-125			2.70	20

Method Blank (MB)

(MB) R3707766-1 09/23/21 00:42

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0185	0.100
Arsenic,Dissolved	U		0.000180	0.00200
Barium,Dissolved	U		0.000381	0.00200
Cadmium,Dissolved	U		0.000150	0.00100
Chromium,Dissolved	U		0.00124	0.00200
Copper,Dissolved	U		0.00151	0.00500
Cobalt,Dissolved	U		0.0000596	0.00200
Iron,Dissolved	U		0.0281	0.100
Lead,Dissolved	U		0.000849	0.00200
Manganese,Dissolved	U		0.000704	0.00500
Molybdenum,Dissolved	U		0.000348	0.00500
Nickel,Dissolved	U		0.000816	0.00200
Selenium,Dissolved	U		0.000300	0.00200
Silver,Dissolved	U		0.0000700	0.00200
Uranium,Dissolved	U		0.0000700	0.0200
Zinc,Dissolved	U		0.00302	0.0250

Laboratory Control Sample (LCS)

(LCS) R3707766-2 09/23/21 00:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	5.00	4.62	92.4	80.0-120	
Arsenic,Dissolved	0.0500	0.0452	90.3	80.0-120	
Barium,Dissolved	0.0500	0.0448	89.6	80.0-120	
Cadmium,Dissolved	0.0500	0.0488	97.6	80.0-120	
Chromium,Dissolved	0.0500	0.0467	93.3	80.0-120	
Copper,Dissolved	0.0500	0.0450	90.0	80.0-120	
Cobalt,Dissolved	0.0500	0.0473	94.6	80.0-120	
Iron,Dissolved	5.00	4.61	92.1	80.0-120	
Lead,Dissolved	0.0500	0.0449	89.7	80.0-120	
Manganese,Dissolved	0.0500	0.0454	90.8	80.0-120	
Molybdenum,Dissolved	0.0500	0.0475	95.1	80.0-120	
Nickel,Dissolved	0.0500	0.0474	94.7	80.0-120	
Selenium,Dissolved	0.0500	0.0478	95.6	80.0-120	
Silver,Dissolved	0.0500	0.0483	96.5	80.0-120	
Uranium,Dissolved	0.0500	0.0449	89.8	80.0-120	
Zinc,Dissolved	0.500	0.448	89.6	80.0-120	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/23/21 00:49 • (MS) R3707766-4 09/23/21 00:55 • (MSD) R3707766-5 09/23/21 00:58

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	5.00	U	4.66	4.68	93.1	93.5	1	75.0-125			0.442	20
Arsenic,Dissolved	0.0500	0.00293	0.0524	0.0518	98.9	97.8	1	75.0-125			1.06	20
Barium,Dissolved	0.0500	0.409	0.455	0.458	93.3	98.7	1	75.0-125			0.595	20
Cadmium,Dissolved	0.0500	U	0.0494	0.0495	98.7	99.0	1	75.0-125			0.347	20
Chromium,Dissolved	0.0500	U	0.0481	0.0485	96.3	97.1	1	75.0-125			0.825	20
Copper,Dissolved	0.0500	U	0.0503	0.0504	101	101	1	75.0-125			0.198	20
Cobalt,Dissolved	0.0500	0.0000660	0.0489	0.0487	97.7	97.2	1	75.0-125			0.457	20
Iron,Dissolved	5.00	U	4.76	4.77	95.2	95.4	1	75.0-125			0.300	20
Lead,Dissolved	0.0500	U	0.0444	0.0446	88.9	89.1	1	75.0-125			0.331	20
Manganese,Dissolved	0.0500	0.621	0.676	0.669	111	96.0	1	75.0-125			1.10	20
Molybdenum,Dissolved	0.0500	0.00267	0.0514	0.0521	97.5	98.8	1	75.0-125			1.25	20
Nickel,Dissolved	0.0500	0.00157	0.0516	0.0505	100	97.8	1	75.0-125			2.20	20
Selenium,Dissolved	0.0500	0.000473	0.0507	0.0518	100	103	1	75.0-125			2.04	20
Silver,Dissolved	0.0500	U	0.0493	0.0509	98.6	102	1	75.0-125			3.24	20
Uranium,Dissolved	0.0500	0.0314	0.0769	0.0777	90.9	92.6	1	75.0-125			1.08	20
Zinc,Dissolved	0.500	U	0.480	0.477	95.9	95.3	1	75.0-125			0.630	20

Method Blank (MB)

(MB) R3708178-1 09/23/21 22:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	0.0274	J	0.0185	0.100
Arsenic,Dissolved	U		0.000180	0.00200
Barium,Dissolved	U		0.000381	0.00200
Cadmium,Dissolved	U		0.000150	0.00100
Chromium,Dissolved	U		0.00124	0.00200
Copper,Dissolved	U		0.00151	0.00500
Cobalt,Dissolved	U		0.0000596	0.00200
Iron,Dissolved	U		0.0281	0.100
Lead,Dissolved	U		0.000849	0.00200
Manganese,Dissolved	U		0.000704	0.00500
Molybdenum,Dissolved	0.000625	J	0.000348	0.00500
Nickel,Dissolved	U		0.000816	0.00200
Selenium,Dissolved	U		0.000300	0.00200
Silver,Dissolved	U		0.0000700	0.00200
Uranium,Dissolved	U		0.0000700	0.0200
Zinc,Dissolved	U		0.00302	0.0250

Laboratory Control Sample (LCS)

(LCS) R3708178-2 09/23/21 22:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	5.00	4.69	93.8	80.0-120	
Arsenic,Dissolved	0.0500	0.0465	93.0	80.0-120	
Barium,Dissolved	0.0500	0.0461	92.2	80.0-120	
Cadmium,Dissolved	0.0500	0.0482	96.4	80.0-120	
Chromium,Dissolved	0.0500	0.0488	97.7	80.0-120	
Copper,Dissolved	0.0500	0.0498	99.6	80.0-120	
Cobalt,Dissolved	0.0500	0.0490	98.0	80.0-120	
Iron,Dissolved	5.00	4.82	96.4	80.0-120	
Lead,Dissolved	0.0500	0.0478	95.6	80.0-120	
Manganese,Dissolved	0.0500	0.0477	95.4	80.0-120	
Molybdenum,Dissolved	0.0500	0.0459	91.9	80.0-120	
Nickel,Dissolved	0.0500	0.0499	99.8	80.0-120	
Selenium,Dissolved	0.0500	0.0549	110	80.0-120	
Silver,Dissolved	0.0500	0.0468	93.6	80.0-120	
Uranium,Dissolved	0.0500	0.0470	94.0	80.0-120	
Zinc,Dissolved	0.500	0.464	92.8	80.0-120	

L1405258-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405258-07 09/23/21 22:28 • (MS) R3708178-4 09/23/21 22:35 • (MSD) R3708178-5 09/23/21 22:39

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	5.00	U	4.81	4.78	96.2	95.6	1	75.0-125			0.615	20
Arsenic,Dissolved	0.0500	0.000182	0.0478	0.0481	95.2	95.8	1	75.0-125			0.586	20
Barium,Dissolved	0.0500	0.0479	0.0952	0.0969	94.6	98.0	1	75.0-125			1.82	20
Cadmium,Dissolved	0.0500	U	0.0476	0.0479	95.2	95.7	1	75.0-125			0.565	20
Chromium,Dissolved	0.0500	U	0.0488	0.0496	97.6	99.2	1	75.0-125			1.63	20
Copper,Dissolved	0.0500	0.00178	0.0491	0.0493	94.6	95.1	1	75.0-125			0.491	20
Cobalt,Dissolved	0.0500	0.00221	0.0508	0.0510	97.1	97.6	1	75.0-125			0.408	20
Iron,Dissolved	5.00	U	4.78	4.81	95.6	96.2	1	75.0-125			0.565	20
Lead,Dissolved	0.0500	U	0.0477	0.0510	95.3	102	1	75.0-125			6.70	20
Manganese,Dissolved	0.0500	0.372	0.428	0.421	112	98.0	1	75.0-125			1.62	20
Molybdenum,Dissolved	0.0500	0.000498	0.0478	0.0488	94.6	96.7	1	75.0-125			2.12	20
Nickel,Dissolved	0.0500	0.00238	0.0505	0.0507	96.2	96.7	1	75.0-125			0.528	20
Selenium,Dissolved	0.0500	0.00217	0.0554	0.0594	107	115	1	75.0-125			6.93	20
Silver,Dissolved	0.0500	U	0.0474	0.0486	94.8	97.3	1	75.0-125			2.53	20
Uranium,Dissolved	0.0500	0.00119	0.0491	0.0505	95.9	98.7	1	75.0-125			2.83	20
Zinc,Dissolved	0.500	0.00600	0.467	0.473	92.2	93.4	1	75.0-125			1.29	20

Received by OCD: 4/18/2022 4:17:12 PM

Method Blank (MB)

(MB) R3709315-3 09/25/21 10:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3709315-1 09/25/21 09:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.40	98.2	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*78.0-120*	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/25/21 14:07 • (MS) R3709315-4 09/26/21 10:21 • (MSD) R3709315-5 09/26/21 10:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.0464	3.54	4.14	63.5	74.4	1	10.0-160			15.6	22
(S) a,a,a-Trifluorotoluene(FID)					*99.1*	*99.0*		*78.0-120*				

Released to Imaging: 7/20/2022 10:39:48 AM

Method Blank (MB)

(MB) R3708782-3 09/19/21 22:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
1,2-Dibromoethane	U		0.000126	0.00100
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
2-Hexanone	U		0.000787	0.0100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100

Method Blank (MB)

(MB) R3708782-3 09/19/21 22:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*110*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*94.6*			*70.0-130*

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

(LCS) R3708782-1 09/19/21 21:42 • (LCSD) R3708782-2 09/19/21 22:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0431	0.0426	172	170	19.0-160	J4	J4	1.17	27
Benzene	0.00500	0.00495	0.00488	99.0	97.6	70.0-123			1.42	20
Bromodichloromethane	0.00500	0.00458	0.00449	91.6	89.8	75.0-120			1.98	20
Bromoform	0.00500	0.00491	0.00522	98.2	104	68.0-132			6.12	20
Bromomethane	0.00500	0.00537	0.00559	107	112	10.0-160			4.01	25
n-Butylbenzene	0.00500	0.00415	0.00394	83.0	78.8	73.0-125			5.19	20
sec-Butylbenzene	0.00500	0.00470	0.00433	94.0	86.6	75.0-125			8.19	20
tert-Butylbenzene	0.00500	0.00487	0.00448	97.4	89.6	76.0-124			8.34	20
Carbon disulfide	0.00500	0.00472	0.00451	94.4	90.2	61.0-128			4.55	20
Carbon tetrachloride	0.00500	0.00464	0.00480	92.8	96.0	68.0-126			3.39	20
Chlorobenzene	0.00500	0.00488	0.00493	97.6	98.6	80.0-121			1.02	20
Chlorodibromomethane	0.00500	0.00515	0.00525	103	105	77.0-125			1.92	20
Chloroethane	0.00500	0.00572	0.00543	114	109	47.0-150			5.20	20
Chloroform	0.00500	0.00480	0.00493	96.0	98.6	73.0-120			2.67	20
Chloromethane	0.00500	0.00504	0.00448	101	89.6	41.0-142			11.8	20
1,2-Dibromoethane	0.00500	0.00523	0.00528	105	106	80.0-122			0.951	20
1,1-Dichloroethane	0.00500	0.00481	0.00491	96.2	98.2	70.0-126			2.06	20
1,2-Dichloroethane	0.00500	0.00462	0.00442	92.4	88.4	70.0-128			4.42	20
1,1-Dichloroethene	0.00500	0.00472	0.00468	94.4	93.6	71.0-124			0.851	20
cis-1,2-Dichloroethene	0.00500	0.00527	0.00549	105	110	73.0-120			4.09	20
trans-1,2-Dichloroethene	0.00500	0.00545	0.00534	109	107	73.0-120			2.04	20
1,2-Dichloropropane	0.00500	0.00463	0.00469	92.6	93.8	77.0-125			1.29	20
cis-1,3-Dichloropropene	0.00500	0.00465	0.00446	93.0	89.2	80.0-123			4.17	20
trans-1,3-Dichloropropene	0.00500	0.00463	0.00457	92.6	91.4	78.0-124			1.30	20

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

(LCS) R3708782-1 09/19/21 21:42 • (LCSD) R3708782-2 09/19/21 22:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.00500	0.00509	0.00508	102	102	79.0-123			0.197	20
Hexachloro-1,3-butadiene	0.00500	0.00389	0.00347	77.8	69.4	54.0-138			11.4	20
2-Hexanone	0.0250	0.0240	0.0243	96.0	97.2	67.0-149			1.24	20
Isopropylbenzene	0.00500	0.00505	0.00503	101	101	76.0-127			0.397	20
p-Isopropyltoluene	0.00500	0.00454	0.00437	90.8	87.4	76.0-125			3.82	20
2-Butanone (MEK)	0.0250	0.0232	0.0246	92.8	98.4	44.0-160			5.86	20
Methylene Chloride	0.00500	0.00507	0.00505	101	101	67.0-120			0.395	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0241	0.0242	96.4	96.8	68.0-142			0.414	20
Methyl tert-butyl ether	0.00500	0.00494	0.00488	98.8	97.6	68.0-125			1.22	20
Naphthalene	0.00500	0.00371	0.00358	74.2	71.6	54.0-135			3.57	20
n-Propylbenzene	0.00500	0.00475	0.00453	95.0	90.6	77.0-124			4.74	20
Styrene	0.00500	0.00516	0.00516	103	103	73.0-130			0.000	20
1,1,2,2-Tetrachloroethane	0.00500	0.00483	0.00472	96.6	94.4	65.0-130			2.30	20
Tetrachloroethene	0.00500	0.00560	0.00557	112	111	72.0-132			0.537	20
Toluene	0.00500	0.00503	0.00502	101	100	79.0-120			0.199	20
1,1,1-Trichloroethane	0.00500	0.00475	0.00460	95.0	92.0	73.0-124			3.21	20
1,1,2-Trichloroethane	0.00500	0.00486	0.00540	97.2	108	80.0-120			10.5	20
Trichloroethene	0.00500	0.00520	0.00496	104	99.2	78.0-124			4.72	20
1,2,4-Trimethylbenzene	0.00500	0.00470	0.00435	94.0	87.0	76.0-121			7.73	20
1,3,5-Trimethylbenzene	0.00500	0.00474	0.00451	94.8	90.2	76.0-122			4.97	20
Vinyl chloride	0.00500	0.00501	0.00496	100	99.2	67.0-131			1.00	20
Xylenes, Total	0.0150	0.0154	0.0157	103	105	79.0-123			1.93	20
(S) Toluene-d8				*107*	*106*	*80.0-120*				
(S) 4-Bromofluorobenzene				*102*	*101*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*94.1*	*95.0*	*70.0-130*				

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Method Blank (MB)

(MB) R3710650-2 09/19/21 22:03

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
1,2-Dibromoethane	U		0.000126	0.00100
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
2-Hexanone	U		0.000787	0.0100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100

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Method Blank (MB)

(MB) R3710650-2 09/19/21 22:03

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*102*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3710650-1 09/19/21 21:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.0250	0.0414	166	19.0-160	J4
Benzene	0.00500	0.00433	86.6	70.0-123	
Bromodichloromethane	0.00500	0.00528	106	75.0-120	
Bromoform	0.00500	0.00516	103	68.0-132	
Bromomethane	0.00500	0.00445	89.0	10.0-160	
n-Butylbenzene	0.00500	0.00560	112	73.0-125	
sec-Butylbenzene	0.00500	0.00581	116	75.0-125	
tert-Butylbenzene	0.00500	0.00563	113	76.0-124	
Carbon disulfide	0.00500	0.00388	77.6	61.0-128	
Carbon tetrachloride	0.00500	0.00512	102	68.0-126	
Chlorobenzene	0.00500	0.00482	96.4	80.0-121	
Chlorodibromomethane	0.00500	0.00515	103	77.0-125	
Chloroethane	0.00500	0.00422	84.4	47.0-150	
Chloroform	0.00500	0.00471	94.2	73.0-120	
Chloromethane	0.00500	0.00412	82.4	41.0-142	
1,2-Dibromoethane	0.00500	0.00507	101	80.0-122	
1,1-Dichloroethane	0.00500	0.00454	90.8	70.0-126	
1,2-Dichloroethane	0.00500	0.00532	106	70.0-128	
1,1-Dichloroethene	0.00500	0.00440	88.0	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00460	92.0	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00428	85.6	73.0-120	
1,2-Dichloropropane	0.00500	0.00501	100	77.0-125	
cis-1,3-Dichloropropene	0.00500	0.00516	103	80.0-123	
trans-1,3-Dichloropropene	0.00500	0.00507	101	78.0-124	

Laboratory Control Sample (LCS)

(LCS) R3710650-1 09/19/21 21:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	0.00500	0.00503	101	79.0-123	
Hexachloro-1,3-butadiene	0.00500	0.00605	121	54.0-138	
2-Hexanone	0.0250	0.0289	116	67.0-149	
Isopropylbenzene	0.00500	0.00548	110	76.0-127	
p-Isopropyltoluene	0.00500	0.00584	117	76.0-125	
2-Butanone (MEK)	0.0250	0.0283	113	44.0-160	
Methylene Chloride	0.00500	0.00436	87.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	0.0250	0.0271	108	68.0-142	
Methyl tert-butyl ether	0.00500	0.00472	94.4	68.0-125	
Naphthalene	0.00500	0.00246	49.2	54.0-135	J4
n-Propylbenzene	0.00500	0.00527	105	77.0-124	
Styrene	0.00500	0.00514	103	73.0-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00433	86.6	65.0-130	
Tetrachloroethene	0.00500	0.00512	102	72.0-132	
Toluene	0.00500	0.00459	91.8	79.0-120	
1,1,1-Trichloroethane	0.00500	0.00481	96.2	73.0-124	
1,1,2-Trichloroethane	0.00500	0.00496	99.2	80.0-120	
Trichloroethene	0.00500	0.00491	98.2	78.0-124	
1,2,4-Trimethylbenzene	0.00500	0.00555	111	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00541	108	76.0-122	
Vinyl chloride	0.00500	0.00432	86.4	67.0-131	
Xylenes, Total	0.0150	0.0145	96.7	79.0-123	
(S) Toluene-d8			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*103*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*113*	*70.0-130*	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/20/21 01:54 • (MS) R3710650-3 09/20/21 06:43 • (MSD) R3710650-4 09/20/21 07:02

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	U	0.0339	0.0404	136	162	1	10.0-160		J5	17.5	35
Benzene	0.00500	0.000313	0.00519	0.00464	97.5	86.5	1	17.0-158			11.2	27
Bromodichloromethane	0.00500	U	0.00587	0.00503	117	101	1	31.0-150			15.4	27
Bromoform	0.00500	U	0.00592	0.00482	118	96.4	1	29.0-150			20.5	29
Bromomethane	0.00500	U	0.00453	0.00425	90.6	85.0	1	10.0-160			6.38	38
n-Butylbenzene	0.00500	U	0.00610	0.00527	122	105	1	31.0-150			14.6	30
sec-Butylbenzene	0.00500	0.000147	0.00635	0.00554	124	108	1	33.0-155			13.6	29
tert-Butylbenzene	0.00500	0.000249	0.00630	0.00538	121	103	1	34.0-153			15.8	28

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/20/21 01:54 • (MS) R3710650-3 09/20/21 06:43 • (MSD) R3710650-4 09/20/21 07:02

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	0.00500	U	0.00426	0.00381	85.2	76.2	1	10.0-156			11.2	28
Carbon tetrachloride	0.00500	U	0.00650	0.00559	130	112	1	23.0-159			15.1	28
Chlorobenzene	0.00500	U	0.00530	0.00460	106	92.0	1	33.0-152			14.1	27
Chlorodibromomethane	0.00500	U	0.00566	0.00483	113	96.6	1	37.0-149			15.8	27
Chloroethane	0.00500	U	0.00456	0.00409	91.2	81.8	1	10.0-160			10.9	30
Chloroform	0.00500	U	0.00596	0.00501	119	100	1	29.0-154			17.3	28
Chloromethane	0.00500	U	0.00487	0.00446	97.4	89.2	1	10.0-160			8.79	29
1,2-Dibromoethane	0.00500	U	0.00546	0.00489	109	97.8	1	34.0-147			11.0	27
1,1-Dichloroethane	0.00500	U	0.00525	0.00469	105	93.8	1	25.0-158			11.3	27
1,2-Dichloroethane	0.00500	U	0.00638	0.00530	128	106	1	29.0-151			18.5	27
1,1-Dichloroethene	0.00500	U	0.00558	0.00471	112	94.2	1	11.0-160			16.9	29
cis-1,2-Dichloroethene	0.00500	U	0.00508	0.00445	102	89.0	1	10.0-160			13.2	27
trans-1,2-Dichloroethene	0.00500	U	0.00497	0.00432	99.4	86.4	1	17.0-153			14.0	27
1,2-Dichloropropane	0.00500	U	0.00570	0.00473	114	94.6	1	30.0-156			18.6	27
cis-1,3-Dichloropropene	0.00500	U	0.00533	0.00468	107	93.6	1	34.0-149			13.0	28
trans-1,3-Dichloropropene	0.00500	U	0.00552	0.00468	110	93.6	1	32.0-149			16.5	28
Ethylbenzene	0.00500	U	0.00561	0.00472	112	94.4	1	30.0-155			17.2	27
Hexachloro-1,3-butadiene	0.00500	U	0.00710	0.00590	142	118	1	20.0-154			18.5	34
2-Hexanone	0.0250	U	0.0303	0.0268	121	107	1	21.0-160			12.3	29
Isopropylbenzene	0.00500	U	0.00625	0.00520	125	104	1	28.0-157			18.3	27
p-Isopropyltoluene	0.00500	U	0.00635	0.00545	127	109	1	30.0-154			15.3	29
2-Butanone (MEK)	0.0250	U	0.0307	0.0300	123	120	1	10.0-160			2.31	32
Methylene Chloride	0.00500	U	0.00475	0.00446	95.0	89.2	1	23.0-144			6.30	28
4-Methyl-2-pentanone (MIBK)	0.0250	U	0.0290	0.0254	116	102	1	29.0-160			13.2	29
Methyl tert-butyl ether	0.00500	U	0.00521	0.00457	104	91.4	1	28.0-150			13.1	29
Naphthalene	0.00500	U	0.00298	0.00251	59.6	50.2	1	12.0-156			17.1	35
n-Propylbenzene	0.00500	U	0.00541	0.00459	108	91.8	1	31.0-154			16.4	28
Styrene	0.00500	U	0.00572	0.00499	114	99.8	1	33.0-155			13.6	28
1,1,2,2-Tetrachloroethane	0.00500	U	0.00477	0.00425	95.4	85.0	1	33.0-150			11.5	28
Tetrachloroethene	0.00500	U	0.00613	0.00512	123	102	1	10.0-160			18.0	27
Toluene	0.00500	U	0.00502	0.00440	100	88.0	1	26.0-154			13.2	28
1,1,1-Trichloroethane	0.00500	U	0.00624	0.00520	125	104	1	23.0-160			18.2	28
1,1,2-Trichloroethane	0.00500	U	0.00566	0.00491	113	98.2	1	35.0-147			14.2	27
Trichloroethene	0.00500	U	0.00569	0.00482	114	96.4	1	10.0-160			16.6	25
1,2,4-Trimethylbenzene	0.00500	U	0.00583	0.00503	117	101	1	26.0-154			14.7	27
1,3,5-Trimethylbenzene	0.00500	U	0.00564	0.00485	113	97.0	1	28.0-153			15.1	27
Vinyl chloride	0.00500	U	0.00517	0.00447	103	89.4	1	10.0-160			14.5	27
Xylenes, Total	0.0150	U	0.0162	0.0138	108	92.0	1	29.0-154			16.0	28
(S) Toluene-d8					*97.2*	*101*		*80.0-120*				
(S) 4-Bromofluorobenzene					*101*	*103*		*77.0-126*				

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/20/21 01:54 • (MS) R3710650-3 09/20/21 06:43 • (MSD) R3710650-4 09/20/21 07:02

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) 1,2-Dichloroethane-d4					*118*	*116*		*70.0-130*				

Method Blank (MB)

(MB) R3708955-1 09/26/21 21:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	*89.5*			*31.0-160*

Laboratory Control Sample (LCS)

(LCS) R3708955-2 09/26/21 21:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	1.50	1.43	95.3	50.0-150	
(S) o-Terphenyl			*121*	*31.0-160*	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/27/21 00:41 • (MS) R3708955-3 09/27/21 01:06 • (MSD) R3708955-4 09/27/21 01:32

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.43	0.0765	1.34	1.32	88.4	87.0	1	50.0-150			1.50	20
(S) o-Terphenyl					*101*	*102*		*31.0-160*				

Received by OCD: 4/18/2022 4:17:12 PM

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

L1404888-02,04,05,06,10

Method Blank (MB)

(MB) R3707329-2 09/22/21 09:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

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Method Blank (MB)

(MB) R3707329-2 09/22/21 09:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*63.2*			*10.0-127*
(S) 2-Fluorobiphenyl	*69.9*			*10.0-130*
(S) p-Terphenyl-d14	*62.7*			*10.0-128*
(S) Phenol-d5	*27.0*			*10.0-120*
(S) 2-Fluorophenol	*42.3*			*10.0-120*
(S) 2,4,6-Tribromophenol	*63.0*			*10.0-155*

Received by OCD: 4/18/2022 4:17:12 PM

Laboratory Control Sample (LCS)

(LCS) R3707329-1 09/22/21 08:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0500	0.0361	72.2	41.0-120	
Acenaphthylene	0.0500	0.0394	78.8	43.0-120	
Acetophenone	0.0500	0.0419	83.8	29.0-120	
Anthracene	0.0500	0.0379	75.8	45.0-120	
Atrazine	0.0500	0.0548	110	39.0-141	
Benzaldehyde	0.0500	0.0921	184	10.0-160	J4
Benzo(a)anthracene	0.0500	0.0391	78.2	47.0-120	
Benzo(b)fluoranthene	0.0500	0.0388	77.6	46.0-120	
Benzo(k)fluoranthene	0.0500	0.0396	79.2	46.0-120	
Benzo(g,h,i)perylene	0.0500	0.0389	77.8	48.0-121	
Benzo(a)pyrene	0.0500	0.0398	79.6	47.0-120	
Biphenyl	0.0500	0.0357	71.4	38.0-120	
Bis(2-chlorethoxy)methane	0.0500	0.0341	68.2	33.0-120	
Bis(2-chloroethyl)ether	0.0500	0.0357	71.4	23.0-120	
2,2-Oxybis(1-Chloropropane)	0.0500	0.0366	73.2	28.0-120	
4-Bromophenyl-phenylether	0.0500	0.0351	70.2	45.0-120	
Caprolactam	0.0500	0.0156	31.2	10.0-120	
Carbazole	0.0500	0.0430	86.0	51.0-122	
4-Chloroaniline	0.0500	0.0272	54.4	25.0-120	
2-Chloronaphthalene	0.0500	0.0356	71.2	37.0-120	
4-Chlorophenyl-phenylether	0.0500	0.0392	78.4	44.0-120	
Chrysene	0.0500	0.0402	80.4	48.0-120	
Dibenz(a,h)anthracene	0.0500	0.0407	81.4	47.0-120	
Dibenzofuran	0.0500	0.0389	77.8	44.0-120	
3,3-Dichlorobenzidine	0.100	0.0789	78.9	44.0-120	
2,4-Dinitrotoluene	0.0500	0.0480	96.0	49.0-124	
2,6-Dinitrotoluene	0.0500	0.0427	85.4	46.0-120	
Fluoranthene	0.0500	0.0442	88.4	51.0-120	
Fluorene	0.0500	0.0396	79.2	47.0-120	
Hexachlorobenzene	0.0500	0.0361	72.2	44.0-120	
Hexachloro-1,3-butadiene	0.0500	0.0315	63.0	19.0-120	
Hexachlorocyclopentadiene	0.0500	0.0271	54.2	15.0-120	
Hexachloroethane	0.0500	0.0354	70.8	15.0-120	
Indeno(1,2,3-cd)pyrene	0.0500	0.0400	80.0	49.0-122	
Isophorone	0.0500	0.0361	72.2	36.0-120	
1-Methylnaphthalene	0.0500	0.0357	71.4	33.0-120	
2-Methylnaphthalene	0.0500	0.0334	66.8	33.0-120	
Naphthalene	0.0500	0.0331	66.2	27.0-120	
2-Nitroaniline	0.0500	0.0423	84.6	43.0-120	
3-Nitroaniline	0.0500	0.0407	81.4	38.0-120	

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Received by OCD: 4/18/2022 4:17:12 PM

Laboratory Control Sample (LCS)

(LCS) R3707329-1 09/22/21 08:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Nitroaniline	0.0500	0.0512	102	18.0-160	
Nitrobenzene	0.0500	0.0342	68.4	27.0-120	
n-Nitrosodiphenylamine	0.0500	0.0314	62.8	47.0-120	
n-Nitrosodi-n-propylamine	0.0500	0.0393	78.6	31.0-120	
Phenanthrene	0.0500	0.0380	76.0	46.0-120	
Benzylbutyl phthalate	0.0500	0.0414	82.8	43.0-121	
Bis(2-ethylhexyl)phthalate	0.0500	0.0423	84.6	43.0-122	
Di-n-butyl phthalate	0.0500	0.0472	94.4	49.0-121	
Diethyl phthalate	0.0500	0.0453	90.6	48.0-122	
Dimethyl phthalate	0.0500	0.0419	83.8	48.0-120	
Di-n-octyl phthalate	0.0500	0.0401	80.2	42.0-125	
Pyrene	0.0500	0.0362	72.4	47.0-120	
1,2,4-Trichlorobenzene	0.0500	0.0324	64.8	24.0-120	
4-Chloro-3-methylphenol	0.0500	0.0371	74.2	40.0-120	
2-Chlorophenol	0.0500	0.0354	70.8	25.0-120	
2-Methylphenol	0.0500	0.0322	64.4	28.0-120	
3&4-Methyl Phenol	0.0500	0.0347	69.4	31.0-120	
2,4-Dichlorophenol	0.0500	0.0343	68.6	36.0-120	
2,4-Dimethylphenol	0.0500	0.0333	66.6	33.0-120	
4,6-Dinitro-2-methylphenol	0.0500	0.0512	102	38.0-138	
2,4-Dinitrophenol	0.0500	0.0542	108	10.0-120	
2-Nitrophenol	0.0500	0.0353	70.6	31.0-120	
4-Nitrophenol	0.0500	0.0228	45.6	10.0-120	
Pentachlorophenol	0.0500	0.0440	88.0	23.0-120	
Phenol	0.0500	0.0162	32.4	10.0-120	
2,4,5-Trichlorophenol	0.0500	0.0411	82.2	44.0-120	
2,4,6-Trichlorophenol	0.0500	0.0338	67.6	42.0-120	
(S) Nitrobenzene-d5			*55.0*	*10.0-127*	
(S) 2-Fluorobiphenyl			*72.7*	*10.0-130*	
(S) p-Terphenyl-d14			*68.5*	*10.0-128*	
(S) Phenol-d5			*31.0*	*10.0-120*	
(S) 2-Fluorophenol			*45.2*	*10.0-120*	
(S) 2,4,6-Tribromophenol			*76.0*	*10.0-155*	

Released to Imaging: 7/20/2022 10:39:48 AM

L1406169-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1406169-02 09/22/21 09:49 • (MS) R3707329-3 09/22/21 10:10 • (MSD) R3707329-4 09/22/21 10:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	0.00251	0.0281	0.0323	51.2	59.6	1	28.0-120			13.9	25
Acenaphthylene	0.0500	U	0.0284	0.0317	56.8	63.4	1	31.0-121			11.0	25
Acetophenone	0.0500	U	0.0325	0.0362	65.0	72.4	1	20.0-120			10.8	35
Anthracene	0.0500	U	0.0291	0.0307	58.2	61.4	1	36.0-120			5.35	23
Atrazine	0.0500	U	0.0400	0.0424	80.0	84.8	1	39.0-130			5.83	23
Benzaldehyde	0.0500	U	0.0626	0.0675	125	135	1	10.0-160			7.53	40
Benzo(a)anthracene	0.0500	U	0.0290	0.0311	58.0	62.2	1	39.0-120			6.99	23
Benzo(b)fluoranthene	0.0500	U	0.0281	0.0304	56.2	60.8	1	37.0-120			7.86	23
Benzo(k)fluoranthene	0.0500	U	0.0287	0.0303	57.4	60.6	1	37.0-120			5.42	26
Benzo(g,h,i)perylene	0.0500	U	0.0276	0.0286	55.2	57.2	1	37.0-123			3.56	25
Benzo(a)pyrene	0.0500	0.0000947	0.0293	0.0311	58.4	62.0	1	37.0-120			5.96	24
Biphenyl	0.0500	U	0.0255	0.0288	51.0	57.6	1	29.0-120			12.2	33
Bis(2-chlorethoxy)methane	0.0500	U	0.0266	0.0297	53.2	59.4	1	17.0-120			11.0	31
Bis(2-chloroethyl)ether	0.0500	U	0.0261	0.0288	52.2	57.6	1	14.0-120			9.84	33
2,2-Oxybis(1-Chloropropane)	0.0500	U	0.0260	0.0284	52.0	56.8	1	18.0-120			8.82	34
4-Bromophenyl-phenylether	0.0500	U	0.0266	0.0283	53.2	56.6	1	37.0-120			6.19	24
Caprolactam	0.0500	U	0.0174	0.0223	34.8	44.6	1	10.0-120			24.7	40
Carbazole	0.0500	U	0.0344	0.0354	68.8	70.8	1	38.0-127			2.87	21
4-Chloroaniline	0.0500	U	0.0242	0.0305	48.4	61.0	1	10.0-120			23.0	31
2-Chloronaphthalene	0.0500	U	0.0252	0.0283	50.4	56.6	1	29.0-120			11.6	28
4-Chlorophenyl-phenylether	0.0500	U	0.0290	0.0314	58.0	62.8	1	36.0-120			7.95	23
Chrysene	0.0500	U	0.0295	0.0314	59.0	62.8	1	38.0-120			6.24	23
Dibenz(a,h)anthracene	0.0500	0.0000829	0.0285	0.0299	56.8	59.6	1	36.0-121			4.79	24
Dibenzofuran	0.0500	U	0.0288	0.0316	57.6	63.2	1	32.0-120			9.27	26
3,3-Dichlorobenzidine	0.100	U	0.00854	0.0104	8.54	10.4	1	10.0-134	J6		19.6	30
2,4-Dinitrotoluene	0.0500	U	0.0396	0.0428	79.2	85.6	1	39.0-125			7.77	25
2,6-Dinitrotoluene	0.0500	U	0.0331	0.0353	66.2	70.6	1	36.0-120			6.43	27
Fluoranthene	0.0500	U	0.0339	0.0337	67.8	67.4	1	41.0-121			0.592	22
Fluorene	0.0500	0.00113	0.0299	0.0331	57.5	63.9	1	37.0-120			10.2	24
Hexachlorobenzene	0.0500	U	0.0259	0.0280	51.8	56.0	1	35.0-122			7.79	24
Hexachloro-1,3-butadiene	0.0500	U	0.0222	0.0252	44.4	50.4	1	12.0-120			12.7	34
Hexachlorocyclopentadiene	0.0500	U	0.0191	0.0221	38.2	44.2	1	10.0-120			14.6	33
Hexachloroethane	0.0500	U	0.0327	0.0372	65.4	74.4	1	10.0-120			12.9	40
Indeno(1,2,3-cd)pyrene	0.0500	U	0.0285	0.0295	57.0	59.0	1	38.0-125			3.45	24
Isophorone	0.0500	U	0.0283	0.0317	56.6	63.4	1	21.0-120			11.3	27
1-Methylnaphthalene	0.0500	U	0.0256	0.0294	51.2	58.8	1	11.0-120			13.8	27
2-Methylnaphthalene	0.0500	U	0.0245	0.0279	49.0	55.8	1	17.0-120			13.0	28
Naphthalene	0.0500	0.000269	0.0243	0.0282	48.1	55.9	1	10.0-120			14.9	31
2-Nitroaniline	0.0500	U	0.0340	0.0379	68.0	75.8	1	33.0-120			10.8	27
3-Nitroaniline	0.0500	U	0.0278	0.0336	55.6	67.2	1	20.0-120			18.9	27

L1406169-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1406169-02 09/22/21 09:49 • (MS) R3707329-3 09/22/21 10:10 • (MSD) R3707329-4 09/22/21 10:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0500	U	0.0363	0.0413	72.6	82.6	1	10.0-160			12.9	26
Nitrobenzene	0.0500	U	0.0254	0.0297	50.8	59.4	1	12.0-120			15.6	30
n-Nitrosodiphenylamine	0.0500	U	0.0317	0.0340	63.4	68.0	1	37.0-120			7.00	24
n-Nitrosodi-n-propylamine	0.0500	U	0.0301	0.0328	60.2	65.6	1	16.0-120			8.59	30
Phenanthrene	0.0500	U	0.0286	0.0303	57.2	60.6	1	33.0-120			5.77	22
Benzylbutyl phthalate	0.0500	U	0.0332	0.0350	66.4	70.0	1	34.0-126			5.28	24
Bis(2-ethylhexyl)phthalate	0.0500	U	0.0312	0.0336	62.4	67.2	1	33.0-126			7.41	25
Di-n-butyl phthalate	0.0500	U	0.0366	0.0374	73.2	74.8	1	35.0-128			2.16	23
Diethyl phthalate	0.0500	U	0.0344	0.0365	68.8	73.0	1	39.0-125			5.92	24
Dimethyl phthalate	0.0500	U	0.0321	0.0353	64.2	70.6	1	37.0-120			9.50	24
Di-n-octyl phthalate	0.0500	U	0.0307	0.0326	61.4	65.2	1	25.0-135			6.00	26
Pyrene	0.0500	U	0.0274	0.0295	54.8	59.0	1	39.0-120			7.38	22
1,2,4-Trichlorobenzene	0.0500	U	0.0232	0.0262	46.4	52.4	1	15.0-120			12.1	31
4-Chloro-3-methylphenol	0.0500	U	0.0296	0.0326	59.2	65.2	1	26.0-120			9.65	27
2-Chlorophenol	0.0500	U	0.0247	0.0277	49.4	55.4	1	18.0-120			11.5	34
2-Methylphenol	0.0500	U	0.0238	0.0265	47.6	53.0	1	10.0-120			10.7	30
3&4-Methyl Phenol	0.0500	0.00210	0.0279	0.0303	51.6	56.4	1	10.0-120			8.25	36
2,4-Dichlorophenol	0.0500	U	0.0261	0.0293	52.2	58.6	1	19.0-120			11.6	27
2,4-Dimethylphenol	0.0500	U	0.0268	0.0293	53.6	58.6	1	15.0-120			8.91	28
4,6-Dinitro-2-methylphenol	0.0500	U	0.0406	0.0433	81.2	86.6	1	10.0-144			6.44	39
2,4-Dinitrophenol	0.0500	U	0.0418	0.0459	83.6	91.8	1	10.0-120			9.35	40
2-Nitrophenol	0.0500	U	0.0268	0.0302	53.6	60.4	1	20.0-120			11.9	30
4-Nitrophenol	0.0500	U	0.0193	0.0213	38.6	42.6	1	10.0-120			9.85	40
Pentachlorophenol	0.0500	U	0.0384	0.0402	76.8	80.4	1	10.0-128			4.58	37
Phenol	0.0500	U	0.0121	0.0136	24.2	27.2	1	10.0-120			11.7	40
2,4,5-Trichlorophenol	0.0500	U	0.0314	0.0346	62.8	69.2	1	33.0-120			9.70	31
2,4,6-Trichlorophenol	0.0500	U	0.0264	0.0289	52.8	57.8	1	26.0-120			9.04	31
(S) Nitrobenzene-d5					*41.4*	*46.0*		*10.0-127*				
(S) 2-Fluorobiphenyl					*54.2*	*61.3*		*10.0-130*				
(S) p-Terphenyl-d14					*50.9*	*54.4*		*10.0-128*				
(S) Phenol-d5					*23.2*	*25.1*		*10.0-120*				
(S) 2-Fluorophenol					*32.0*	*34.6*		*10.0-120*				
(S) 2,4,6-Tribromophenol					*63.5*	*65.0*		*10.0-155*				

Method Blank (MB)

(MB) R3708107-3 09/23/21 09:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

Received by OCD: 4/18/2022 4:17:12 PM

Method Blank (MB)

(MB) R3708107-3 09/23/21 09:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*52.0*			*10.0-127*
(S) 2-Fluorobiphenyl	*58.8*			*10.0-130*
(S) p-Terphenyl-d14	*64.4*			*10.0-128*
(S) Phenol-d5	*23.8*			*10.0-120*
(S) 2-Fluorophenol	*32.8*			*10.0-120*
(S) 2,4,6-Tribromophenol	*62.5*			*10.0-155*

Released to Imaging: 7/20/2022 10:39:48 AM

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

(LCS) R3708107-1 09/23/21 09:15 • (LCSD) R3708107-2 09/23/21 09:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	0.0329	0.0339	65.8	67.8	41.0-120			2.99	22
Acenaphthylene	0.0500	0.0354	0.0365	70.8	73.0	43.0-120			3.06	22
Acetophenone	0.0500	0.0350	0.0362	70.0	72.4	29.0-120			3.37	28
Anthracene	0.0500	0.0362	0.0373	72.4	74.6	45.0-120			2.99	20
Atrazine	0.0500	0.0504	0.0523	101	105	39.0-141			3.70	20
Benzaldehyde	0.0500	0.0696	0.0755	139	151	10.0-160			8.13	40
Benzo(a)anthracene	0.0500	0.0360	0.0376	72.0	75.2	47.0-120			4.35	20
Benzo(b)fluoranthene	0.0500	0.0345	0.0370	69.0	74.0	46.0-120			6.99	20
Benzo(k)fluoranthene	0.0500	0.0358	0.0367	71.6	73.4	46.0-120			2.48	21
Benzo(g,h,i)perylene	0.0500	0.0358	0.0381	71.6	76.2	48.0-121			6.22	20
Benzo(a)pyrene	0.0500	0.0362	0.0376	72.4	75.2	47.0-120			3.79	20
Biphenyl	0.0500	0.0317	0.0329	63.4	65.8	38.0-120			3.72	27
Bis(2-chlorethoxy)methane	0.0500	0.0312	0.0327	62.4	65.4	33.0-120			4.69	24
Bis(2-chloroethyl)ether	0.0500	0.0315	0.0305	63.0	61.0	23.0-120			3.23	33
2,2-Oxybis(1-Chloropropane)	0.0500	0.0298	0.0306	59.6	61.2	28.0-120			2.65	31
4-Bromophenyl-phenylether	0.0500	0.0338	0.0353	67.6	70.6	45.0-120			4.34	20
Caprolactam	0.0500	0.0184	0.0196	36.8	39.2	10.0-120			6.32	26
Carbazole	0.0500	0.0402	0.0424	80.4	84.8	51.0-122			5.33	20
4-Chloroaniline	0.0500	0.0271	0.0277	54.2	55.4	25.0-120			2.19	25
2-Chloronaphthalene	0.0500	0.0310	0.0317	62.0	63.4	37.0-120			2.23	25
4-Chlorophenyl-phenylether	0.0500	0.0374	0.0381	74.8	76.2	44.0-120			1.85	20
Chrysene	0.0500	0.0358	0.0386	71.6	77.2	48.0-120			7.53	20
Dibenz(a,h)anthracene	0.0500	0.0375	0.0401	75.0	80.2	47.0-120			6.70	20
Dibenzofuran	0.0500	0.0359	0.0373	71.8	74.6	44.0-120			3.83	22
3,3-Dichlorobenzidine	0.100	0.0829	0.0846	82.9	84.6	44.0-120			2.03	20
2,4-Dinitrotoluene	0.0500	0.0457	0.0491	91.4	98.2	49.0-124			7.17	20
2,6-Dinitrotoluene	0.0500	0.0404	0.0434	80.8	86.8	46.0-120			7.16	21
Fluoranthene	0.0500	0.0408	0.0427	81.6	85.4	51.0-120			4.55	20
Fluorene	0.0500	0.0373	0.0385	74.6	77.0	47.0-120			3.17	20
Hexachlorobenzene	0.0500	0.0336	0.0351	67.2	70.2	44.0-120			4.37	20
Hexachloro-1,3-butadiene	0.0500	0.0244	0.0253	48.8	50.6	19.0-120			3.62	32
Hexachlorocyclopentadiene	0.0500	0.0177	0.0165	35.4	33.0	15.0-120			7.02	31
Hexachloroethane	0.0500	0.0267	0.0275	53.4	55.0	15.0-120			2.95	37
Indeno(1,2,3-cd)pyrene	0.0500	0.0367	0.0391	73.4	78.2	49.0-122			6.33	20
Isophorone	0.0500	0.0335	0.0353	67.0	70.6	36.0-120			5.23	23
1-Methylnaphthalene	0.0500	0.0310	0.0319	62.0	63.8	33.0-120			2.86	24
2-Methylnaphthalene	0.0500	0.0294	0.0302	58.8	60.4	33.0-120			2.68	25
Naphthalene	0.0500	0.0271	0.0280	54.2	56.0	27.0-120			3.27	27
2-Nitroaniline	0.0500	0.0400	0.0425	80.0	85.0	43.0-120			6.06	22
3-Nitroaniline	0.0500	0.0413	0.0424	82.6	84.8	38.0-120			2.63	21

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

(LCS) R3708107-1 09/23/21 09:15 • (LCSD) R3708107-2 09/23/21 09:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0500	0.0478	0.0497	95.6	99.4	18.0-160			3.90	21
Nitrobenzene	0.0500	0.0278	0.0296	55.6	59.2	27.0-120			6.27	29
n-Nitrosodiphenylamine	0.0500	0.0326	0.0339	65.2	67.8	47.0-120			3.91	20
n-Nitrosodi-n-propylamine	0.0500	0.0353	0.0364	70.6	72.8	31.0-120			3.07	28
Phenanthrene	0.0500	0.0350	0.0373	70.0	74.6	46.0-120			6.36	20
Benzylbutyl phthalate	0.0500	0.0389	0.0404	77.8	80.8	43.0-121			3.78	20
Bis(2-ethylhexyl)phthalate	0.0500	0.0407	0.0418	81.4	83.6	43.0-122			2.67	20
Di-n-butyl phthalate	0.0500	0.0435	0.0455	87.0	91.0	49.0-121			4.49	20
Diethyl phthalate	0.0500	0.0422	0.0448	84.4	89.6	48.0-122			5.98	20
Dimethyl phthalate	0.0500	0.0397	0.0416	79.4	83.2	48.0-120			4.67	20
Di-n-octyl phthalate	0.0500	0.0403	0.0412	80.6	82.4	42.0-125			2.21	20
Pyrene	0.0500	0.0321	0.0334	64.2	66.8	47.0-120			3.97	20
1,2,4-Trichlorobenzene	0.0500	0.0249	0.0262	49.8	52.4	24.0-120			5.09	29
4-Chloro-3-methylphenol	0.0500	0.0332	0.0317	66.4	63.4	40.0-120			4.62	21
2-Chlorophenol	0.0500	0.0255	0.0248	51.0	49.6	25.0-120			2.78	35
2-Methylphenol	0.0500	0.0252	0.0244	50.4	48.8	28.0-120			3.23	29
3&4-Methyl Phenol	0.0500	0.0280	0.0277	56.0	55.4	31.0-120			1.08	30
2,4-Dichlorophenol	0.0500	0.0289	0.0267	57.8	53.4	36.0-120			7.91	26
2,4-Dimethylphenol	0.0500	0.0291	0.0280	58.2	56.0	33.0-120			3.85	26
4,6-Dinitro-2-methylphenol	0.0500	0.0473	0.0481	94.6	96.2	38.0-138			1.68	25
2,4-Dinitrophenol	0.0500	0.0492	0.0482	98.4	96.4	10.0-120			2.05	39
2-Nitrophenol	0.0500	0.0283	0.0287	56.6	57.4	31.0-120			1.40	29
4-Nitrophenol	0.0500	0.0209	0.0219	41.8	43.8	10.0-120			4.67	33
Pentachlorophenol	0.0500	0.0408	0.0416	81.6	83.2	23.0-120			1.94	25
Phenol	0.0500	0.0133	0.0141	26.6	28.2	10.0-120			5.84	36
2,4,5-Trichlorophenol	0.0500	0.0382	0.0361	76.4	72.2	44.0-120			5.65	22
2,4,6-Trichlorophenol	0.0500	0.0310	0.0295	62.0	59.0	42.0-120			4.96	23
(S) Nitrobenzene-d5				*45.1*	*47.7*	*10.0-127*				
(S) 2-Fluorobiphenyl				*64.9*	*67.0*	*10.0-130*				
(S) p-Terphenyl-d14				*60.7*	*63.8*	*10.0-128*				
(S) Phenol-d5				*25.6*	*26.8*	*10.0-120*				
(S) 2-Fluorophenol				*34.3*	*34.8*	*10.0-120*				
(S) 2,4,6-Tribromophenol				*70.5*	*74.0*	*10.0-155*				

Method Blank (MB)

(MB) R3708120-2 09/23/21 09:39

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Acetophenone	U		0.000208	0.0100
Anthracene	U		0.0000804	0.00100
Atrazine	U		0.000255	0.0100
Benzaldehyde	U		0.00169	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.000200
Biphenyl	U		0.000790	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
Caprolactam	U		0.000309	0.0100
Carbazole	U		0.000111	0.0100
4-Chloroaniline	U		0.000234	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.000200
Dibenzofuran	U		0.0000970	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
1-Methylnaphthalene	U		0.0000790	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
Naphthalene	U		0.000159	0.00100
2-Nitroaniline	U		0.000102	0.0100
3-Nitroaniline	U		0.0000869	0.0100

Method Blank (MB)

(MB) R3708120-2 09/23/21 09:39

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Nitroaniline	U		0.0000910	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2-Methylphenol	U		0.0000929	0.0100
3&4-Methyl Phenol	U		0.000168	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,5-Trichlorophenol	U		0.000109	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*49.8*			*10.0-127*
(S) 2-Fluorobiphenyl	*51.0*			*10.0-130*
(S) p-Terphenyl-d14	*67.3*			*10.0-128*
(S) Phenol-d5	*24.6*			*10.0-120*
(S) 2-Fluorophenol	*32.0*			*10.0-120*
(S) 2,4,6-Tribromophenol	*61.0*			*10.0-155*

Received by OCD: 4/18/2022 4:17:12 PM

Laboratory Control Sample (LCS)

(LCS) R3708120-1 09/23/21 09:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0500	0.0317	63.4	41.0-120	
Acenaphthylene	0.0500	0.0346	69.2	43.0-120	
Acetophenone	0.0500	0.0315	63.0	29.0-120	
Anthracene	0.0500	0.0371	74.2	45.0-120	
Atrazine	0.0500	0.0377	75.4	39.0-141	
Benzaldehyde	0.0500	0.0660	132	10.0-160	
Benzo(a)anthracene	0.0500	0.0404	80.8	47.0-120	
Benzo(b)fluoranthene	0.0500	0.0364	72.8	46.0-120	
Benzo(k)fluoranthene	0.0500	0.0351	70.2	46.0-120	
Benzo(g,h,i)perylene	0.0500	0.0372	74.4	48.0-121	
Benzo(a)pyrene	0.0500	0.0363	72.6	47.0-120	
Biphenyl	0.0500	0.0319	63.8	38.0-120	
Bis(2-chlorethoxy)methane	0.0500	0.0286	57.2	33.0-120	
Bis(2-chloroethyl)ether	0.0500	0.0292	58.4	23.0-120	
2,2-Oxybis(1-Chloropropane)	0.0500	0.0271	54.2	28.0-120	
4-Bromophenyl-phenylether	0.0500	0.0349	69.8	45.0-120	
Caprolactam	0.0500	0.0142	28.4	10.0-120	
Carbazole	0.0500	0.0404	80.8	51.0-122	
4-Chloroaniline	0.0500	0.0249	49.8	25.0-120	
2-Chloronaphthalene	0.0500	0.0307	61.4	37.0-120	
4-Chlorophenyl-phenylether	0.0500	0.0338	67.6	44.0-120	
Chrysene	0.0500	0.0372	74.4	48.0-120	
Dibenz(a,h)anthracene	0.0500	0.0373	74.6	47.0-120	
Dibenzofuran	0.0500	0.0336	67.2	44.0-120	
3,3-Dichlorobenzidine	0.100	0.0780	78.0	44.0-120	
2,4-Dinitrotoluene	0.0500	0.0398	79.6	49.0-124	
2,6-Dinitrotoluene	0.0500	0.0362	72.4	46.0-120	
Fluoranthene	0.0500	0.0390	78.0	51.0-120	
Fluorene	0.0500	0.0331	66.2	47.0-120	
Hexachlorobenzene	0.0500	0.0348	69.6	44.0-120	
Hexachloro-1,3-butadiene	0.0500	0.0233	46.6	19.0-120	
Hexachlorocyclopentadiene	0.0500	0.0175	35.0	15.0-120	
Hexachloroethane	0.0500	0.0252	50.4	15.0-120	
Indeno(1,2,3-cd)pyrene	0.0500	0.0387	77.4	49.0-122	
Isophorone	0.0500	0.0305	61.0	36.0-120	
1-Methylnaphthalene	0.0500	0.0275	55.0	33.0-120	
2-Methylnaphthalene	0.0500	0.0267	53.4	33.0-120	
Naphthalene	0.0500	0.0248	49.6	27.0-120	
2-Nitroaniline	0.0500	0.0405	81.0	43.0-120	
3-Nitroaniline	0.0500	0.0360	72.0	38.0-120	

Released to Imaging: 7/20/2022 10:39:48 AM

Laboratory Control Sample (LCS)

(LCS) R3708120-1 09/23/21 09:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Nitroaniline	0.0500	0.0401	80.2	18.0-160	
Nitrobenzene	0.0500	0.0266	53.2	27.0-120	
n-Nitrosodiphenylamine	0.0500	0.0350	70.0	47.0-120	
n-Nitrosodi-n-propylamine	0.0500	0.0310	62.0	31.0-120	
Phenanthrene	0.0500	0.0409	81.8	46.0-120	
Benzylbutyl phthalate	0.0500	0.0407	81.4	43.0-121	
Bis(2-ethylhexyl)phthalate	0.0500	0.0360	72.0	43.0-122	
Di-n-butyl phthalate	0.0500	0.0411	82.2	49.0-121	
Diethyl phthalate	0.0500	0.0378	75.6	48.0-122	
Dimethyl phthalate	0.0500	0.0370	74.0	48.0-120	
Di-n-octyl phthalate	0.0500	0.0389	77.8	42.0-125	
Pyrene	0.0500	0.0370	74.0	47.0-120	
1,2,4-Trichlorobenzene	0.0500	0.0248	49.6	24.0-120	
4-Chloro-3-methylphenol	0.0500	0.0301	60.2	40.0-120	
2-Chlorophenol	0.0500	0.0250	50.0	25.0-120	
2-Methylphenol	0.0500	0.0244	48.8	28.0-120	
3&4-Methyl Phenol	0.0500	0.0270	54.0	31.0-120	
2,4-Dichlorophenol	0.0500	0.0274	54.8	36.0-120	
2,4-Dimethylphenol	0.0500	0.0276	55.2	33.0-120	
4,6-Dinitro-2-methylphenol	0.0500	0.0431	86.2	38.0-138	
2,4-Dinitrophenol	0.0500	0.0374	74.8	10.0-120	
2-Nitrophenol	0.0500	0.0290	58.0	31.0-120	
4-Nitrophenol	0.0500	0.0168	33.6	10.0-120	
Pentachlorophenol	0.0500	0.0309	61.8	23.0-120	
Phenol	0.0500	0.0147	29.4	10.0-120	
2,4,5-Trichlorophenol	0.0500	0.0354	70.8	44.0-120	
2,4,6-Trichlorophenol	0.0500	0.0333	66.6	42.0-120	
(S) Nitrobenzene-d5			*52.8*	*10.0-127*	
(S) 2-Fluorobiphenyl			*65.3*	*10.0-130*	
(S) p-Terphenyl-d14			*66.0*	*10.0-128*	
(S) Phenol-d5			*26.4*	*10.0-120*	
(S) 2-Fluorophenol			*34.4*	*10.0-120*	
(S) 2,4,6-Tribromophenol			*74.5*	*10.0-155*	

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/23/21 13:13 • (MS) R3708120-3 09/23/21 13:34 • (MSD) R3708120-4 09/23/21 13:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	U	0.0229	0.0315	45.8	63.0	1	28.0-120		J3	31.6	25
Acenaphthylene	0.0500	U	0.0251	0.0342	50.2	68.4	1	31.0-121		J3	30.7	25
Acetophenone	0.0500	U	0.0229	0.0311	45.8	62.2	1	20.0-120			30.4	35
Anthracene	0.0500	U	0.0263	0.0370	52.6	74.0	1	36.0-120		J3	33.8	23
Atrazine	0.0500	U	0.0277	0.0395	55.4	79.0	1	39.0-130		J3	35.1	23
Benzaldehyde	0.0500	U	0.0487	0.0654	97.4	131	1	10.0-160			29.3	40
Benzo(a)anthracene	0.0500	U	0.0308	0.0416	61.6	83.2	1	39.0-120		J3	29.8	23
Benzo(b)fluoranthene	0.0500	U	0.0288	0.0407	57.6	81.4	1	37.0-120		J3	34.2	23
Benzo(k)fluoranthene	0.0500	U	0.0283	0.0397	56.6	79.4	1	37.0-120		J3	33.5	26
Benzo(g,h,i)perylene	0.0500	U	0.0262	0.0352	52.4	70.4	1	37.0-123		J3	29.3	25
Benzo(a)pyrene	0.0500	U	0.0280	0.0392	56.0	78.4	1	37.0-120		J3	33.3	24
Biphenyl	0.0500	U	0.0233	0.0320	46.6	64.0	1	29.0-120			31.5	33
Bis(2-chlorethoxy)methane	0.0500	U	0.0215	0.0291	43.0	58.2	1	17.0-120			30.0	31
Bis(2-chloroethyl)ether	0.0500	U	0.0217	0.0243	43.4	48.6	1	14.0-120			11.3	33
2,2-Oxybis(1-Chloropropane)	0.0500	U	0.0196	0.0268	39.2	53.6	1	18.0-120			31.0	34
4-Bromophenyl-phenylether	0.0500	U	0.0255	0.0352	51.0	70.4	1	37.0-120		J3	32.0	24
Caprolactam	0.0500	U	0.0154	0.0162	30.8	32.4	1	10.0-120			5.06	40
Carbazole	0.0500	U	0.0280	0.0416	56.0	83.2	1	38.0-127		J3	39.1	21
4-Chloroaniline	0.0500	U	0.0255	0.0297	51.0	59.4	1	10.0-120			15.2	31
2-Chloronaphthalene	0.0500	U	0.0227	0.0306	45.4	61.2	1	29.0-120		J3	29.6	28
4-Chlorophenyl-phenylether	0.0500	U	0.0247	0.0338	49.4	67.6	1	36.0-120		J3	31.1	23
Chrysene	0.0500	U	0.0282	0.0384	56.4	76.8	1	38.0-120		J3	30.6	23
Dibenz(a,h)anthracene	0.0500	U	0.0259	0.0359	51.8	71.8	1	36.0-121		J3	32.4	24
Dibenzofuran	0.0500	U	0.0249	0.0335	49.8	67.0	1	32.0-120		J3	29.5	26
3,3-Dichlorobenzidine	0.100	U	0.0540	0.0781	54.0	78.1	1	10.0-134		J3	36.5	30
2,4-Dinitrotoluene	0.0500	U	0.0267	0.0401	53.4	80.2	1	39.0-125		J3	40.1	25
2,6-Dinitrotoluene	0.0500	U	0.0249	0.0360	49.8	72.0	1	36.0-120		J3	36.5	27
Fluoranthene	0.0500	U	0.0286	0.0405	57.2	81.0	1	41.0-121		J3	34.4	22
Fluorene	0.0500	U	0.0242	0.0335	48.4	67.0	1	37.0-120		J3	32.2	24
Hexachlorobenzene	0.0500	U	0.0254	0.0351	50.8	70.2	1	35.0-122		J3	32.1	24
Hexachloro-1,3-butadiene	0.0500	U	0.0179	0.0241	35.8	48.2	1	12.0-120			29.5	34
Hexachlorocyclopentadiene	0.0500	U	0.0128	0.0179	25.6	35.8	1	10.0-120		J3	33.2	33
Hexachloroethane	0.0500	U	0.0178	0.0256	35.6	51.2	1	10.0-120			35.9	40
Indeno(1,2,3-cd)pyrene	0.0500	U	0.0268	0.0369	53.6	73.8	1	38.0-125		J3	31.7	24
Isophorone	0.0500	U	0.0225	0.0311	45.0	62.2	1	21.0-120		J3	32.1	27
1-Methylnaphthalene	0.0500	U	0.0213	0.0279	42.6	55.8	1	11.0-120			26.8	27
2-Methylnaphthalene	0.0500	U	0.0200	0.0268	40.0	53.6	1	17.0-120		J3	29.1	28
Naphthalene	0.0500	U	0.0187	0.0247	37.4	49.4	1	10.0-120			27.6	31
2-Nitroaniline	0.0500	U	0.0288	0.0400	57.6	80.0	1	33.0-120		J3	32.6	27
3-Nitroaniline	0.0500	U	0.0306	0.0374	61.2	74.8	1	20.0-120			20.0	27

L1404888-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404888-30 09/23/21 13:13 • (MS) R3708120-3 09/23/21 13:34 • (MSD) R3708120-4 09/23/21 13:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	0.0500	U	0.0311	0.0420	62.2	84.0	1	10.0-160		J3	29.8	26
Nitrobenzene	0.0500	U	0.0201	0.0274	40.2	54.8	1	12.0-120		J3	30.7	30
n-Nitrosodiphenylamine	0.0500	U	0.0255	0.0351	51.0	70.2	1	37.0-120		J3	31.7	24
n-Nitrosodi-n-propylamine	0.0500	U	0.0219	0.0304	43.8	60.8	1	16.0-120		J3	32.5	30
Phenanthrene	0.0500	U	0.0292	0.0407	58.4	81.4	1	33.0-120		J3	32.9	22
Benzylbutyl phthalate	0.0500	U	0.0309	0.0438	61.8	87.6	1	34.0-126		J3	34.5	24
Bis(2-ethylhexyl)phthalate	0.0500	U	0.0289	0.0387	57.8	77.4	1	33.0-126		J3	29.0	25
Di-n-butyl phthalate	0.0500	U	0.0296	0.0421	59.2	84.2	1	35.0-128		J3	34.9	23
Diethyl phthalate	0.0500	U	0.0256	0.0375	51.2	75.0	1	39.0-125		J3	37.7	24
Dimethyl phthalate	0.0500	U	0.0251	0.0366	50.2	73.2	1	37.0-120		J3	37.3	24
Di-n-octyl phthalate	0.0500	U	0.0312	0.0421	62.4	84.2	1	25.0-135		J3	29.7	26
Pyrene	0.0500	U	0.0275	0.0383	55.0	76.6	1	39.0-120		J3	32.8	22
1,2,4-Trichlorobenzene	0.0500	U	0.0185	0.0255	37.0	51.0	1	15.0-120		J3	31.8	31
4-Chloro-3-methylphenol	0.0500	U	0.0247	0.0319	49.4	63.8	1	26.0-120			25.4	27
2-Chlorophenol	0.0500	U	0.0205	0.0266	41.0	53.2	1	18.0-120			25.9	34
2-Methylphenol	0.0500	U	0.0211	0.0259	42.2	51.8	1	10.0-120			20.4	30
3&4-Methyl Phenol	0.0500	U	0.0230	0.0282	46.0	56.4	1	10.0-120			20.3	36
2,4-Dichlorophenol	0.0500	U	0.0219	0.0292	43.8	58.4	1	19.0-120		J3	28.6	27
2,4-Dimethylphenol	0.0500	U	0.0230	0.0289	46.0	57.8	1	15.0-120			22.7	28
4,6-Dinitro-2-methylphenol	0.0500	U	0.0283	0.0432	56.6	86.4	1	10.0-144		J3	41.7	39
2,4-Dinitrophenol	0.0500	U	0.0257	0.0392	51.4	78.4	1	10.0-120		J3	41.6	40
2-Nitrophenol	0.0500	U	0.0225	0.0297	45.0	59.4	1	20.0-120			27.6	30
4-Nitrophenol	0.0500	U	0.0156	0.0193	31.2	38.6	1	10.0-120			21.2	40
Pentachlorophenol	0.0500	U	0.0240	0.0365	48.0	73.0	1	10.0-128		J3	41.3	37
Phenol	0.0500	U	0.0156	0.0173	31.2	34.6	1	10.0-120			10.3	40
2,4,5-Trichlorophenol	0.0500	U	0.0257	0.0368	51.4	73.6	1	33.0-120		J3	35.5	31
2,4,6-Trichlorophenol	0.0500	U	0.0244	0.0336	48.8	67.2	1	26.0-120		J3	31.7	31
(S) Nitrobenzene-d5					*41.1*	*55.1*		*10.0-127*				
(S) 2-Fluorobiphenyl					*47.1*	*65.4*		*10.0-130*				
(S) p-Terphenyl-d14					*52.7*	*69.2*		*10.0-128*				
(S) Phenol-d5					*23.2*	*28.7*		*10.0-120*				
(S) 2-Fluorophenol					*29.8*	*36.5*		*10.0-120*				
(S) 2,4,6-Tribromophenol					*54.5*	*81.0*		*10.0-155*				

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
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.
U	Not detected at the Reporting Limit (or MDL where applicable).
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

B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	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 [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

* 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 Analytical.

TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trcsolutions.com

Pres Chk

Report to: **Julie Speer**

Email To: **jspeer@trccompanies.com**

Project Description: **Lovington Lea Refinery**

City/State Collected: **Lovington, NM**

Phone: **512-684-3170**
Fax:

Client Project # **425919.0000.0000.**

Lab Project # **TRCATX-LOVINGTON NAV**

Collected by (print): **Scott Ude/HMI Team**

Site/Facility ID #

P.O. # **165094**

Collected by (signature): Scott Ude

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 5

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 140488

L-041

Acctnum: TRCATX
Template: T114712
Prelogin: P868259
TSR: 526
PB: BF 8/24/21
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs - 40mlAmb-HCl	SVOCs - 100ml Amb NoPres	Total Hg - 250mlHDPE-HNO3	Diss. Metals - LF -250mlHDPE-NoPres	Cl, F, SO4 - 250mlHDPE NoPres	NO2NO3 - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	ALK - 500mlHDPE-NoPres	GRO - 40mlAmb HCl	DRO - 40mlAmb-HCl-BT	Remarks	Sample # (lab only)
MW-1	Grab	GW		9/16/21	800	7	X		X	X	X	X	X					01
MW-2	Grab	GW			1010	9	X	X	X	X	X	X	X					02
MW-3	Grab	GW			1125	2					X	X						03
MW-4	Grab	GW			1205	9	X	X	X	X	X	X	X					04
MW-5	Grab	GW			930	13	X	X	X	X	X	X	X	X	X	X		05
MW-6	Grab	GW			930	9	X	X	X	X	X	X	X					06
MW-8	Grab	GW			815	7	X		X	X	X	X	X					07
MW-9	Grab	GW			855	2					X	X						08
MW-10	Grab	GW			1015	2					X	X						09
MW-11R	Grab	GW			1005	9	X	X	X	X	X	X	X	X				10

0-1.0 - 1.2 - 1.2+0-1.2 - 2.5-0-2.7

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Use 8270TX for SVOCs. 500ml container used when ALK, Anions, and TDS all being analyzed.

pH ____ Temp 26.8

Flow 2607 Other 2629

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking # 516377202630 2652 / 2607 / 2629
516377202610 2673 2884 2651

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Scott Ude	9/16/21	1300	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR
Temp: 2.6+0=2.6 Bottles Received: 3 6 8

If preservation required by Login: Date/Time

Date: 9/17/21 Time: 7:02

Hold: Condition: NCF / OK

#2 2.0-2.2 1.2+0=1.2 3 12.0-3 n 3.4 2.0-2.4 1.0+.0=1.0

TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trcsolutions.com

Pres Chk

Report to: **Julie Speer**

Email To: **jspeer@trccompanies.com**

Project Description: **Lovington Lea Refinery**

City/State Collected: **Lovington, NM**

Phone: **512-684-3170**
Fax:

Client Project # **425919.0000.0000.**

Lab Project # **TRCATX-LOVINGTON NAV**

Collected by (print): **Scott Ude/HMI Team**

Site/Facility ID #

P.O. # **165094**

Collected by (signature): Scott Ude
Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 2 of 5

Pace Analytical® National Center for Testing & Innovation
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 1424888
Table #
Acctnum: TRCATX
Template: T114712
Prelogin: P868259
TSR: 526
PB: BF 8/24/21
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs - 40mlAmb-HCl	SVOCs - 100ml Amb NoPres	Total Hg - 250mlHDPE-HNO3	Diss. Metals - LF -250mlHDPE-NoPres	Cl, F, SO4 - 250mlHDPE NoPres	NO2NO3 - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	ALK - 500mlHDPE-NoPres	GRO - 40mlAmb HCl	DRO - 40mlAmb-HCl-BT	Remarks	Sample # (lab only)
MW-12R2	Grab	GW		9/16/21	940	9	X	X	X	X	X	X	X	X				11
MW-13R	Grab	GW			1015	9	X	X	X	X	X	X	X					12
MW-14R	Grab	GW			1120	9	X	X	X	X	X	X	X					13
MW-15R	Grab	GW			1110	9	X	X	X	X	X	X	X	X				14
MW-16R	Grab	GW			825	9	X	X	X	X	X	X	X					15
MW-17R	Grab	GW			1045	9	X	X	X	X	X	X	X	X			VOC, SVOC, diss & total metals volume collected	16
MW-18R	Grab	GW			905	9	X	X	X	X	X	X	X					17
MW-19R	Grab	GW			910	9	X	X	X	X	X	X	X	X				18
MW-20R	Grab	GW			1000	9	X	X	X	X	X	X	X					19
MW-21	Grab	GW			1200	6		X							X	X		20

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Use 8270TX for SVOCs. 500ml container used when ALK, Anions, and TDS all being analyzed. MW-17R (limited volume available - see note above; complete final 4 analyses if lab determines provided volume supports those analyses

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier _____
Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
Scott Ude	9/16/21	1300		2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.8 °C Bottles Received: 2 6 0 2 a 6 3 6 8	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) K. Faller	Date: 9/17/21 Time: 9:02	Hold: Condition: NCF / OK

TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trcsolutions.com

Report to: **Julie Speer**

Email To: **jspeer@trccompanies.com**

Project Description: **Lovington Lea Refinery**

City/State Collected: **Lovington, NM**

Phone: **512-684-3170**
Fax:

Client Project # **425919.0000.0000.**

Lab Project # **TRCATX-LOVINGTON NAV**

Collected by (print): **Scott Ude/HMI Team**

Site/Facility ID #

P.O. # **165094**

Collected by (signature): Scott Ude
Immediately Packed on Ice N ___ Y ✓

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

Quote #

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 3 of 5

Pace Analytical® National Center for Testing & Innovation
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 140420

Table #

Acctnum: TRCATX
Template: T114712
Prelogin: P868259
TSR: 526
PB: BF 8/24/21
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs - 40mlAmb-HCl	SVOCs - 100ml Amb NoPres	Total Hg - 250mlHDPE-HNO3	Diss. Metals - LF -250mlHDPE-NoPres	Cl, F, SO4 - 250mlHDPE NoPres	NO2NO3 - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	ALK - 500mlHDPE-NoPres	GRO - 40mlAmb HCl	DRO - 40mlAmb-HCl-BT	Remarks	Sample # (lab only)
MW-22	Grab	GW		9/16/21	1040	13	X	X	X	X	X	X	X		X	X		21
MW-23R	Grab	GW			1055	2					X	X	X					22
MW-24R	Grab	GW			1145	9	X	X	X	X	X	X	X	X				23
~~MW-25R~~	~~Grab~~	~~GW~~				9	X	X	X	X	X	X	X	X	not	installed		
MW-26R	Grab	GW			925	2					X	X						24
MW-27	Grab	GW			1020	5	X	X										25
MW-28	Grab	GW			1115	9	X	X	X	X	X	X	X	X				26
MW-29	Grab	GW			1100	9	X	X	X	X	X	X	X					27
MW-30	Grab	GW			900	9	X	X	X	X	X	X	X	X				28
~~MW-31~~	Grab	GW		↓		13	X	X	X	X	X	X	X	X	X	X	LNAPL	/

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Use 8270TX for SVOCs. 500ml container used when ALK, Anions, and TDS all being analyzed.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
Scott Ude	9/16/21	1300		Temp: 2.6+0.2=2.6 °C Bottles Received: 368	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)		
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/17/21 Time: 9:02	Hold: Condition: NCF / OK

TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trcsolutions.com

Pres Chk

Report to: **Julie Speer**

Email To: **jspeer@trccompanies.com**

Project Description: **Lovington Lea Refinery**

City/State Collected: **Lovington, NM**

Phone: **512-684-3170**
Fax:

Client Project # **425919.0000.0000.**

Lab Project # **TRCATX-LOVINGTON NAV**

Collected by (print): **Scott Ude/HMI Team**

Site/Facility ID #

P.O. # **165094**

Collected by (signature): Scott Ude

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs - 40mlAmb-HCl	SVOCs - 100ml Amb NoPres	Total Hg - 250mlHDPE-HNO3	Diss. Metals - LF -250mlHDPE-NoPres	Cl, F, SO4 - 250mlHDPE NoPres	NO2NO3 - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	ALK - 500mlHDPE-NoPres	GRO - 40mlAmb HCl	DRO - 40mlAmb-HCl-BT	Remarks	Sample # (lab only)
MW-32	Grab	GW		9/16/21	850	13	X	X	X	X	X	X	X	X	X	X		29
MW-33	Grab	GW			1000	34	X	X	X	X	X	X	X	X	X	X	MS/MSD	30
WW-NORTH	Grab	GW			1000	13	X	X	X	X	X	X	X	X	X	X		31
WW-SOUTH	Grab	GW			905	13	X	X	X	X	X	X	X	X	X	X		32
WW-EAST	Grab	GW			1055	13	X	X	X	X	X	X	X	X	X	X		33
DUP-01	Grab	GW			900	13	X	X	X	X	X	X	X	X	X	X		34
DUP-02	Grab	GW			1000	13	X	X	X	X	X	X	X	X	X	X		35
DUP-03	Grab	GW			1100	13	X	X	X	X	X	X	X	X	X	X		36
DUP-04	Grab	GW			900	9	X	X	X	X	X	X	X					37
EB-01	Grab	GW			950	13	X	X	X	X	X	X	X	X	X	X		38

Chain of Custody Page 4 of 5

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 148488

Table #

Acctnum: **TRCATX**
Template: **T114712**
Prelogin: **P868259**
TSR: **526**
PB: BC 8/24/21

Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Use 8270TX for SVOCs. 500ml container used when ALK, Anions, and TDS all being analyzed.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	__NP	__Y __N
COC Signed/Accurate:		__Y __N
Bottles arrive intact:		__Y __N
Correct bottles used:		__Y __N
Sufficient volume sent:		__Y __N
If Applicable		
VOA Zero Headspace:		__Y __N
Preservation Correct/Checked:		__Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Scott Ude	9/16/21	1300		2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.0 °C Bottles Received: 2.6 38	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/17/21 Time: 9:02	Hold: / Condition: NCF / OK

TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trcsolutions.com

Pres Chk

Report to: **Julie Speer**

Email To: **jspeer@trccompanies.com**

Project Description: **Lovington Lea Refinery**

City/State Collected: **Lovington, NM**

Phone: **512-684-3170**
Fax:

Client Project # **425919.0000.0000.**

Lab Project # **TRCATX-LOVINGTON NAV**

Collected by (print): **Scott Ude/HMI Team**

Site/Facility ID #

P.O. # **165094**

Collected by (signature): Scott Ude
Immediately Packed on Ice N ___ Y ✓

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

Quote #

Analysis / Container / Preservative

Chain of Custody Page 5 of 5

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 1704888

Table #

Acctnum: **TRCATX**
Template: **T114712**
Prelogin: **P868259**
TSR: **526**
PB: DF 8/24/21
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs - 40mlAmb-HCl	SVOCs - 100ml Amb NoPres	Total Hg - 250mlHDPE-HNO3	Diss. Metals - LF -250mlHDPE-NoPres (Lab Filter)	Cl, F, SO4 - 250mlHDPE NoPres	NO2NO3 - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	ALK - 500mlHDPE-NoPres	GRO - 40mlAmb HCl	DRO - 40mlAmb-HCl-BT	Remarks	Sample # (lab only)
EB-02	Grab	GW		9/16/21	920	9	X	X	X	X	X	X	X	X				39
Trip Blank-01	Grab	GW		↓	—	1	X											40
Trip Blank-02	Grab	GW		↓	—	1	X											41

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Use 8270TX for SVOCs. 500ml container used when ALK, Anions, and TDS all being analyzed.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Scott Ude	9/16/21	1300		HCL	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
				2.6+0=2.6 8	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK
			R. Tolen	9/17/21 9:00	

ANALYTICAL REPORT

November 23, 2021

TRC Solutions - Austin, TX

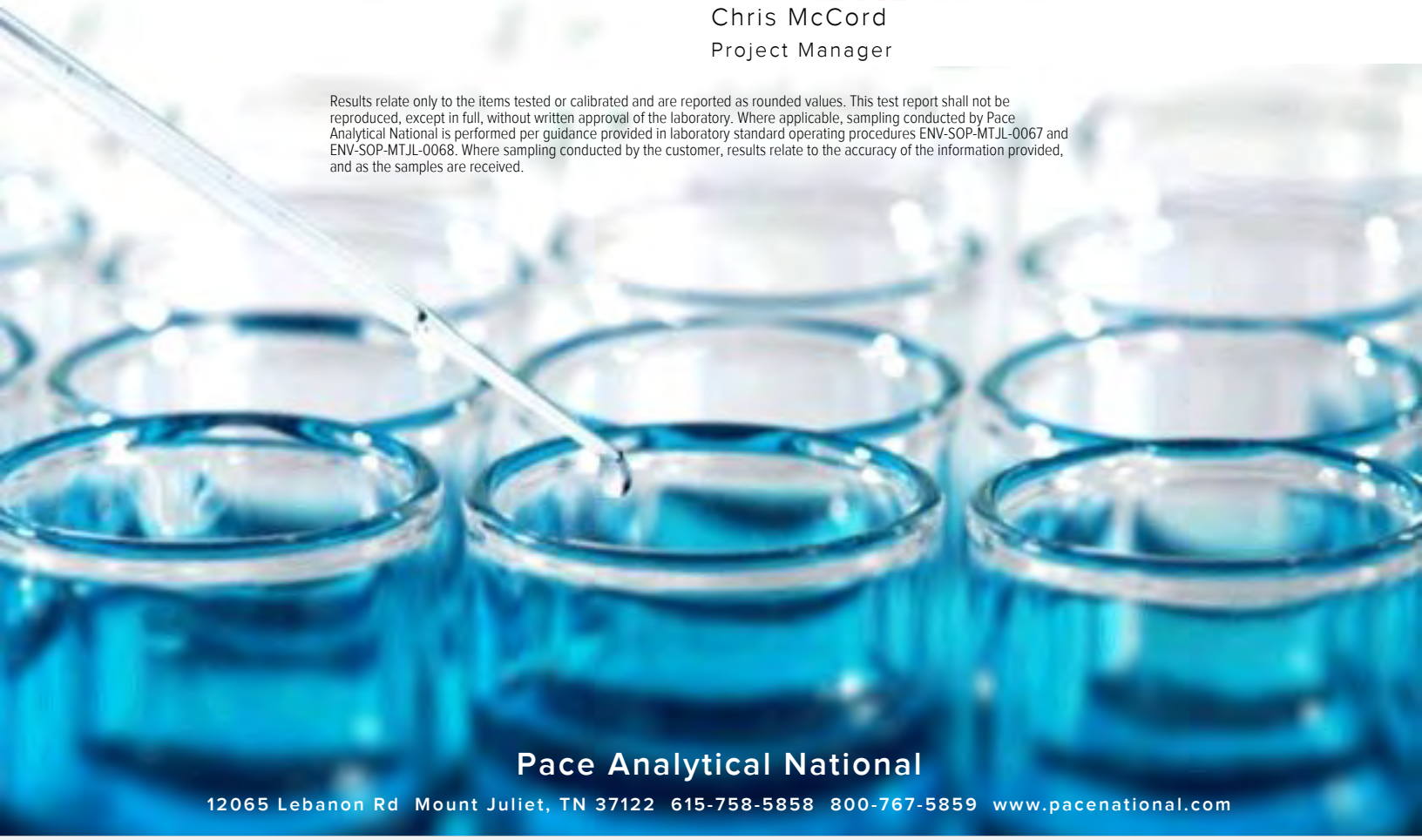
Sample Delivery Group:	L1430167
Samples Received:	11/11/2021
Project Number:	425919.0000.0000.
Description:	Lovington Lea Refinery

Report To: Julie Speer
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Entire Report Reviewed By:

Chris McCord
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.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

WW-EAST L1430167-01 GW

Collected by: Scott Duncan
Collected date/time: 11/10/21 07:55
Received date/time: 11/11/21 14:20

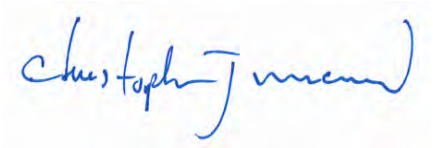
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1774563	1	11/16/21 22:40	11/17/21 22:25	SHG	Mt. Juliet, TN

DUP-01 L1430167-02 GW

Collected by: Scott Duncan
Collected date/time: 11/10/21 08:00
Received date/time: 11/11/21 14:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1774563	1	11/16/21 22:40	11/17/21 22:47	SHG	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. 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.



Chris McCord
Project Manager

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
1-Methylnaphthalene	U		0.0000790	0.00100	1	11/17/2021 22:25	WG1774563
2-Methylnaphthalene	U		0.000117	0.00100	1	11/17/2021 22:25	WG1774563
Naphthalene	U		0.000159	0.00100	1	11/17/2021 22:25	WG1774563
(S) Nitrobenzene-d5	*89.3*			*10.0-150*		*11/17/2021 22:25*	WG1774563
(S) 2-Fluorobiphenyl	*77.1*			*25.0-137*		*11/17/2021 22:25*	WG1774563
(S) p-Terphenyl-d14	*52.9*			*17.0-139*		*11/17/2021 22:25*	WG1774563

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1-Methylnaphthalene	U		0.0000790	0.00100	1	11/17/2021 22:47	WG1774563
2-Methylnaphthalene	U		0.000117	0.00100	1	11/17/2021 22:47	WG1774563
Naphthalene	U		0.000159	0.00100	1	11/17/2021 22:47	WG1774563
(S) Nitrobenzene-d5	*78.4*			*10.0-150*		*11/17/2021 22:47*	WG1774563
(S) 2-Fluorobiphenyl	*72.2*			*25.0-137*		*11/17/2021 22:47*	WG1774563
(S) p-Terphenyl-d14	*59.4*			*17.0-139*		*11/17/2021 22:47*	WG1774563

Method Blank (MB)

(MB) R3732556-1 11/17/21 21:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Naphthalene	U		0.000159	0.00100
2-Methylnaphthalene	U		0.000117	0.00100
1-Methylnaphthalene	U		0.0000790	0.00100
(S) Nitrobenzene-d5	*77.8*			*10.0-150*
(S) 2-Fluorobiphenyl	*70.1*			*25.0-137*
(S) p-Terphenyl-d14	*73.9*			*17.0-139*

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

(LCS) R3732556-2 11/17/21 21:43 • (LCSD) R3732556-3 11/17/21 22:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.0100	0.00825	0.00764	82.5	76.4	38.0-120			7.68	20
2-Methylnaphthalene	0.0100	0.00813	0.00760	81.3	76.0	35.0-120			6.74	25
1-Methylnaphthalene	0.0100	0.00819	0.00732	81.9	73.2	33.0-120			11.2	23
(S) Nitrobenzene-d5				*82.6*	*79.2*	*10.0-150*				
(S) 2-Fluorobiphenyl				*79.2*	*75.3*	*25.0-137*				
(S) p-Terphenyl-d14				*83.1*	*79.8*	*17.0-139*				

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.
U	Not detected at the Reporting Limit (or MDL where applicable).
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.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	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 [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

* 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 Analytical.

Company Name/Address:
TRC Solutions - Austin, TX
505 E. Huntland Dr, Ste 250
Austin, TX 78752

Billing Information:
Accounts Payable
21 Griffin Road North
Windsor, CT 06095

Pres Chk

Report to: **Julie Speer**

Email To: jspeer@trccompanies.com;aeljuri@trccompanie

Project Description: **Lovington Lea Refinery**

City/State Collected: Lovington, NM

Please Circle: PT MT CT ET

Phone: **512-684-3170**

Client Project # **425919.0000.0000.**

Lab Project # **TRCATX-LOVRESAMP**

Collected by (print): Scott Duncan

Site/Facility ID #

P.O. # **165094**

Collected by (signature): Scott

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical®

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 1430167

C245

Acctnum: **TRCATX**
Template: **T198580**
Prelogin: **P885041**
PM: **526 - Chris McCord**
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No of Cntrs	8270PAH 100ml Amb-NoPres	Remarks	Sample # (lab only)
WW-EAST	Grab	GW		11/10/21	755	2	X		-01
DUP-01	Grab	GW		11/10/21	800	2	X		-02

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:8270PAH = Naphthalene, 1-MN, 2-MN

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier _____

Tracking # 5300 4297 5131

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

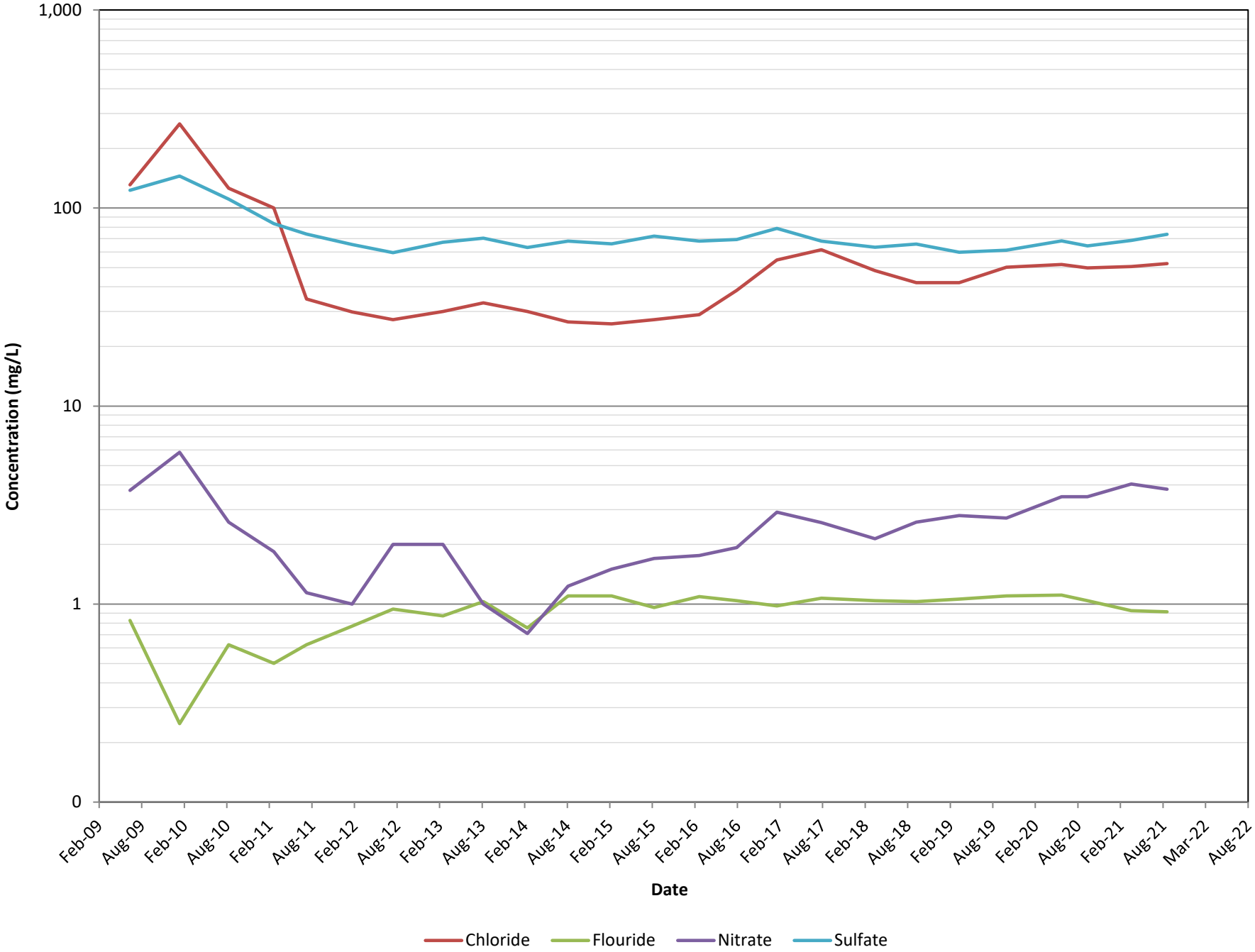
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Scott	11/10/21	1300			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: ACBC 4.6 4.6 Bottles Received: 4	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-11-21 Time: 1420	Hold: Condition: NCF / OK

APPENDIX D

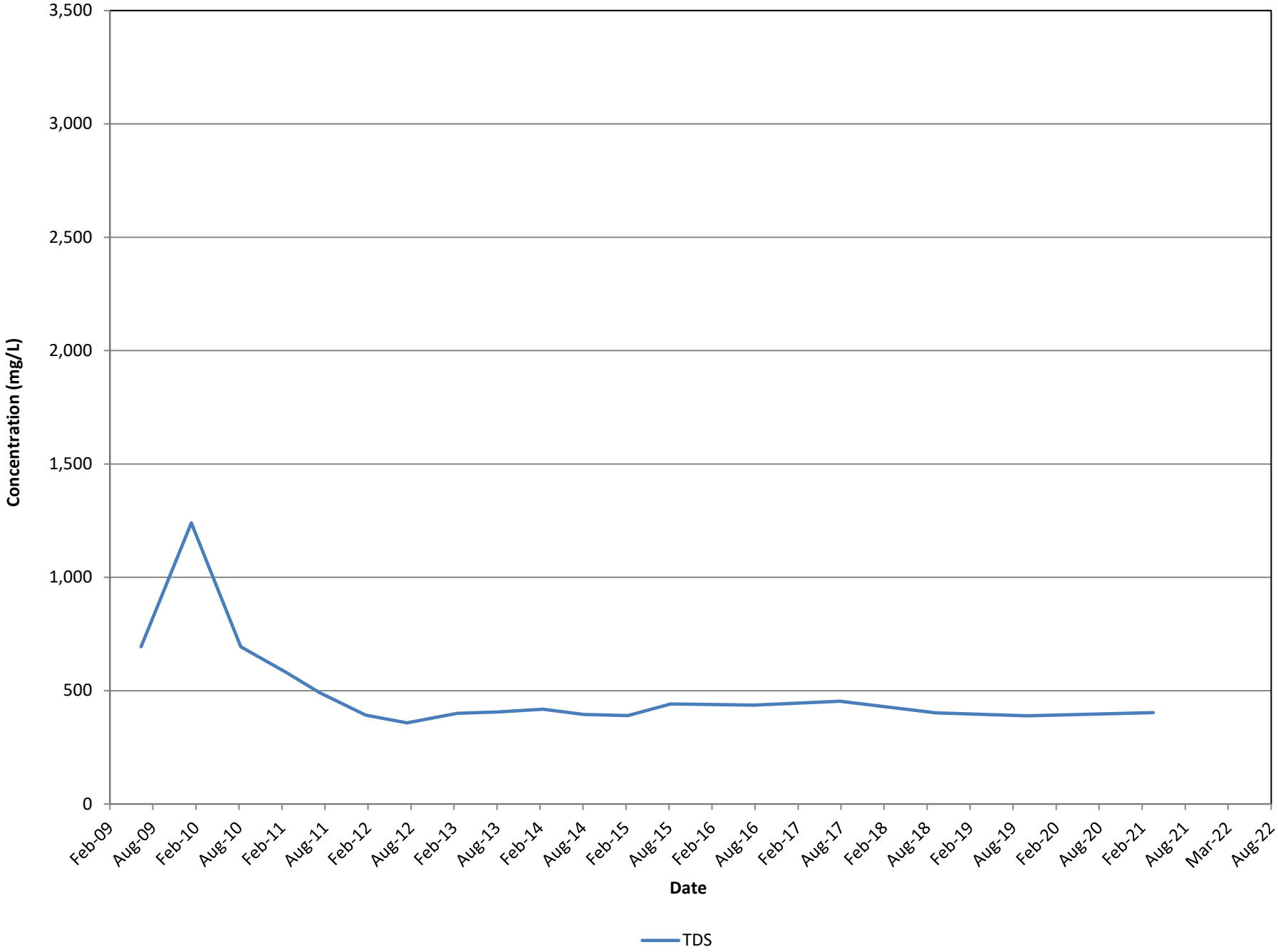
PLOTS OF GROUNDWATER CONCENTRATIONS OVER TIME

Released to Imaging: 7/20/2022 10:39:48 AM

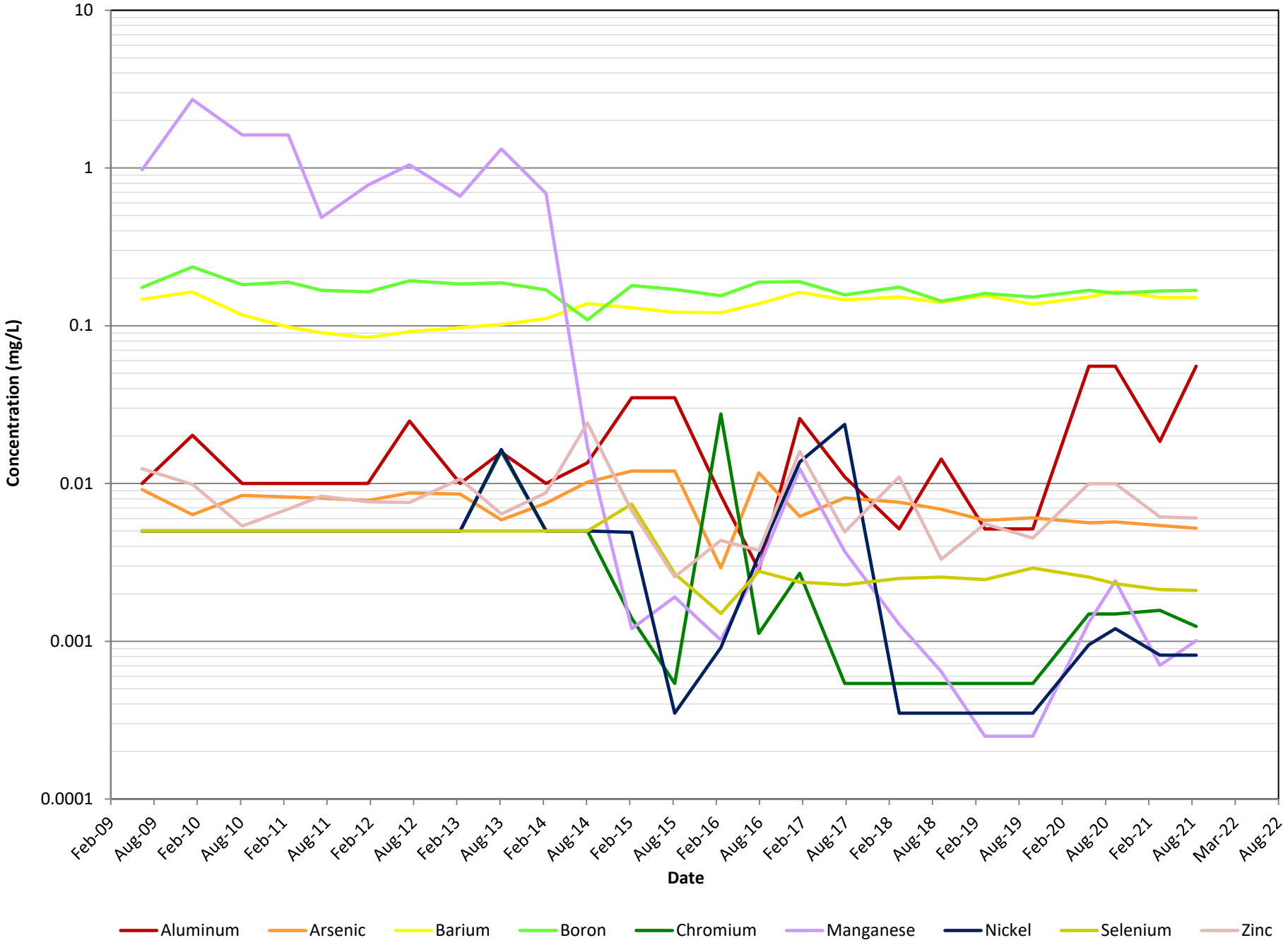
MW-1: ANION CONCENTRATIONS OVER TIME



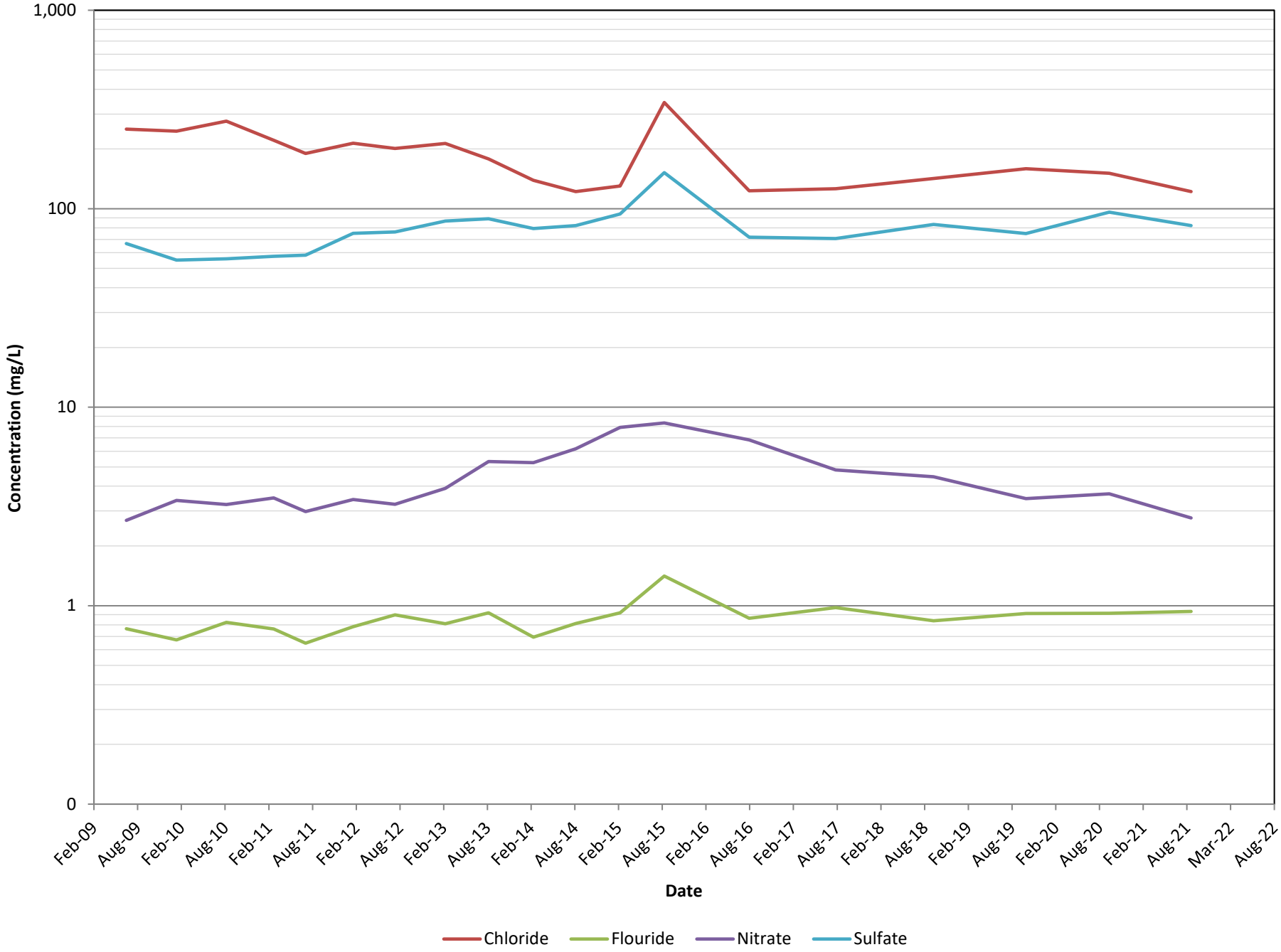
MW-1: TDS CONCENTRATIONS OVER TIME



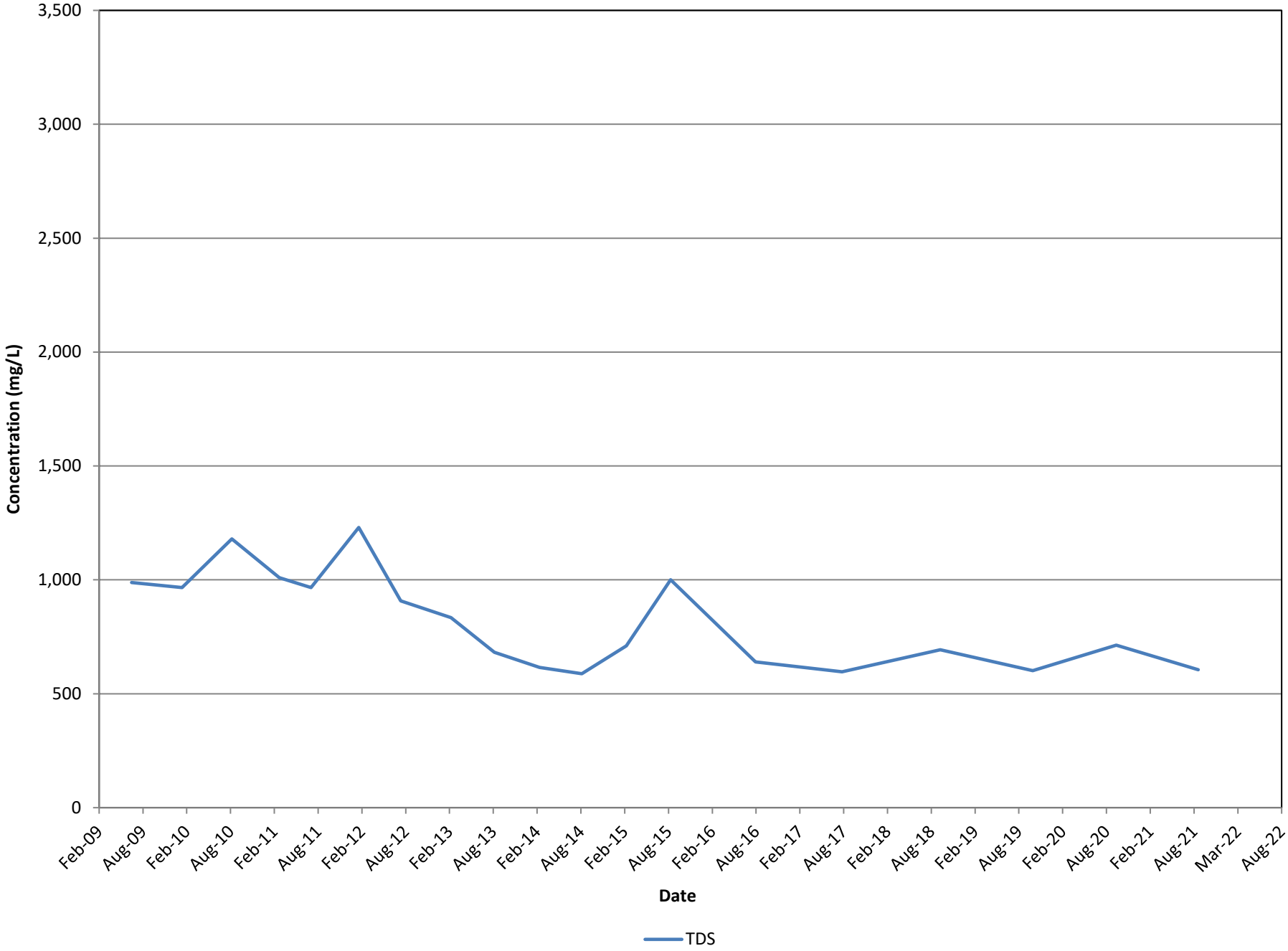
MW-1: METAL CONCENTRATIONS OVER TIME



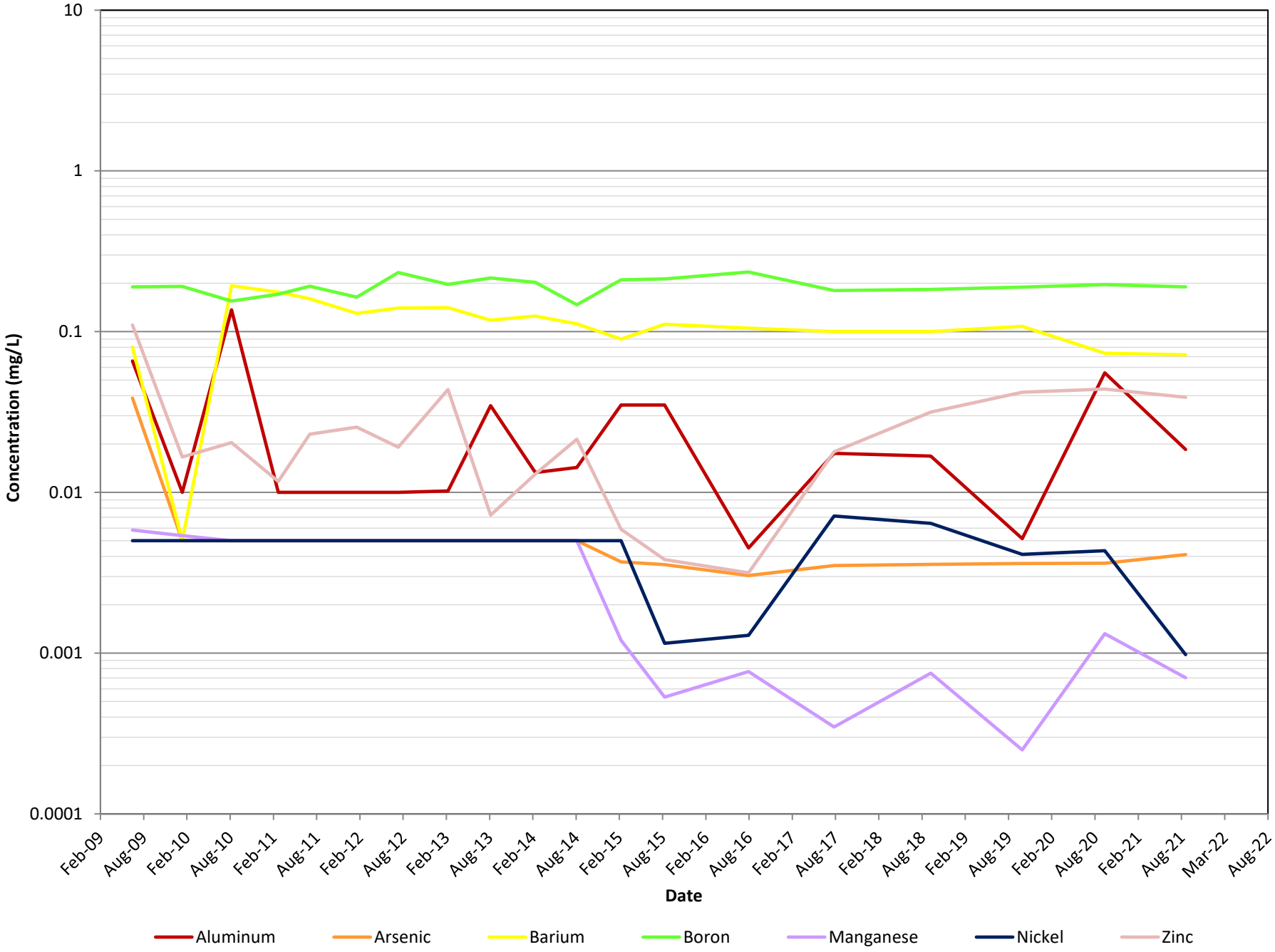
MW-2: ANION CONCENTRATIONS OVER TIME



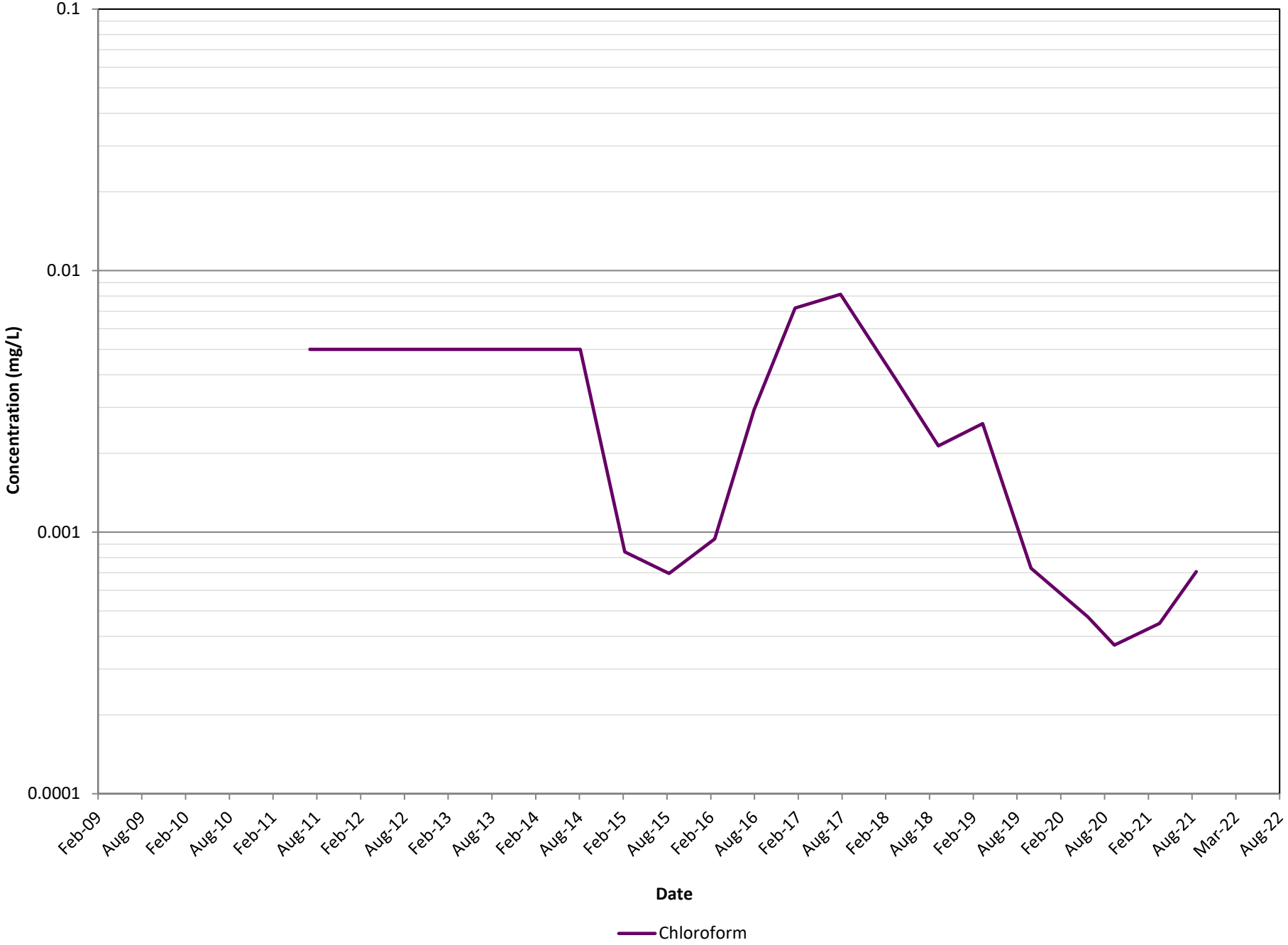
MW-2: TDS CONCENTRATIONS OVER TIME



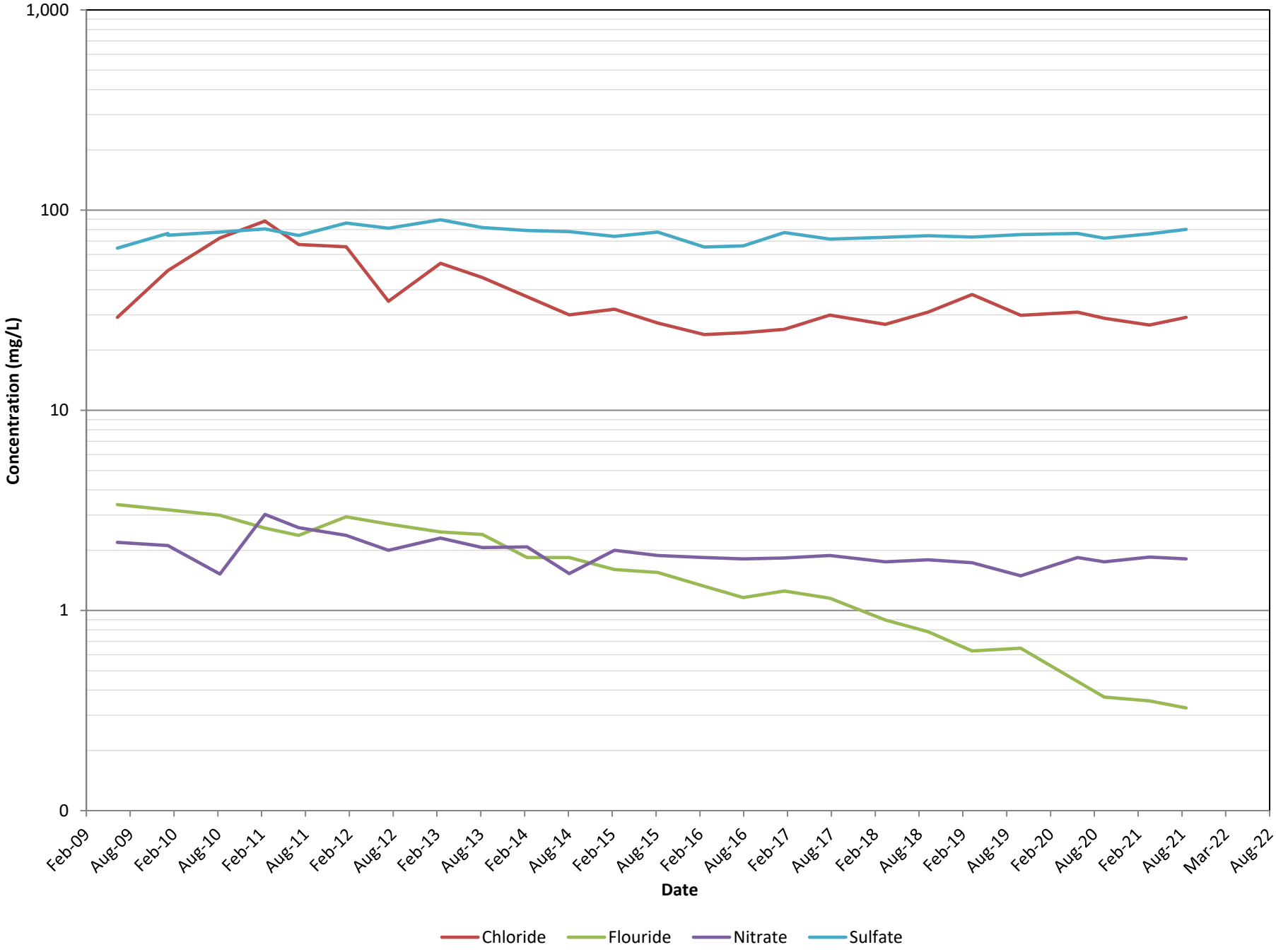
MW-2: METAL CONCENTRATIONS OVER TIME



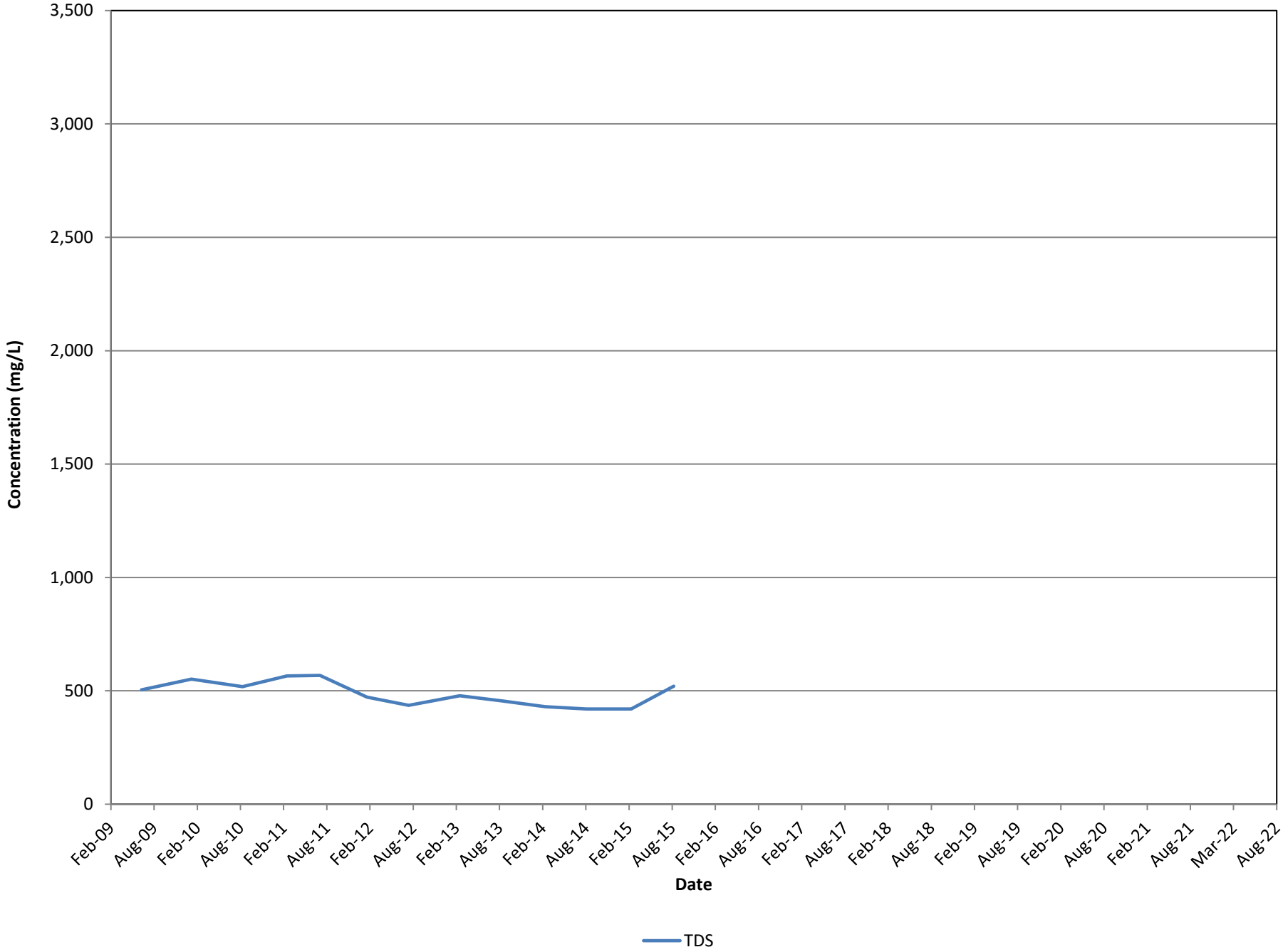
MW-2: VOC CONCENTRATIONS OVER TIME



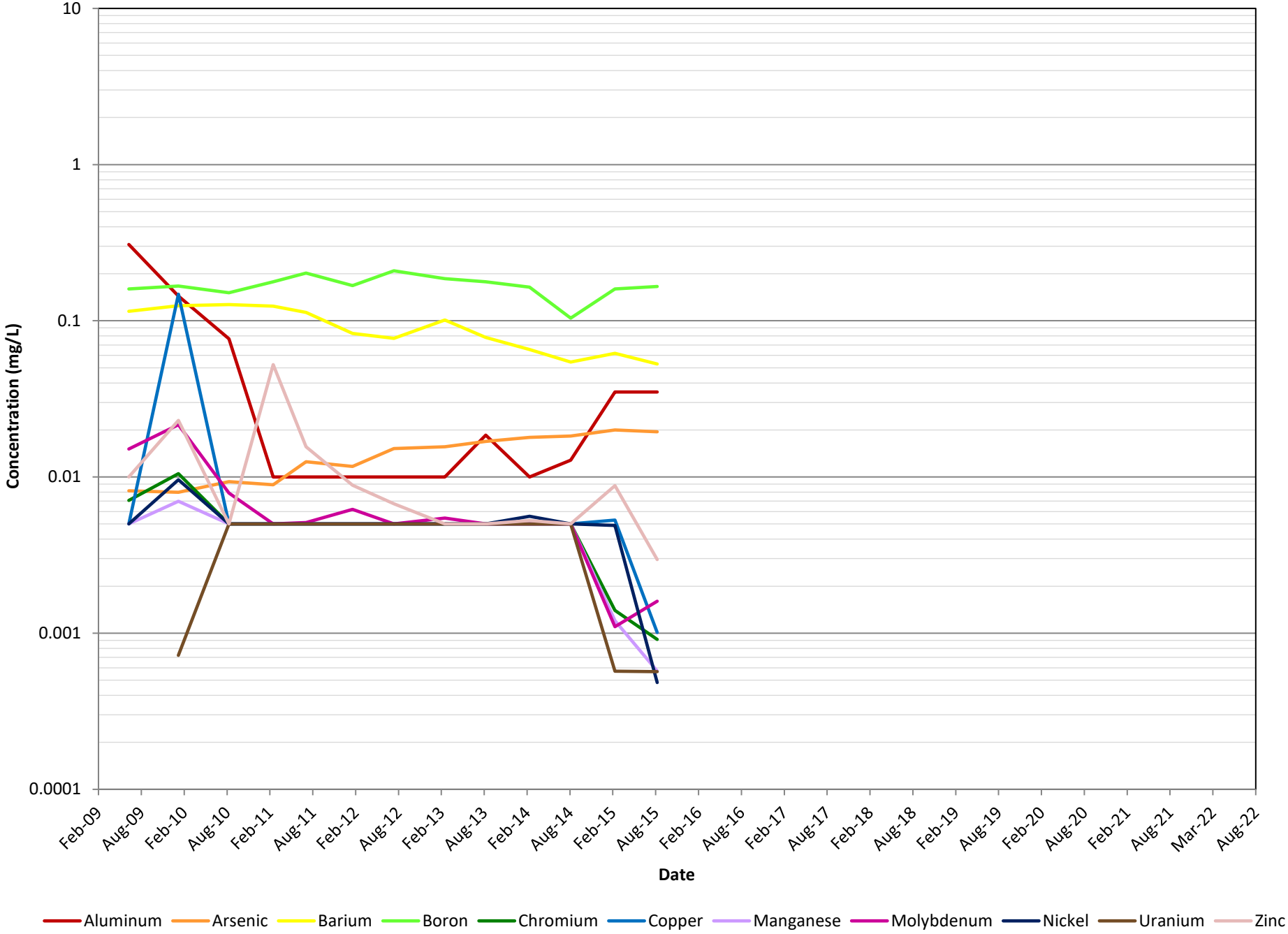
MW-3: ANION CONCENTRATIONS OVER TIME



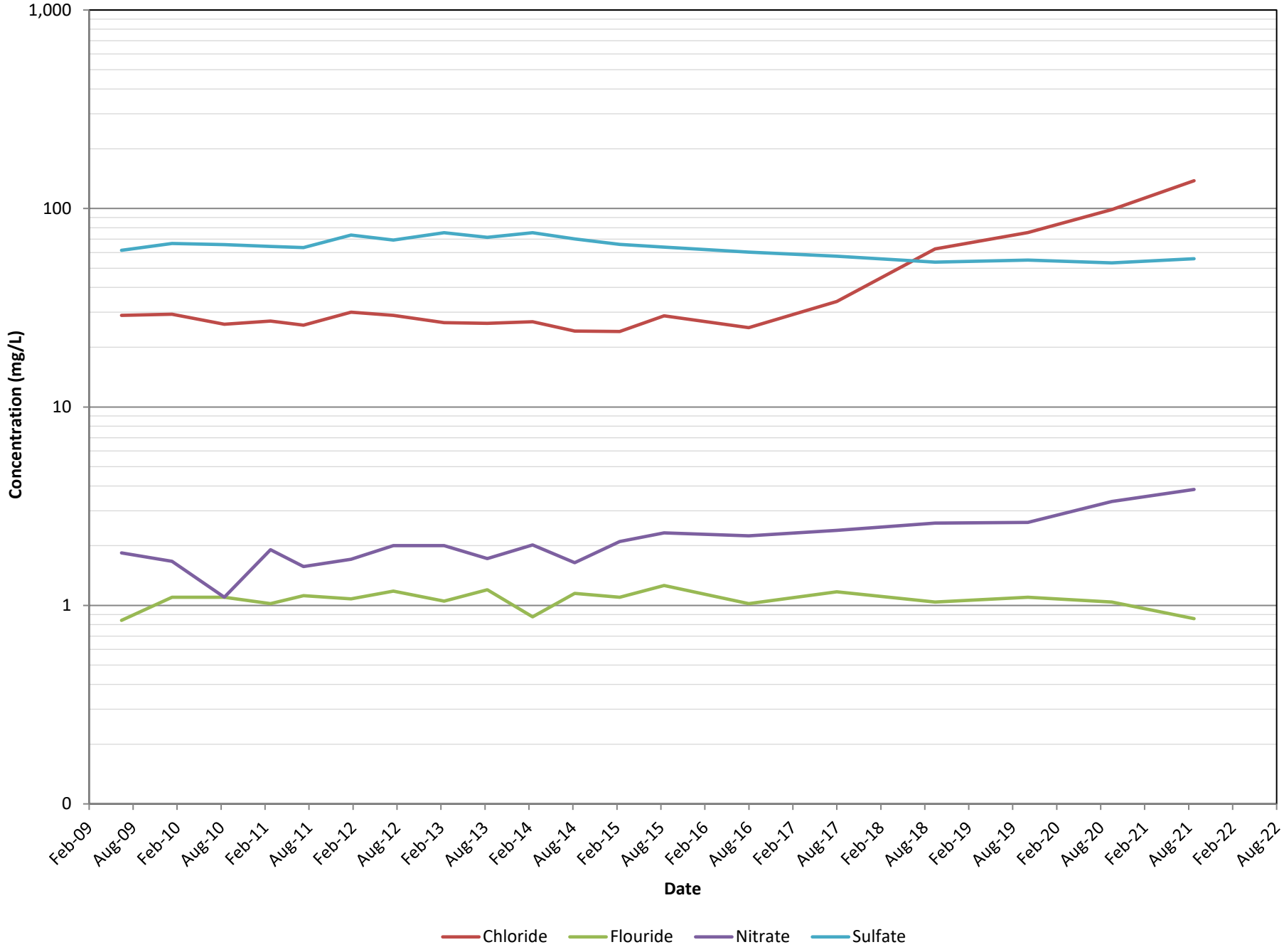
MW-3: TDS CONCENTRATIONS OVER TIME



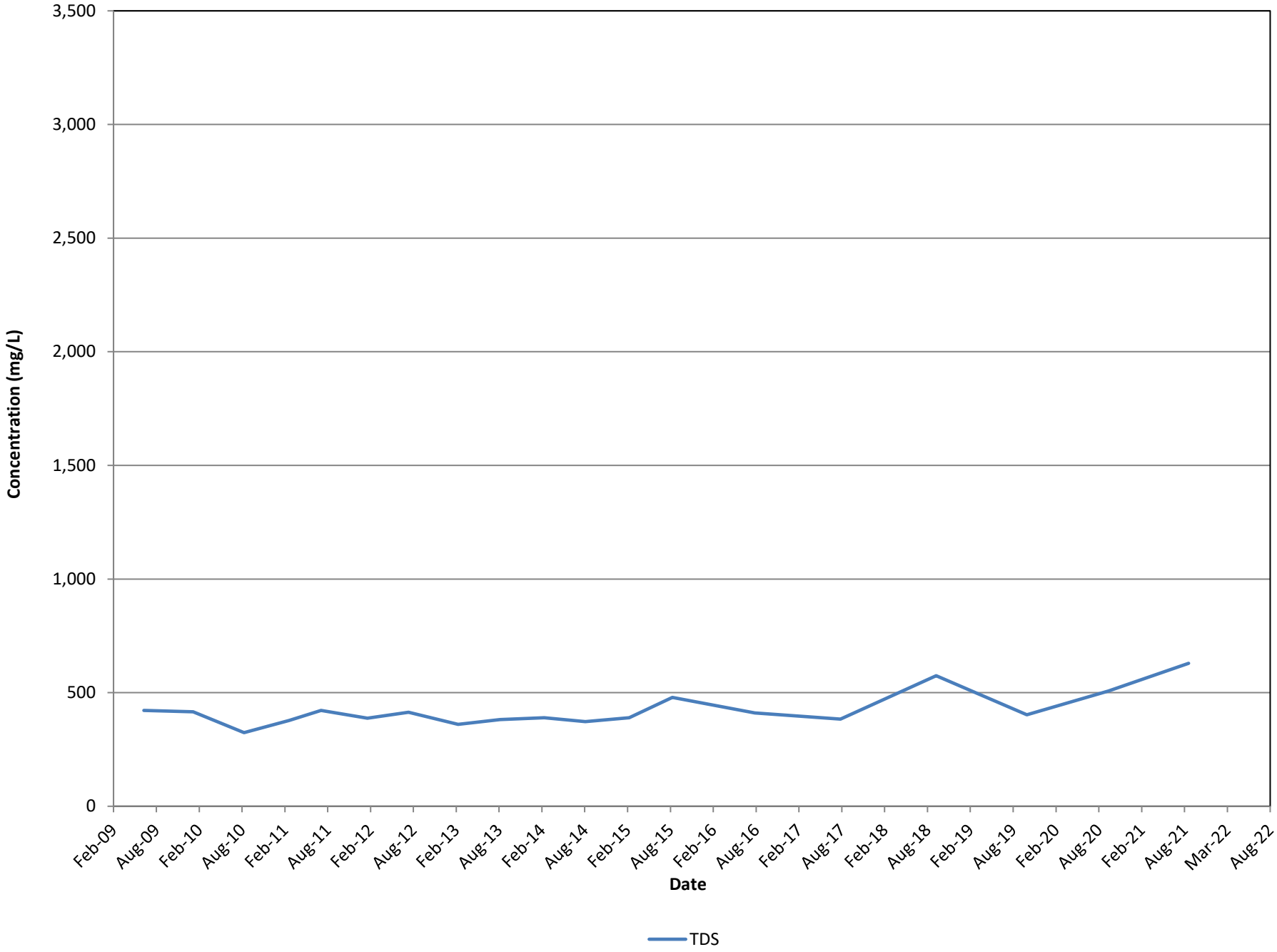
MW-3: METAL CONCENTRATIONS OVER TIME



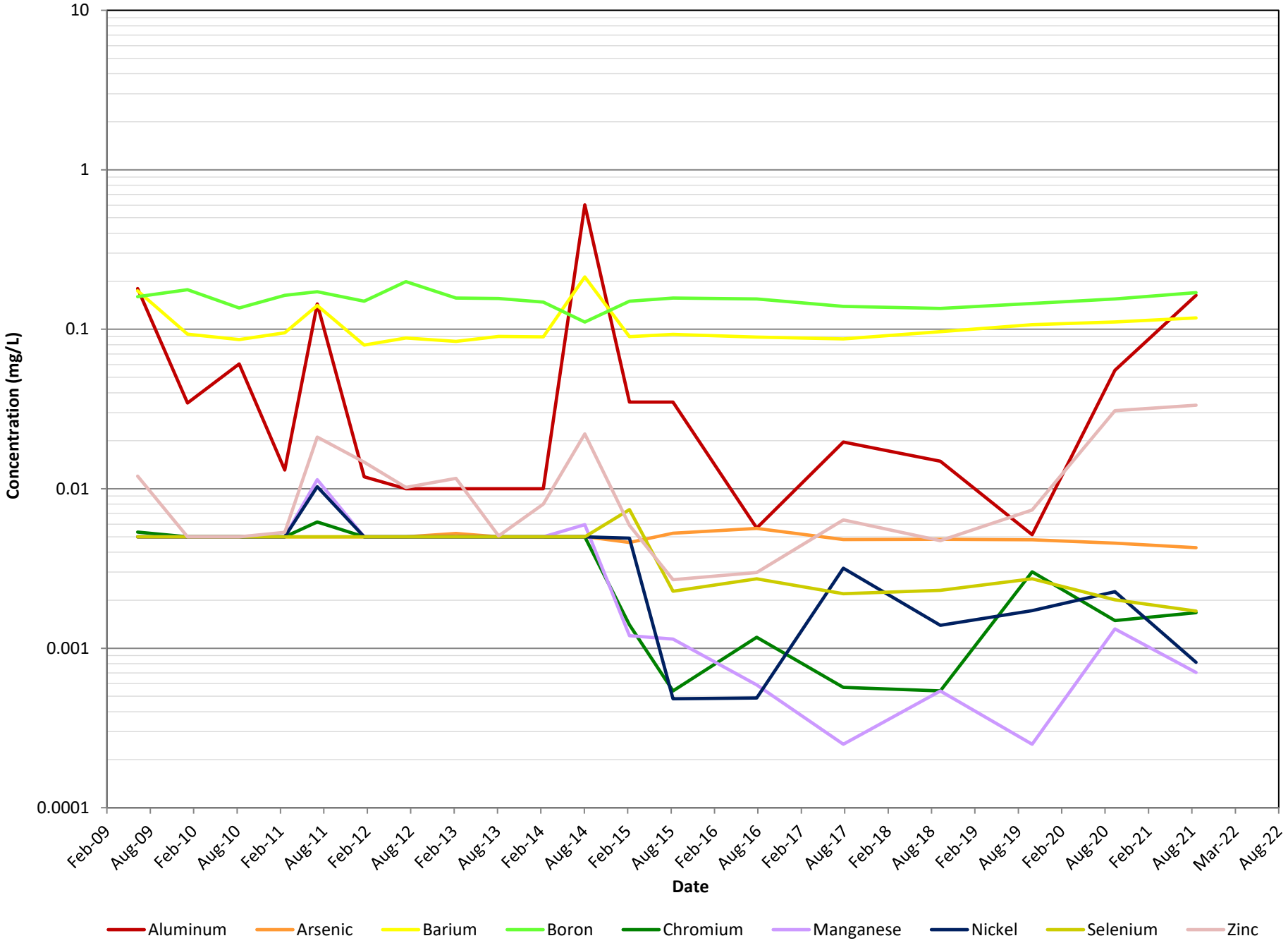
MW-4: ANION CONCENTRATIONS OVER TIME



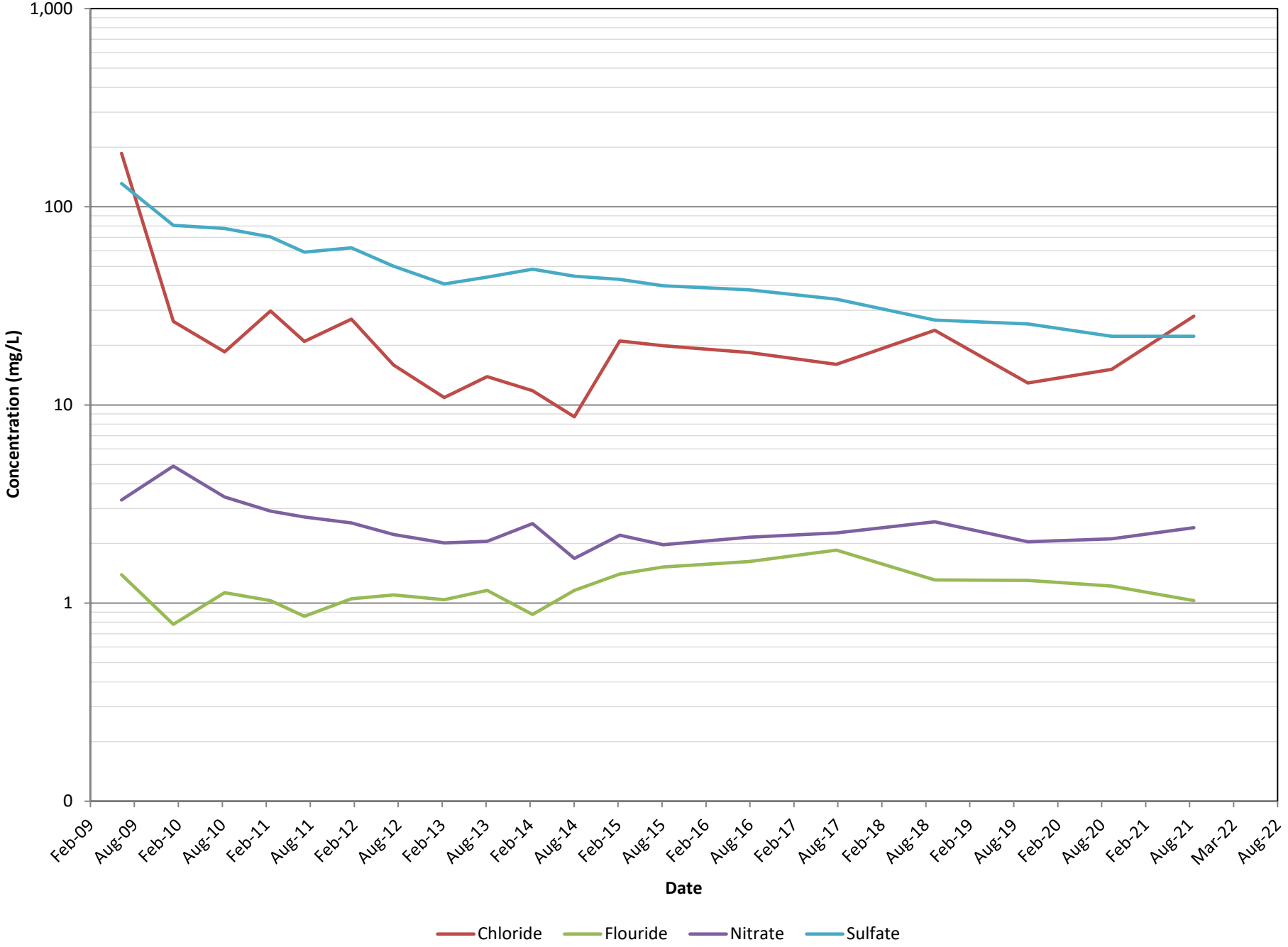
MW-4: TDS CONCENTRATIONS OVER TIME



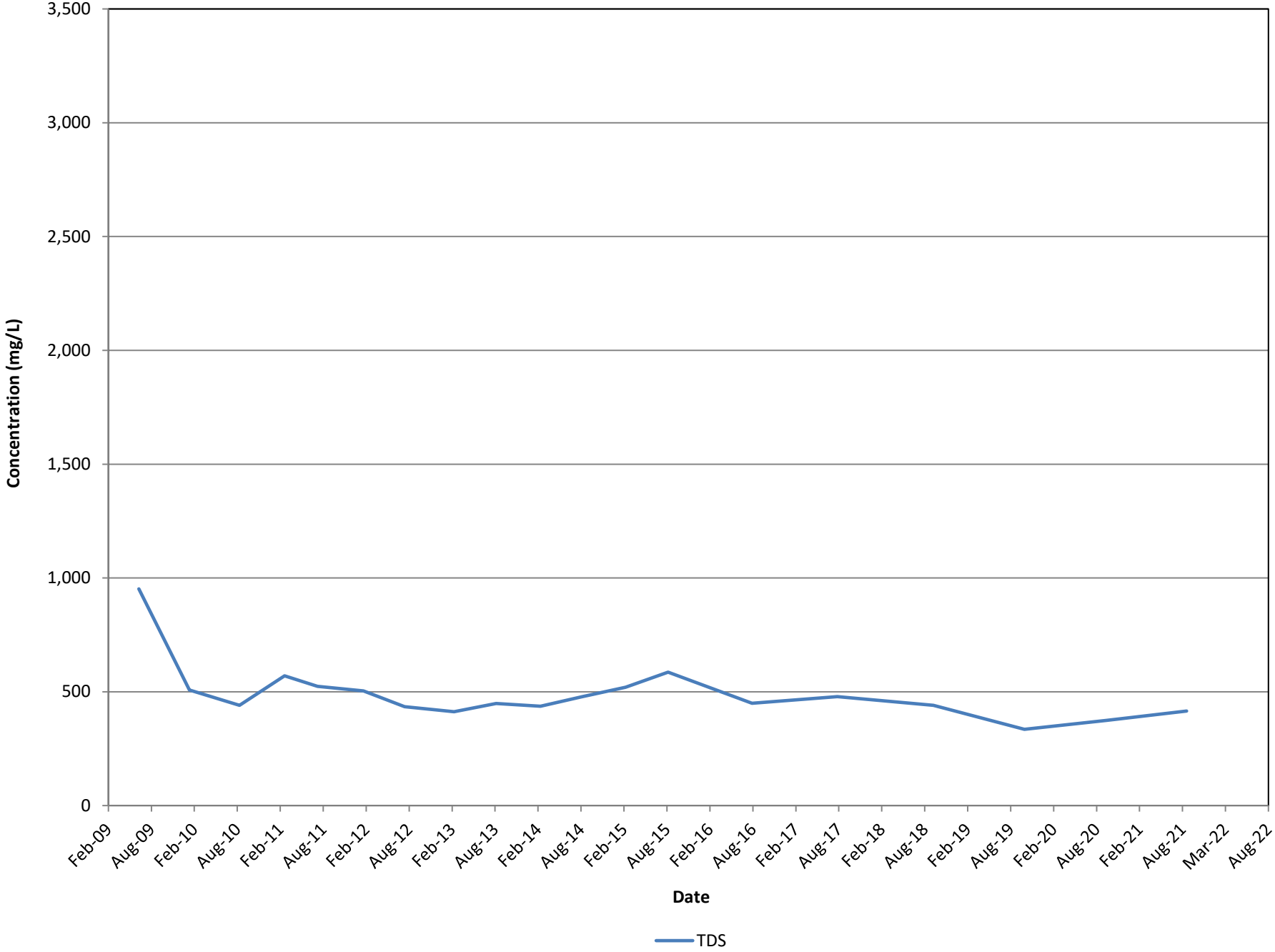
MW-4: METAL CONCENTRATIONS OVER TIME



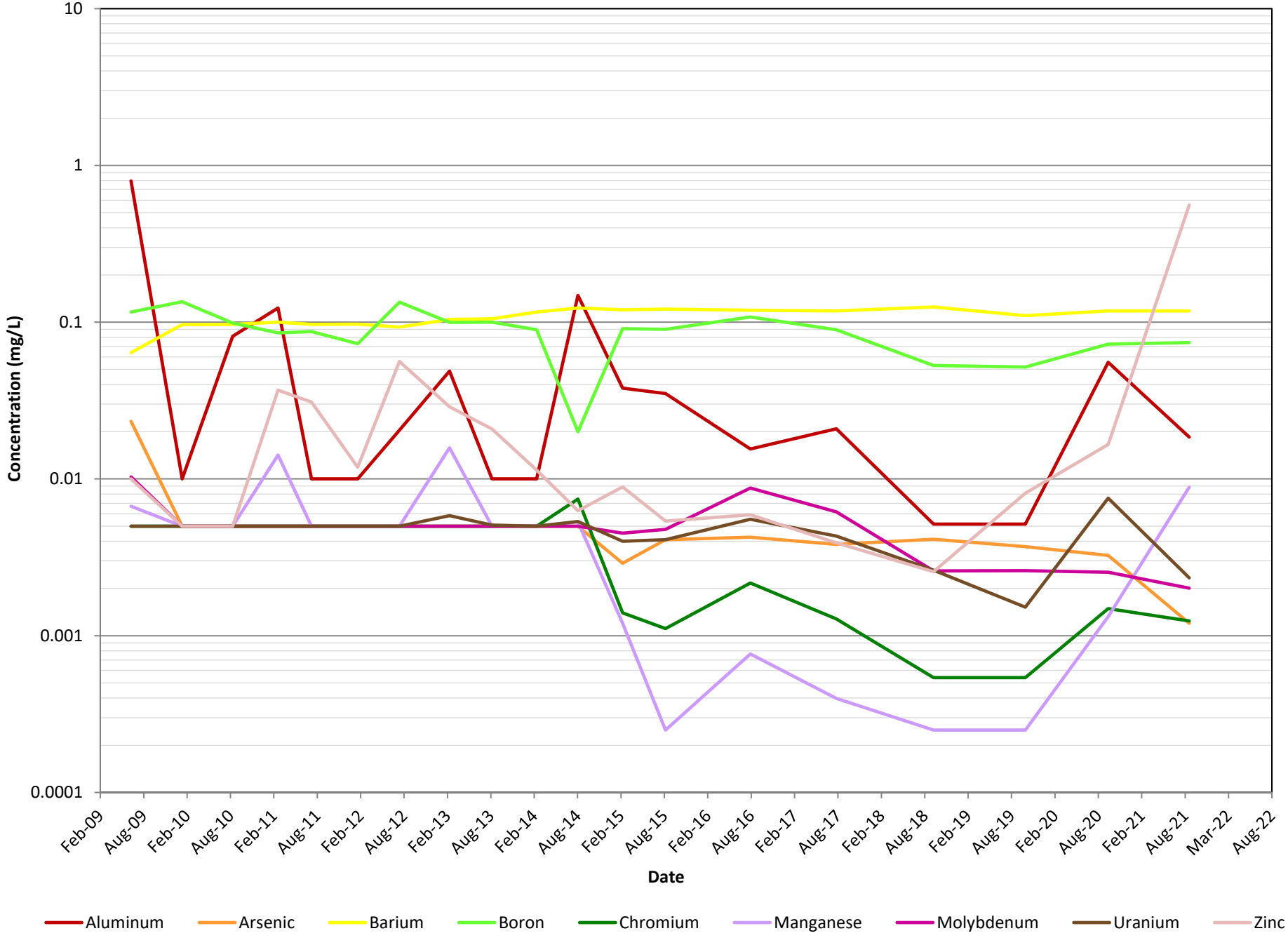
MW-5: ANION CONCENTRATIONS OVER TIME



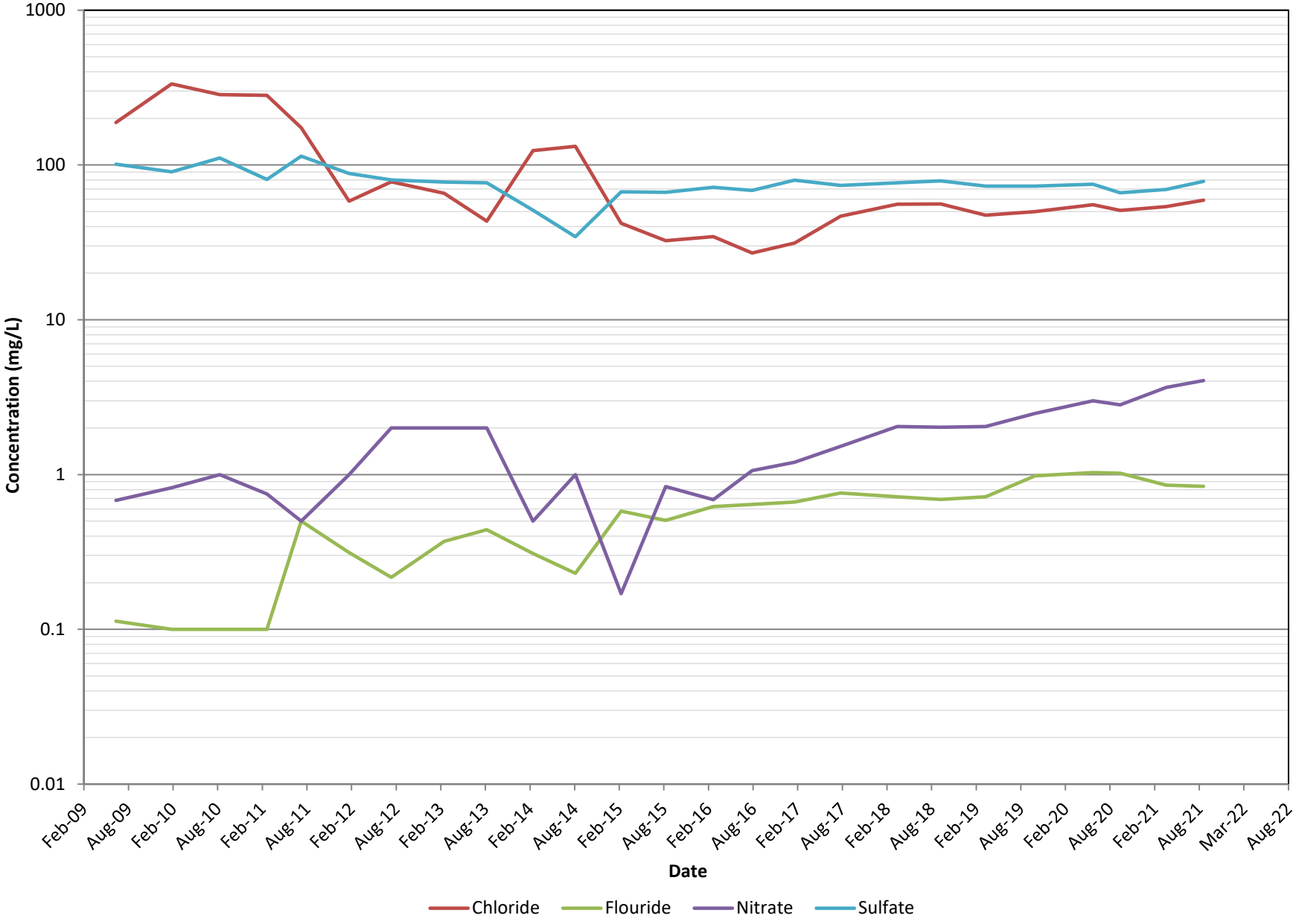
MW-5: TDS CONCENTRATIONS OVER TIME

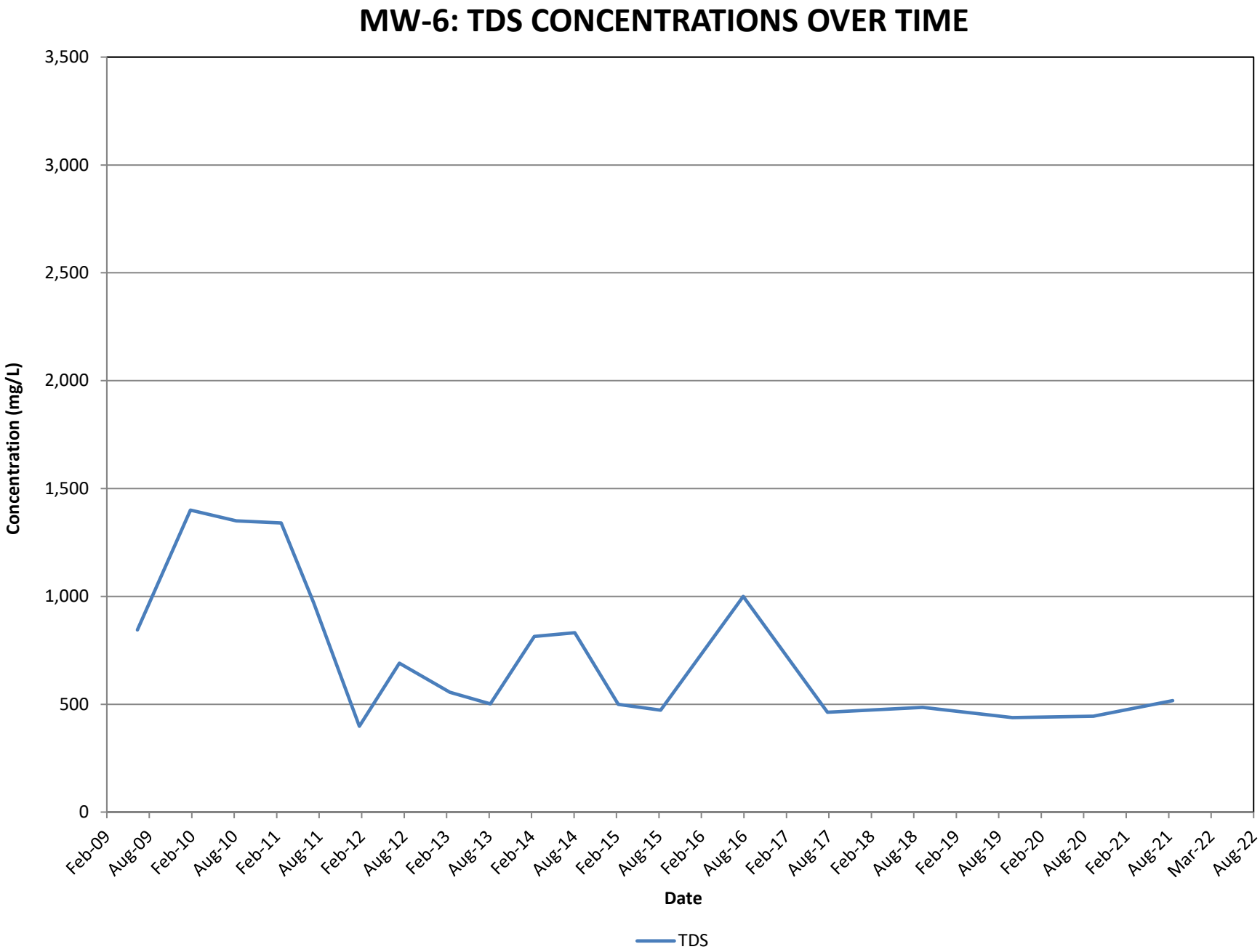


MW-5: METAL CONCENTRATIONS OVER TIME

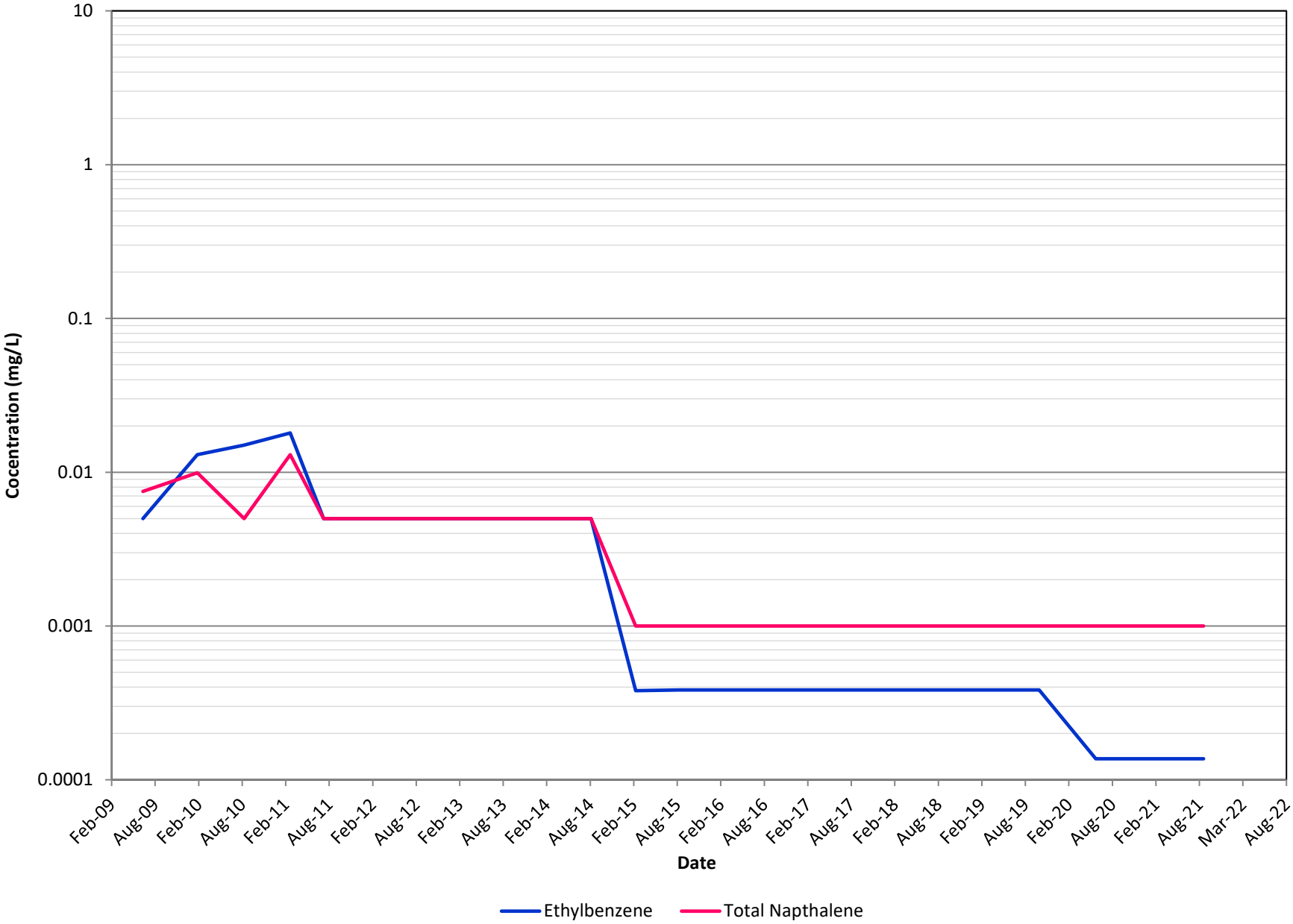


MW-6: ANION CONCENTRATIONS OVER TIME

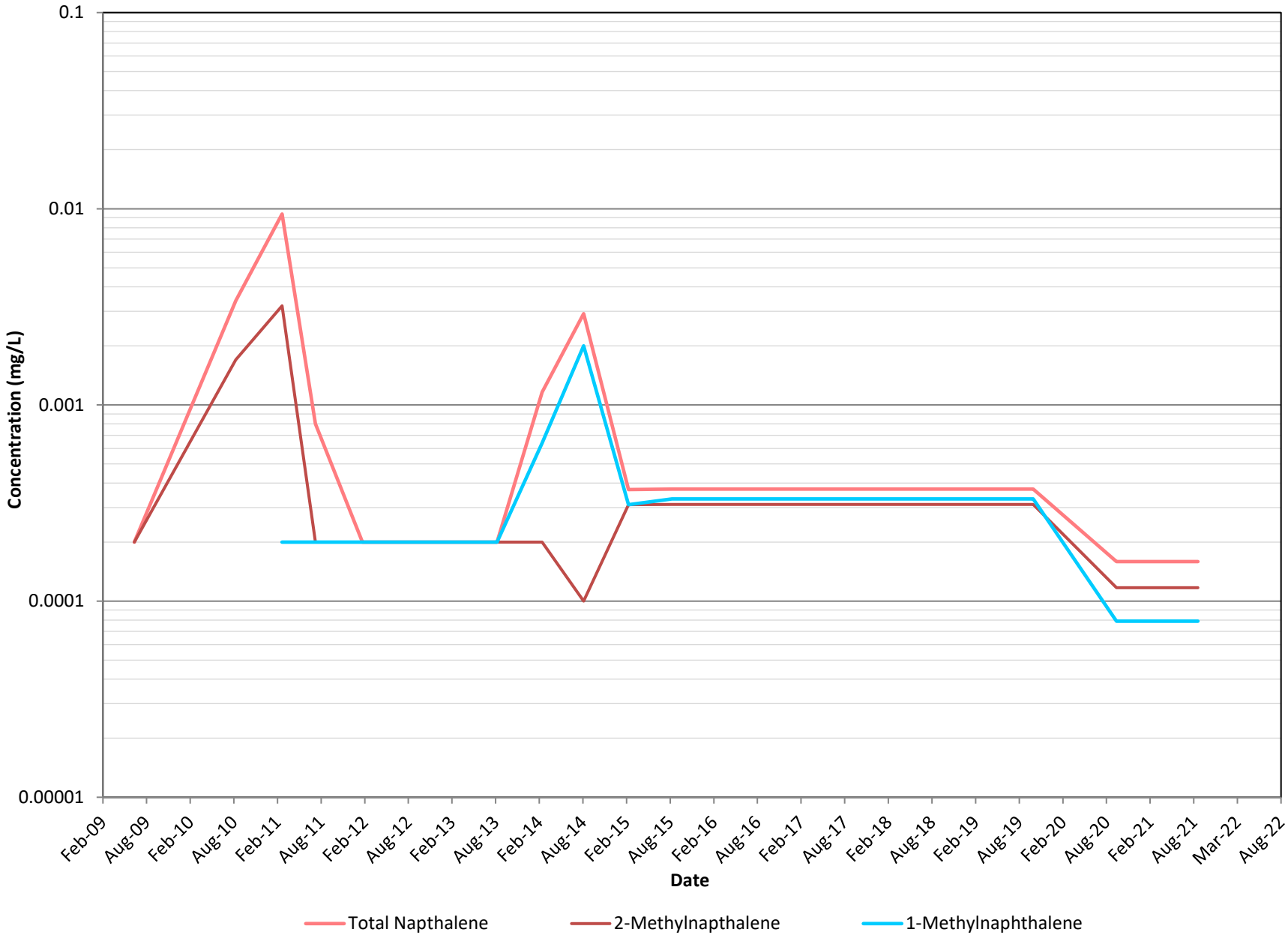



MW-6: TDS CONCENTRATIONS OVER TIME
Concentration (mg/L)
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Feb-09
Aug-09
Feb-10
Aug-10
Feb-11
Aug-11
Feb-12
Aug-12
Feb-13
Aug-13
Feb-14
Aug-14
Feb-15
Aug-15
Feb-16
Aug-16
Feb-17
Aug-17
Feb-18
Aug-18
Feb-19
Aug-19
Feb-20
Aug-20
Feb-21
Aug-21
Mar-22
Aug-22
Date
TDS

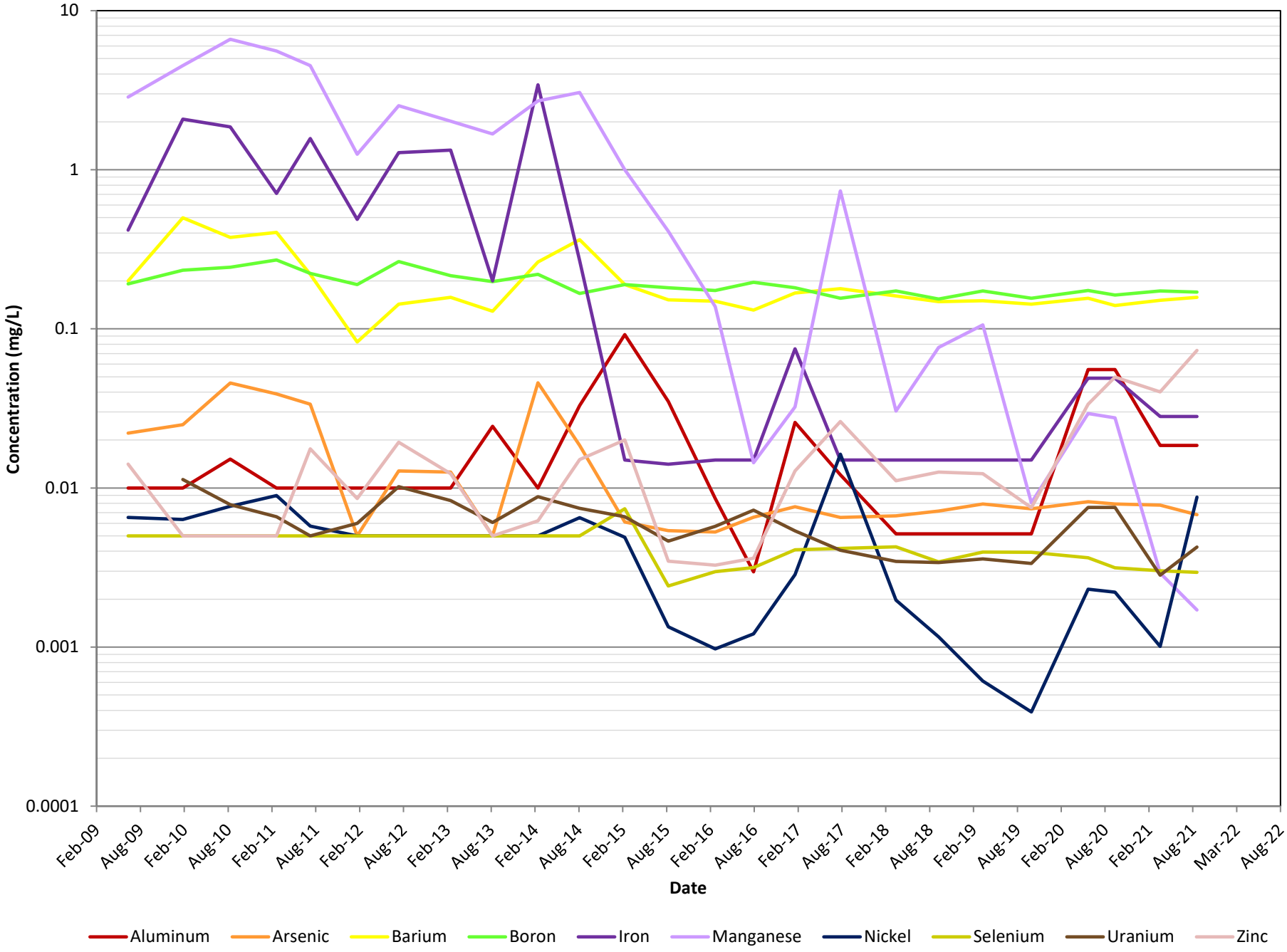
MW-6: VOC CONCENTRATIONS OVER TIME



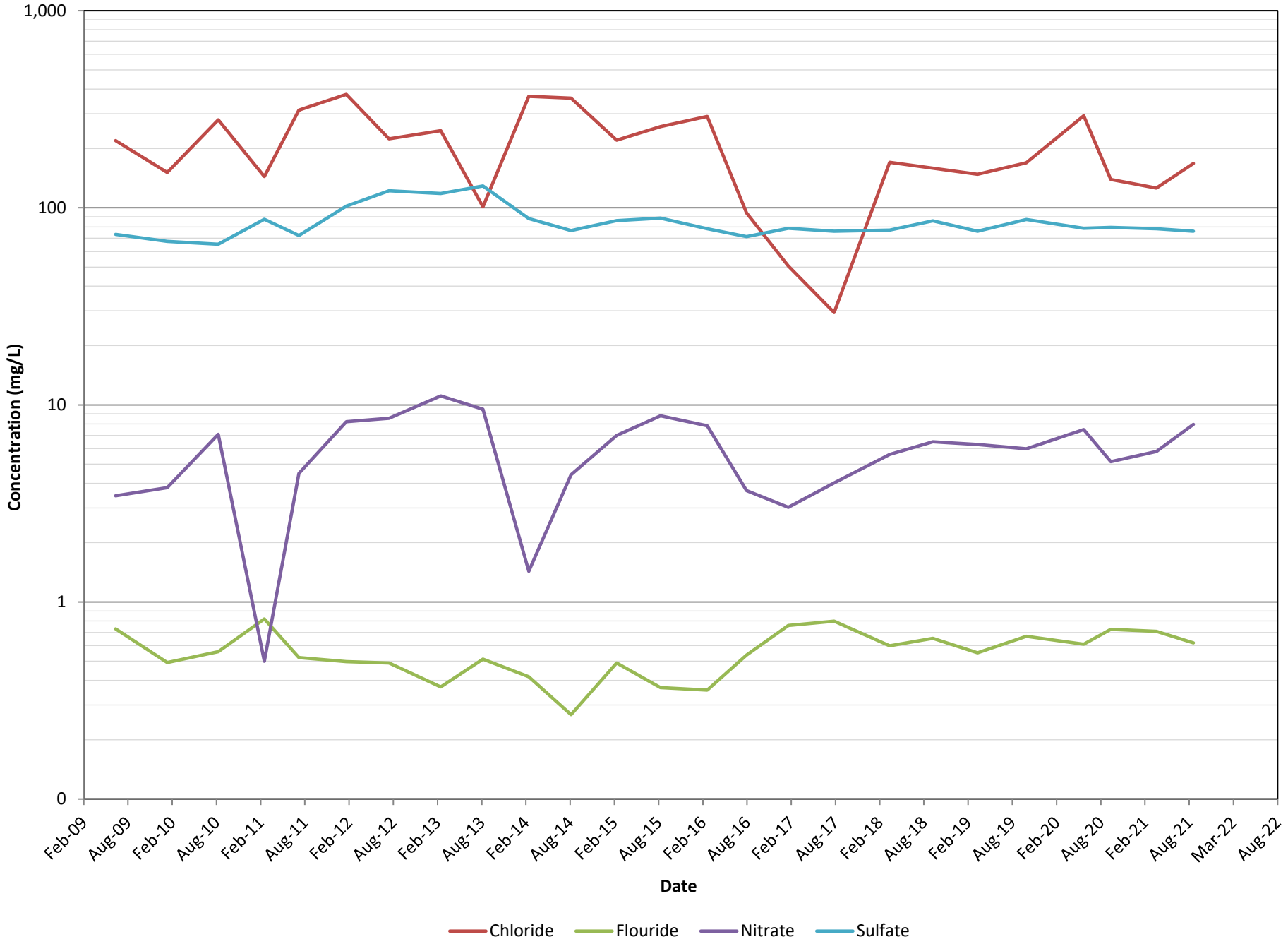
MW-6: SVOC CONCENTRATIONS OVER TIME



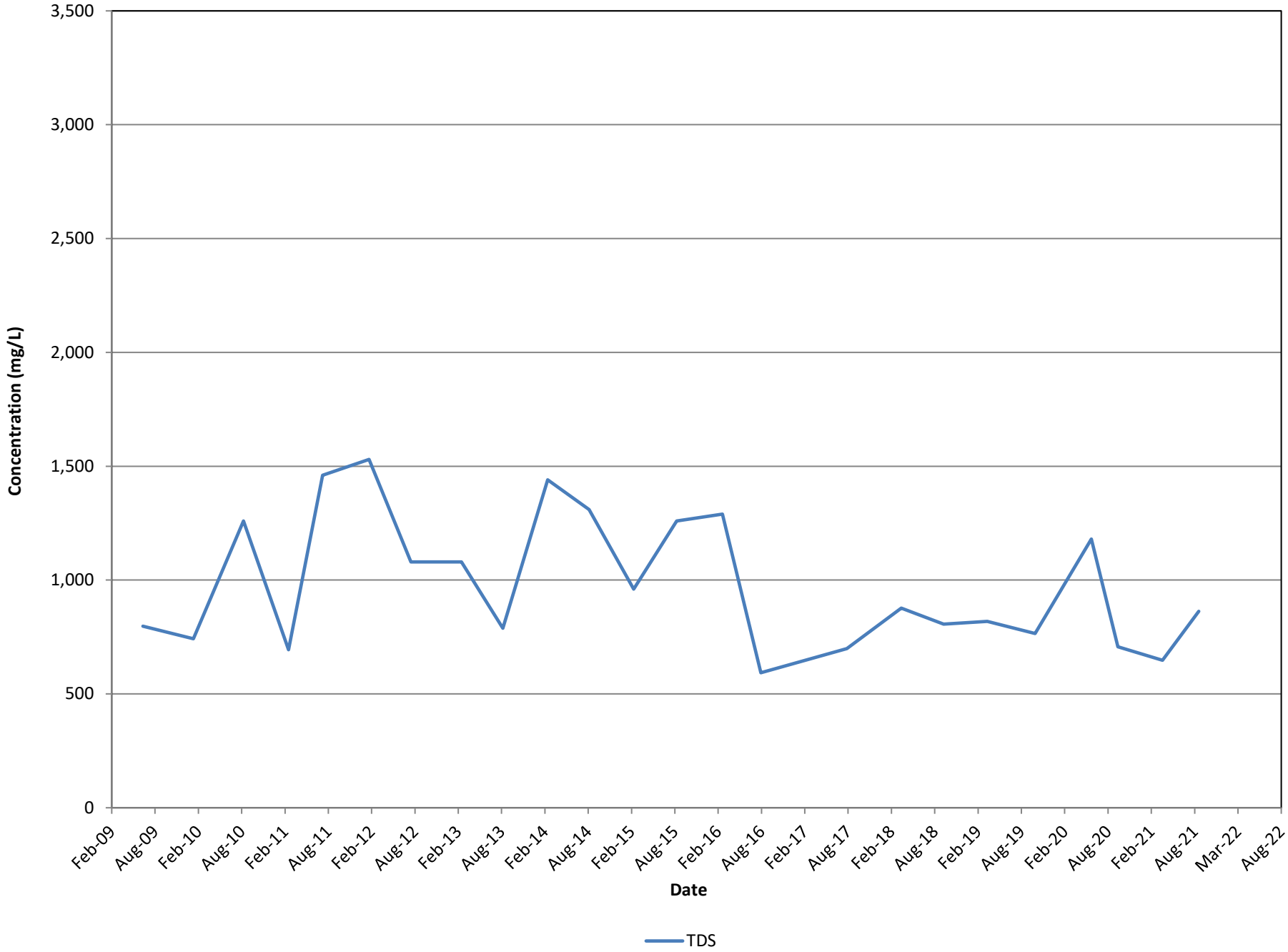
MW-6: METAL CONCENTRATIONS OVER TIME



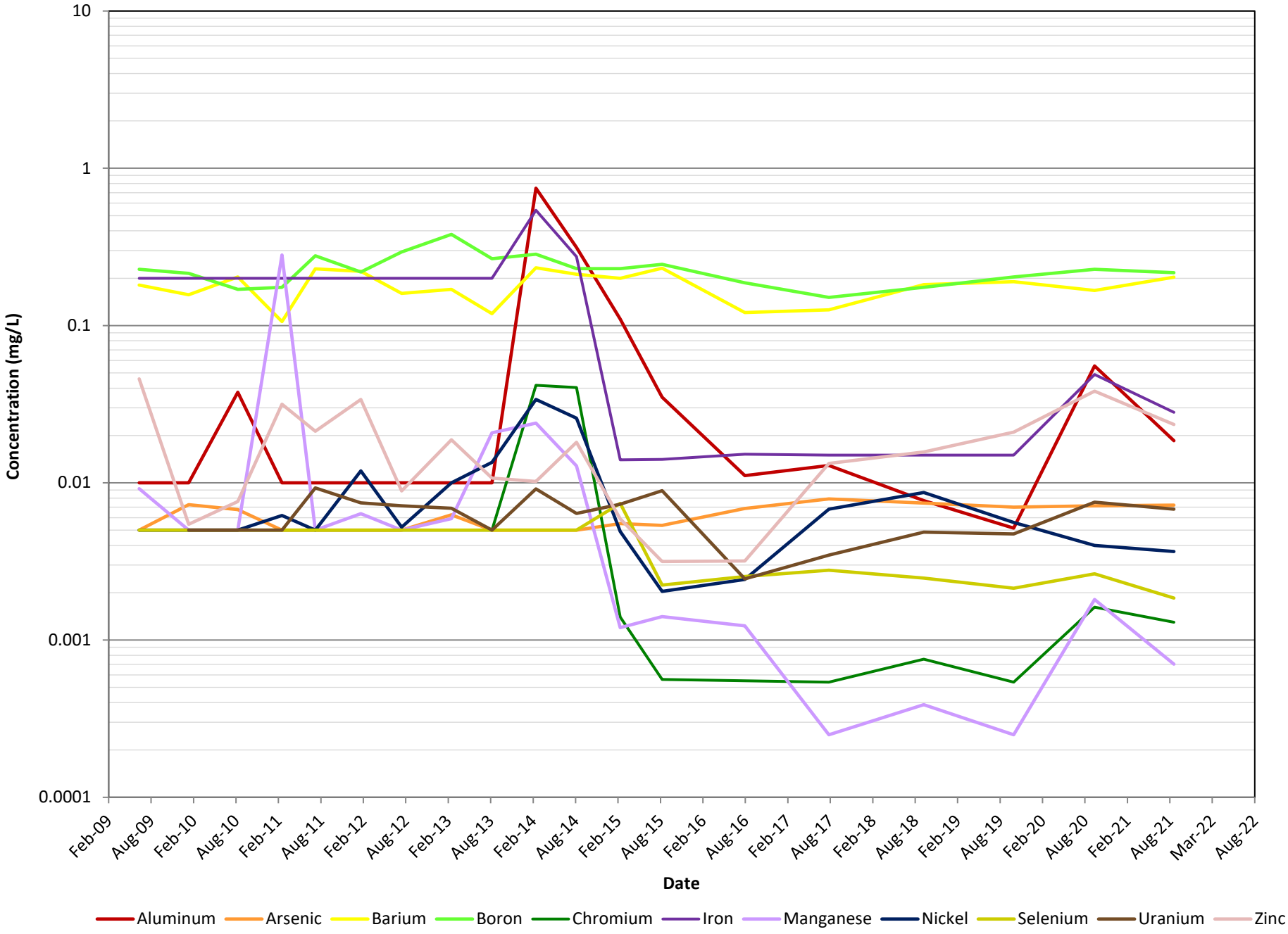
MW-8: ANION CONCENTRATIONS OVER TIME



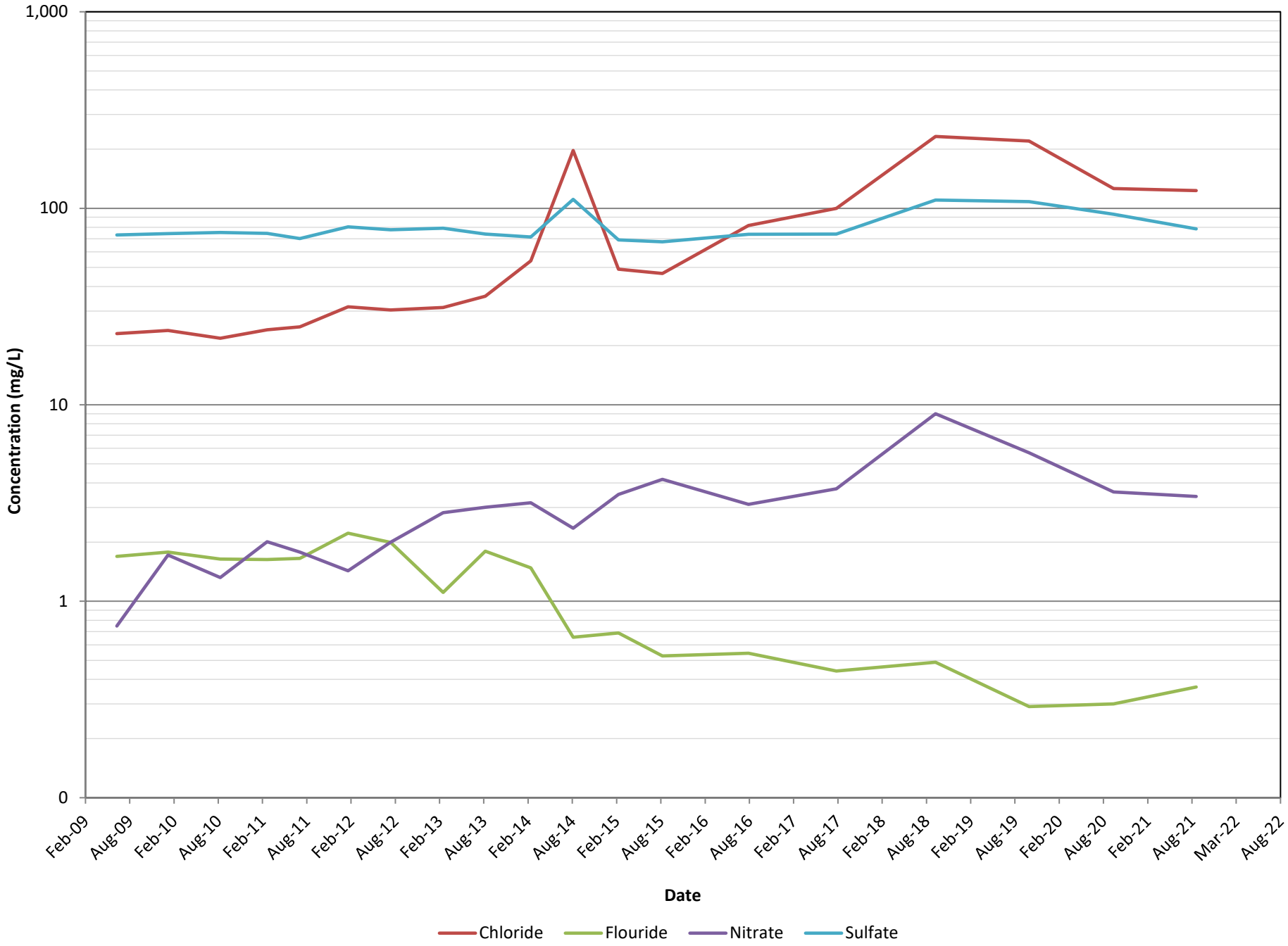
MW-8: TDS CONCENTRATIONS OVER TIME



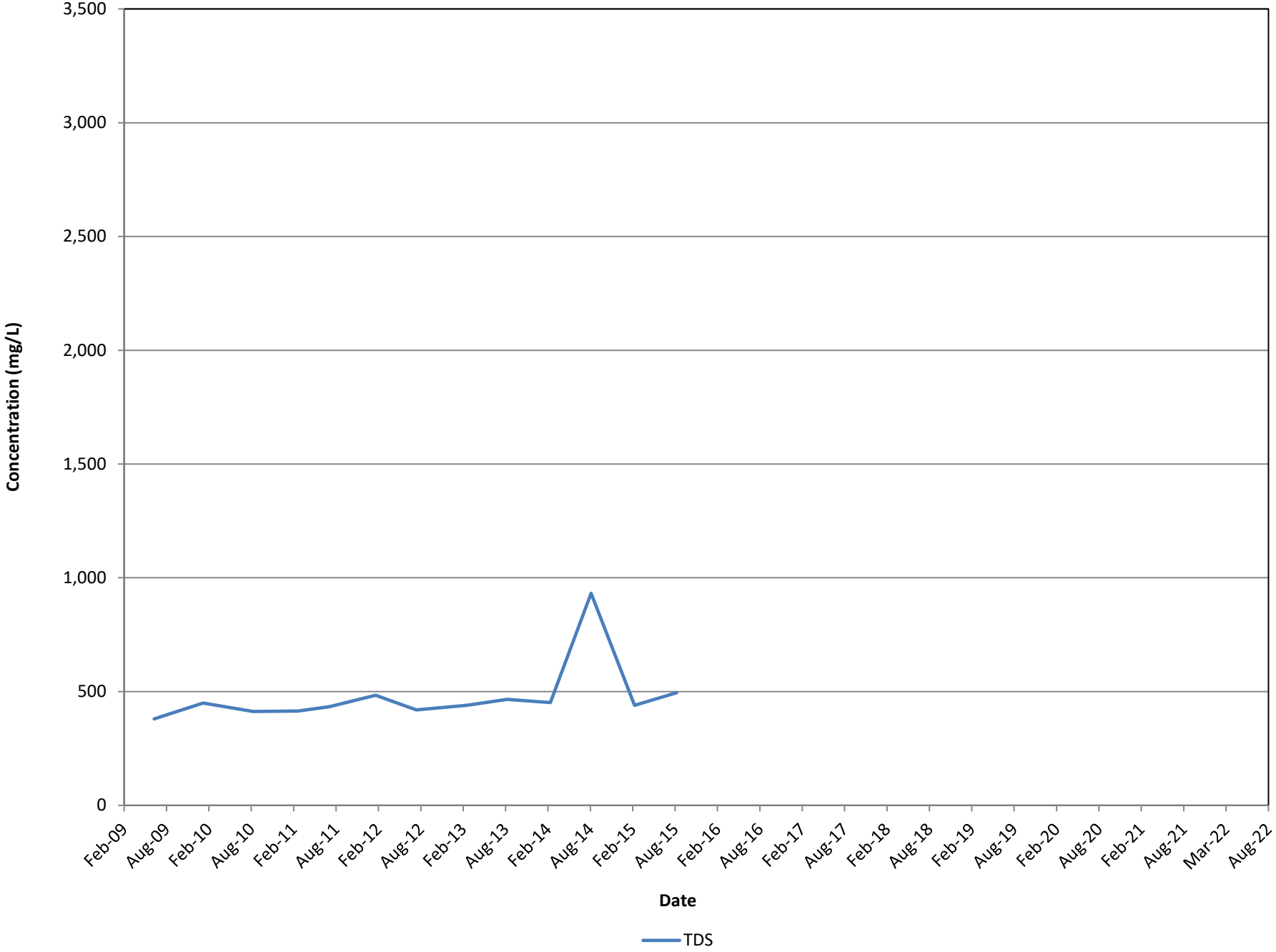
MW-8: METAL CONCENTRATIONS OVER TIME



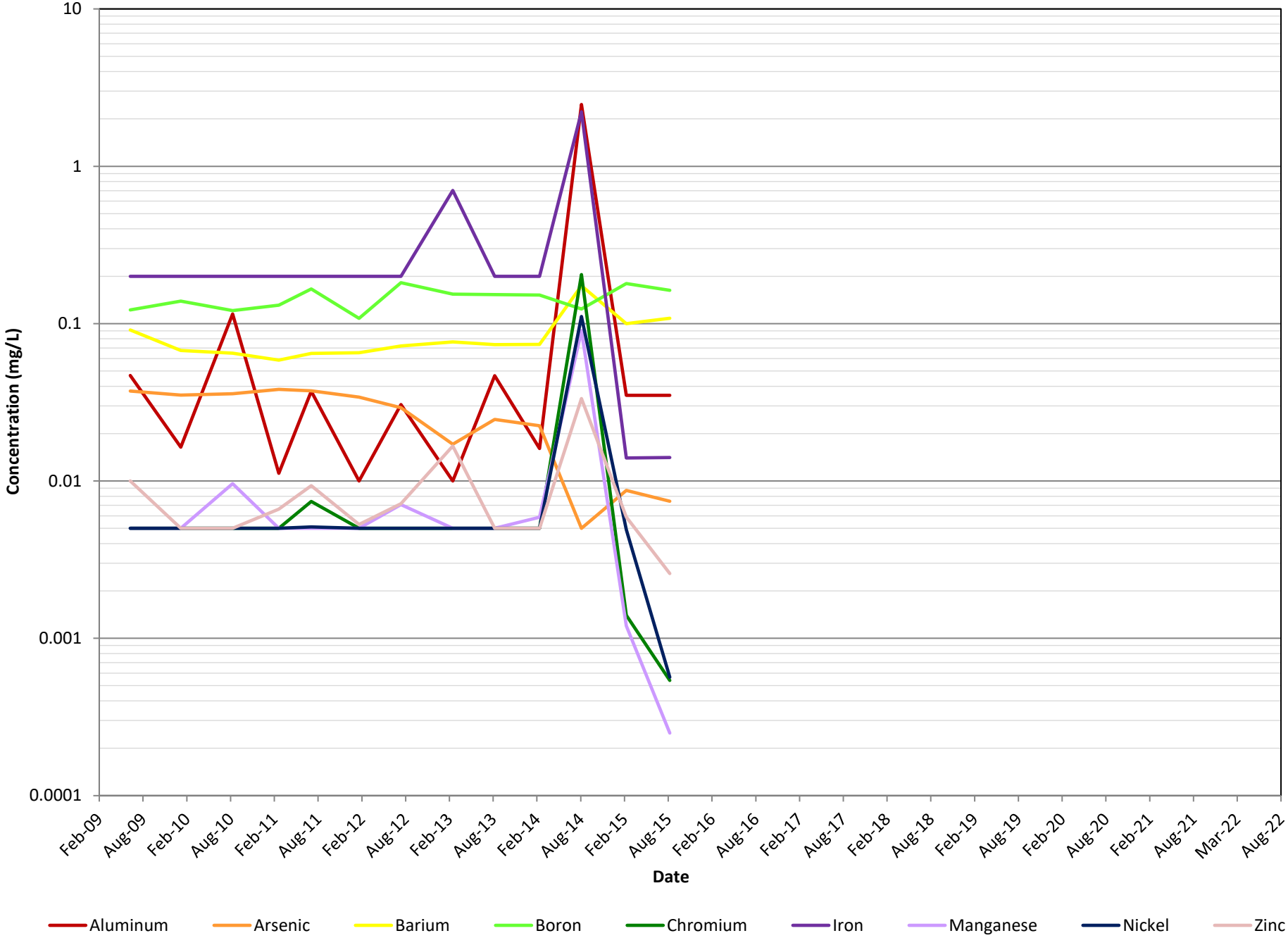
MW-9: ANION CONCENTRATIONS OVER TIME



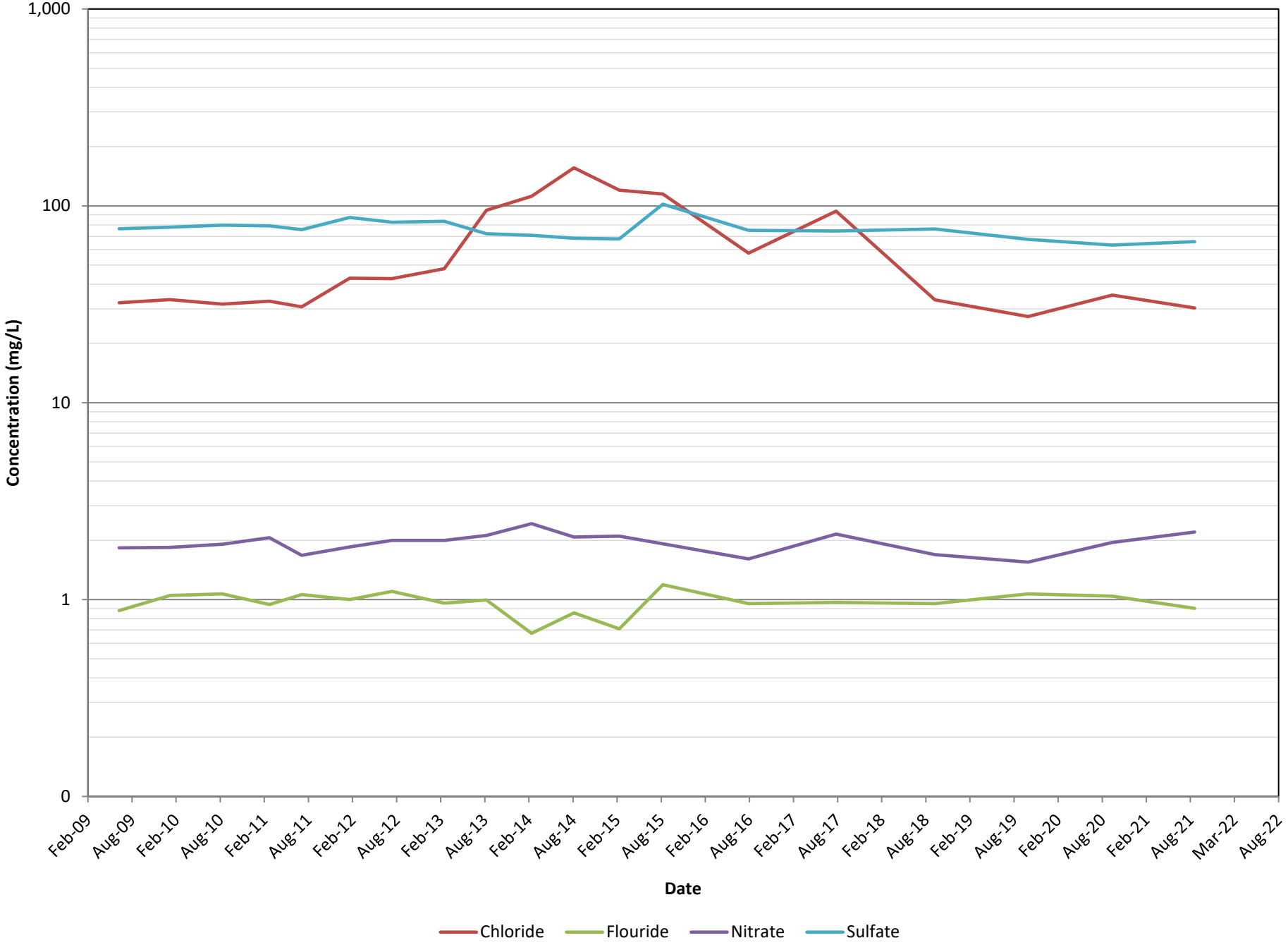
MW-9: TDS CONCENTRATIONS OVER TIME



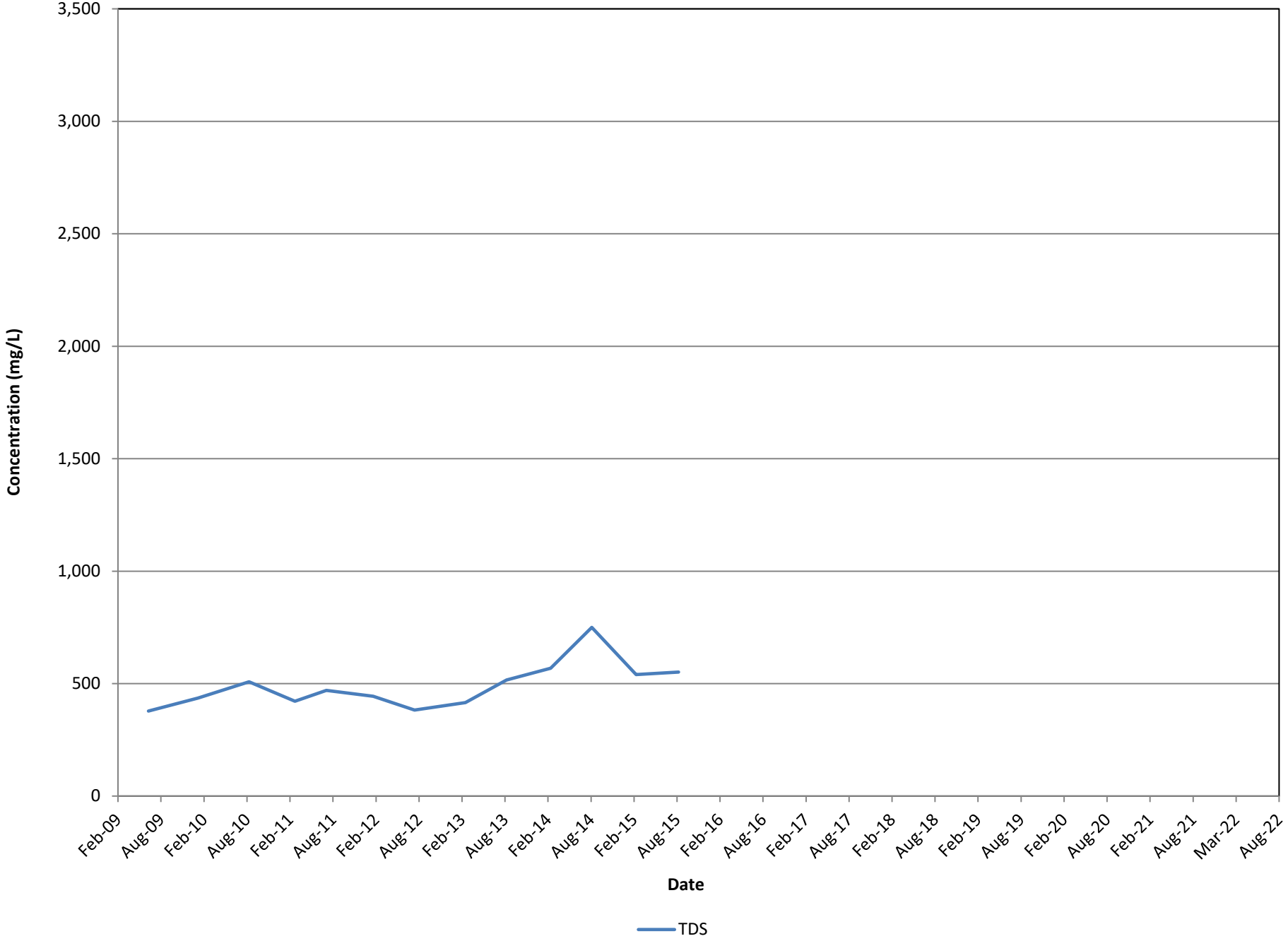
MW-9: METAL CONCENTRATIONS OVER TIME



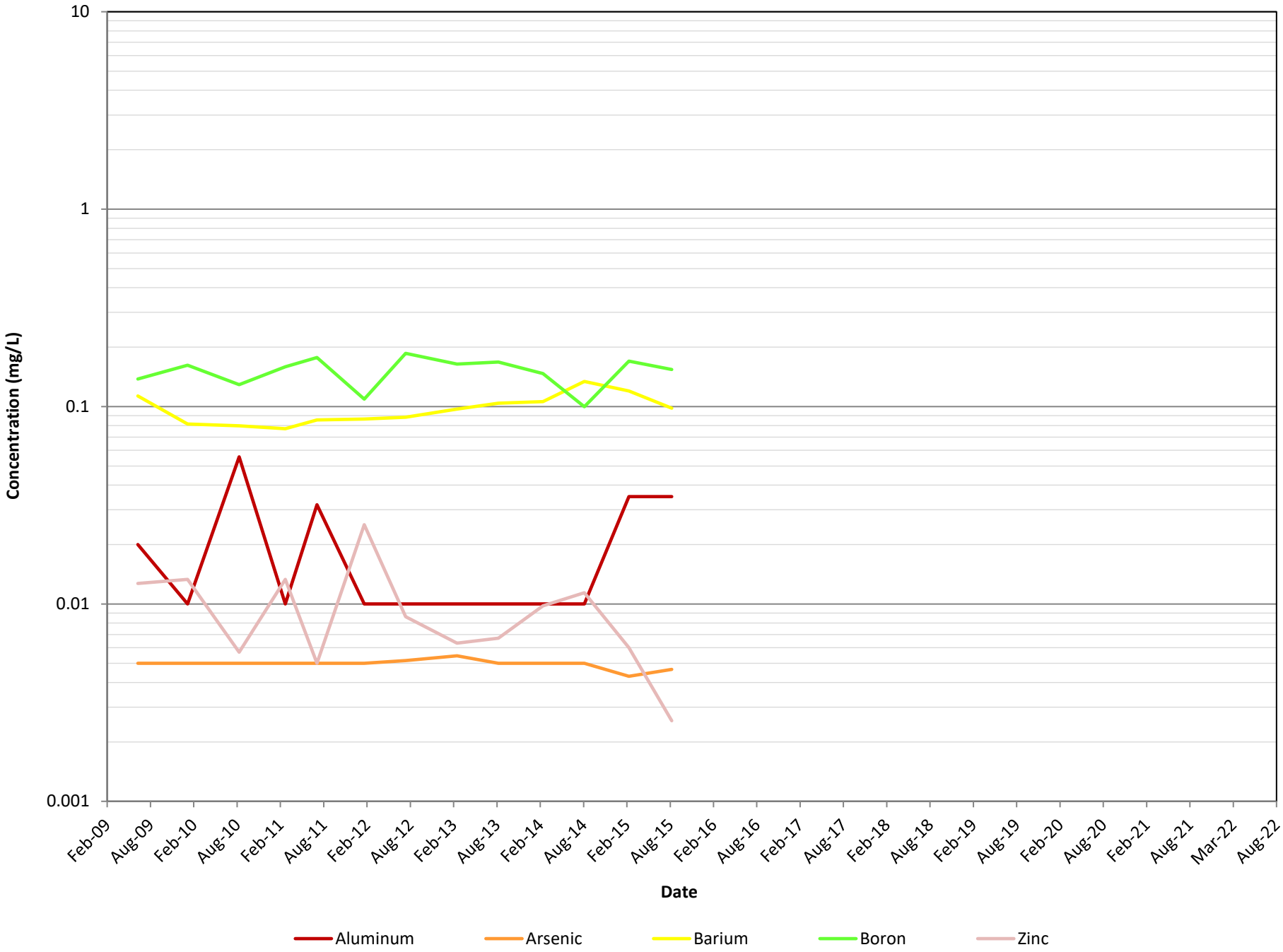
MW-10: ANION CONCENTRATIONS OVER TIME



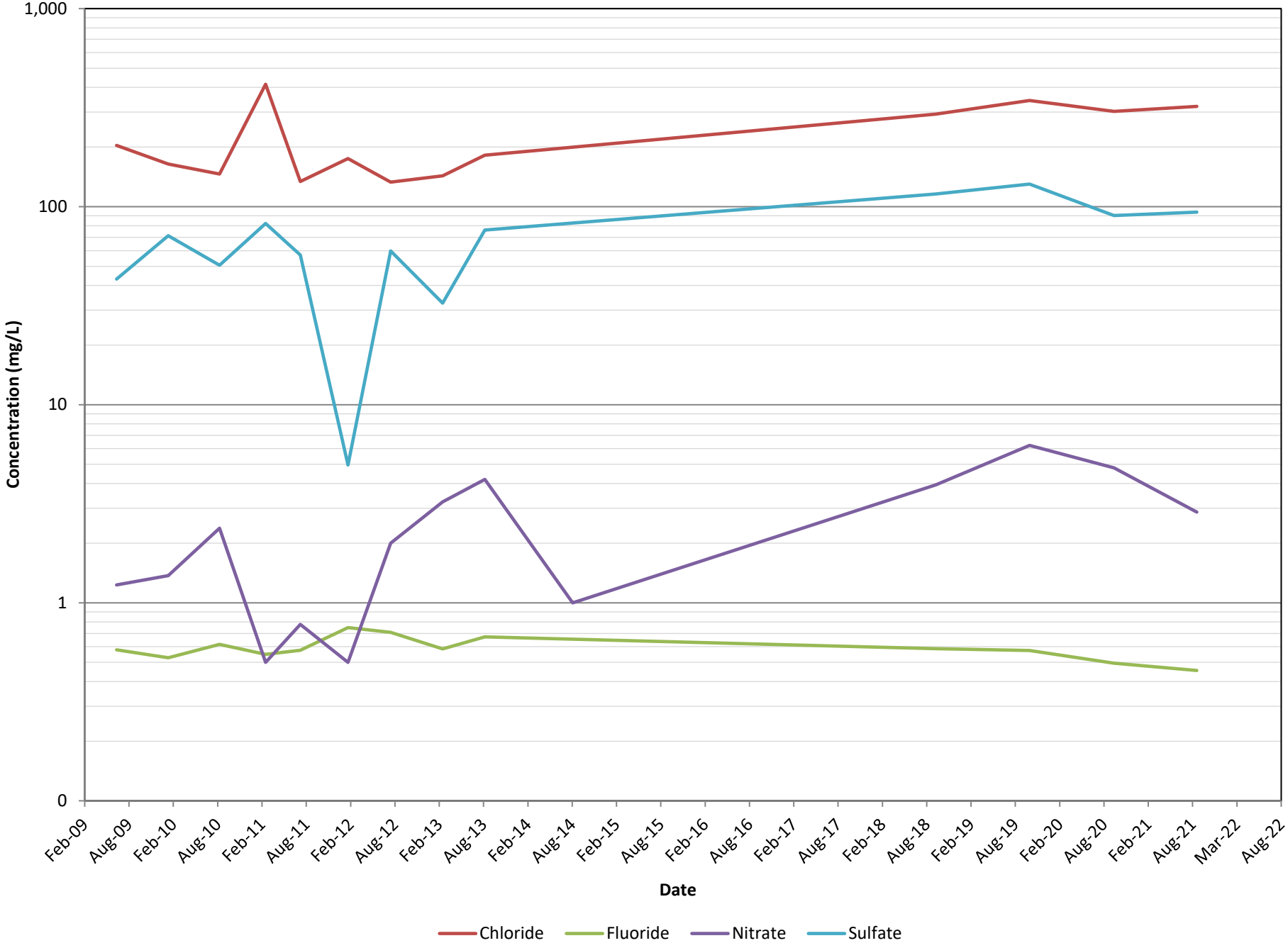
MW-10: TDS CONCENTRATIONS OVER TIME



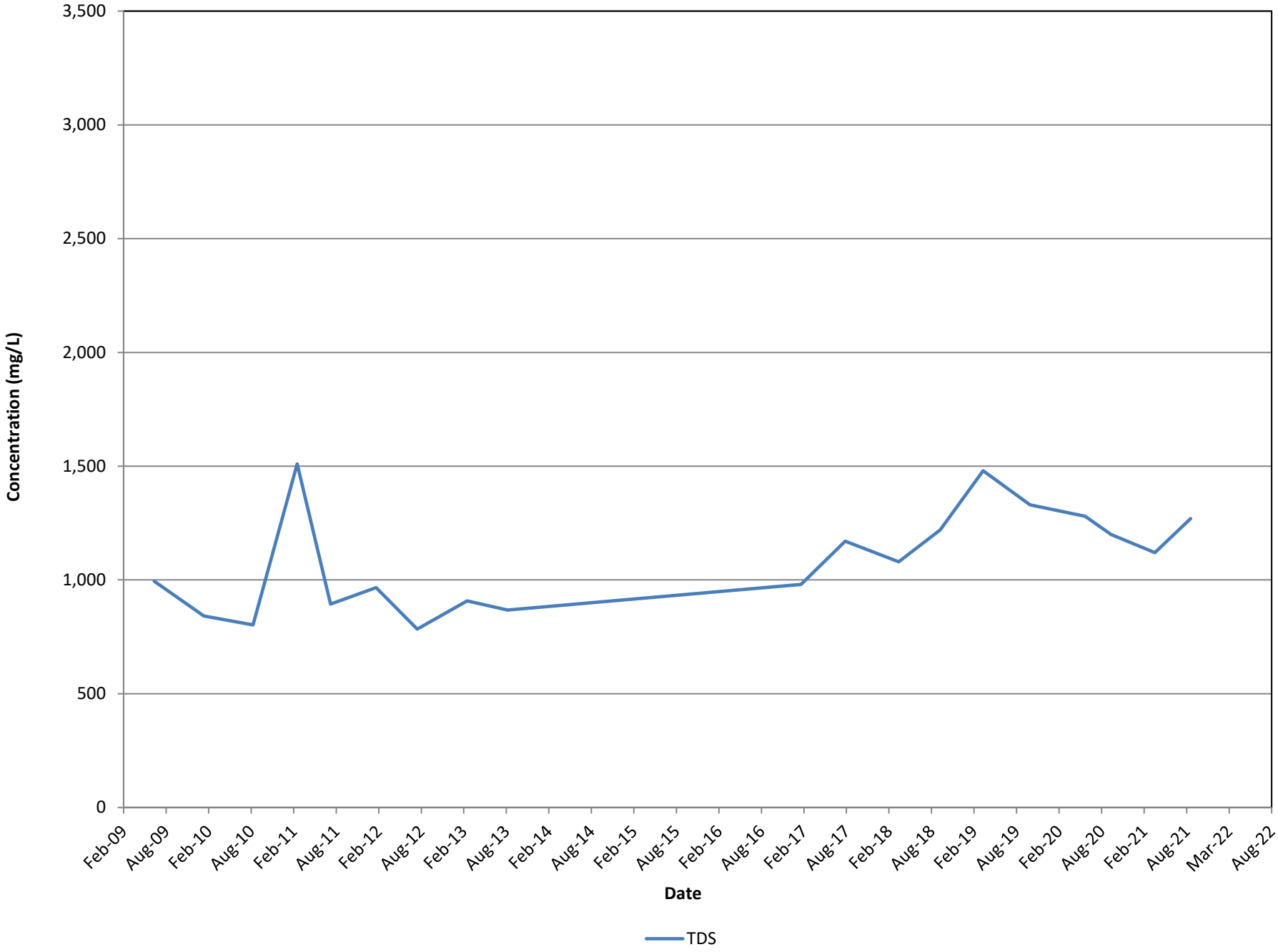
MW-10: METAL CONCENTRATIONS OVER TIME



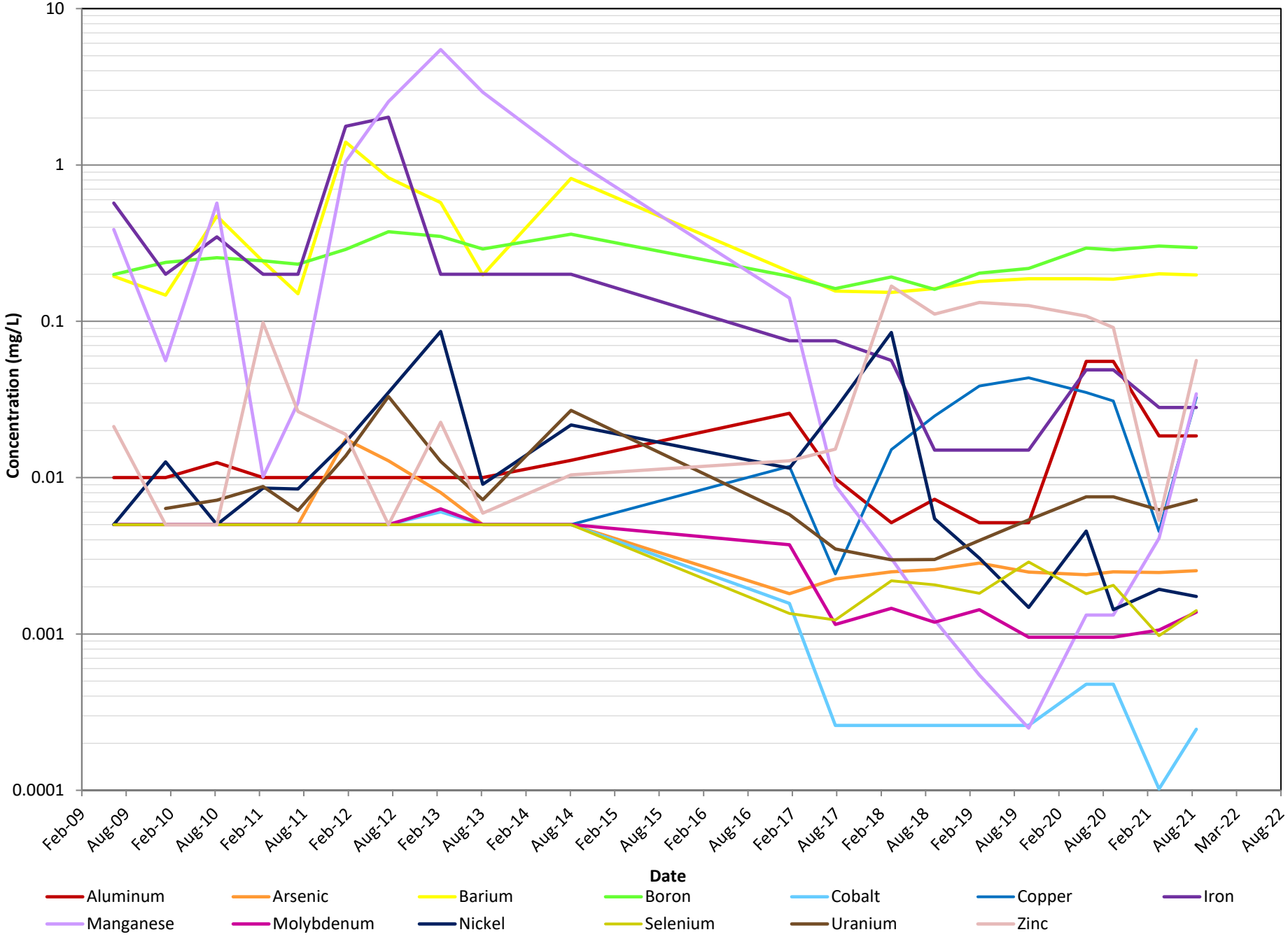
MW-11/MW-11R: ANION CONCENTRATIONS OVER TIME



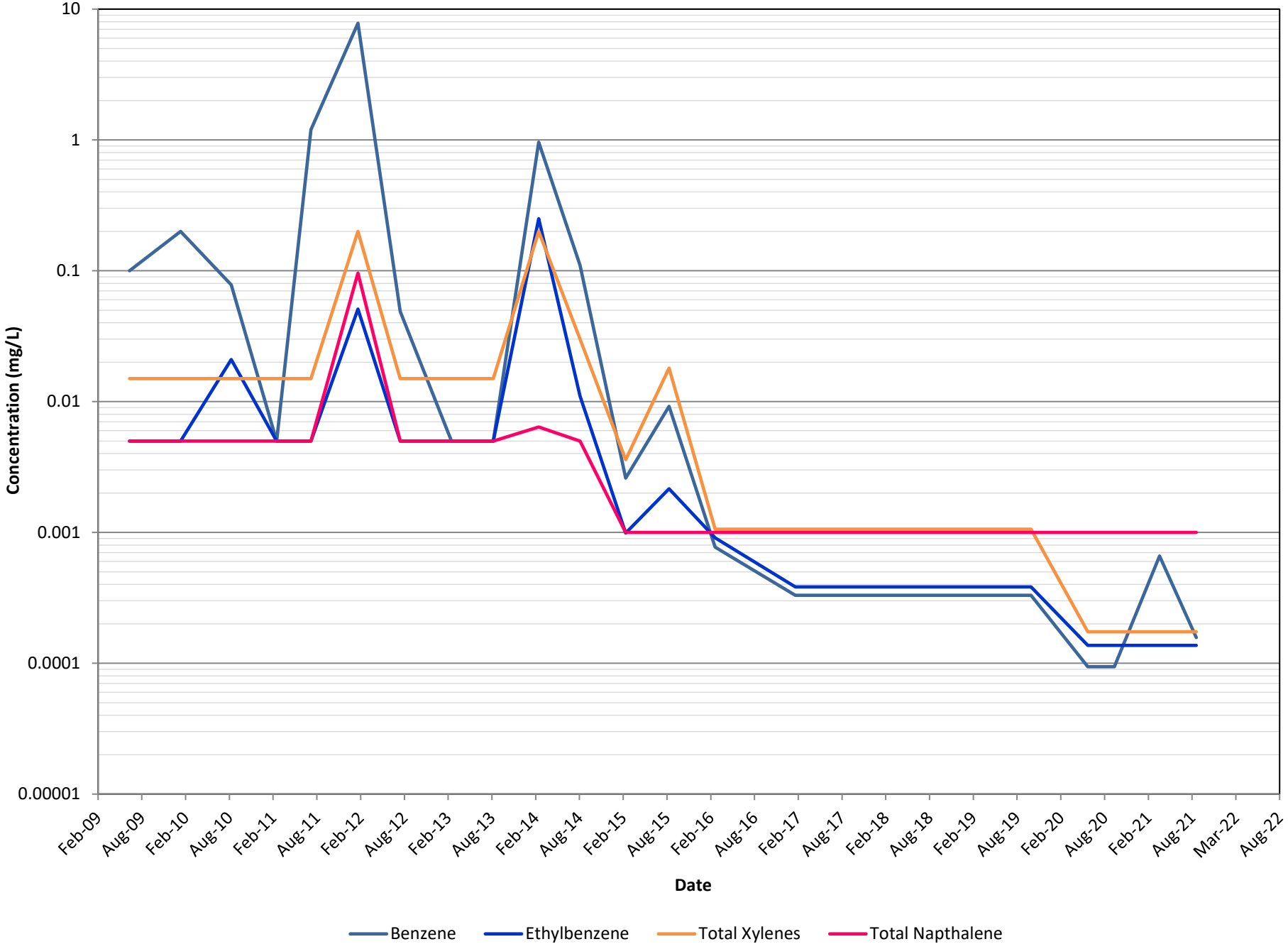
MW-11/MW-11R: TDS CONCENTRATIONS OVER TIME



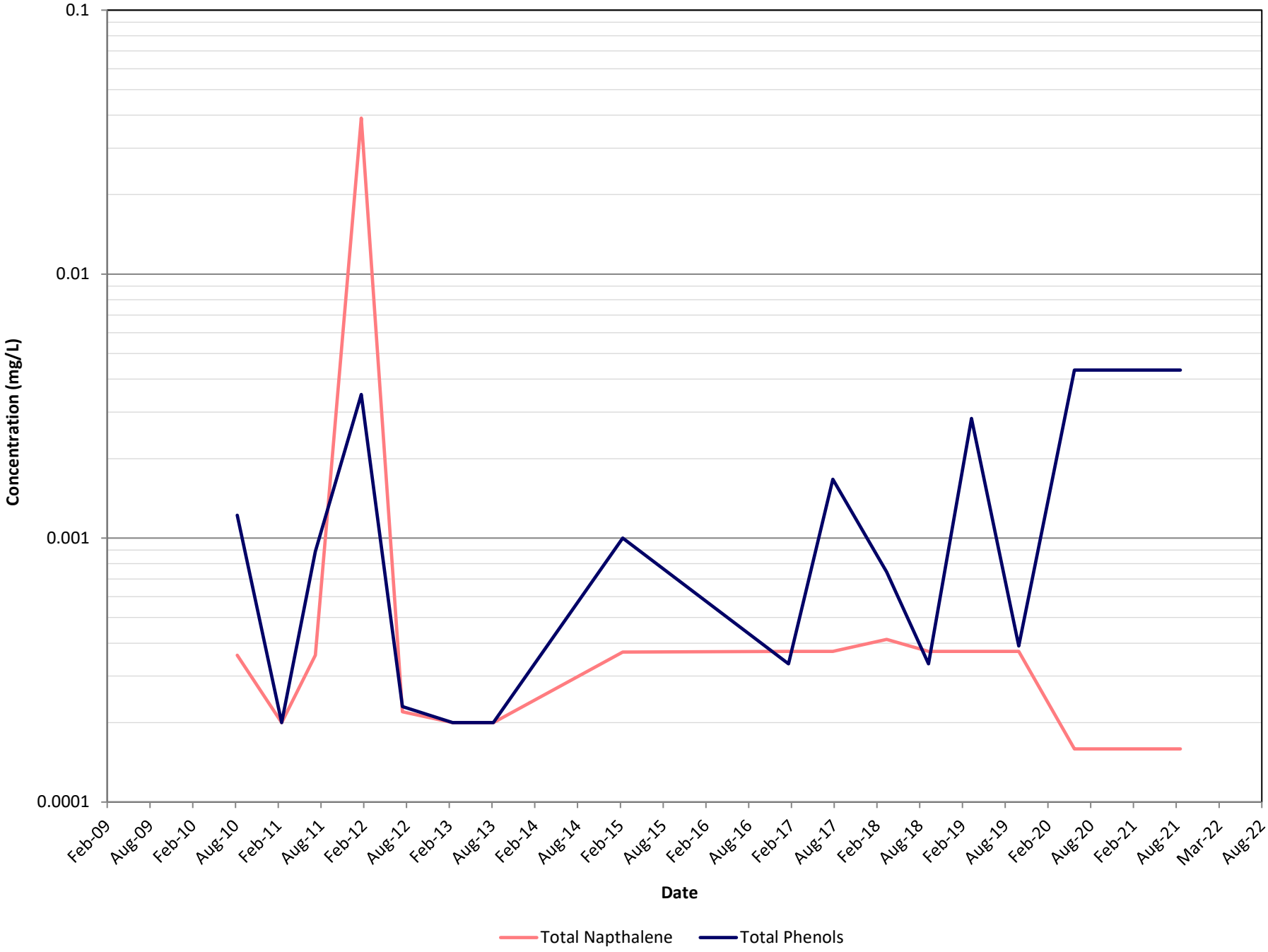
MW-11/MW-11R: METAL CONCENTRATIONS OVER TIME



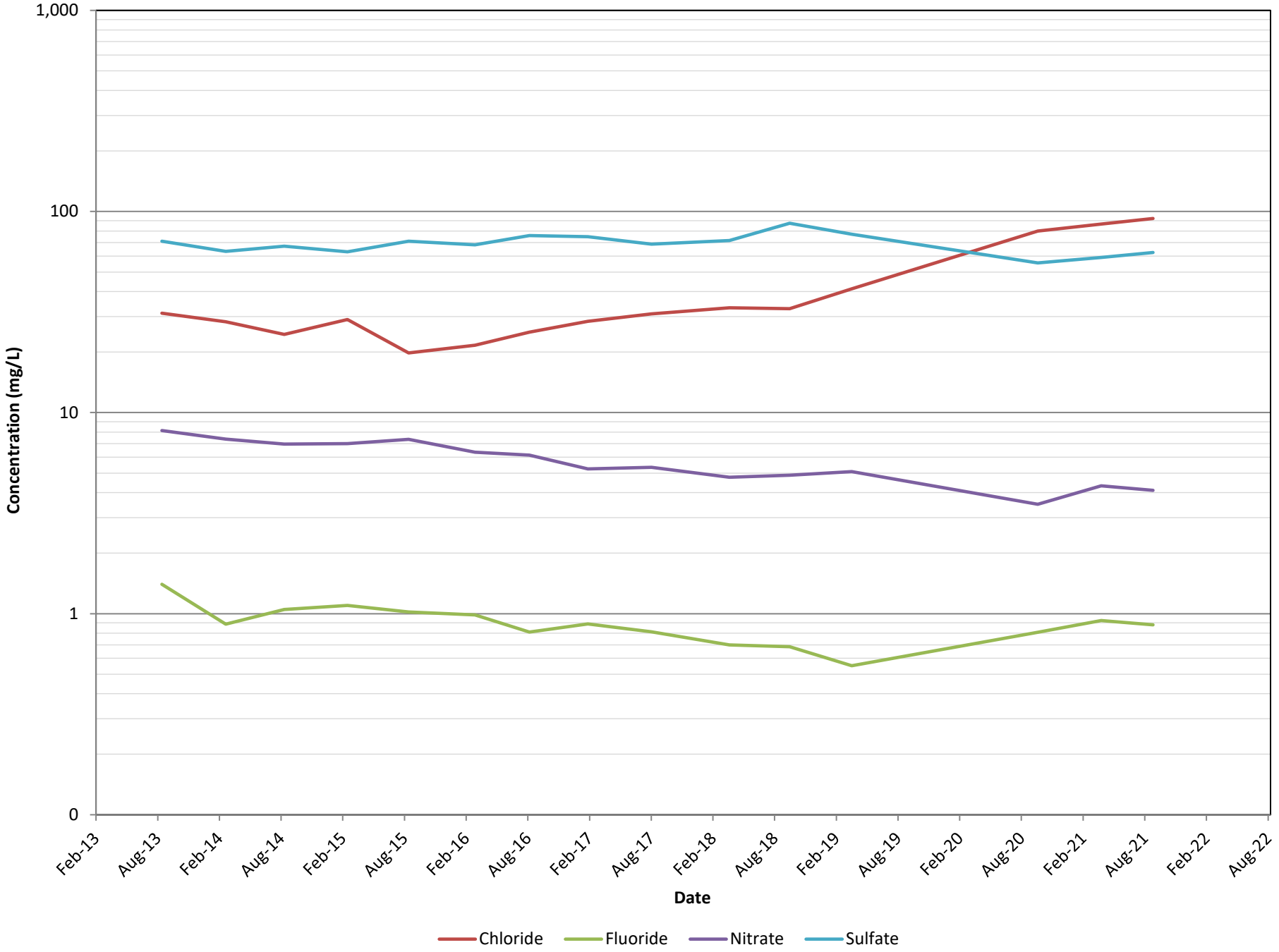
MW-11/MW-11R: VOC CONCENTRATIONS OVER TIME



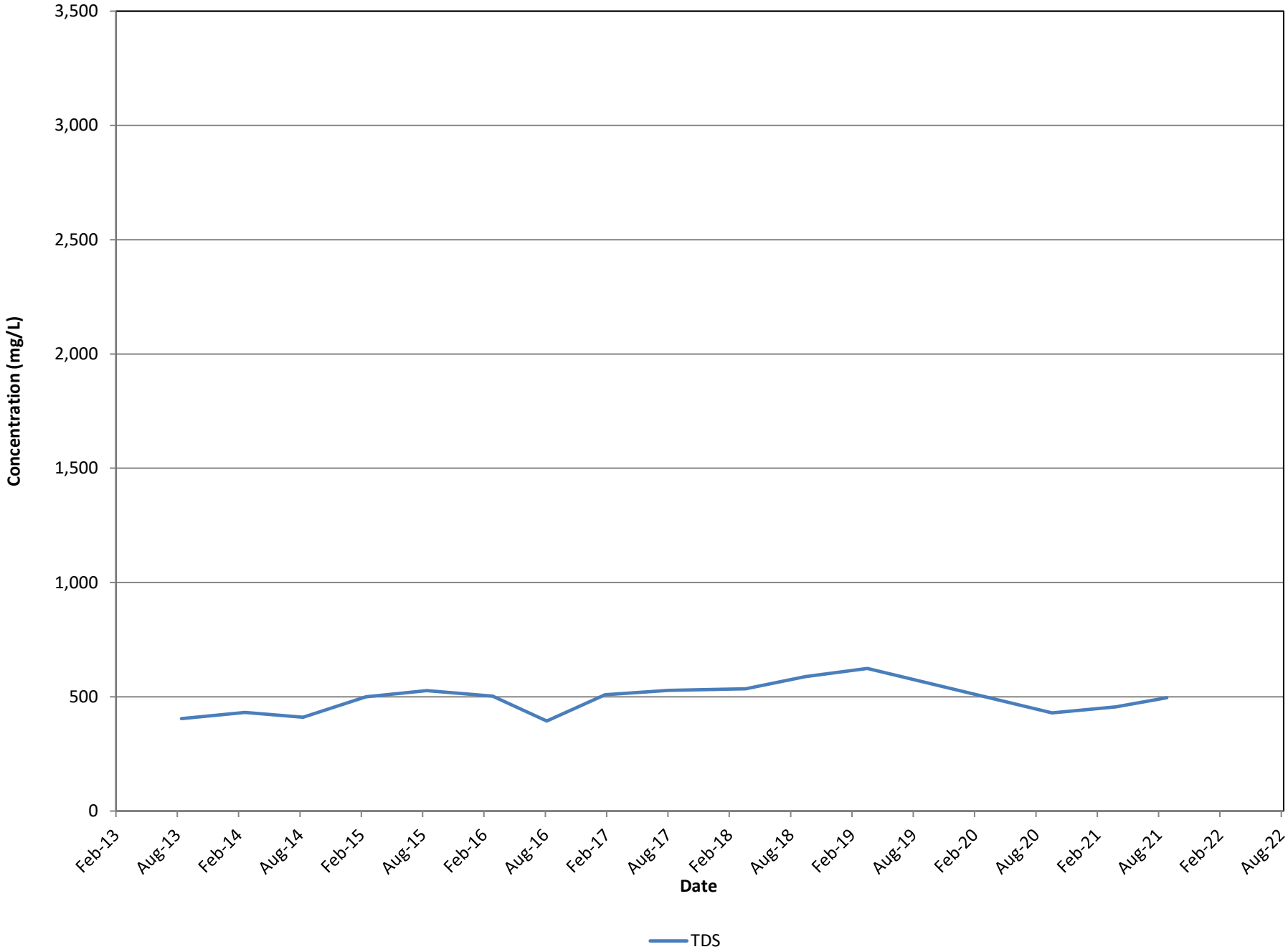
MW-11/MW-11R: SVOC CONCENTRATIONS OVER TIME



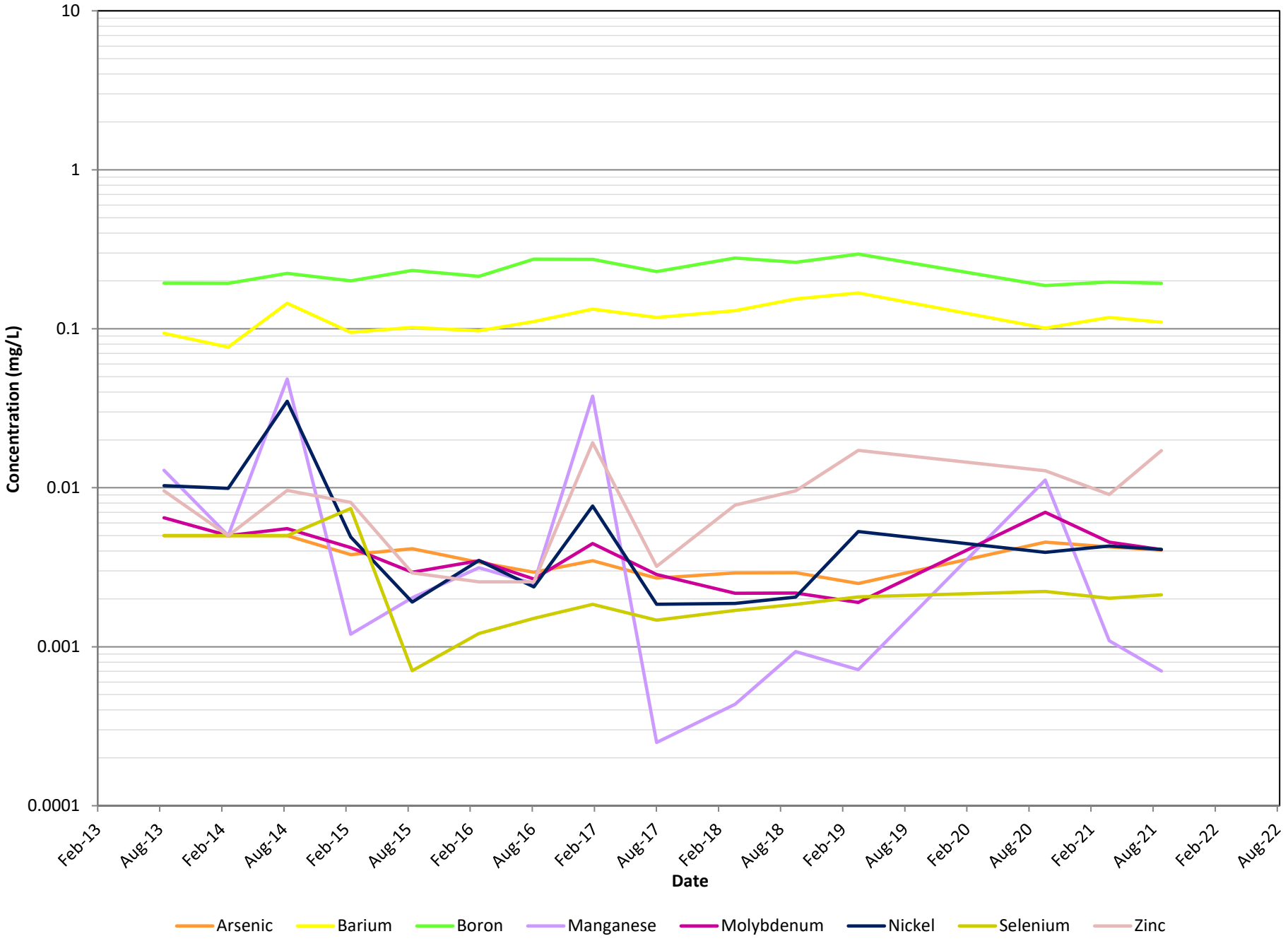
MW-12R/MW-12R2: ANION CONCENTRATIONS OVER TIME



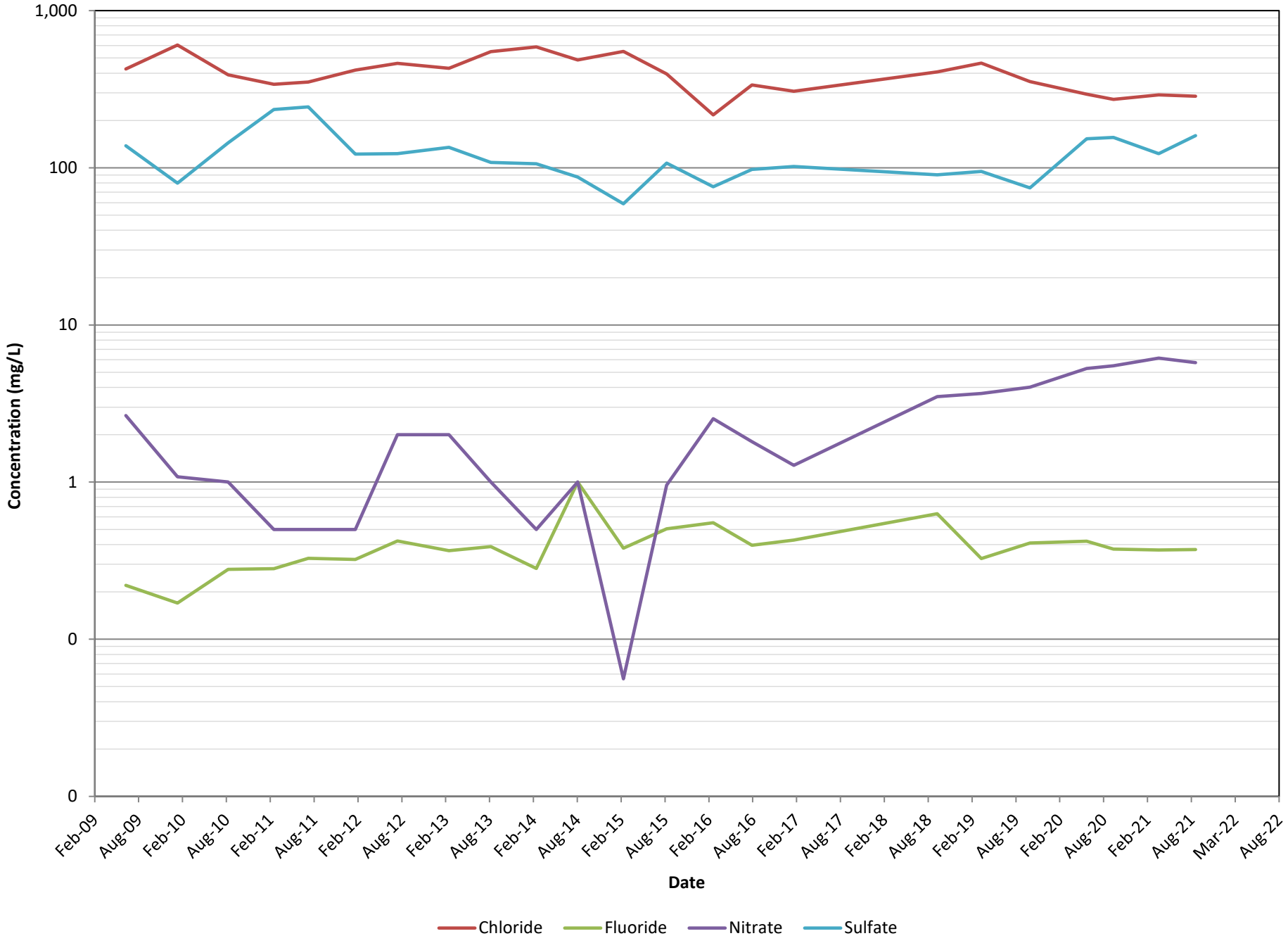
MW-12R/MW-12R2: TDS CONCENTRATIONS OVER TIME



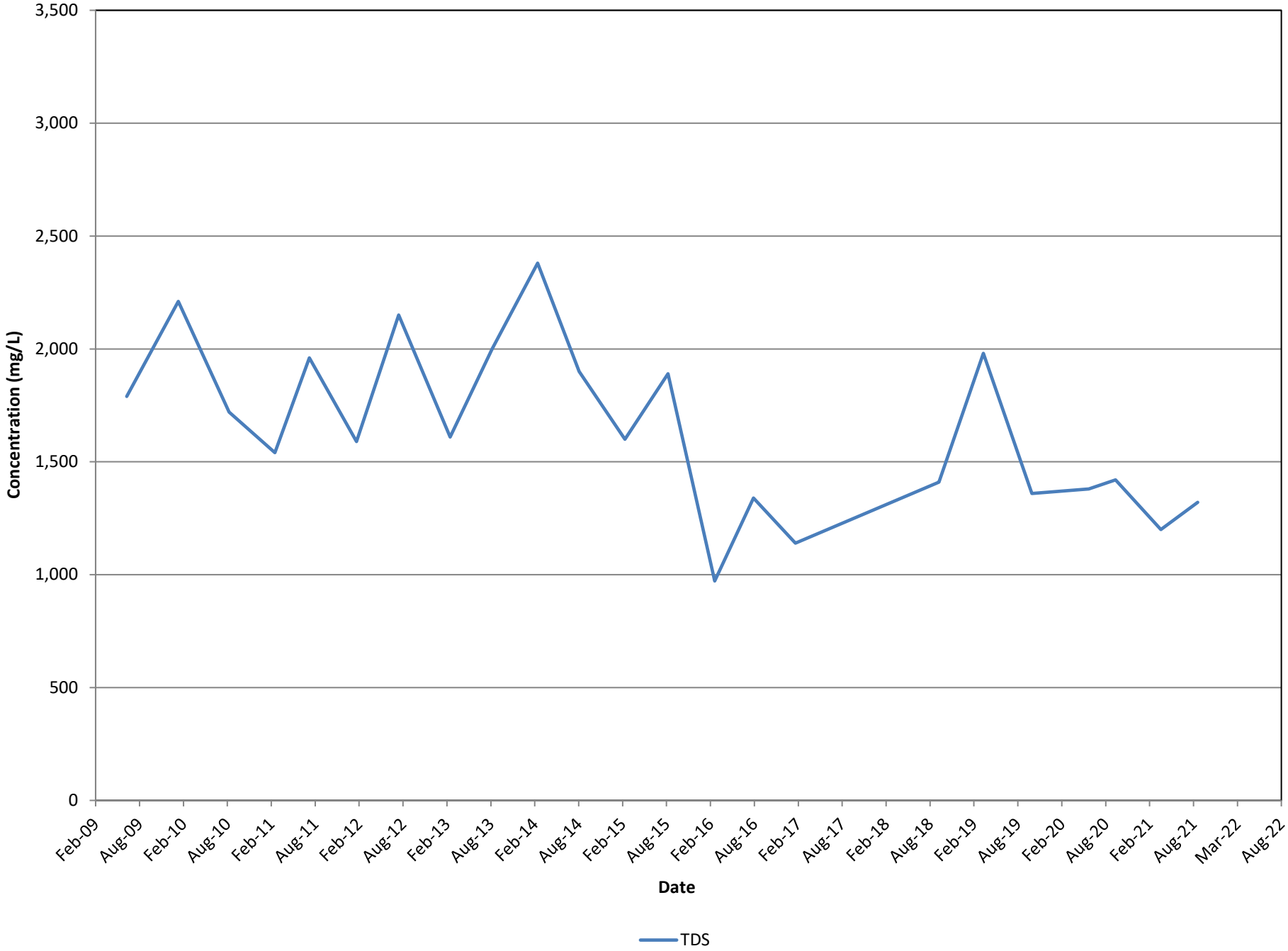
MW-12R/MW-12R2: METAL CONCENTRATIONS OVER TIME



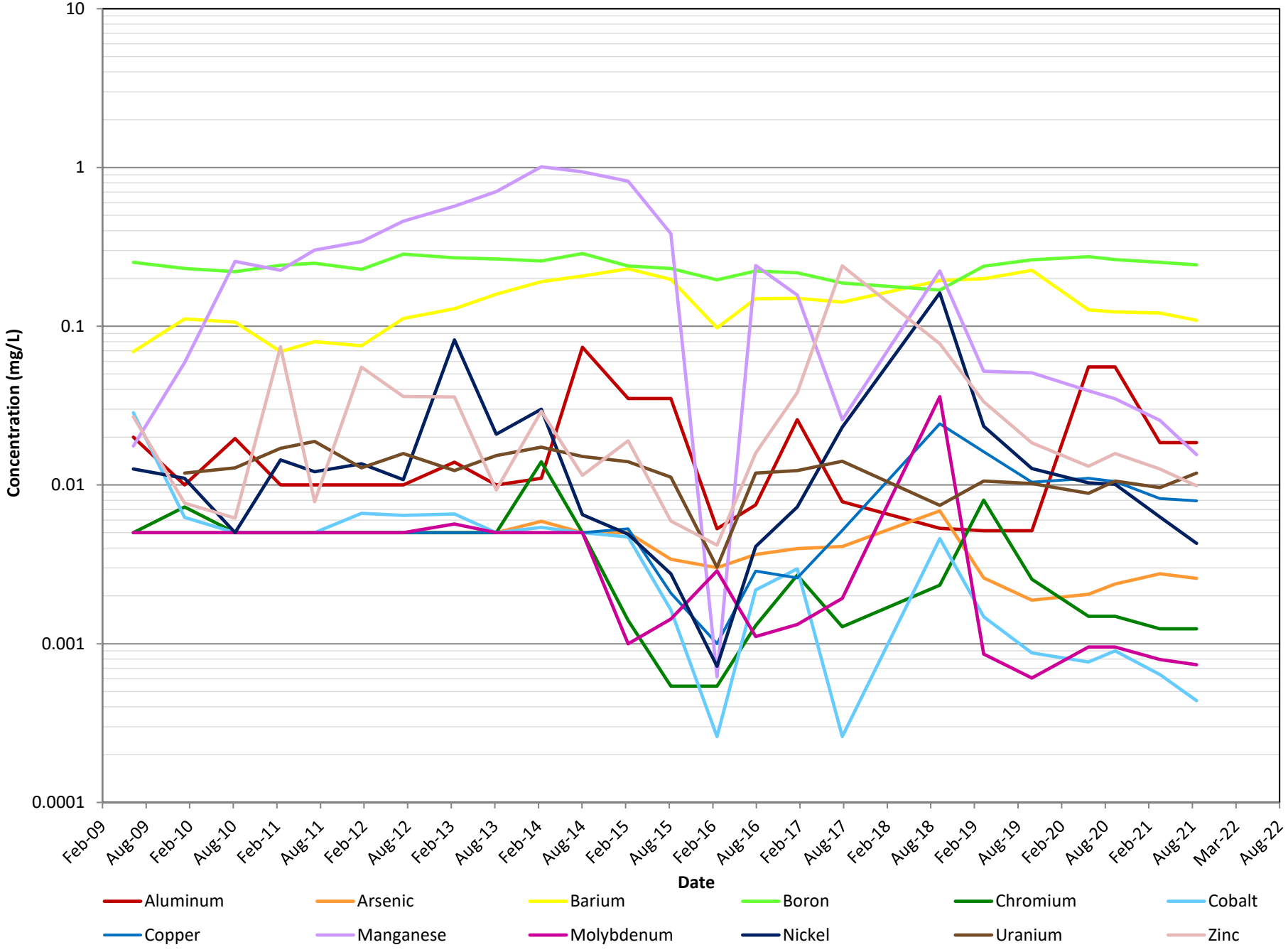
MW-13/MW-13R: ANION CONCENTRATIONS OVER TIME



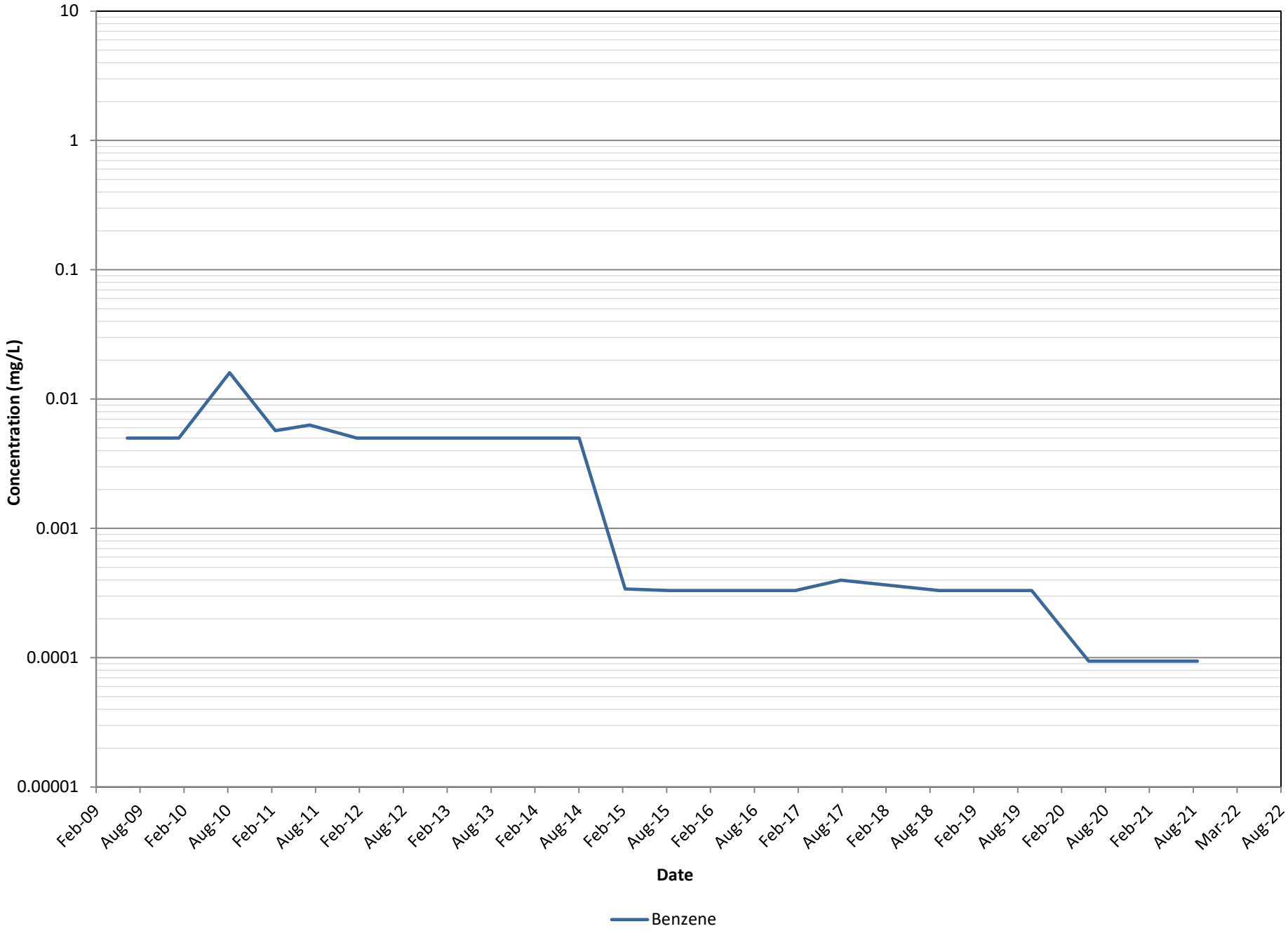
MW-13/MW-13R: TDS CONCENTRATIONS OVER TIME



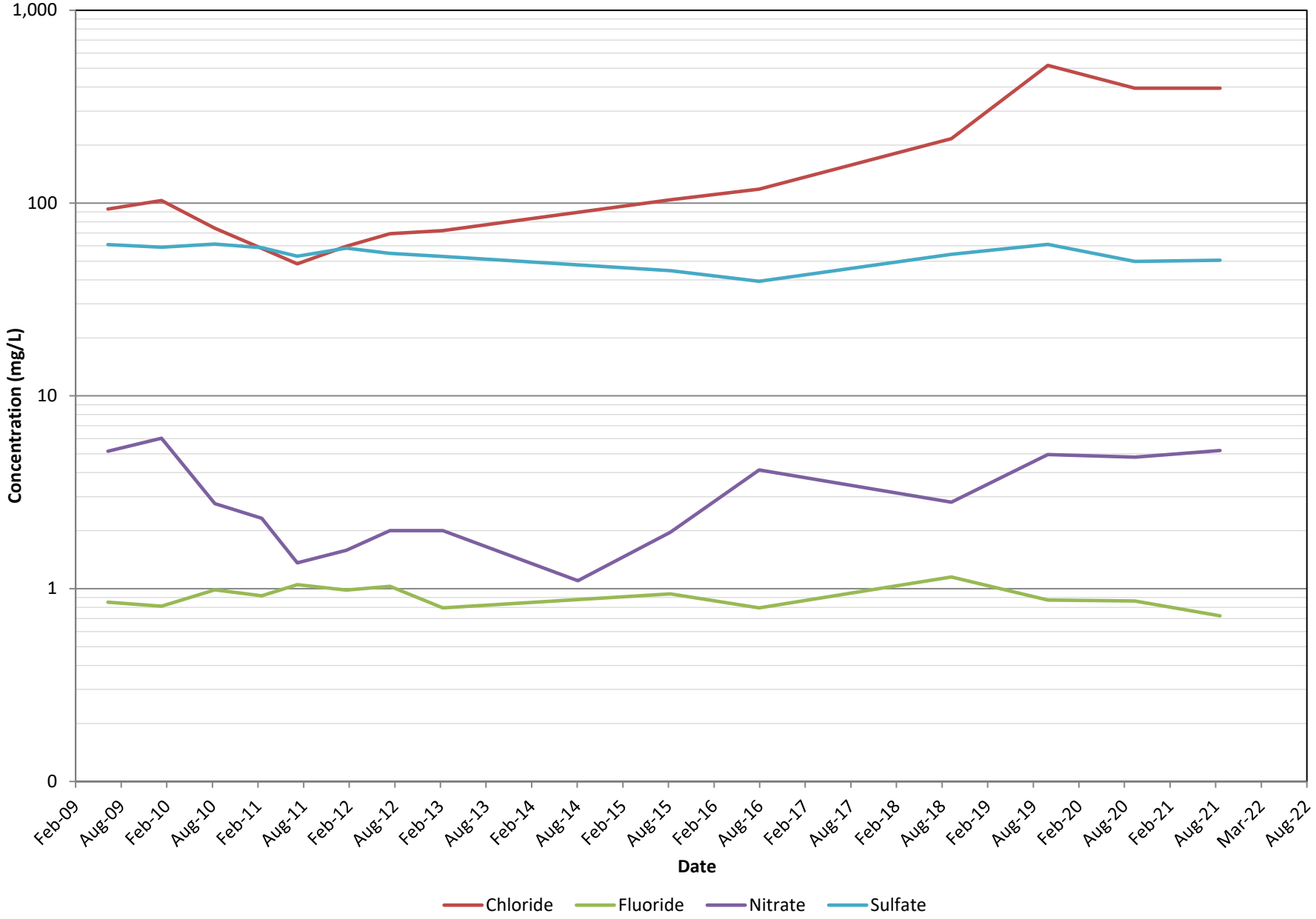
MW-13/MW-13R: METAL CONCENTRATIONS OVER TIME

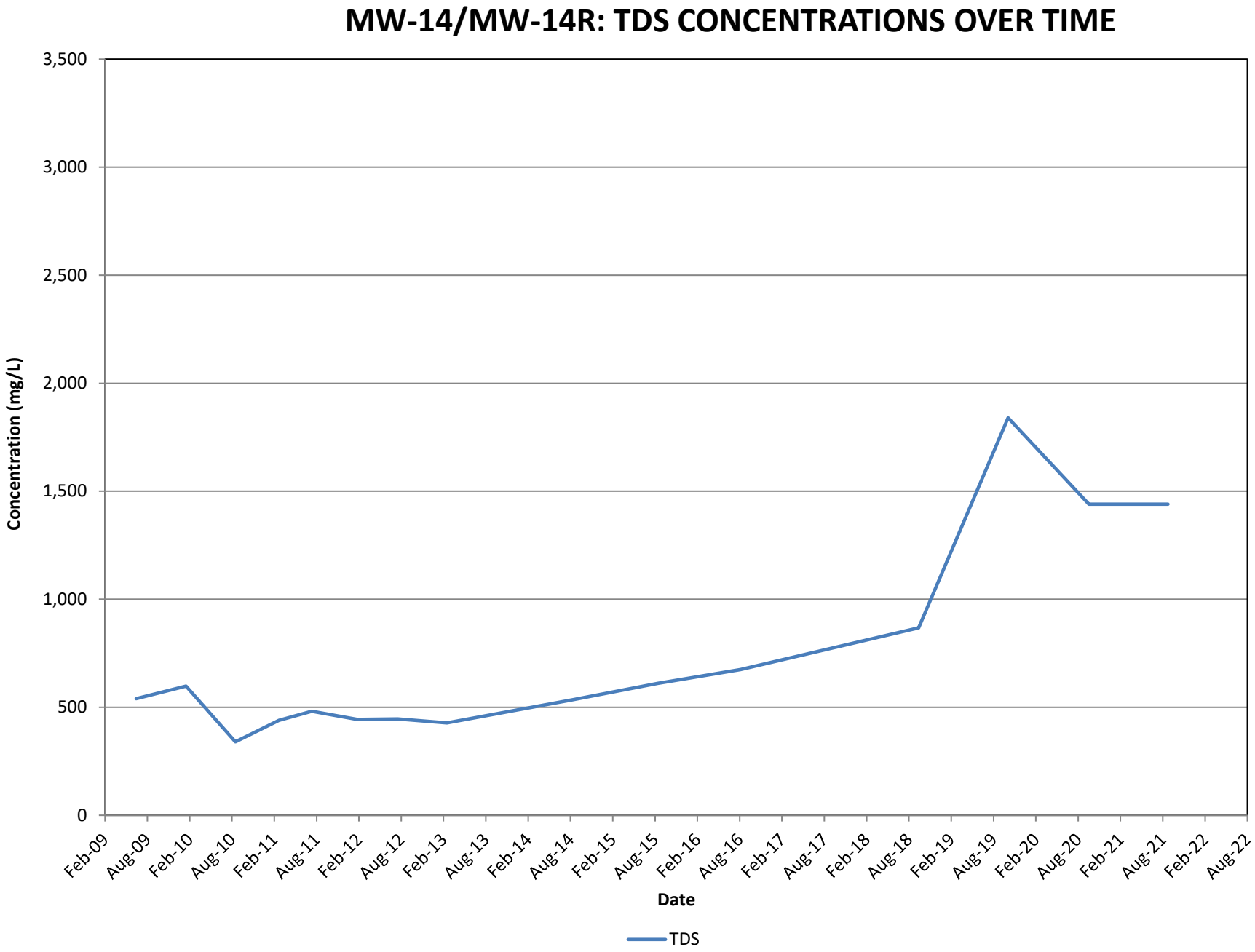


MW-13/MW-13R: VOC CONCENTRATIONS OVER TIME

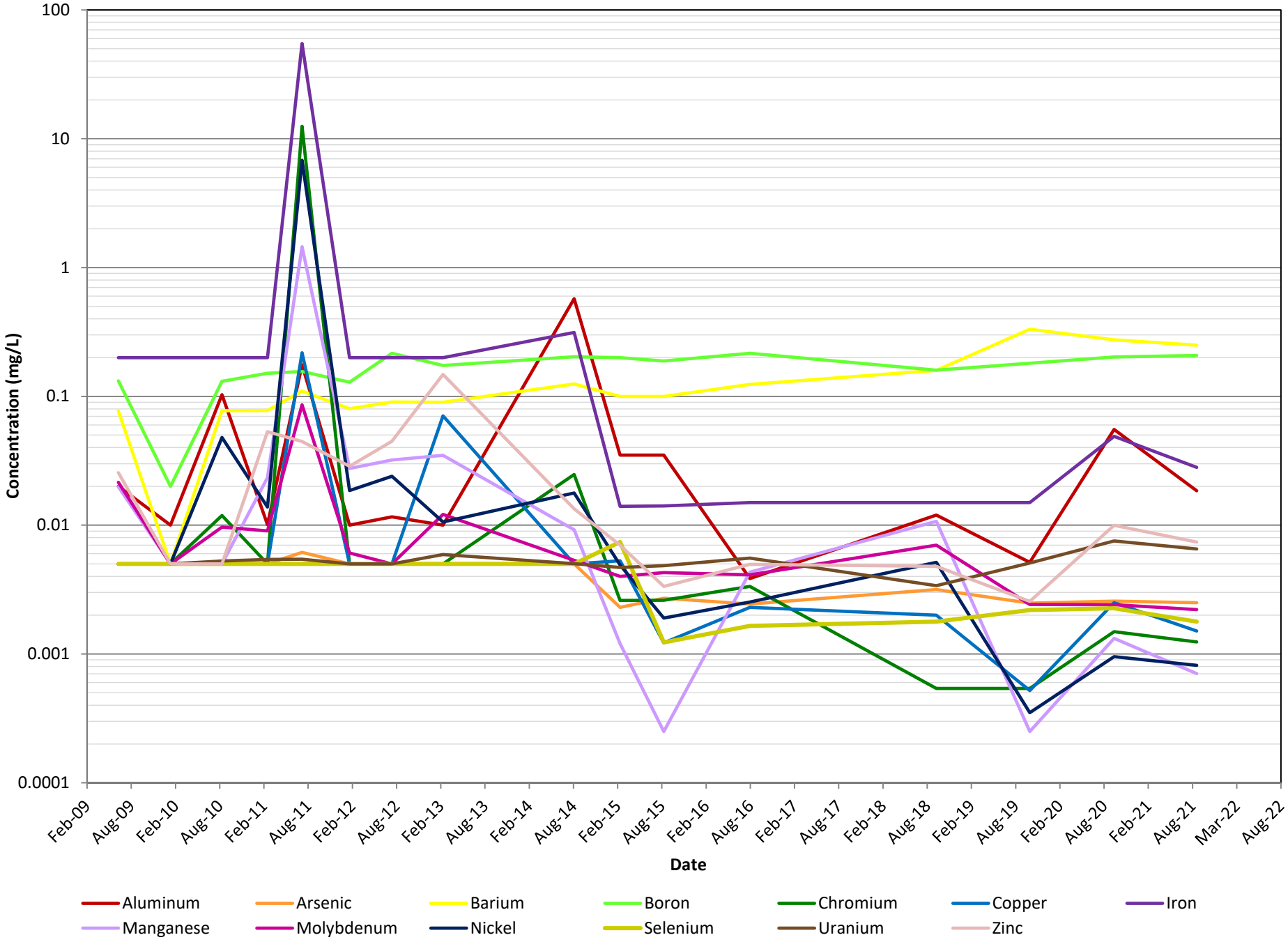


MW-14/MW-14R: ANION CONCENTRATIONS OVER TIME

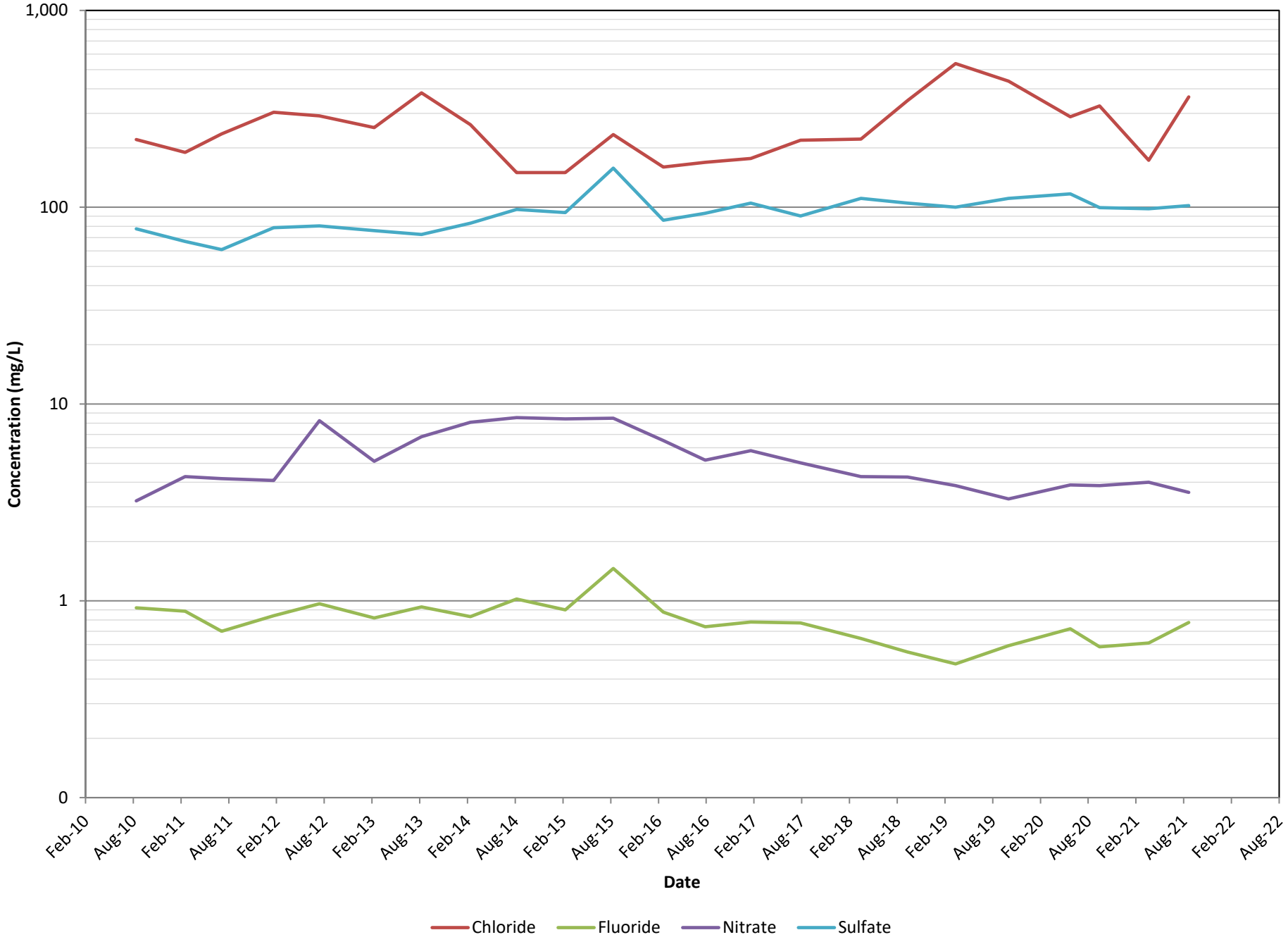



MW-14/MW-14R: TDS CONCENTRATIONS OVER TIME
Concentration (mg/L)
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Feb-09
Aug-09
Feb-10
Aug-10
Feb-11
Aug-11
Feb-12
Aug-12
Feb-13
Aug-13
Feb-14
Aug-14
Feb-15
Aug-15
Feb-16
Aug-16
Feb-17
Aug-17
Feb-18
Aug-18
Feb-19
Aug-19
Feb-20
Aug-20
Feb-21
Aug-21
Feb-22
Aug-22
Date
TDS

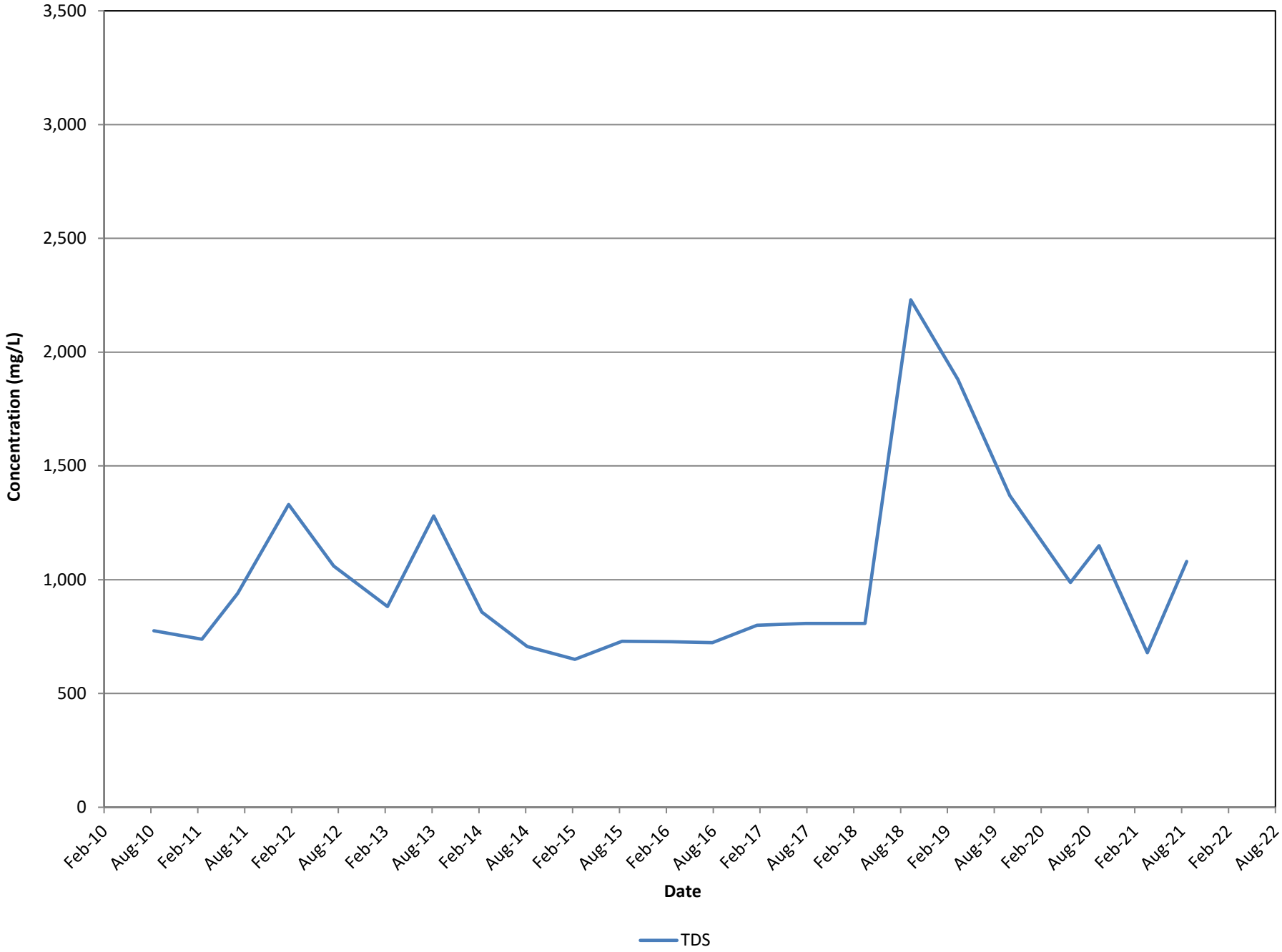
MW-14/MW-14R: METAL CONCENTRATIONS OVER TIME



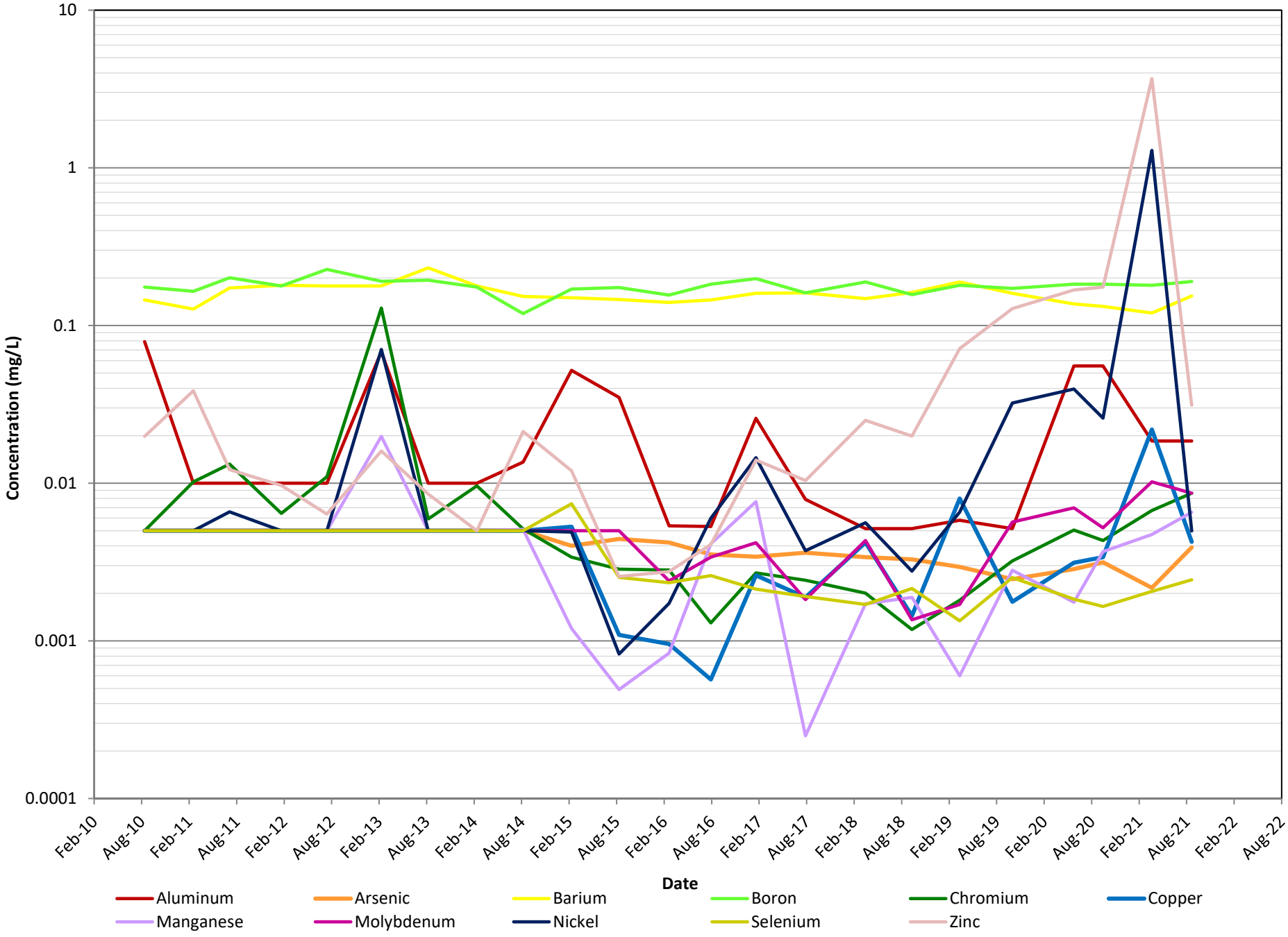
MW-15/MW-15R: ANION CONCENTRATIONS OVER TIME



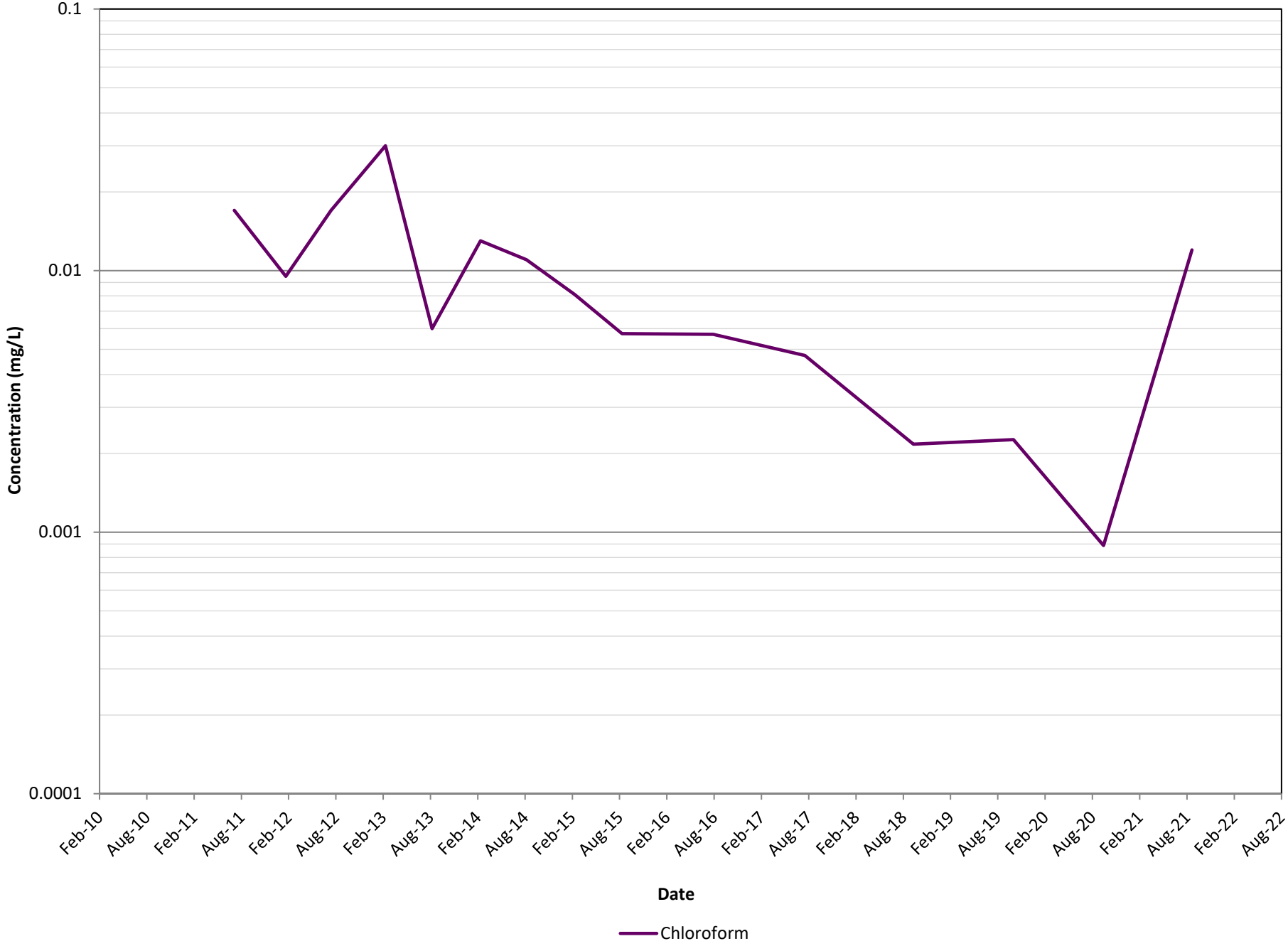
MW-15/MW-15R: TDS CONCENTRATIONS OVER TIME



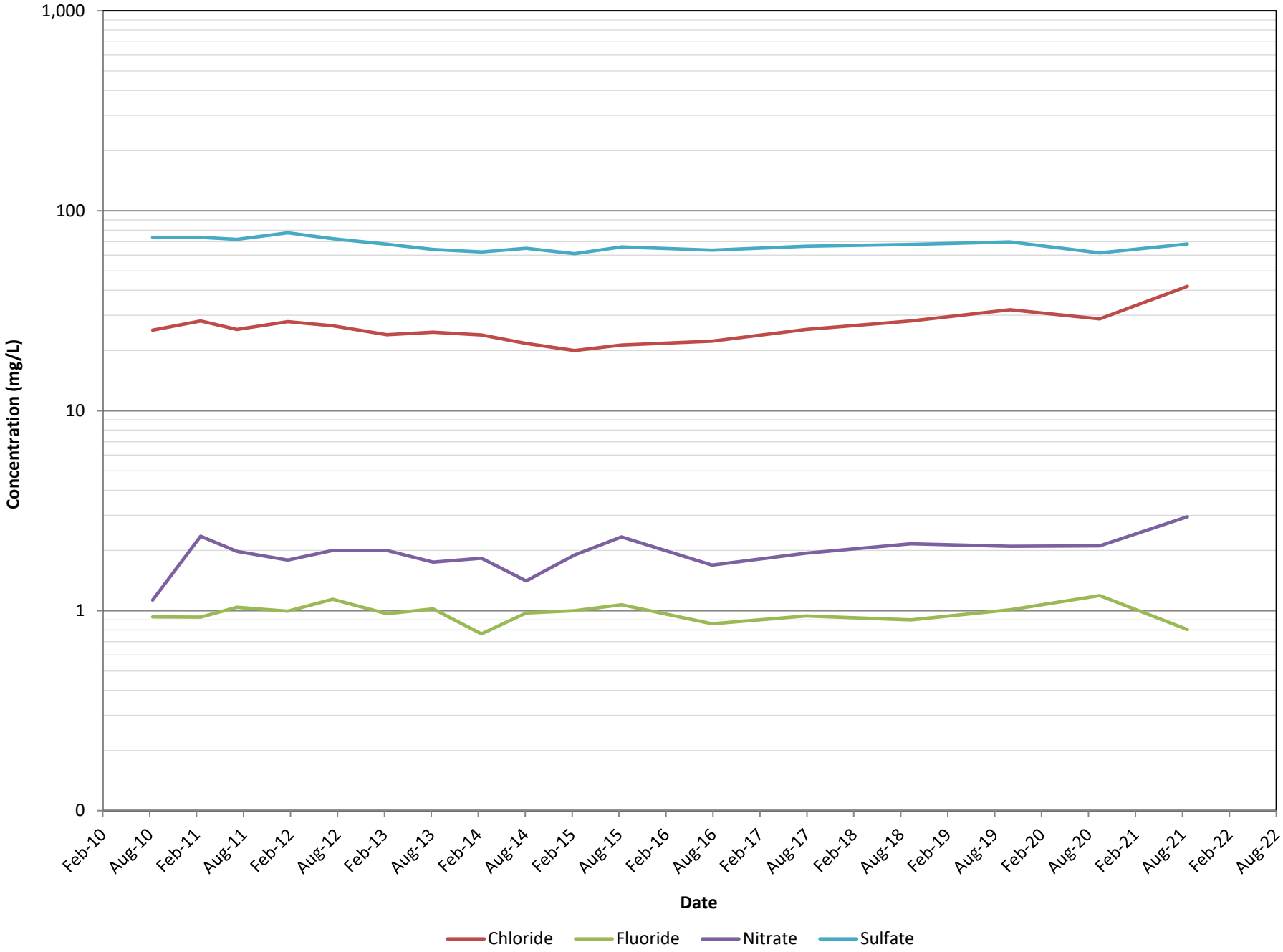
MW-15/MW-15R: METAL CONCENTRATIONS OVER TIME



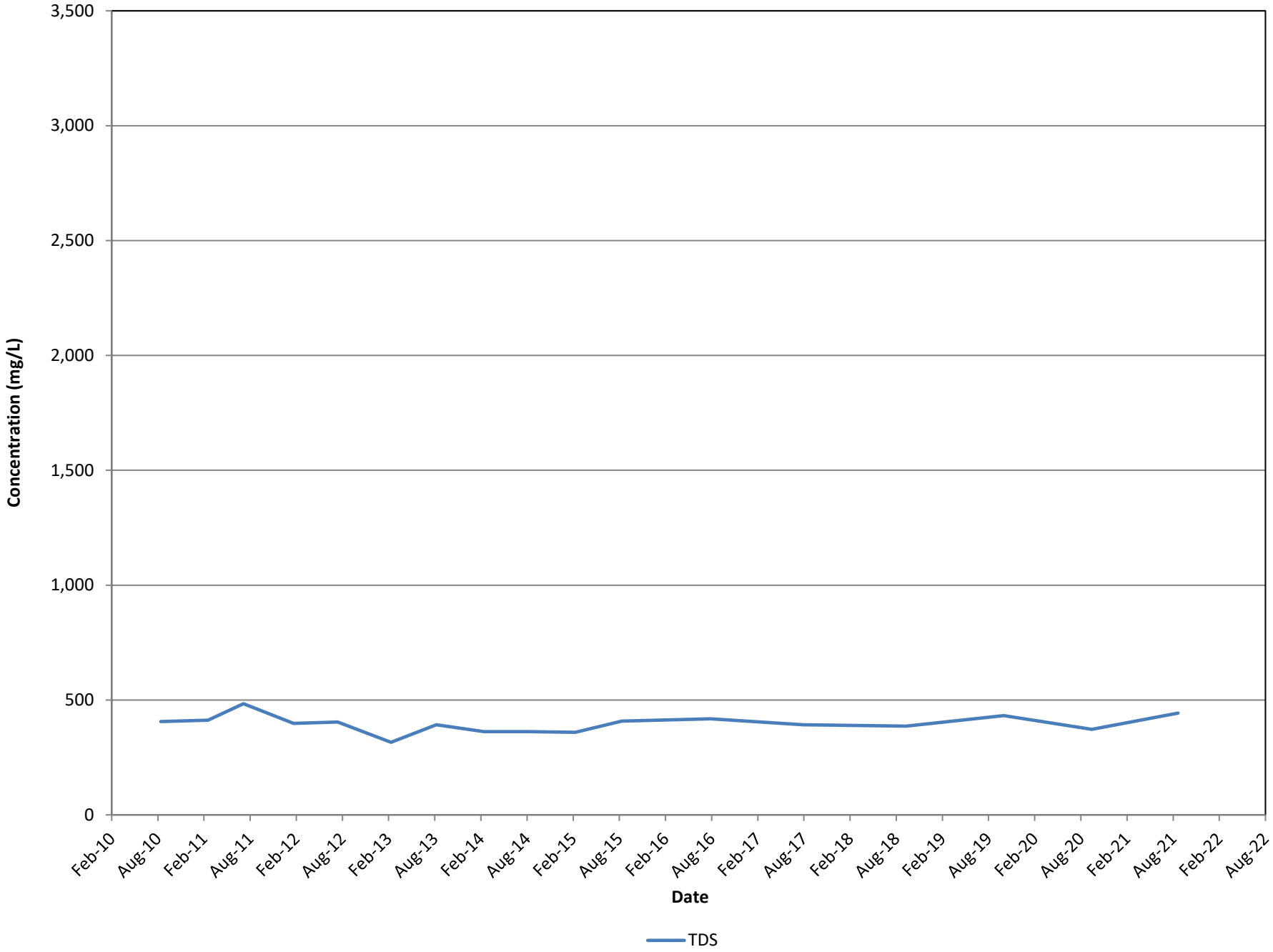
MW-15/MW-15R: VOC CONCENTRATIONS OVER TIME



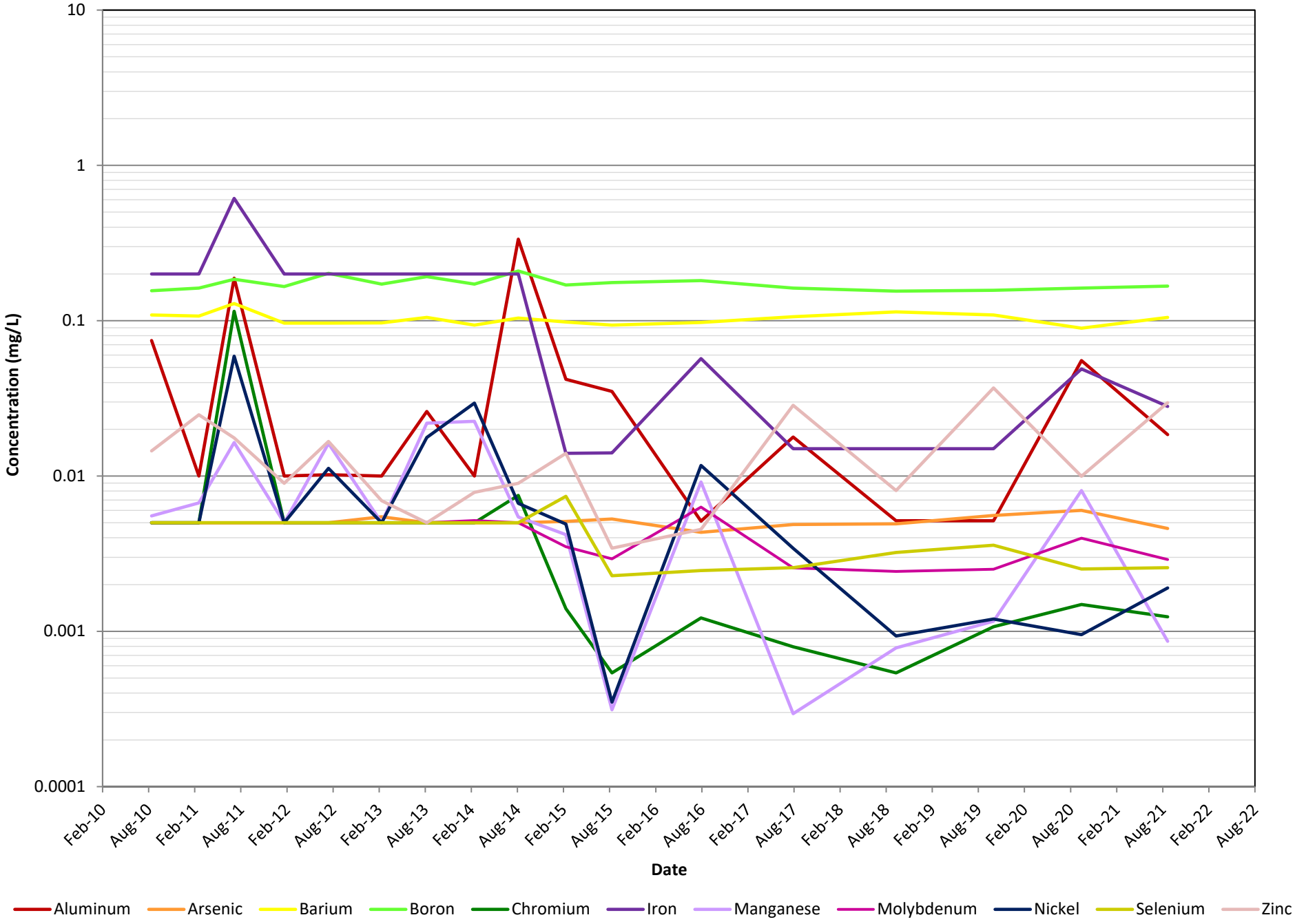
MW-16/MW-16R: ANION CONCENTRATIONS OVER TIME



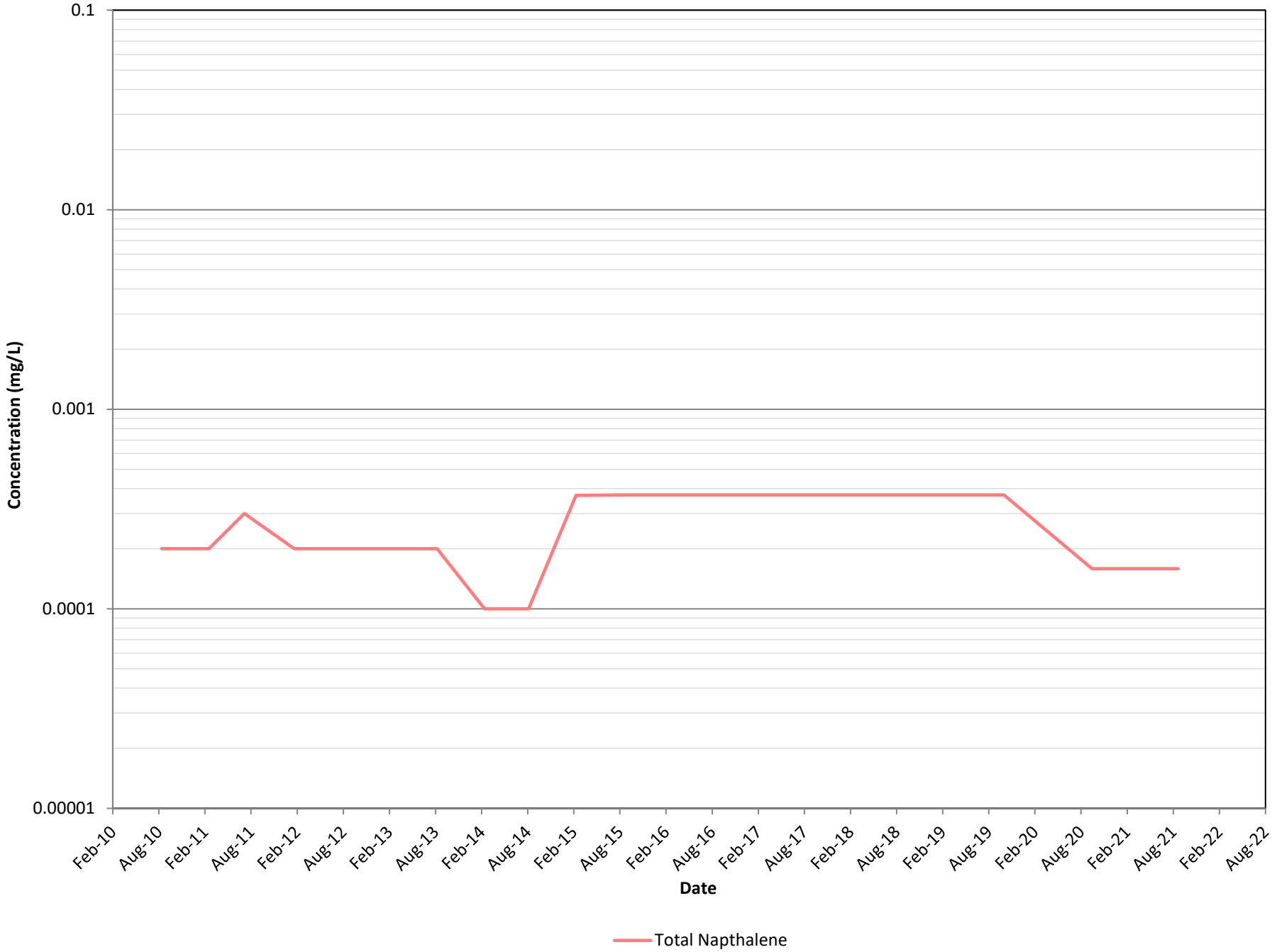
MW-16/MW-16R: TDS CONCENTRATIONS OVER TIME



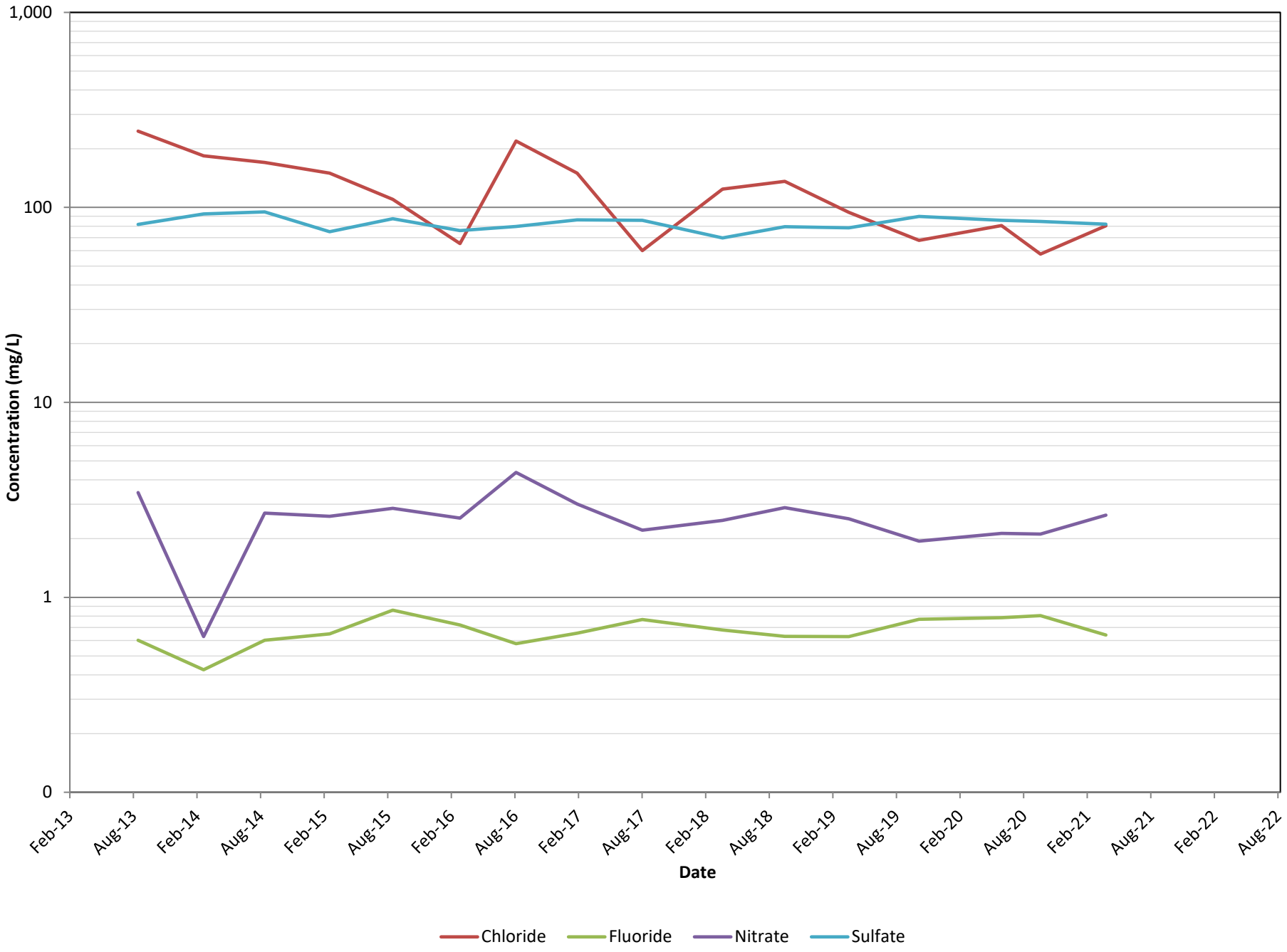
MW-16/MW-16R: METAL CONCENTRATIONS OVER TIME



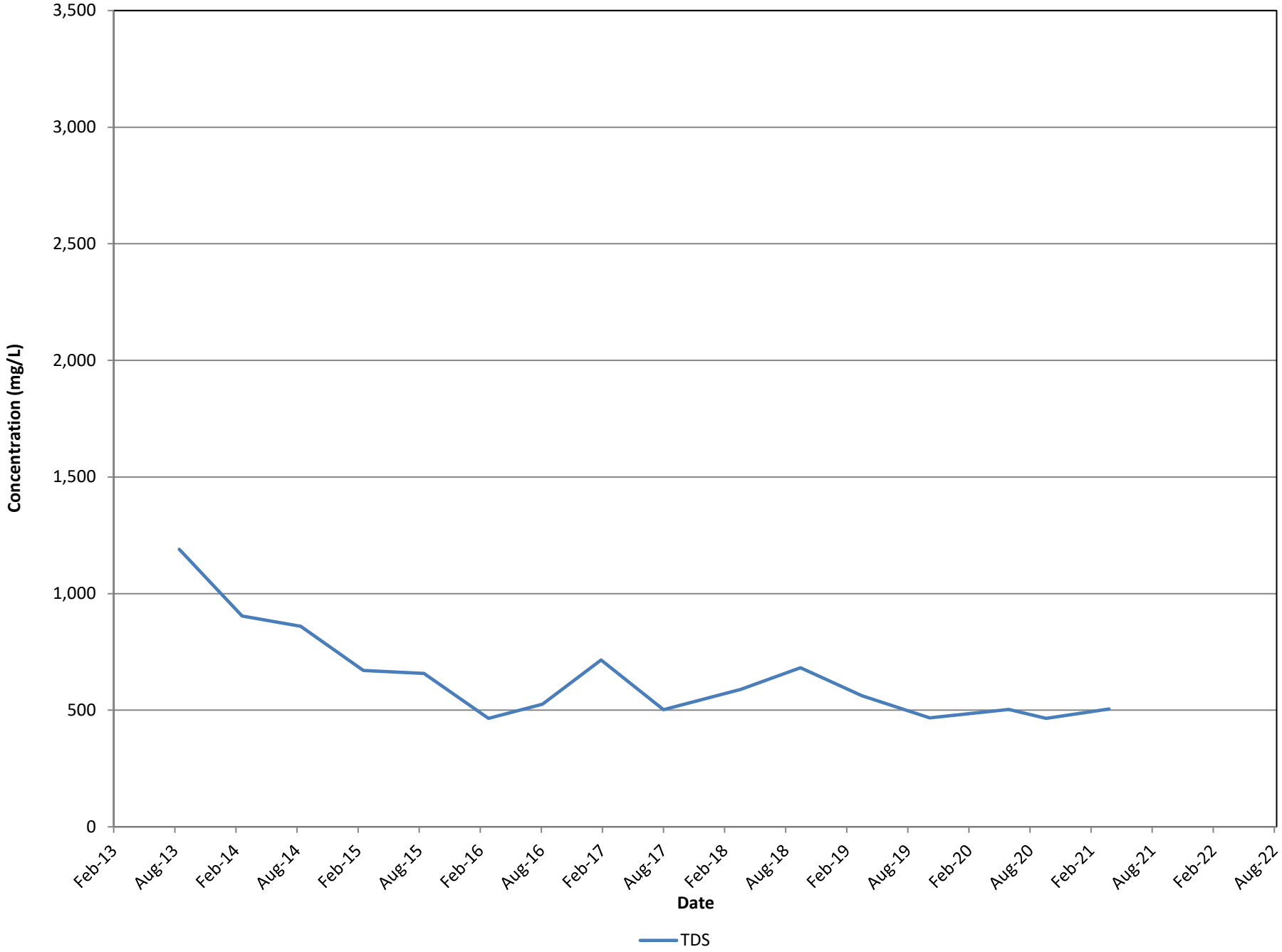
MW-16/MW-16R: SVOC CONCENTRATIONS OVER TIME



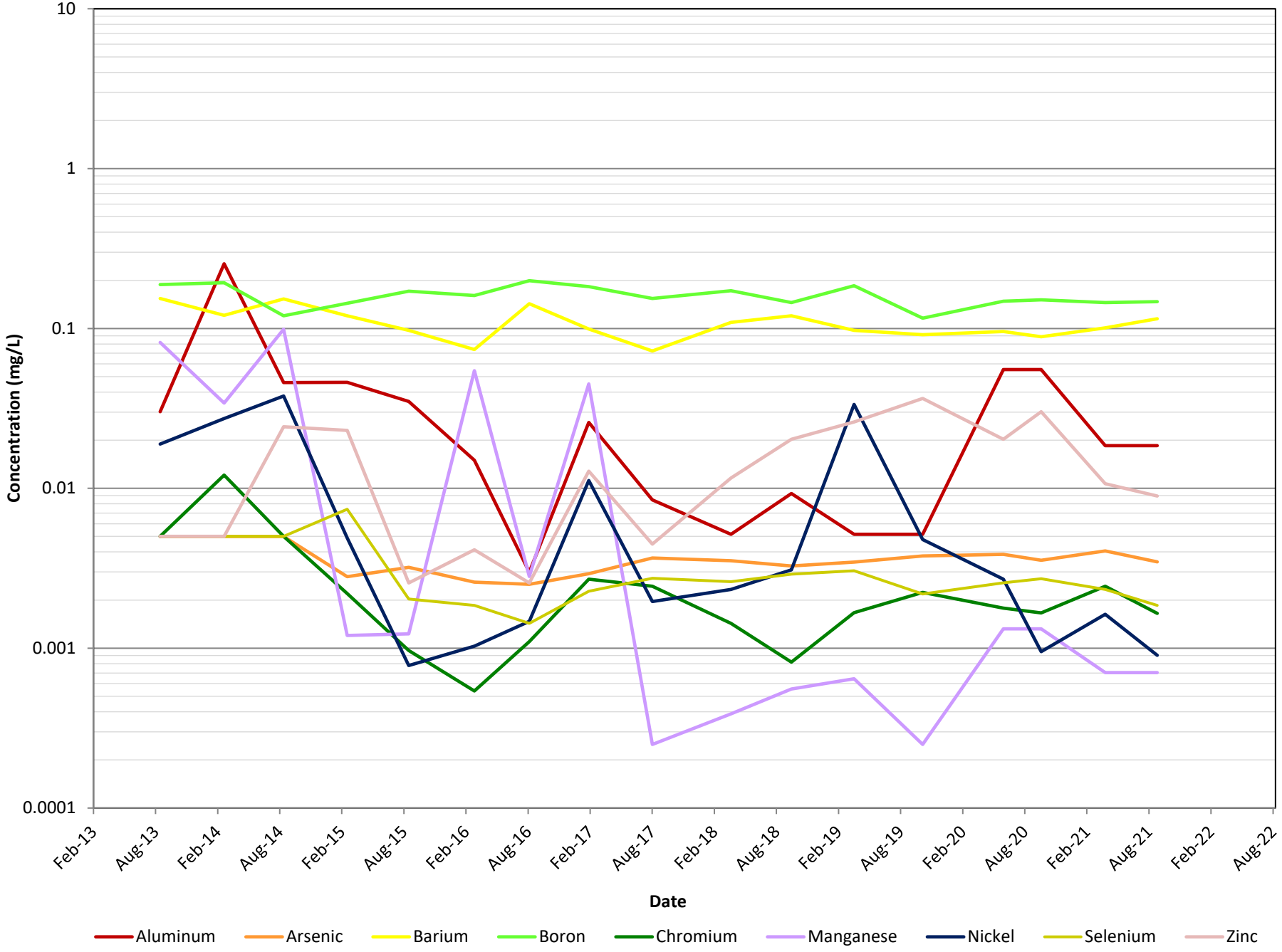
MW-17R: ANION CONCENTRATIONS OVER TIME

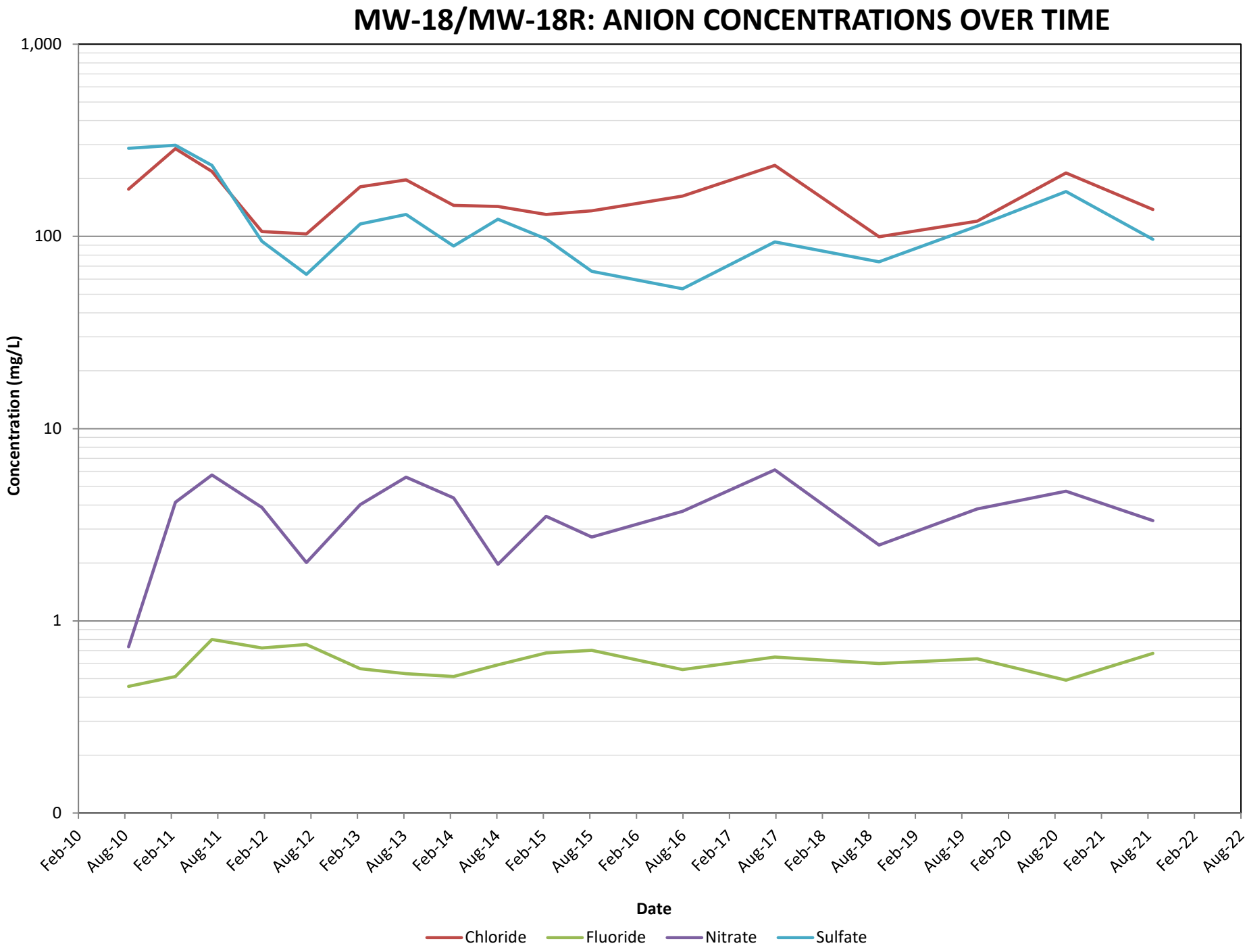


MW-17R: TDS CONCENTRATIONS OVER TIME

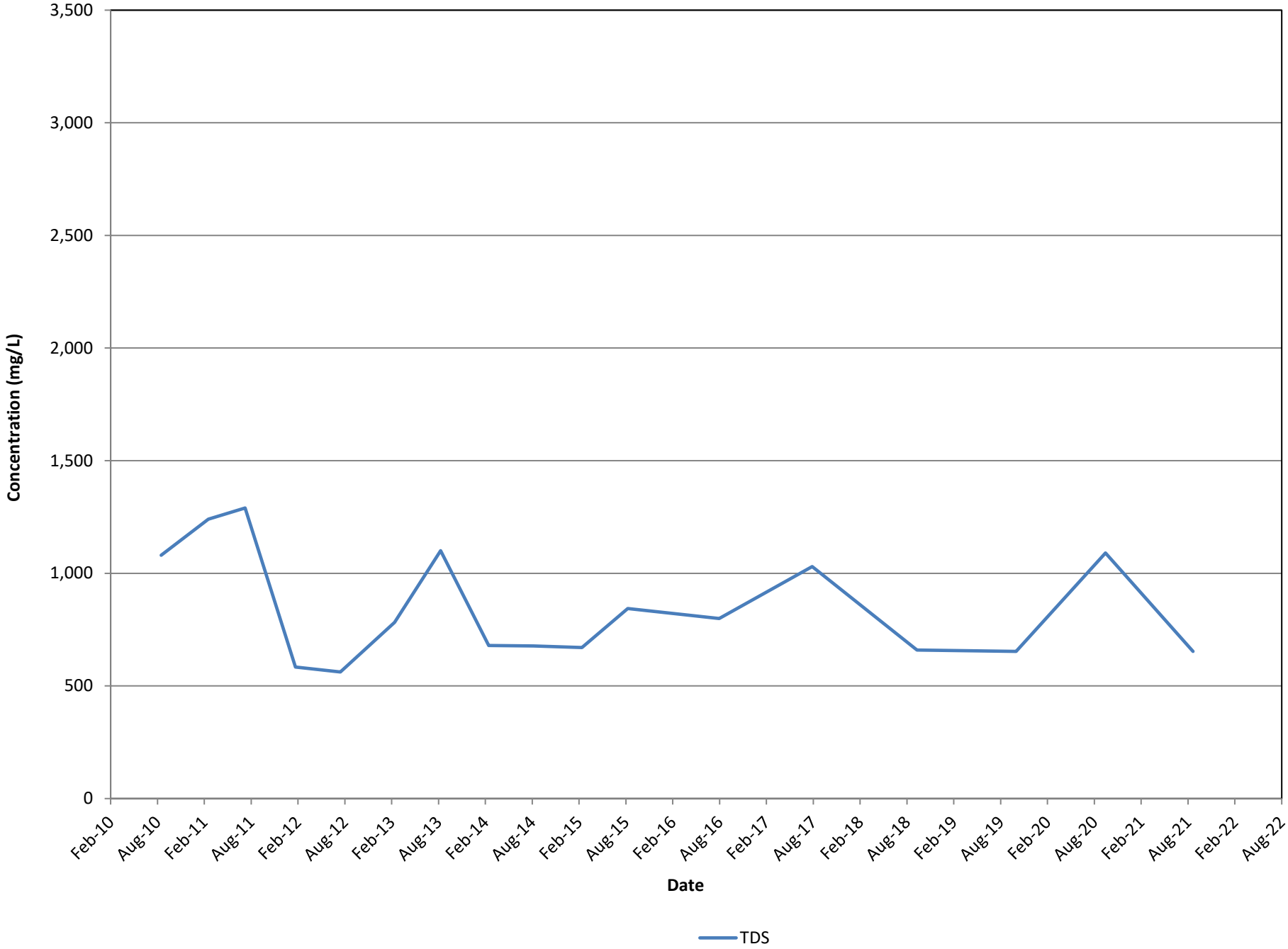


MW-17R: METAL CONCENTRATIONS OVER TIME

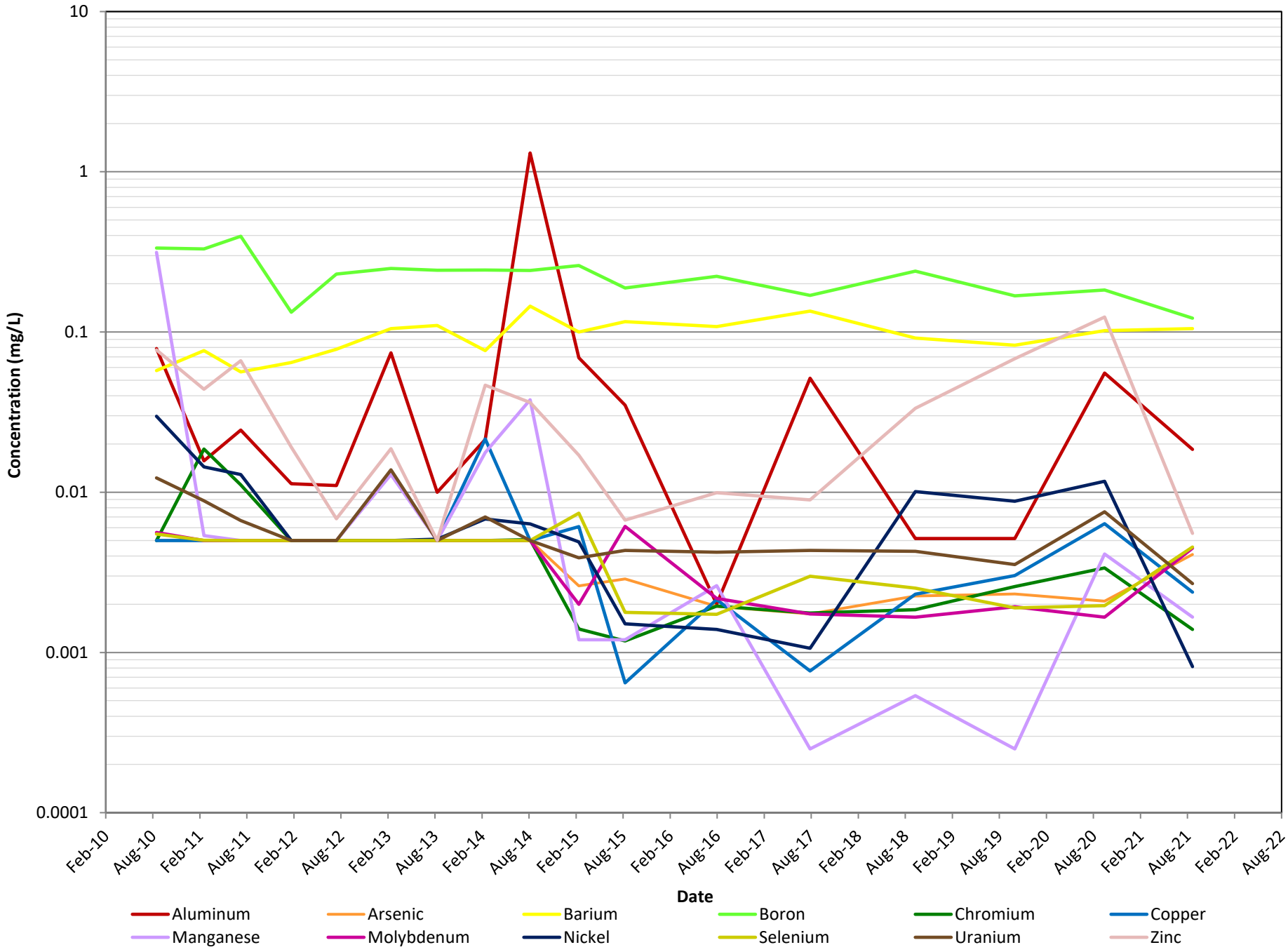



MW-18/MW-18R: ANION CONCENTRATIONS OVER TIME
1,000
100
10
1
0
Concentration (mg/L)
Feb-10
Aug-10
Feb-11
Aug-11
Feb-12
Aug-12
Feb-13
Aug-13
Feb-14
Aug-14
Feb-15
Aug-15
Feb-16
Aug-16
Feb-17
Aug-17
Feb-18
Aug-18
Feb-19
Aug-19
Feb-20
Aug-20
Feb-21
Aug-21
Feb-22
Aug-22
Date
Chloride
Fluoride
Nitrate
Sulfate

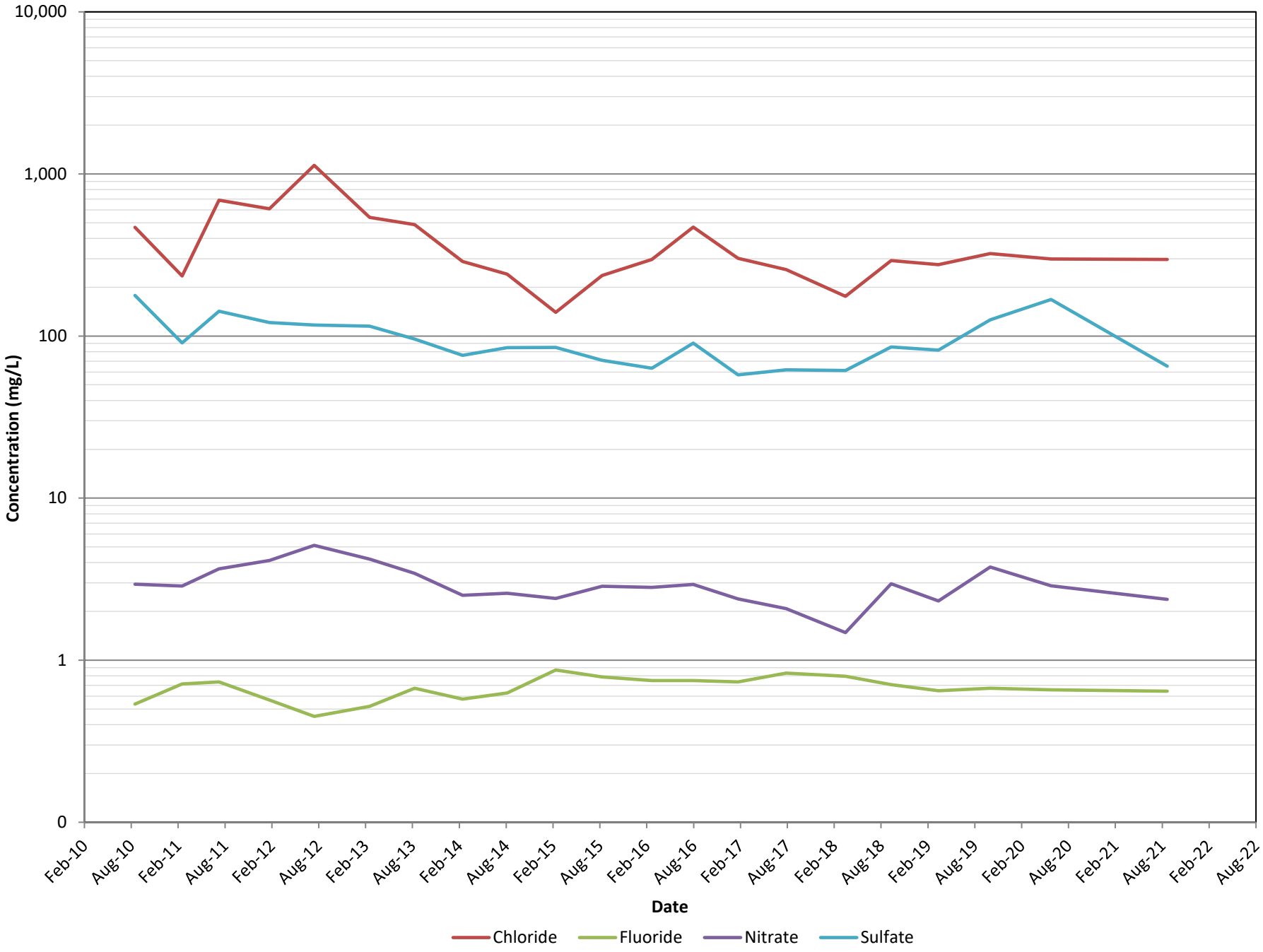
MW-18/MW-18R: TDS CONCENTRATIONS OVER TIME



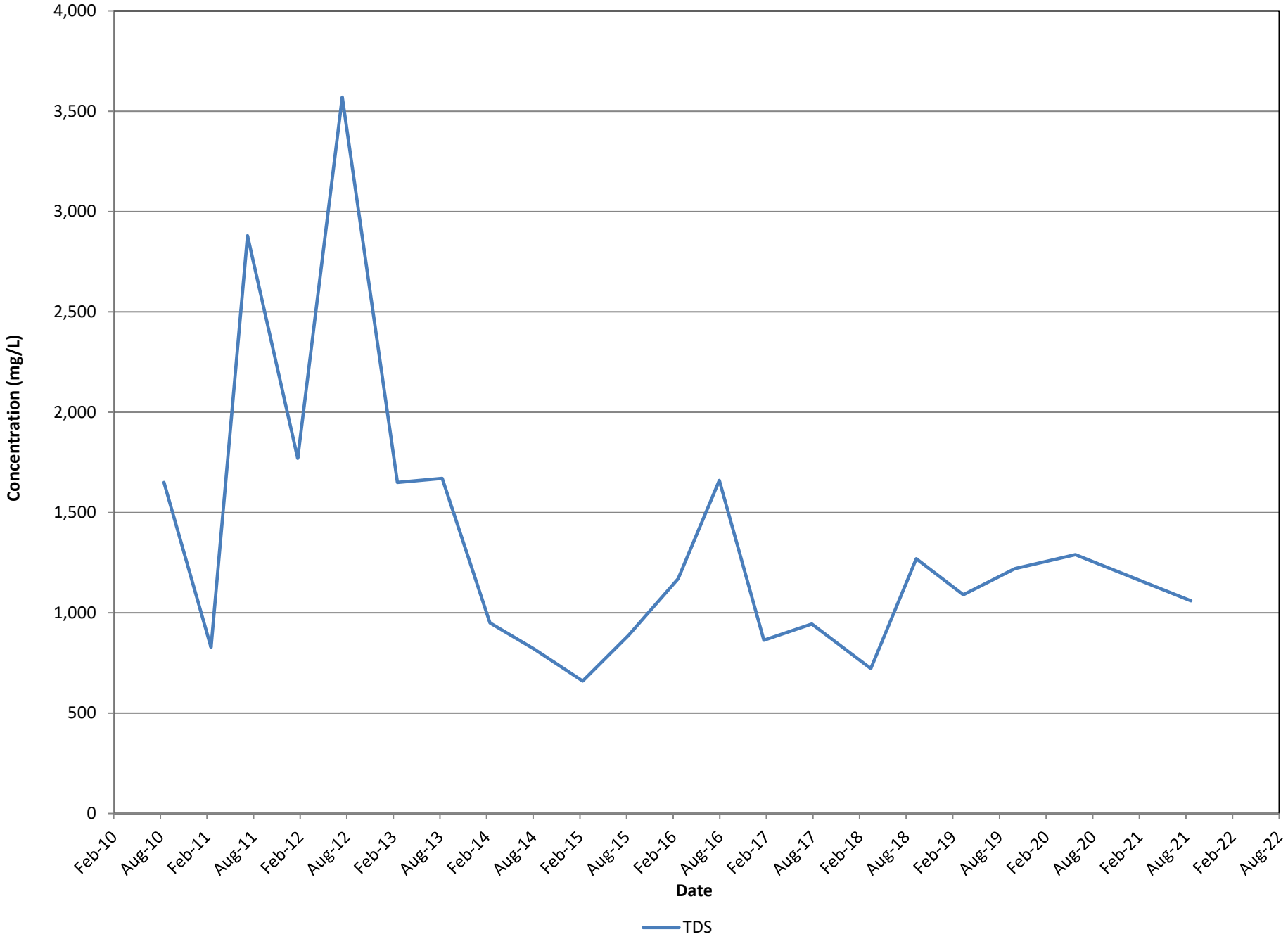
MW-18/MW-18R: METAL CONCENTRATIONS OVER TIME



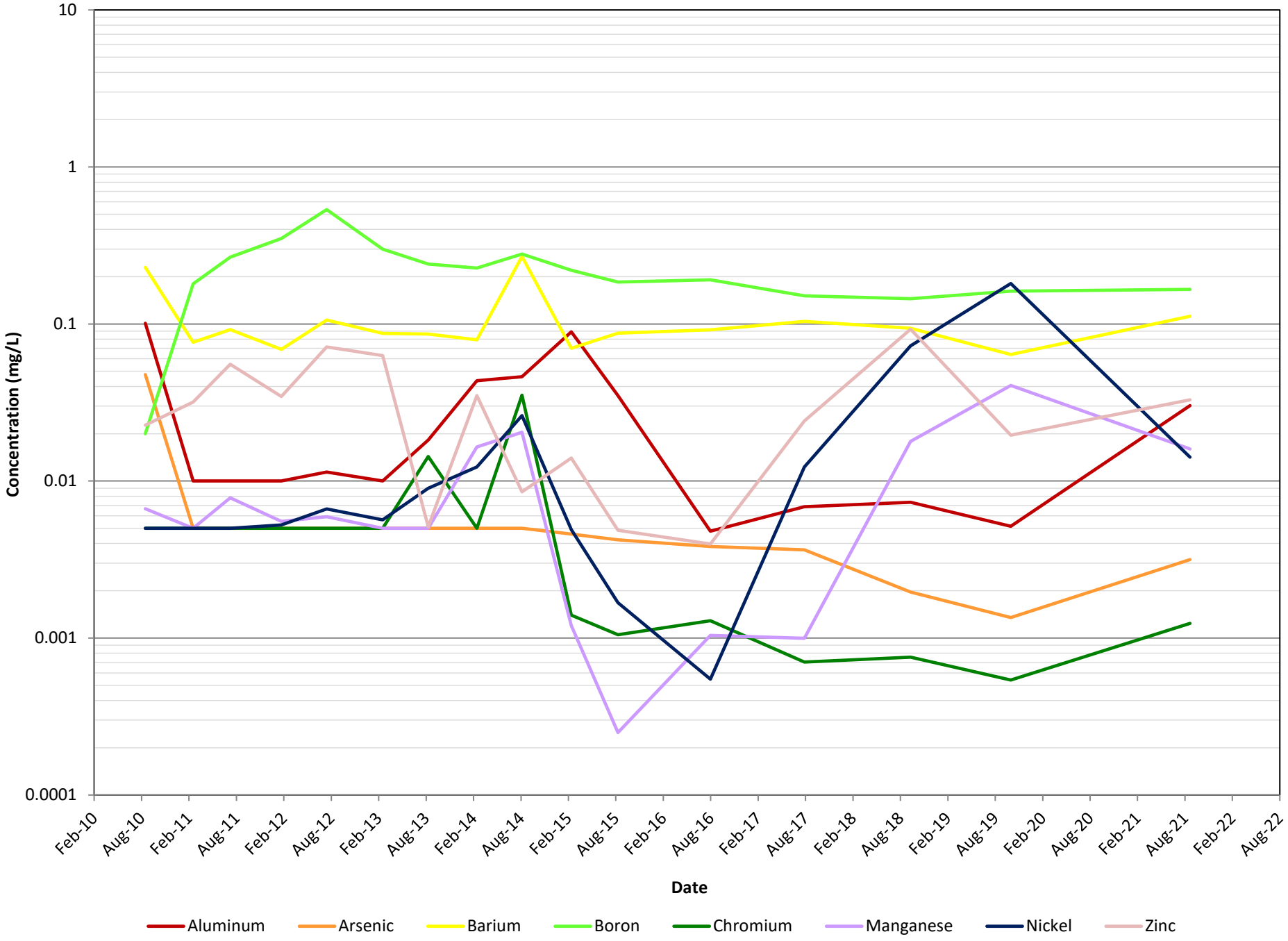
MW-19/MW-19R: ANION CONCENTRATIONS OVER TIME



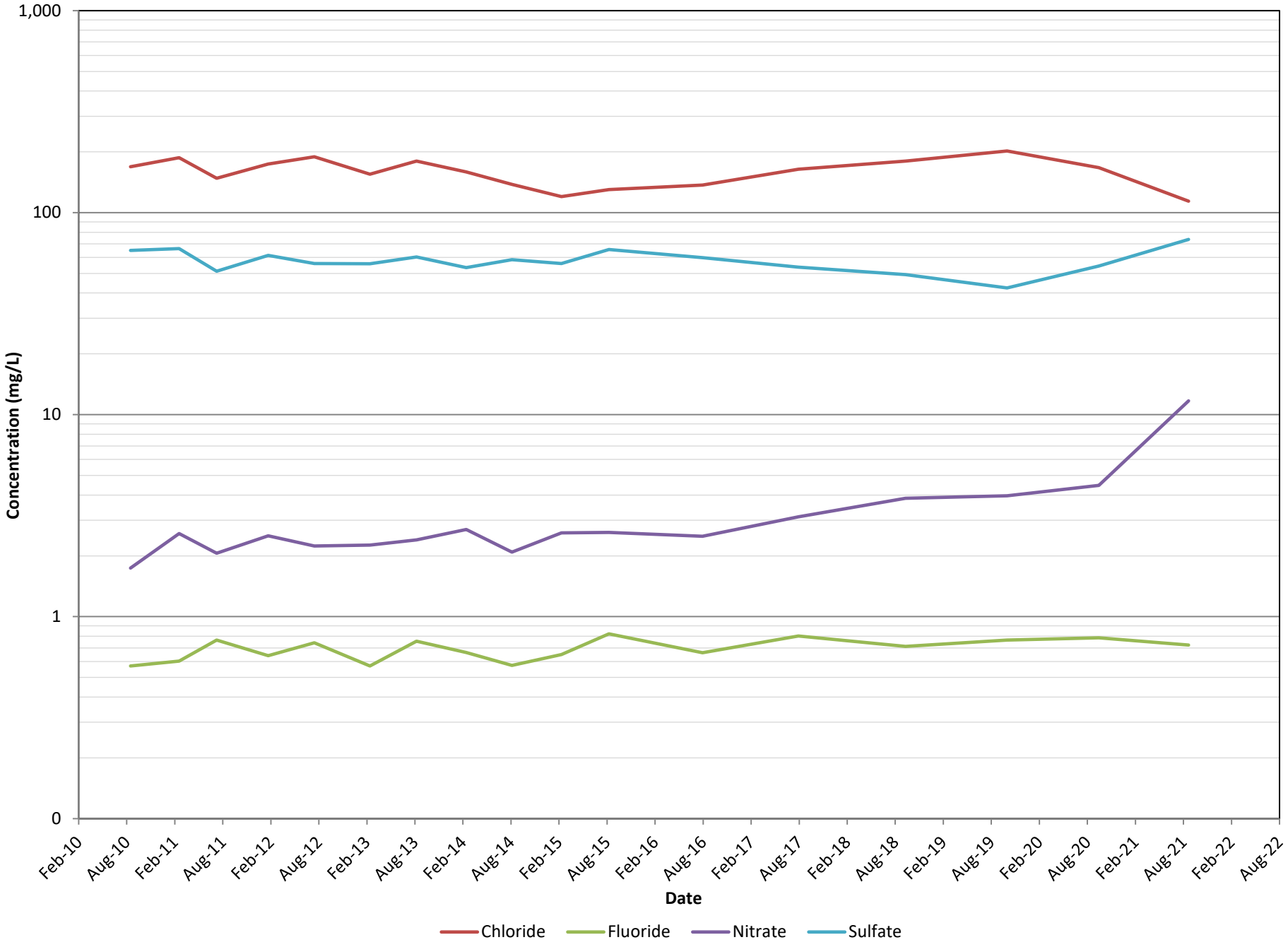
MW-19/MW-19R: TDS CONCENTRATIONS OVER TIME



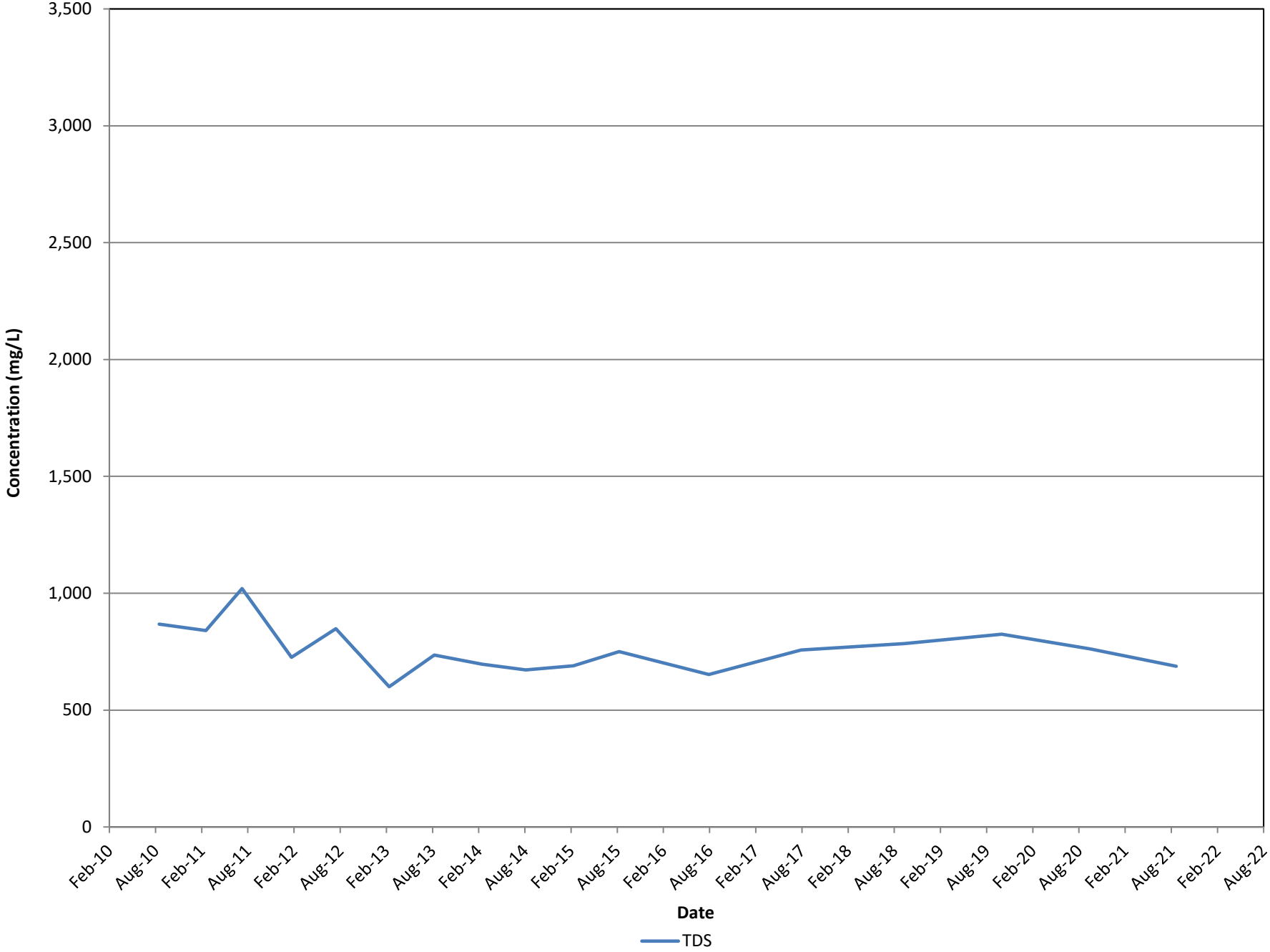
MW-19/MW-19R: METAL CONCENTRATIONS OVER TIME



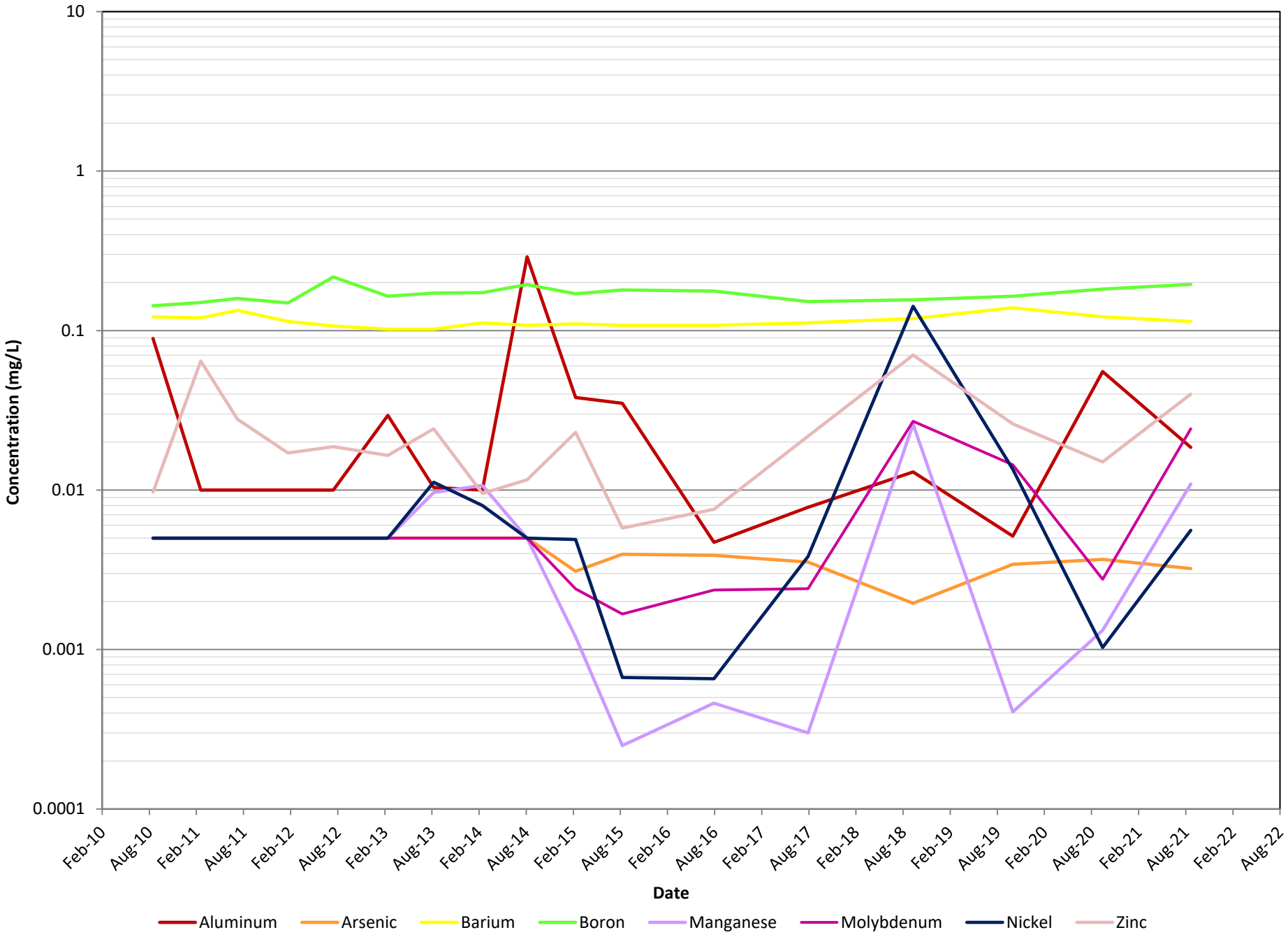
MW-20/MW-20R: ANION CONCENTRATIONS OVER TIME



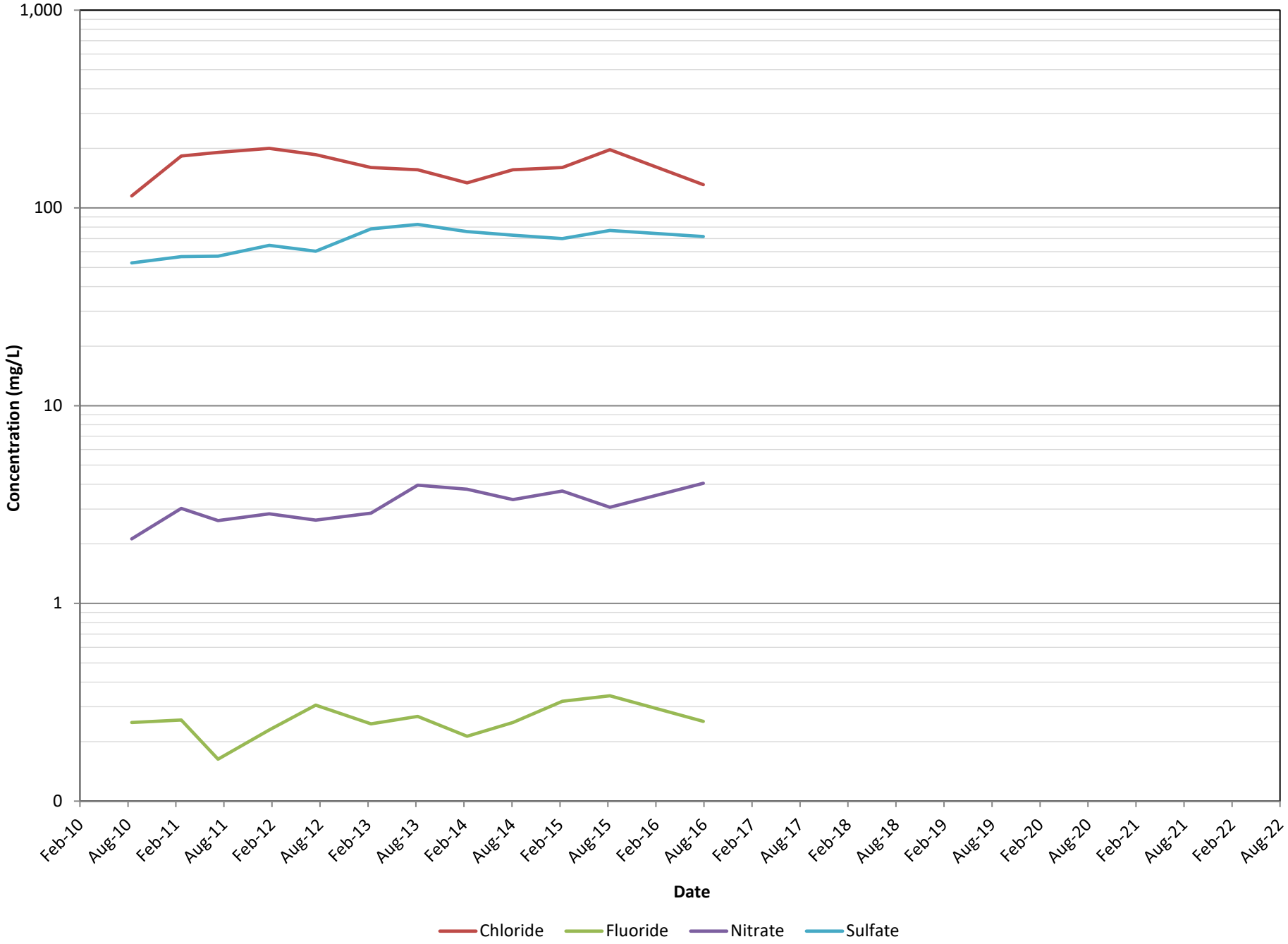
MW-20/MW-20R: TDS CONCENTRATIONS OVER TIME



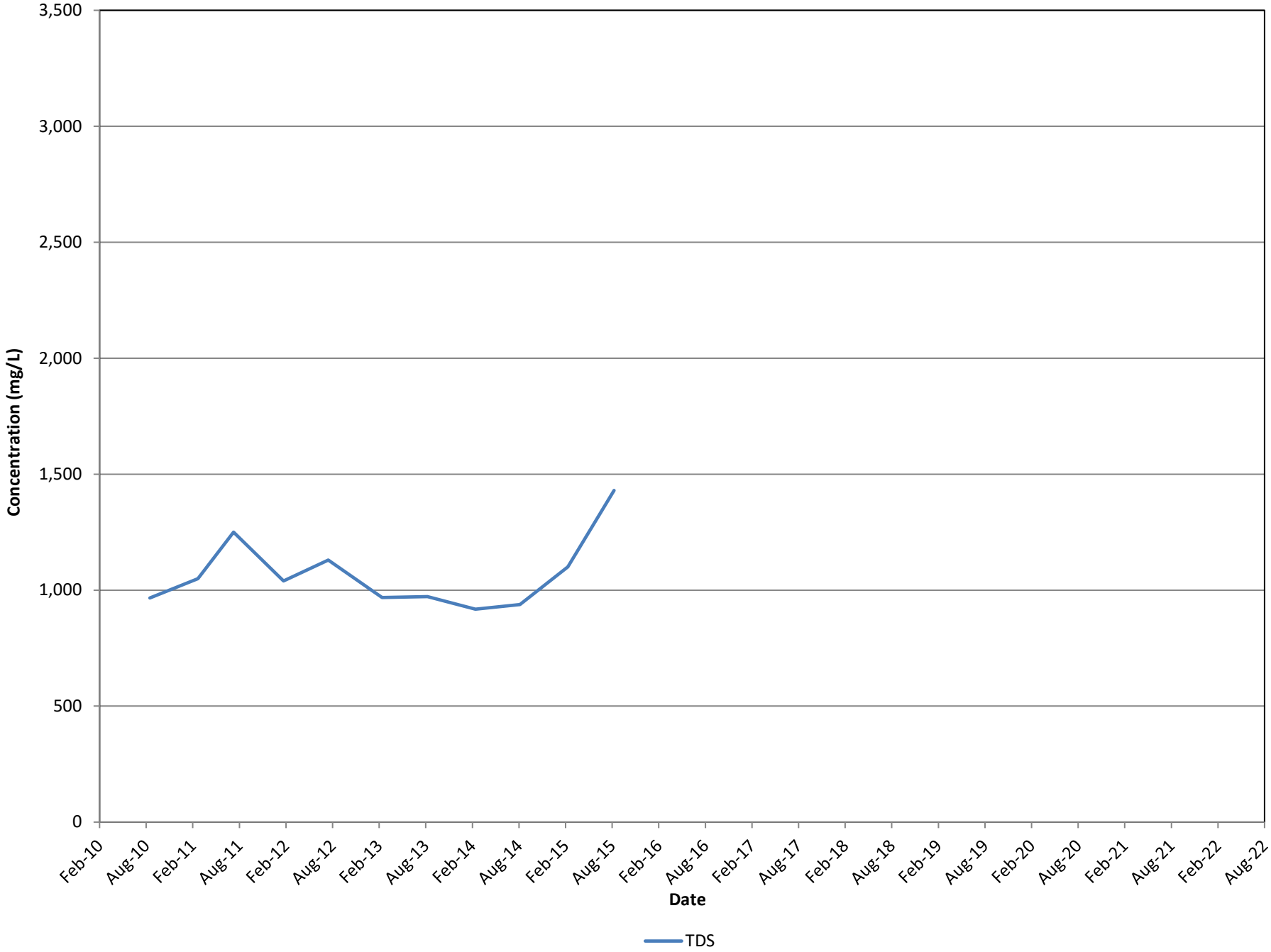
MW-20/MW-20R: METAL CONCENTRATIONS OVER TIME



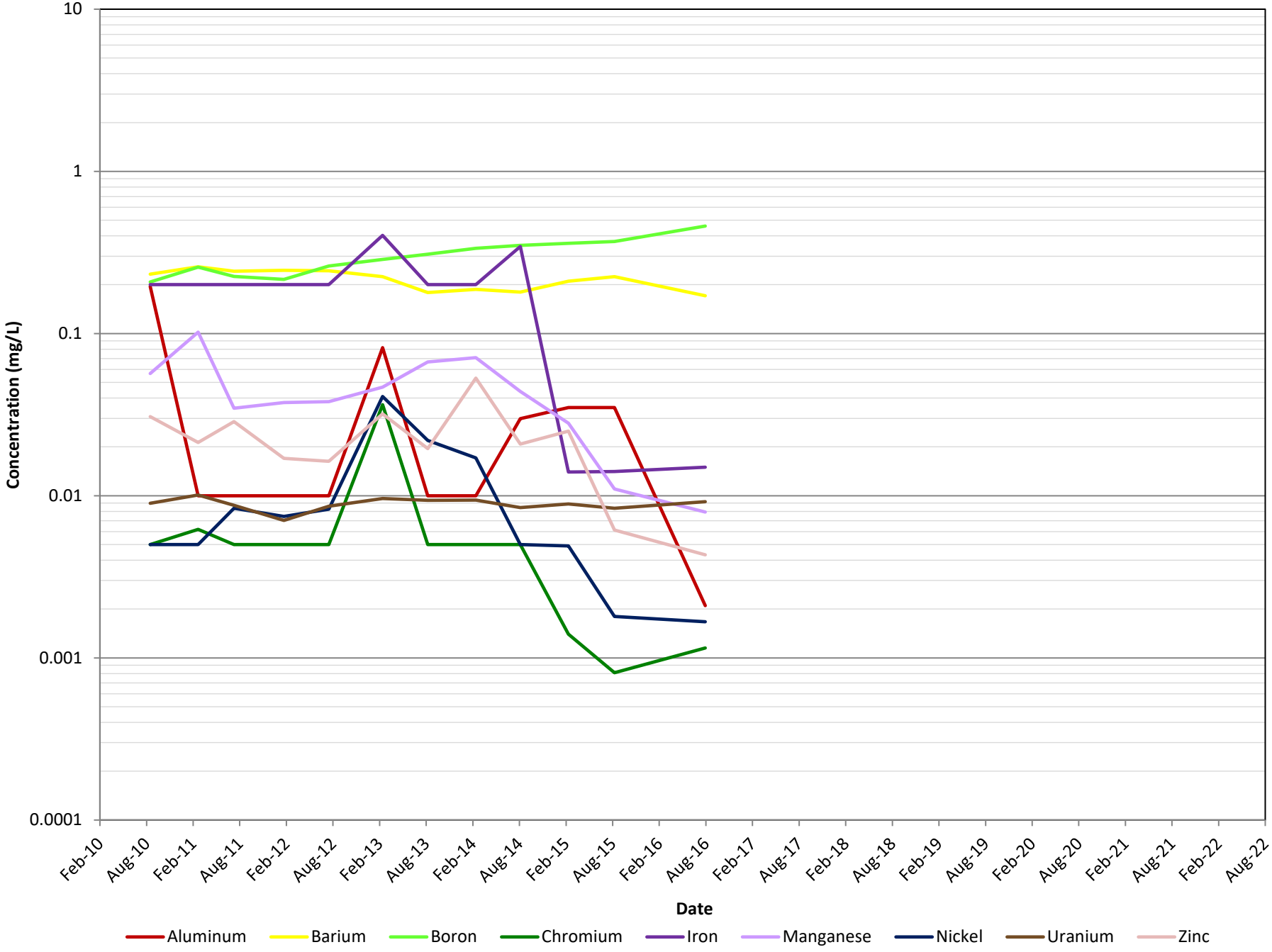
MW-21: ANION CONCENTRATIONS OVER TIME



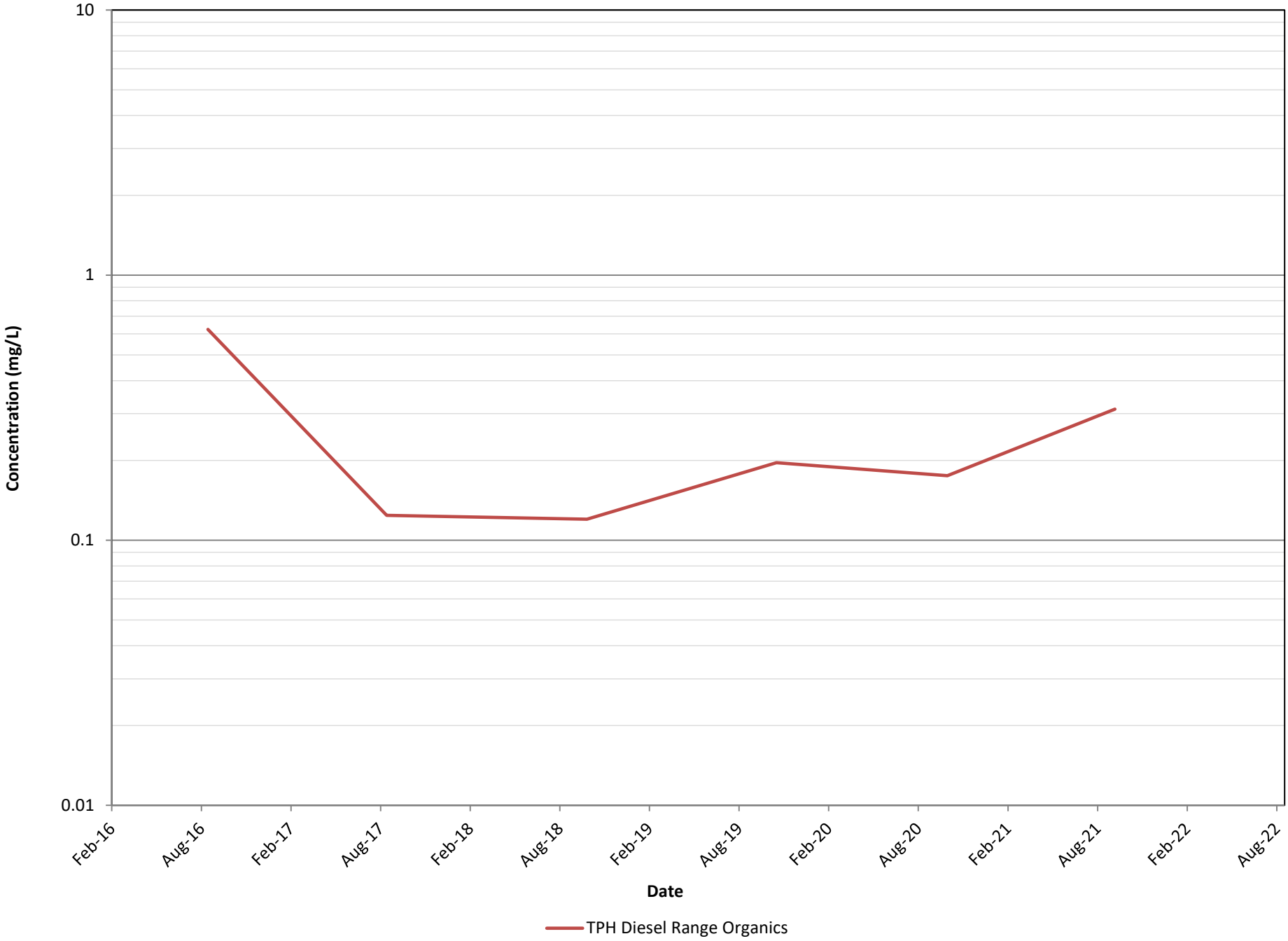
MW-21: TDS CONCENTRATIONS OVER TIME



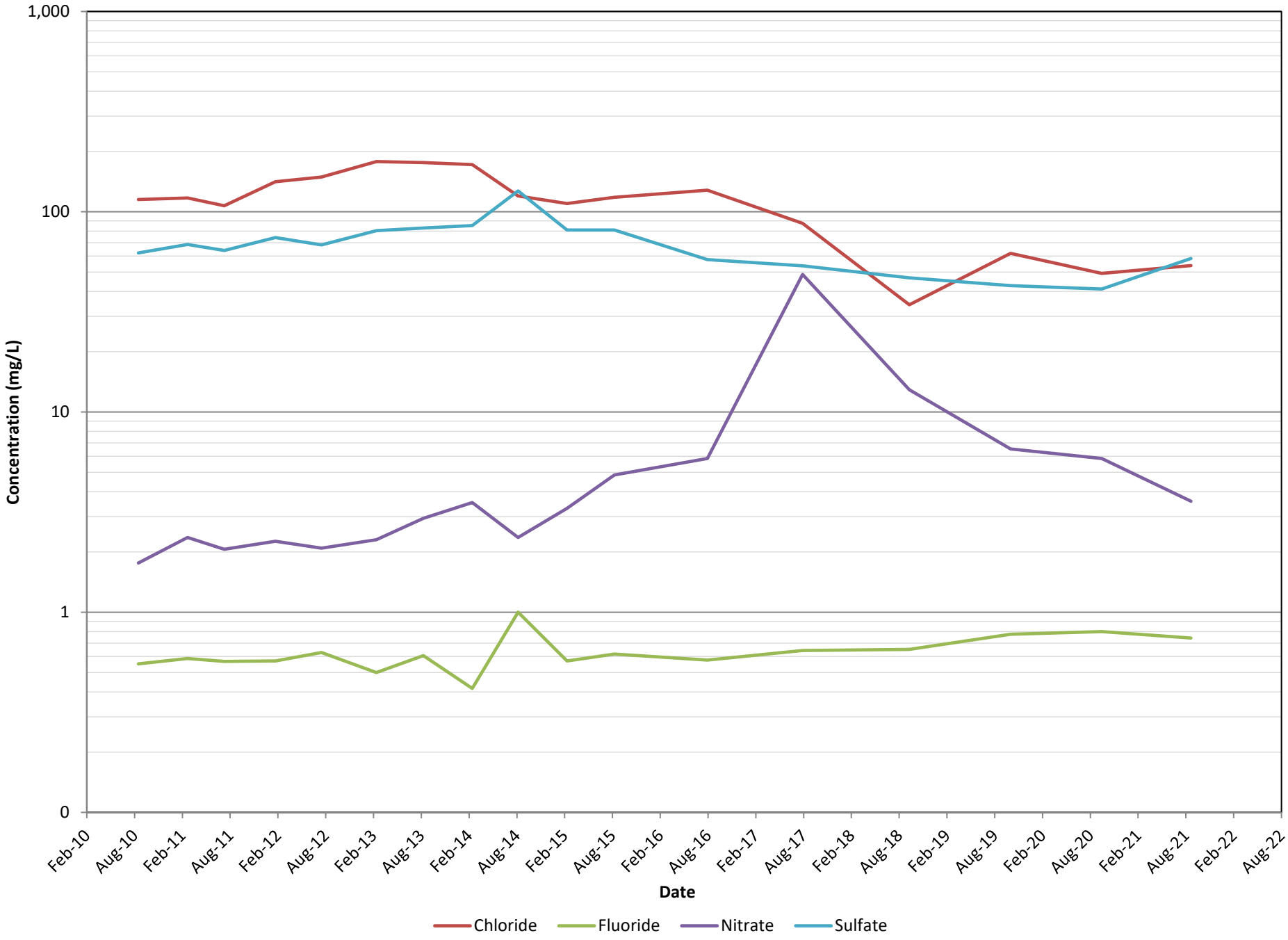
MW-21: METAL CONCENTRATIONS OVER TIME



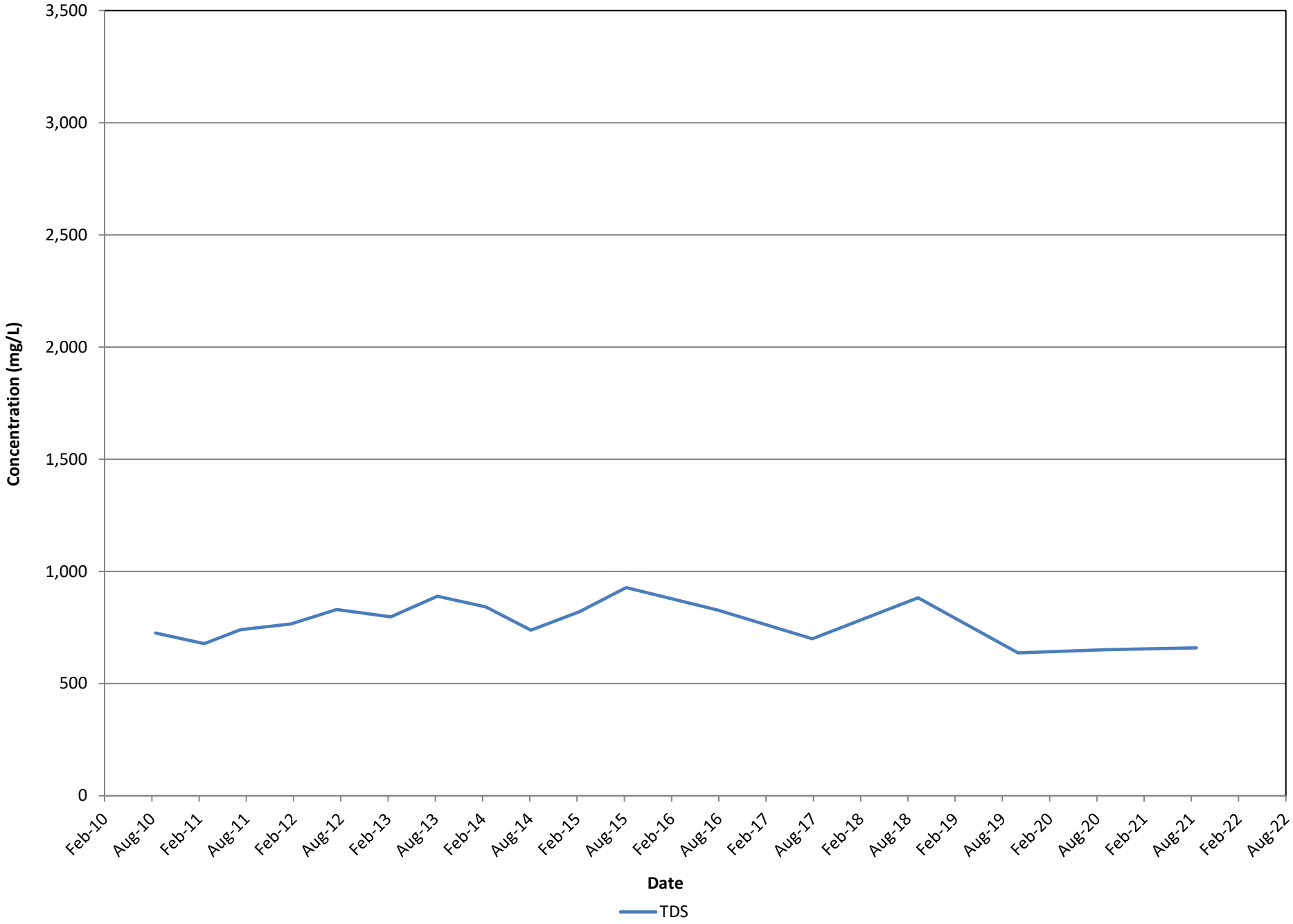
MW-21: TPH CONCENTRATIONS OVER TIME



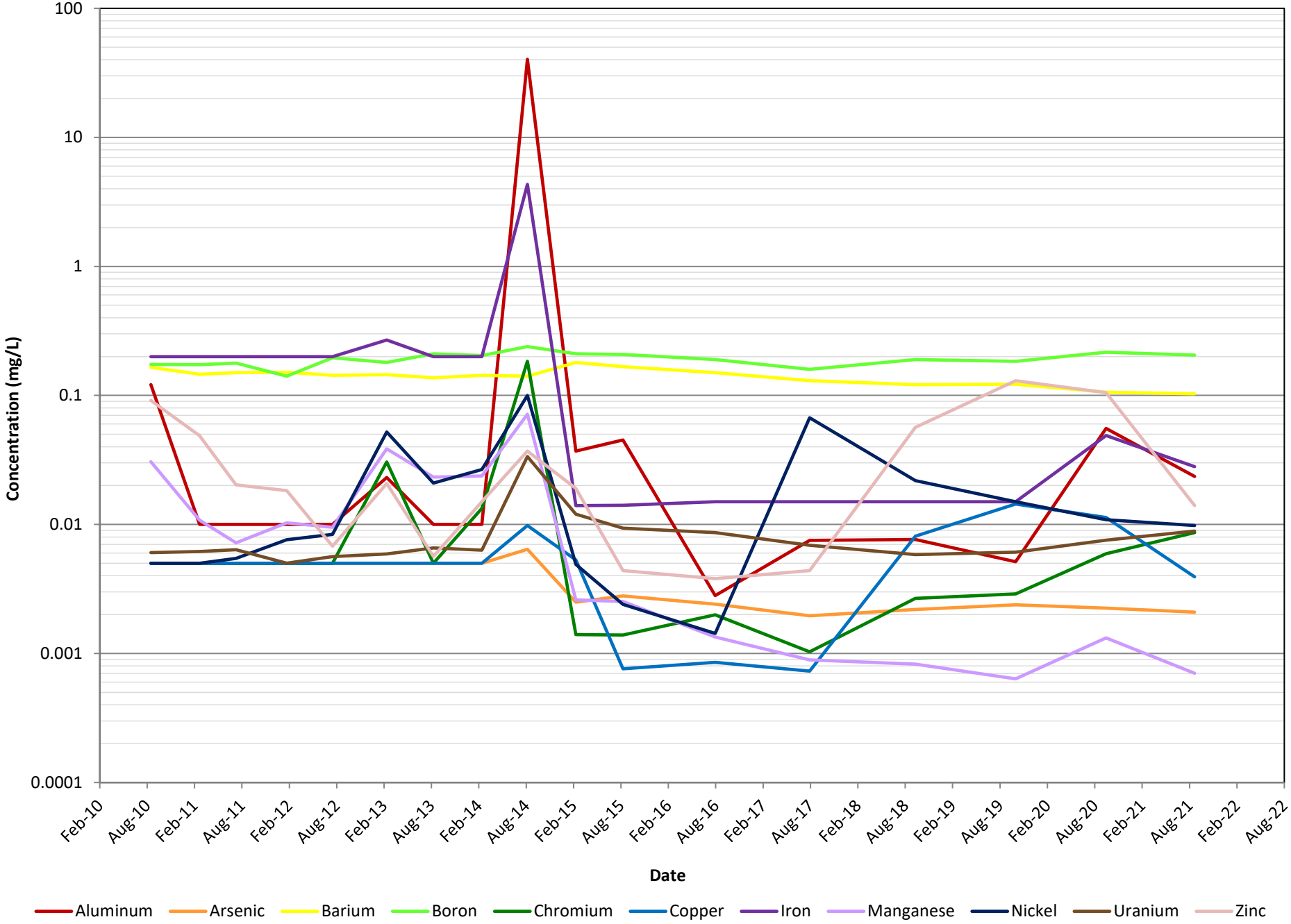
MW-22: ANION CONCENTRATIONS OVER TIME



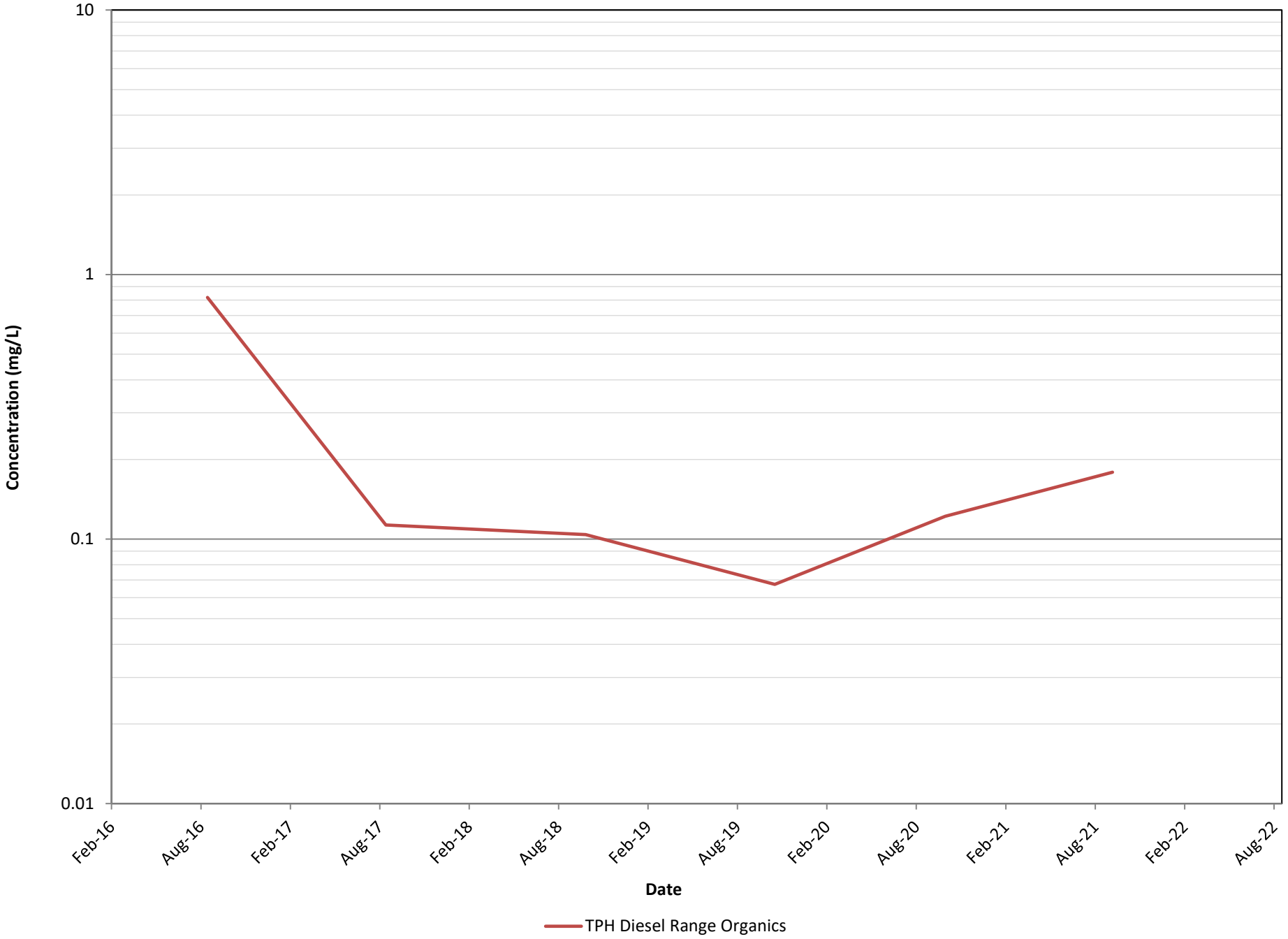
MW-22: TDS CONCENTRATIONS OVER TIME

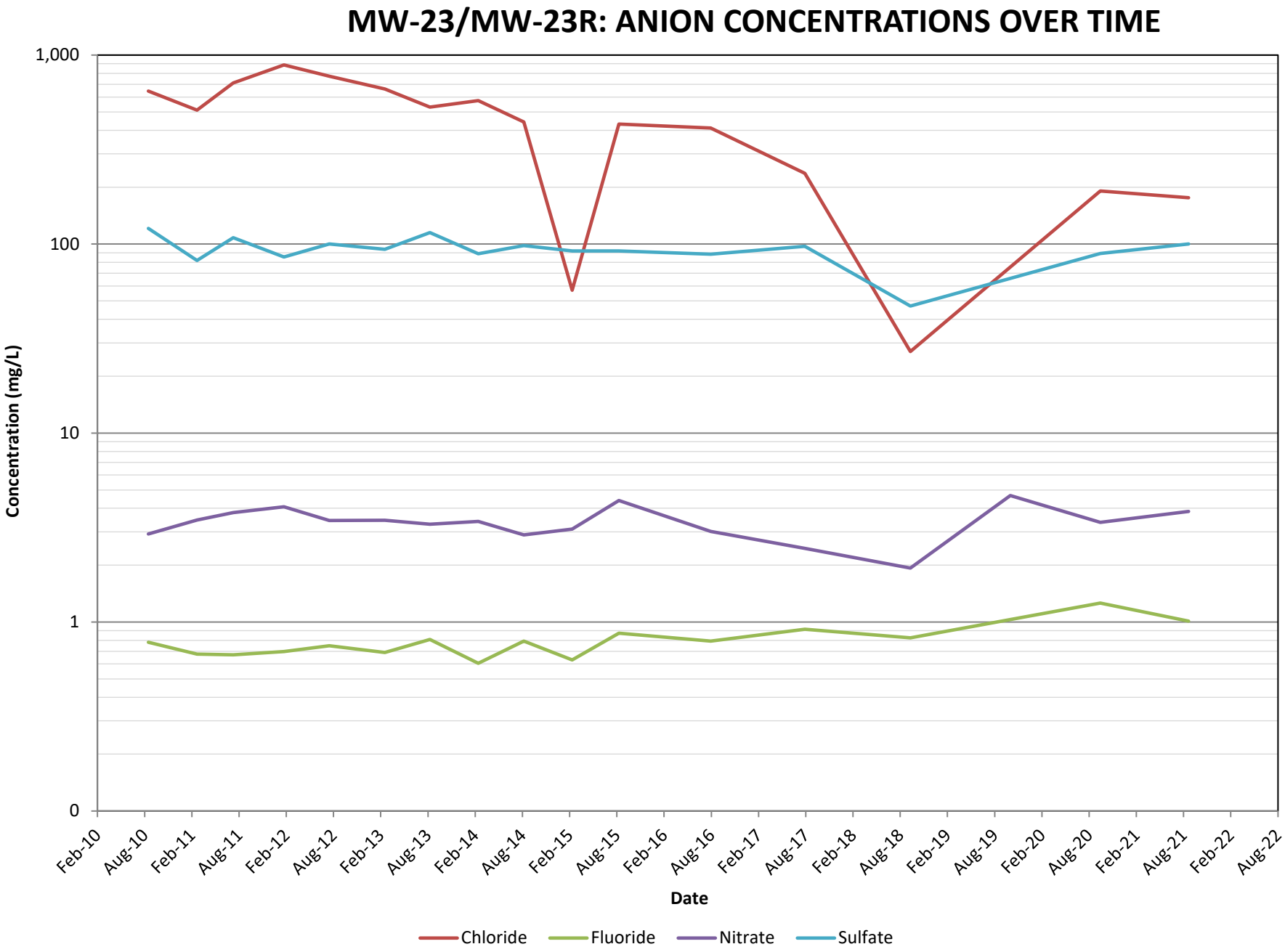


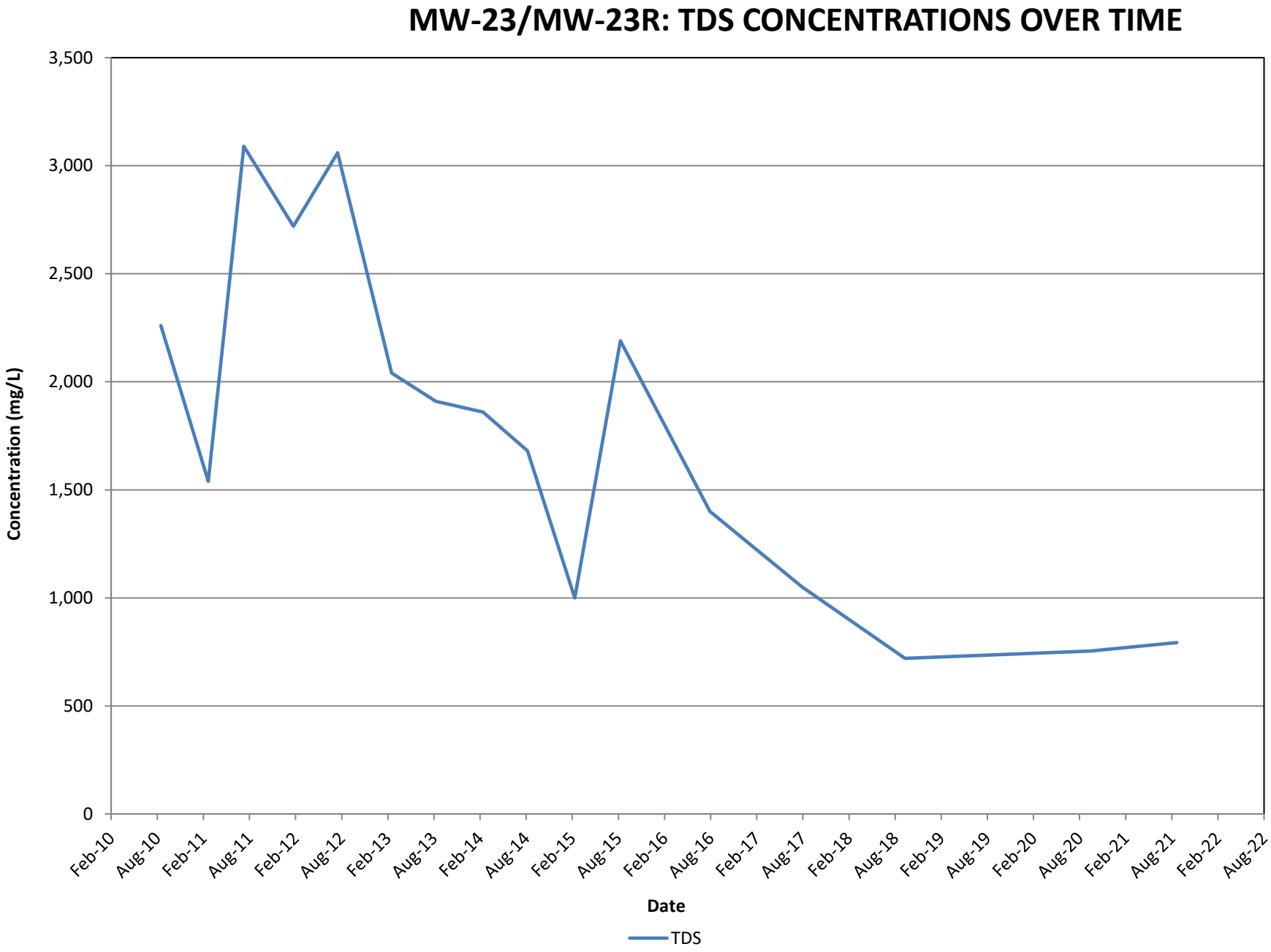
MW-22: METAL CONCENTRATIONS OVER TIME



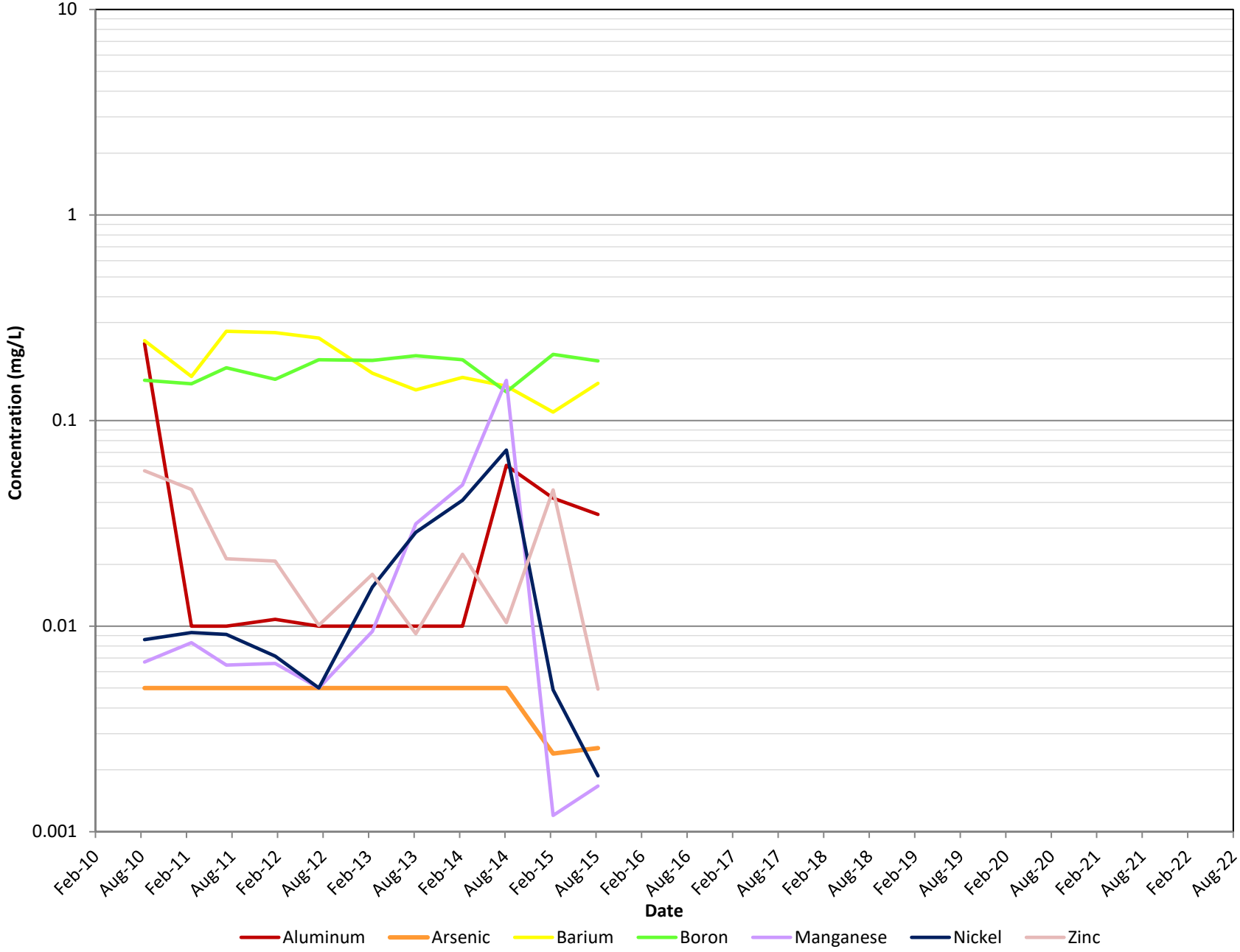
MW-22: TPH CONCENTRATIONS OVER TIME



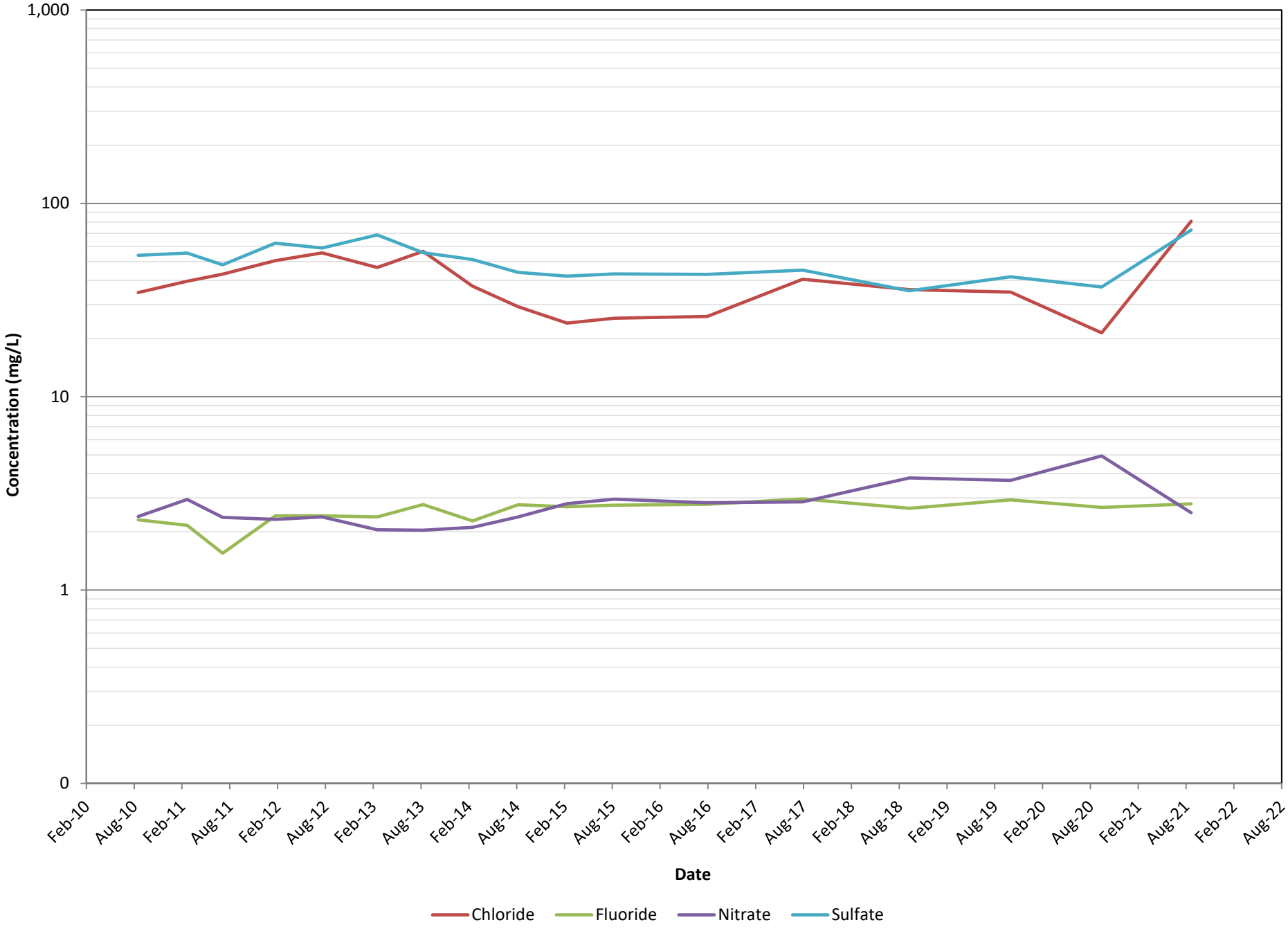

MW-23/MW-23R: ANION CONCENTRATIONS OVER TIME
1,000
100
10
1
0
Concentration (mg/L)
Feb-10
Aug-10
Feb-11
Aug-11
Feb-12
Aug-12
Feb-13
Aug-13
Feb-14
Aug-14
Feb-15
Aug-15
Feb-16
Aug-16
Feb-17
Aug-17
Feb-18
Aug-18
Feb-19
Aug-19
Feb-20
Aug-20
Feb-21
Aug-21
Feb-22
Aug-22
Date
Chloride
Fluoride
Nitrate
Sulfate


MW-23/MW-23R: TDS CONCENTRATIONS OVER TIME
Concentration (mg/L)
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Feb-10
Aug-10
Feb-11
Aug-11
Feb-12
Aug-12
Feb-13
Aug-13
Feb-14
Aug-14
Feb-15
Aug-15
Feb-16
Aug-16
Feb-17
Aug-17
Feb-18
Aug-18
Feb-19
Aug-19
Feb-20
Aug-20
Feb-21
Aug-21
Feb-22
Aug-22
Date
TDS

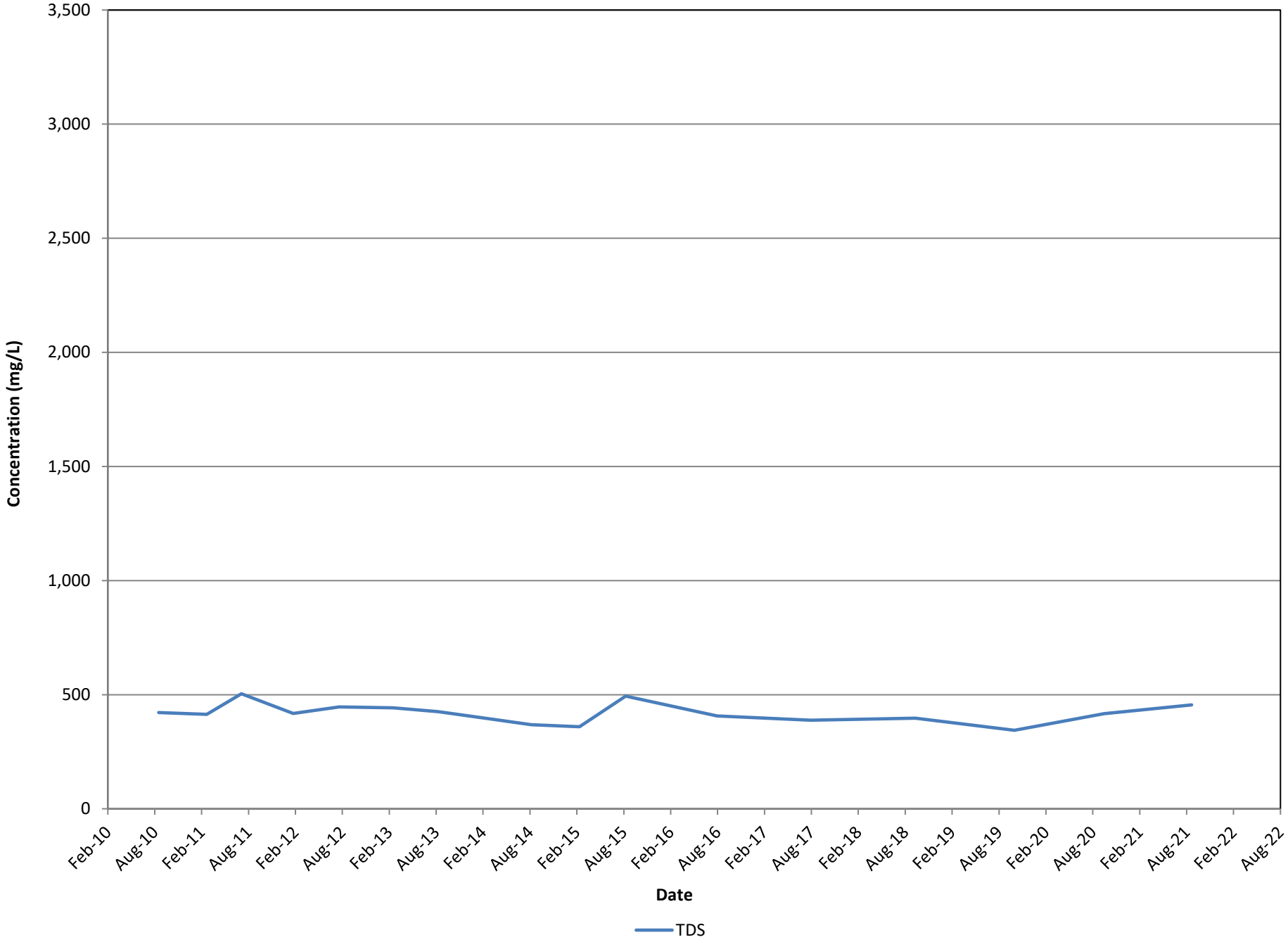
MW-23/MW-23R: METAL CONCENTRATIONS OVER TIME



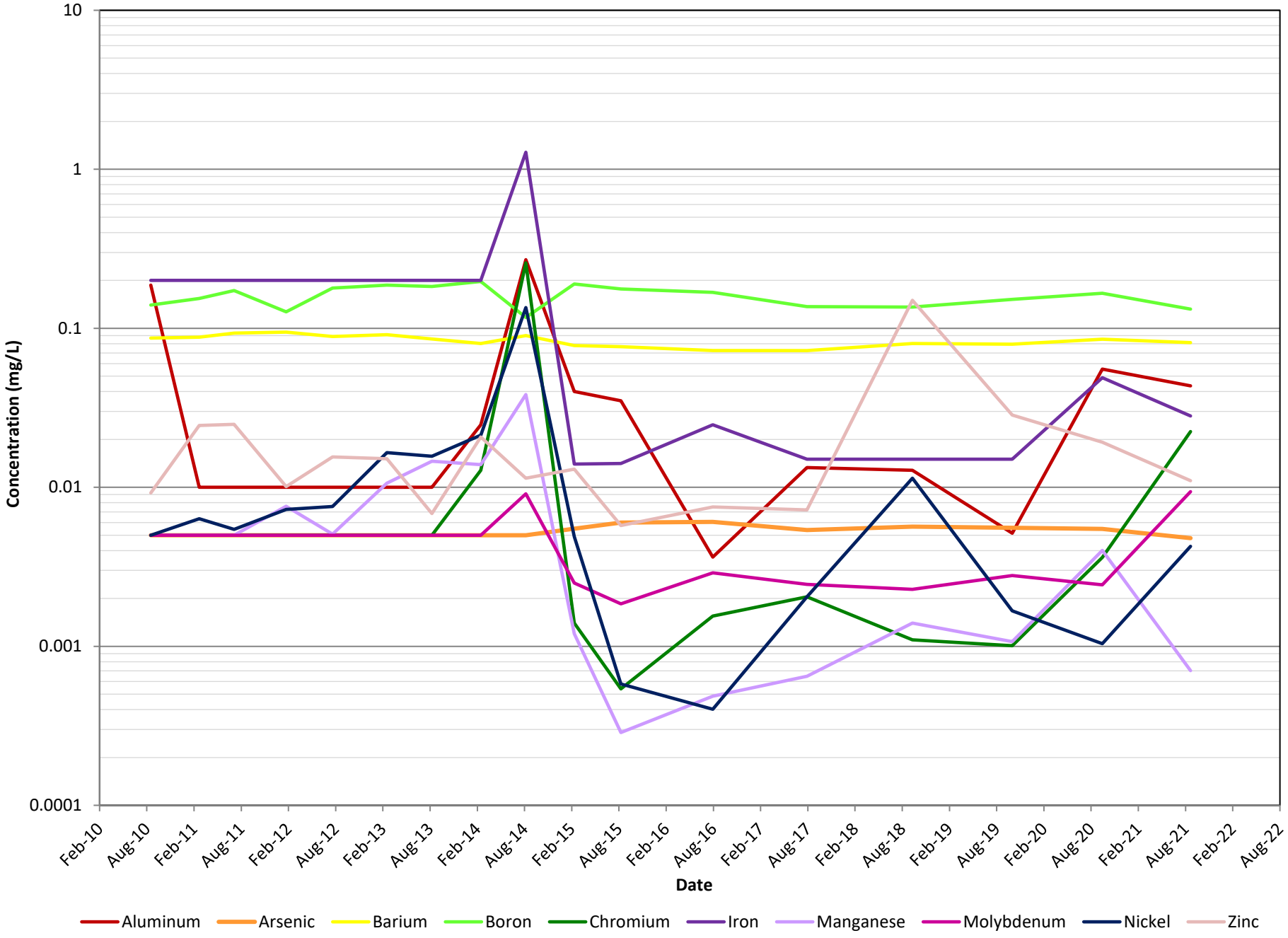
MW-24/MW-24R: ANION CONCENTRATIONS OVER TIME



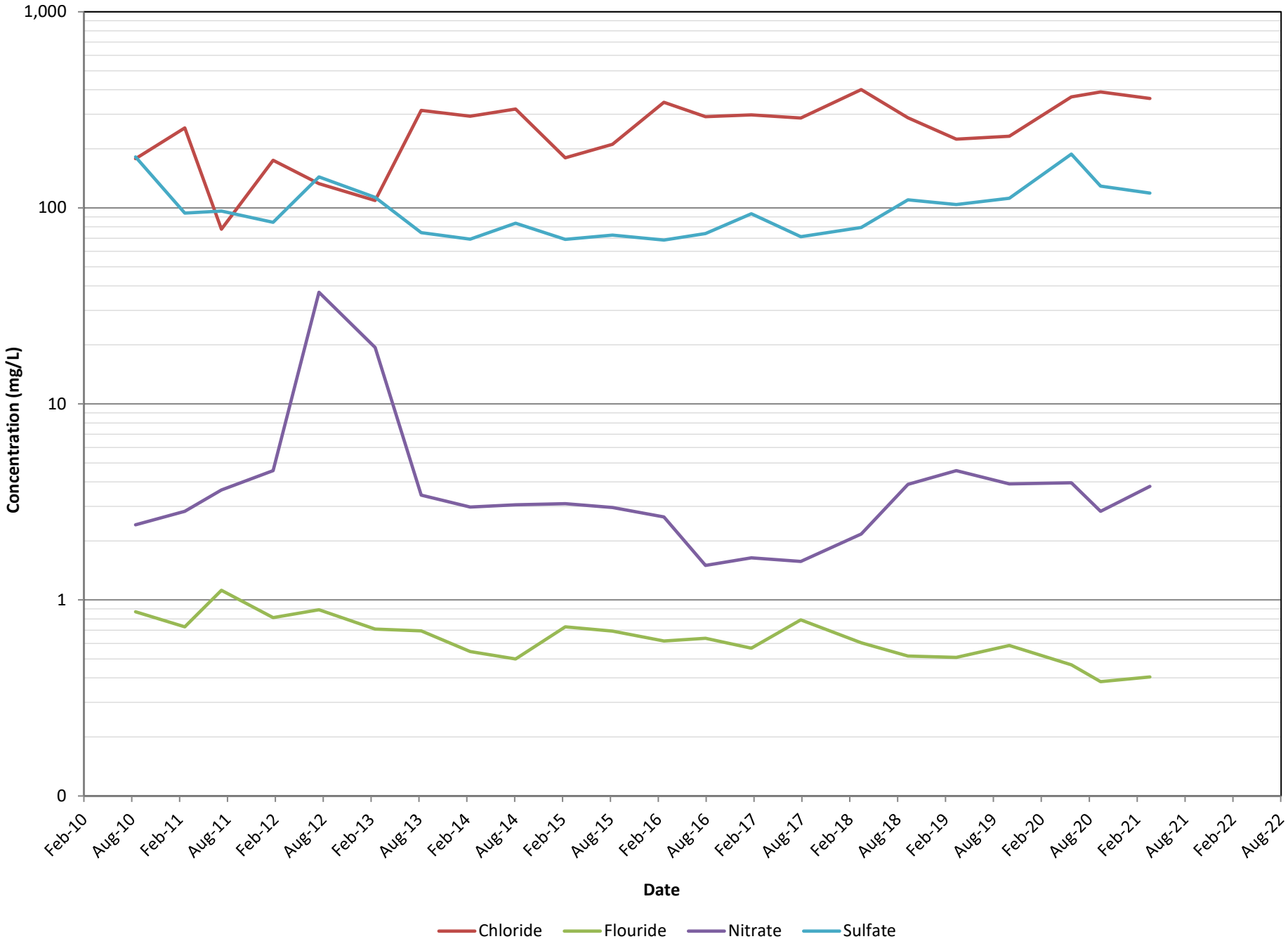
MW-24/MW-24R: TDS CONCENTRATIONS OVER TIME



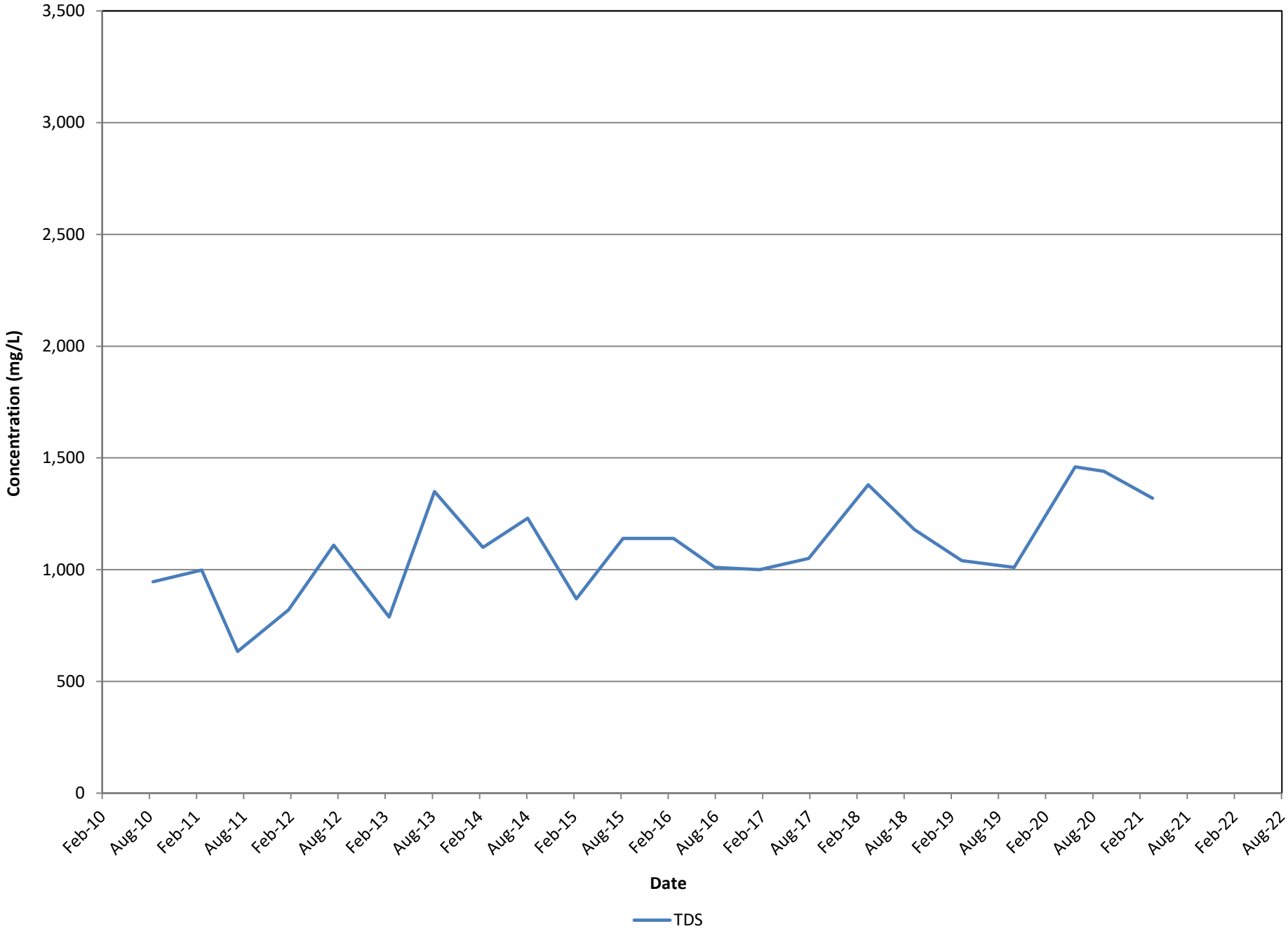
MW-24/MW-24R: METAL CONCENTRATIONS OVER TIME



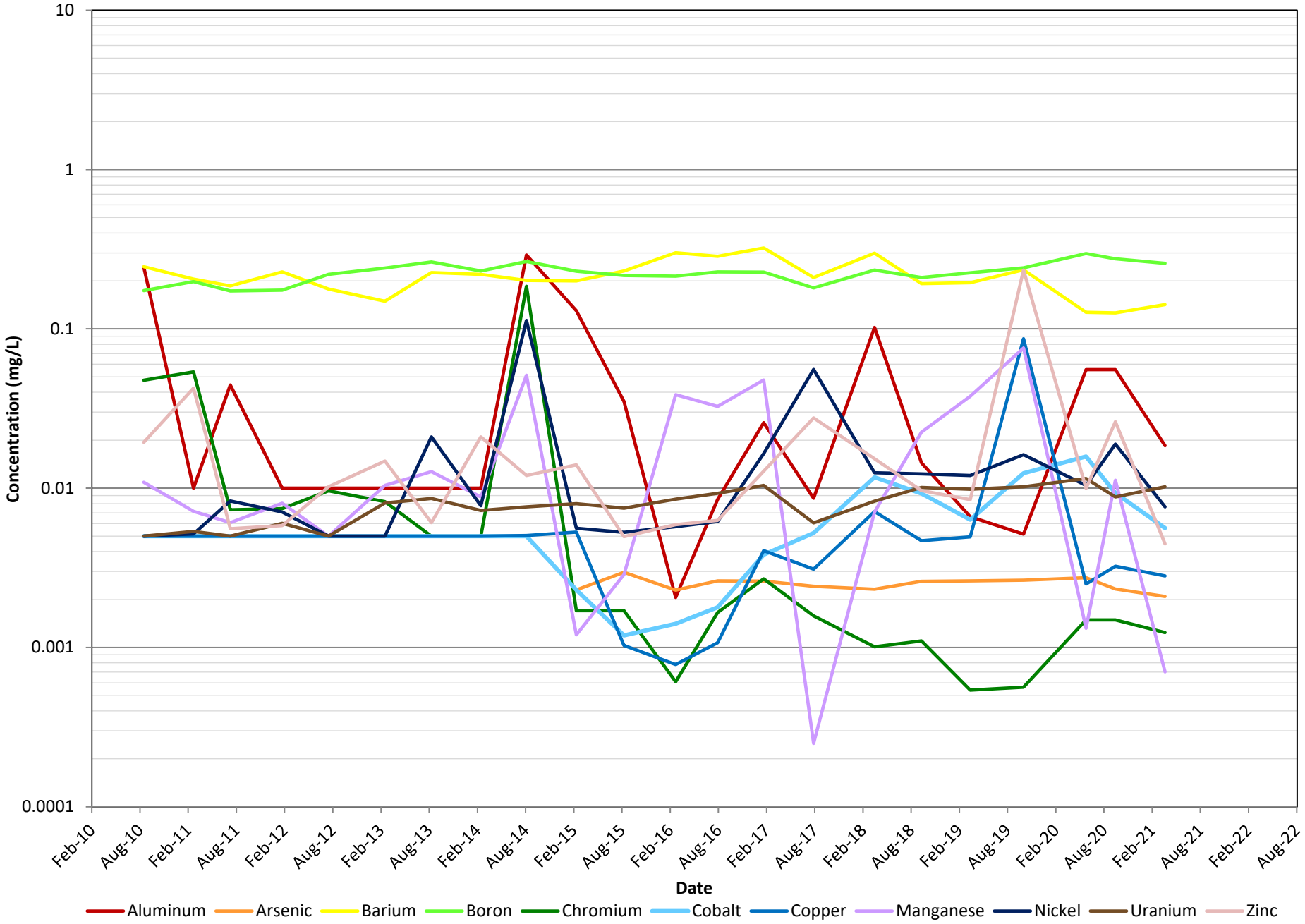
MW-25: ANION CONCENTRATIONS OVER TIME



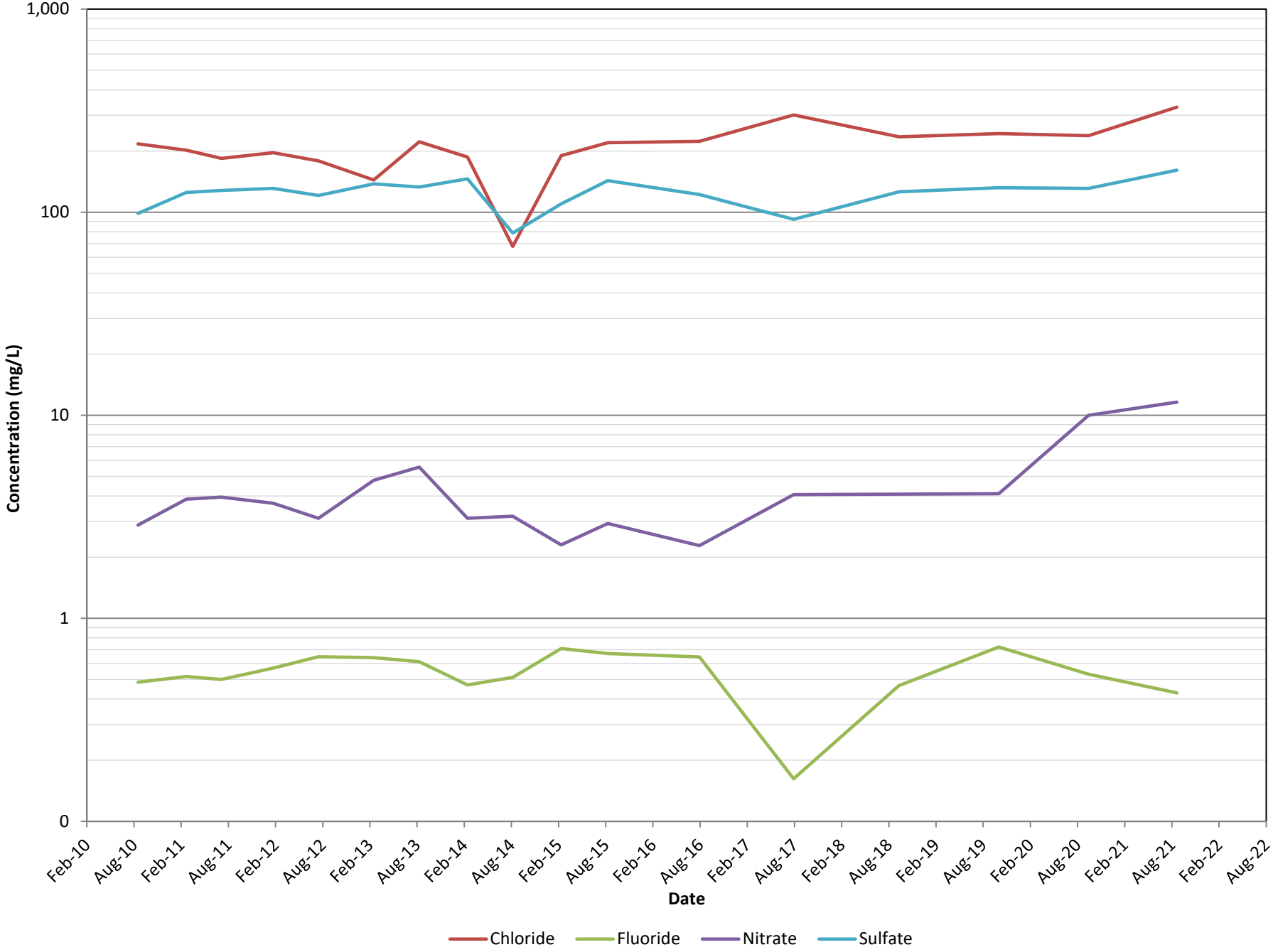
MW-25: TDS CONCENTRATIONS OVER TIME



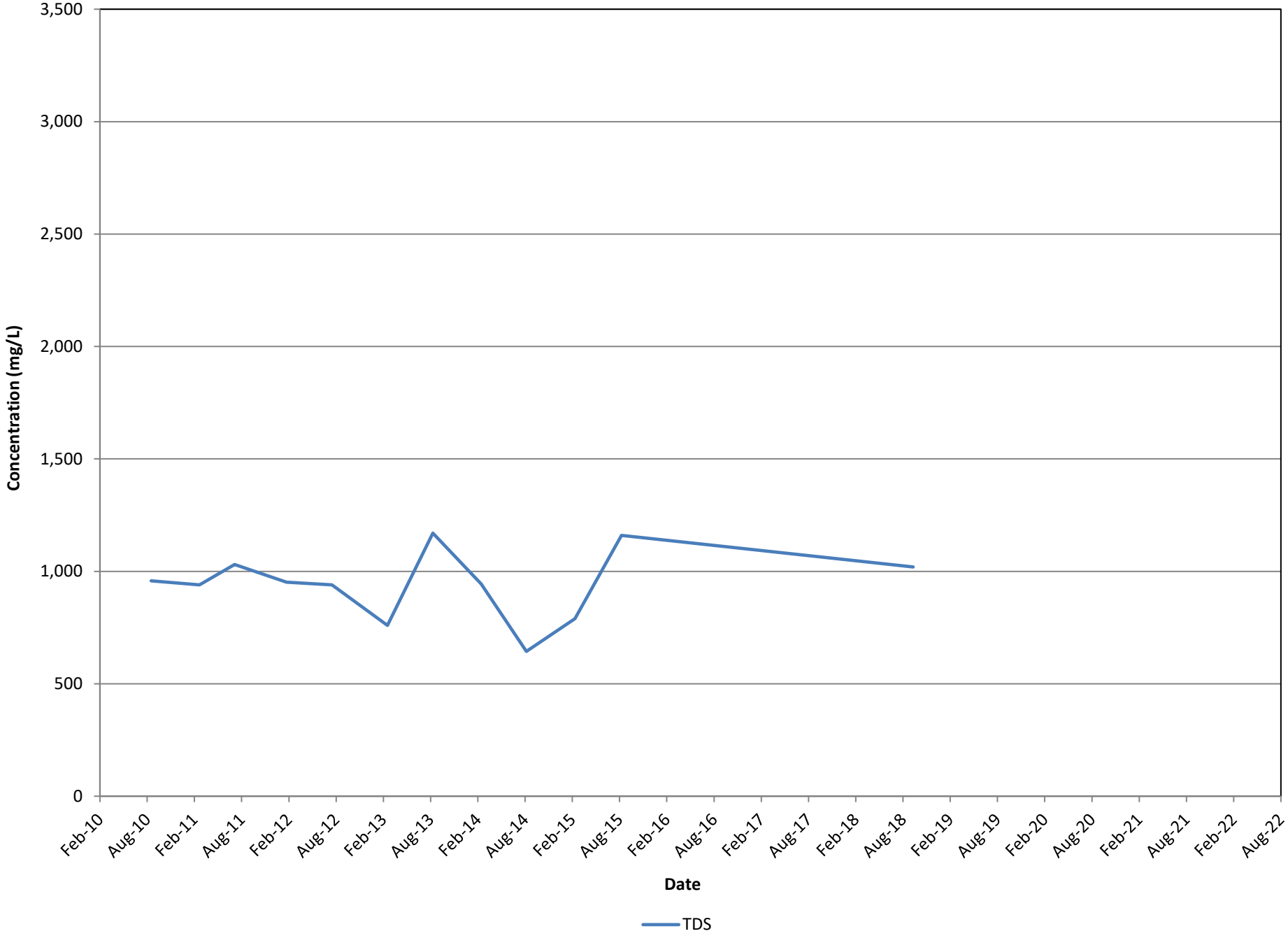
MW-25: METAL CONCENTRATIONS OVER TIME



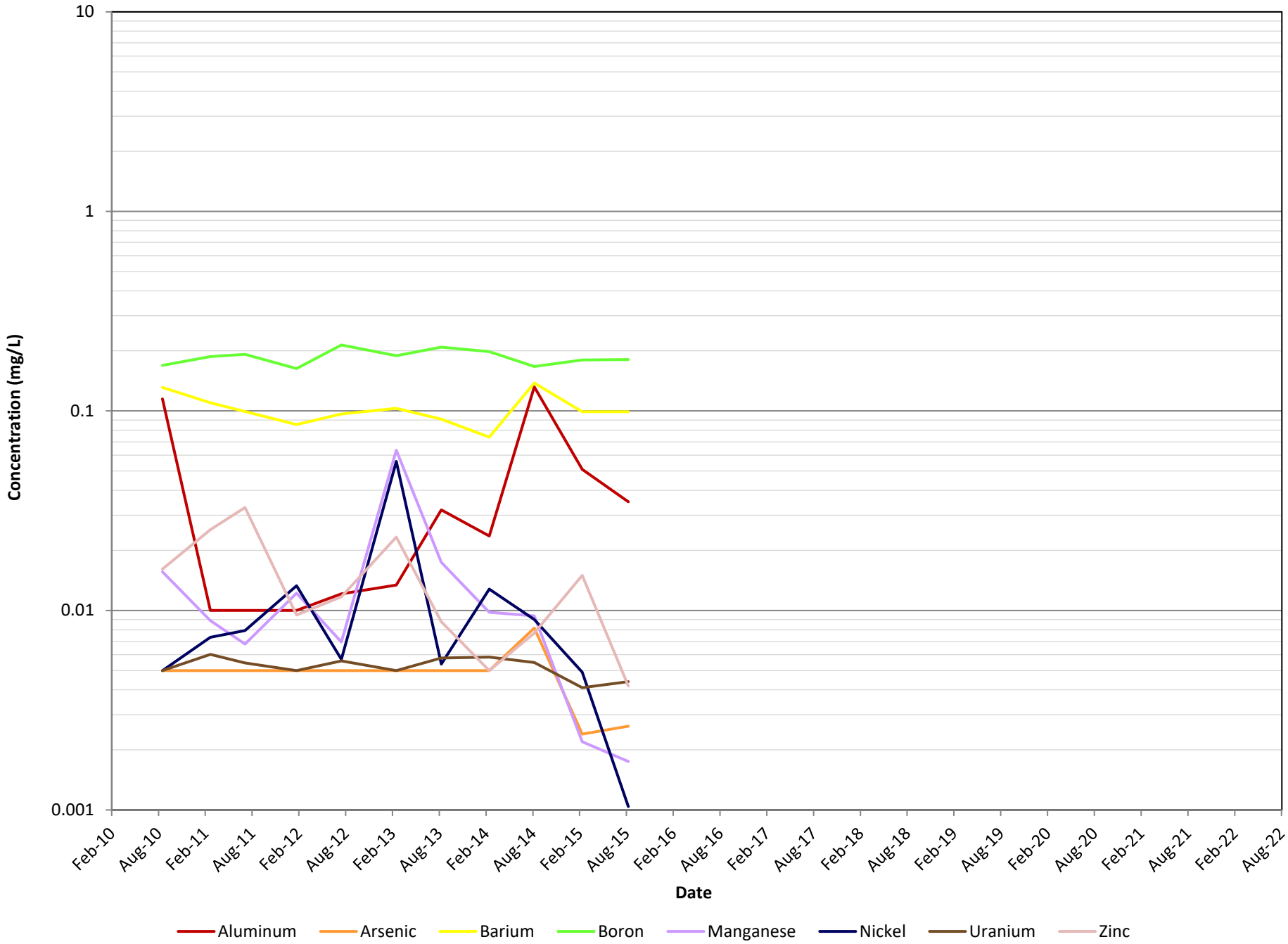
MW-26/MW-26R: ANION CONCENTRATIONS OVER TIME



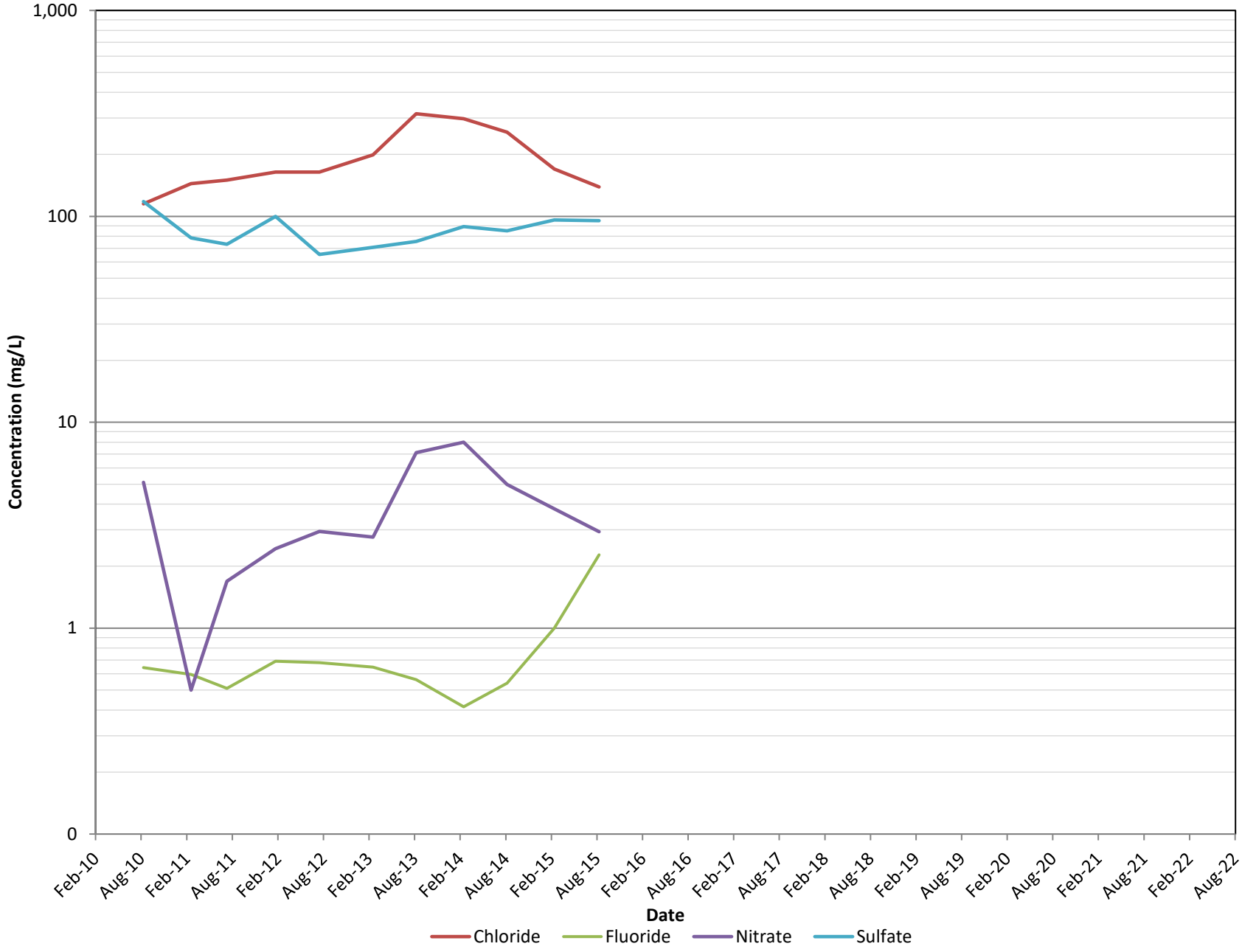
MW-26/MW-26R: TDS CONCENTRATIONS OVER TIME



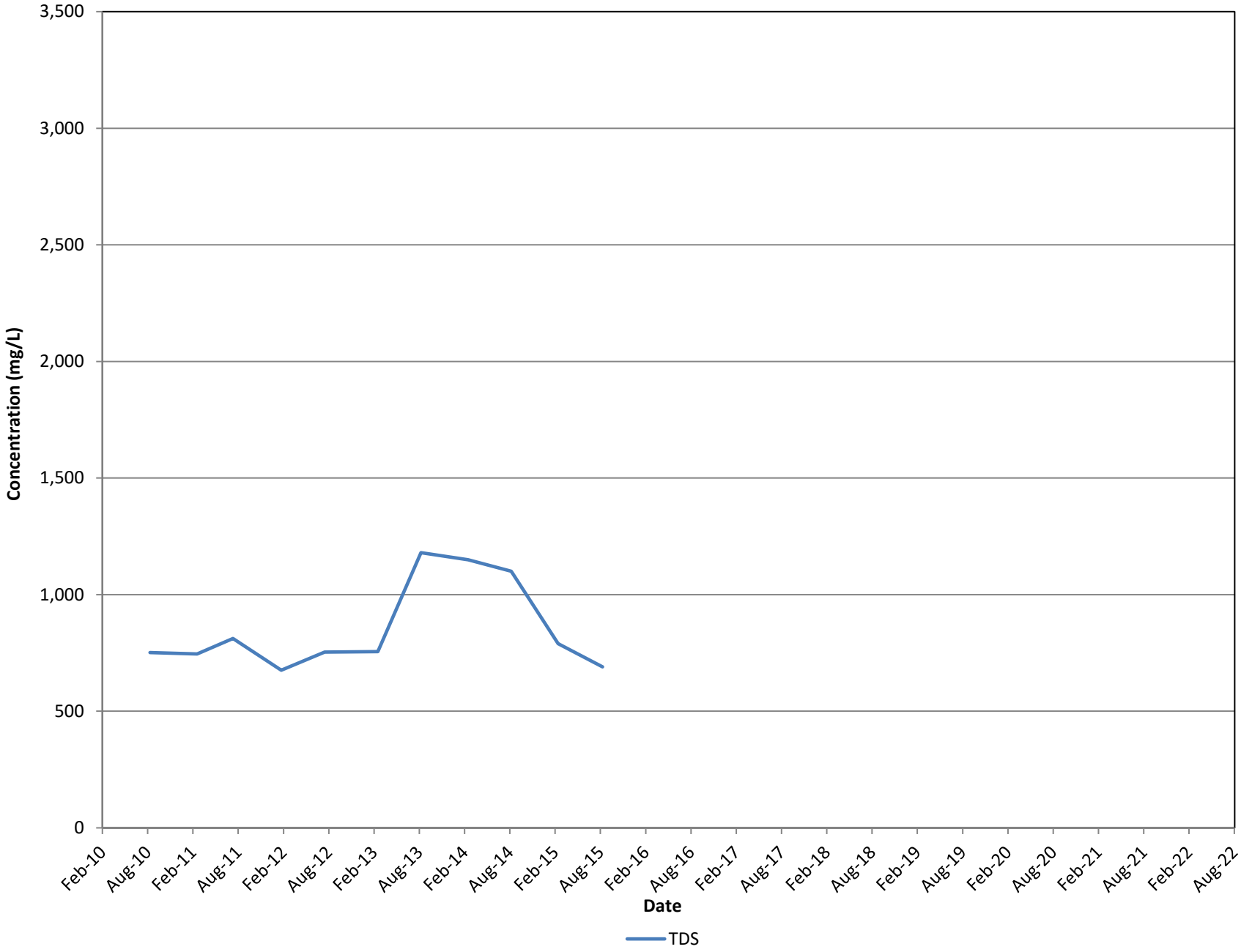
MW-26/MW-26R: METAL CONCENTRATIONS OVER TIME



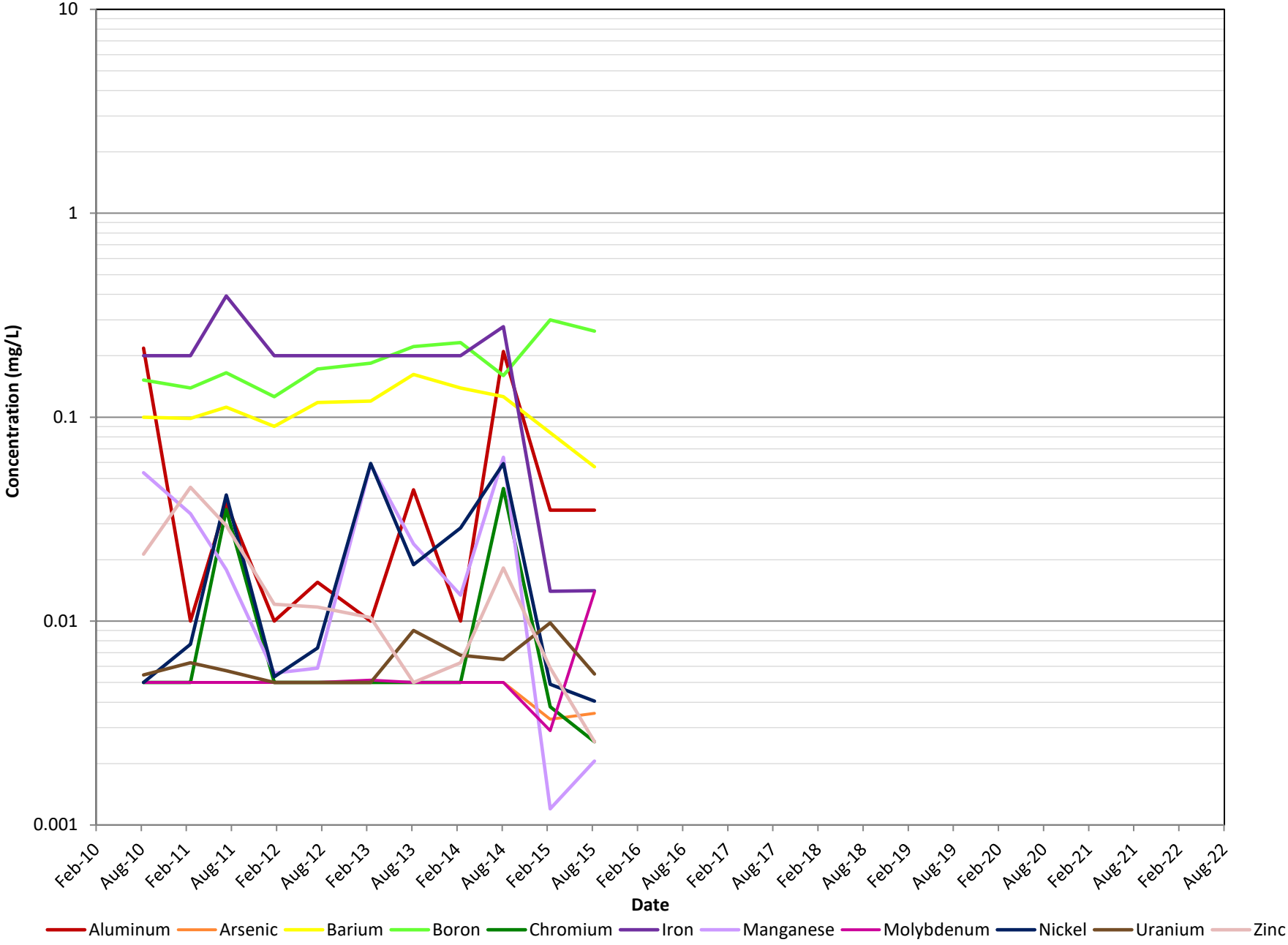
MW-27: ANION CONCENTRATIONS OVER TIME



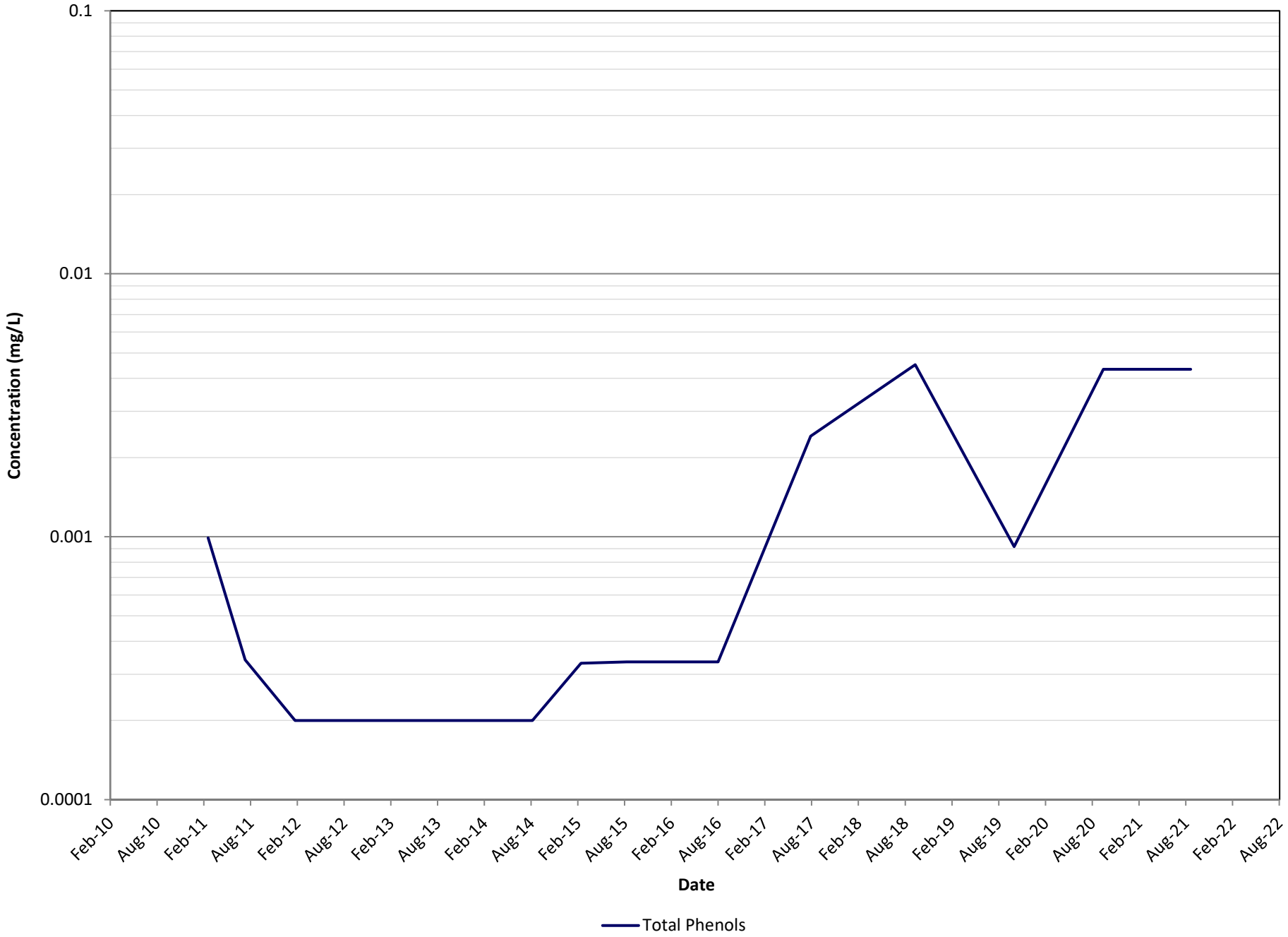
MW-27: TDS CONCENTRATIONS OVER TIME



MW-27: METAL CONCENTRATIONS OVER TIME



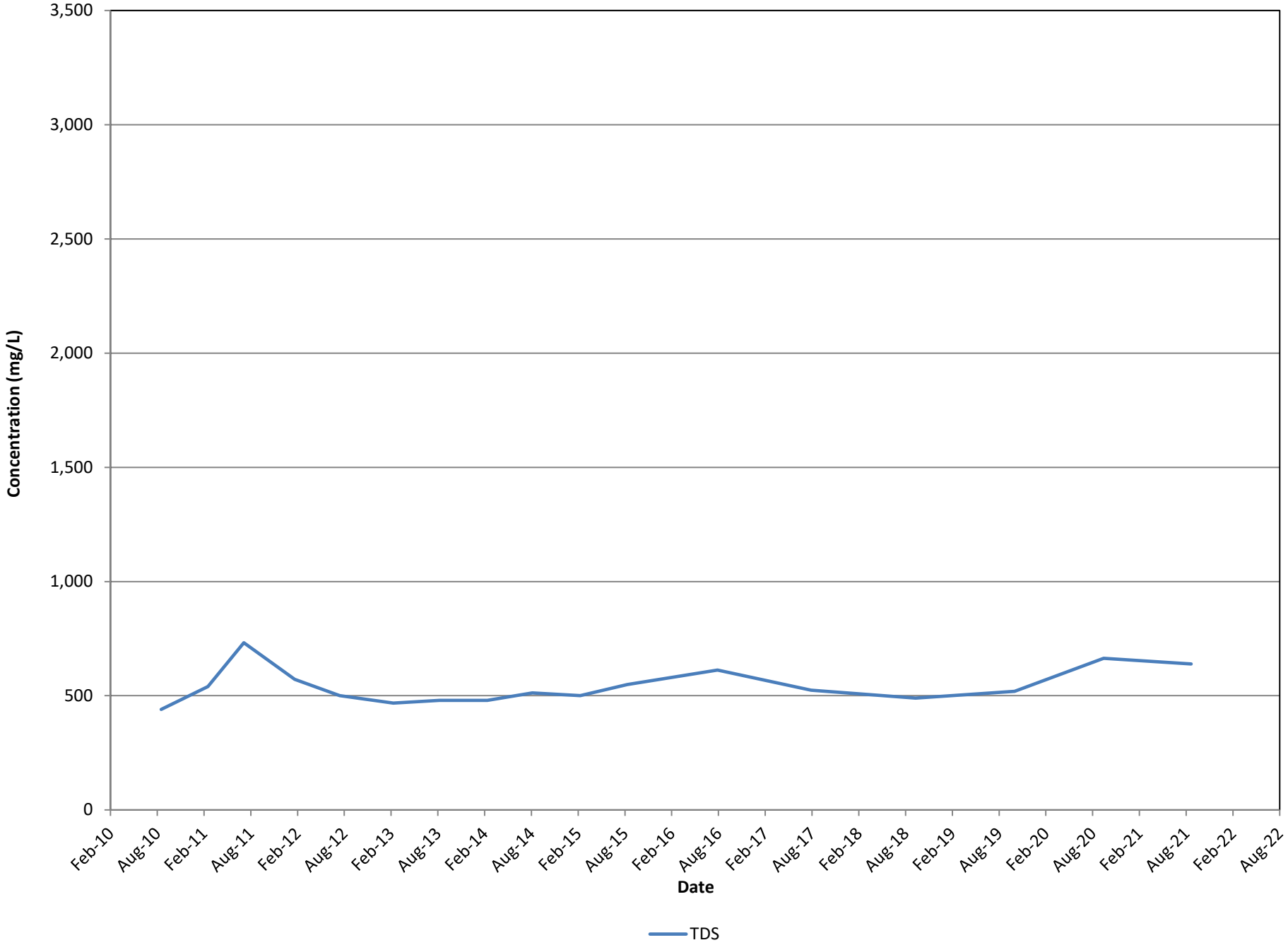
MW-27: SVOC CONCENTRATIONS OVER TIME



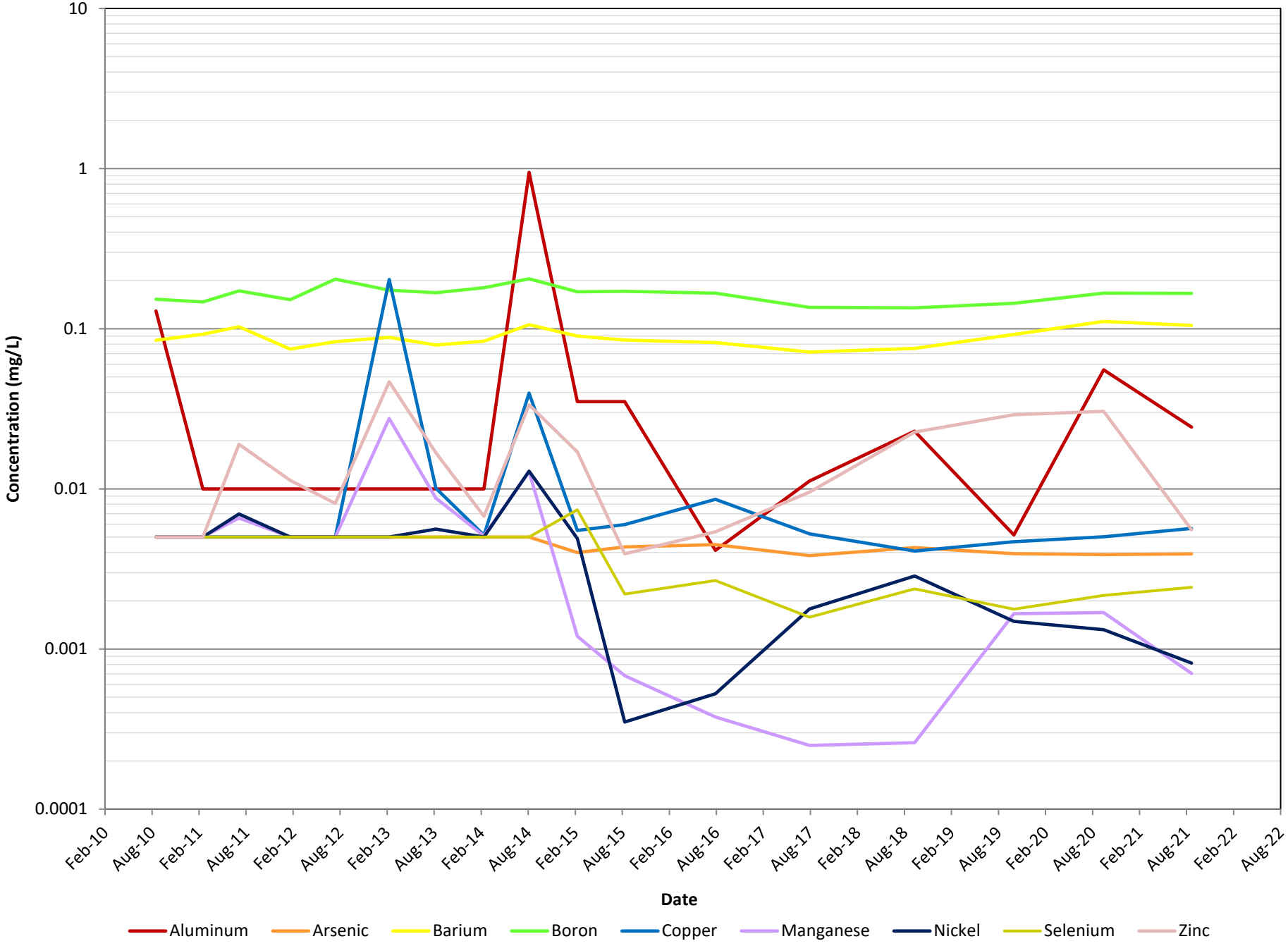
MW-28: ANION CONCENTRATIONS OVER TIME



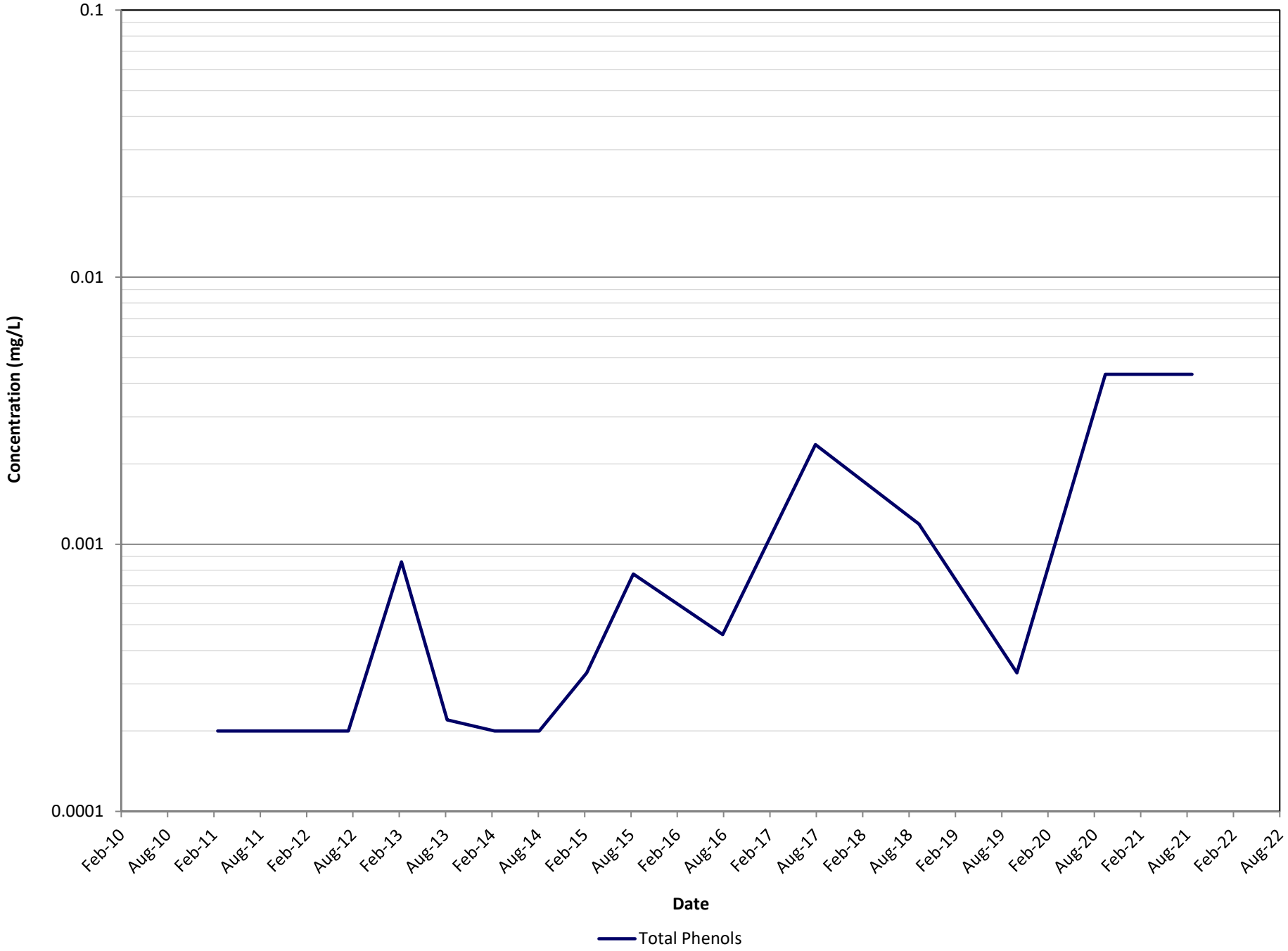
MW-28: TDS CONCENTRATIONS OVER TIME



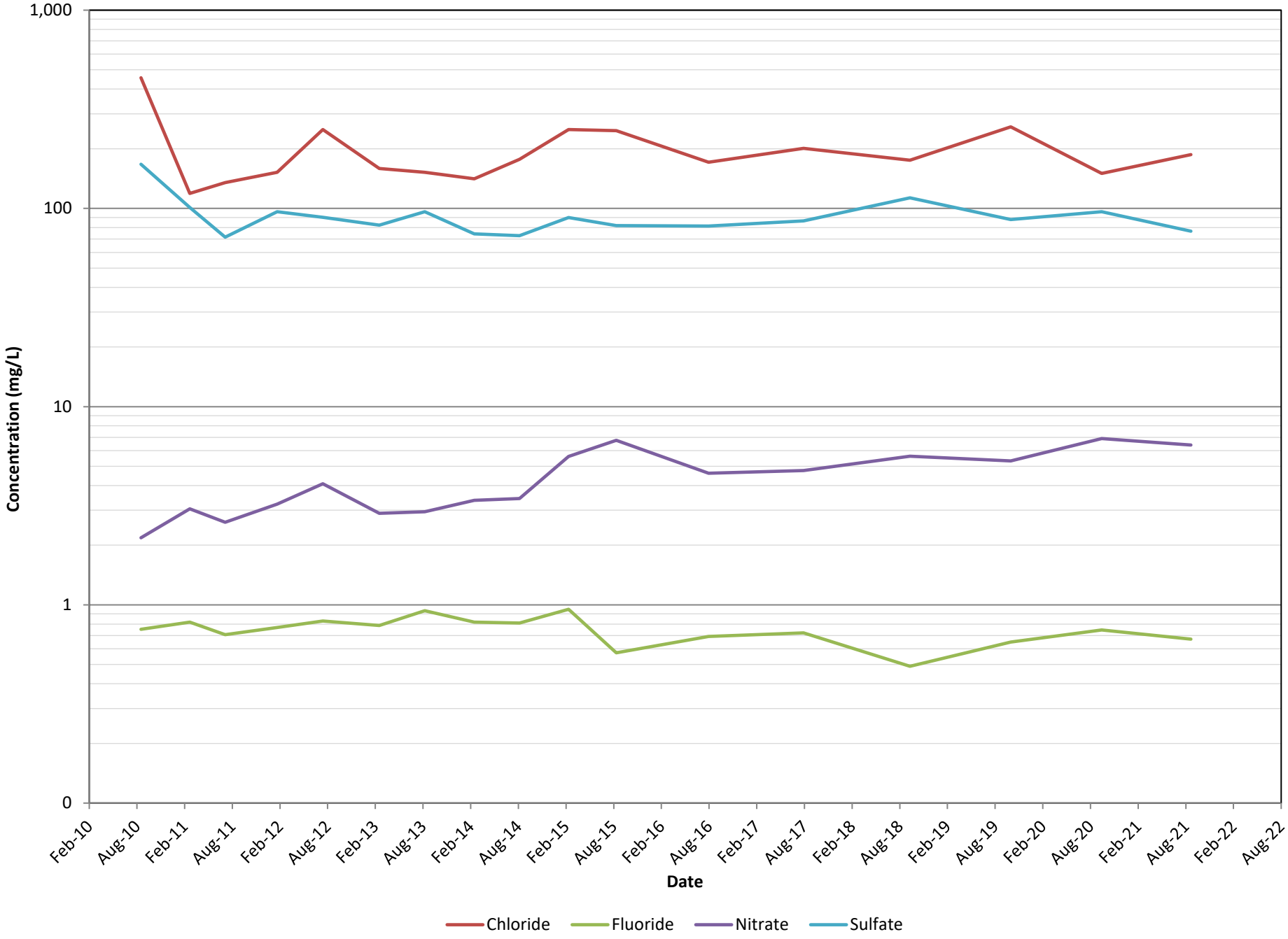
MW-28: METAL CONCENTRATIONS OVER TIME



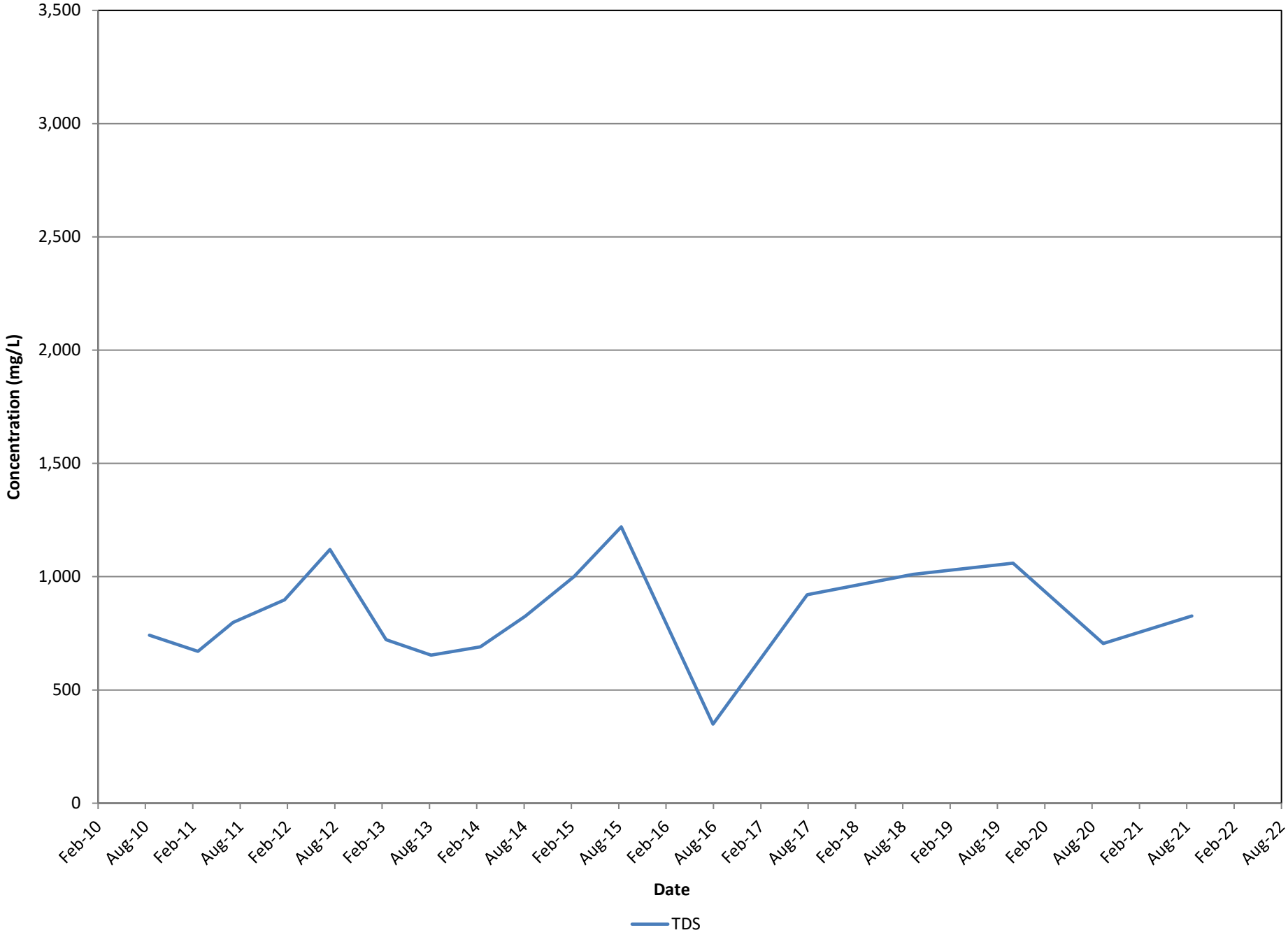
MW-28: SVOC CONCENTRATIONS OVER TIME



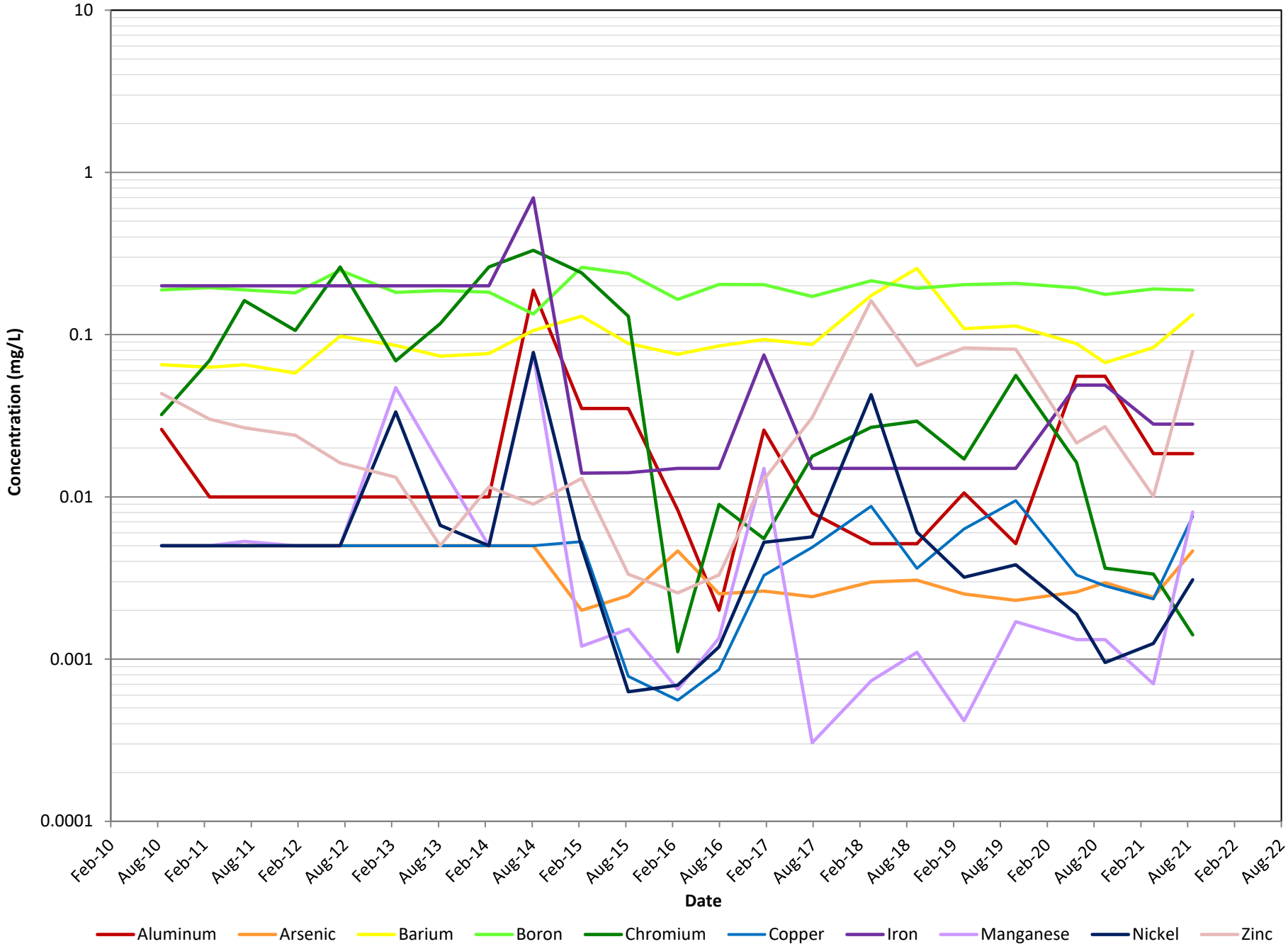
MW-29: ANION CONCENTRATIONS OVER TIME



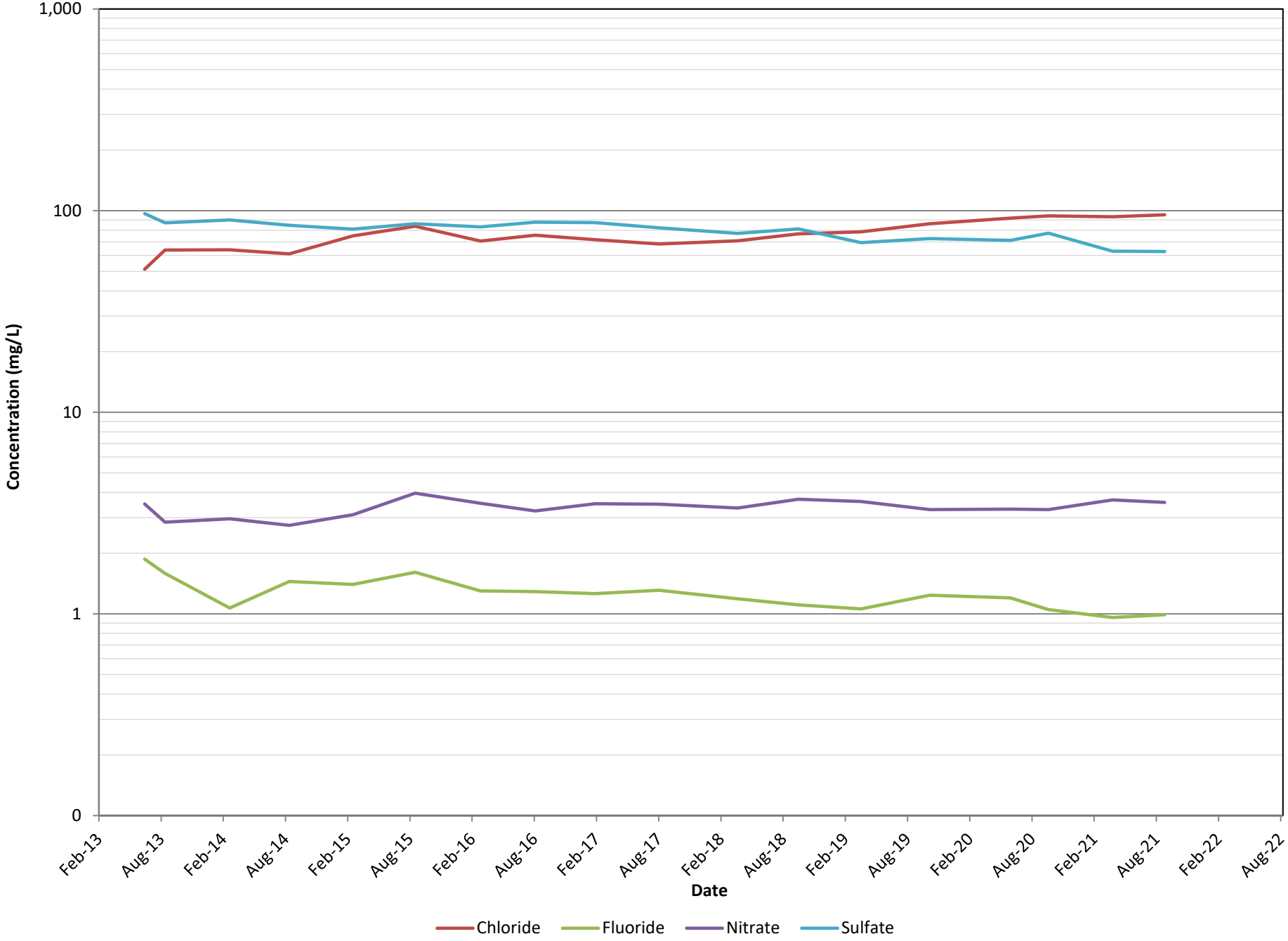
MW-29: TDS CONCENTRATIONS OVER TIME



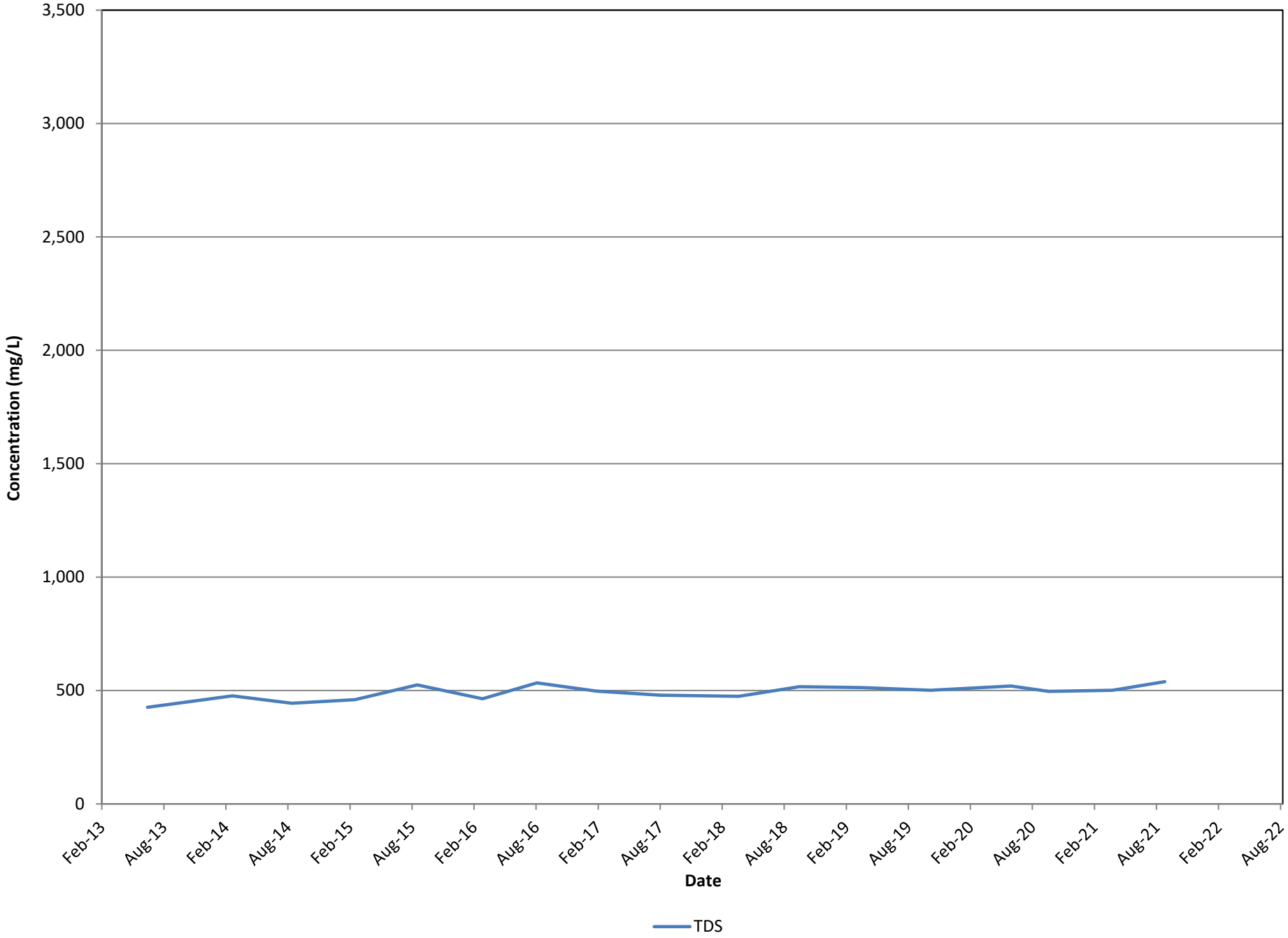
MW-29: METAL CONCENTRATIONS OVER TIME



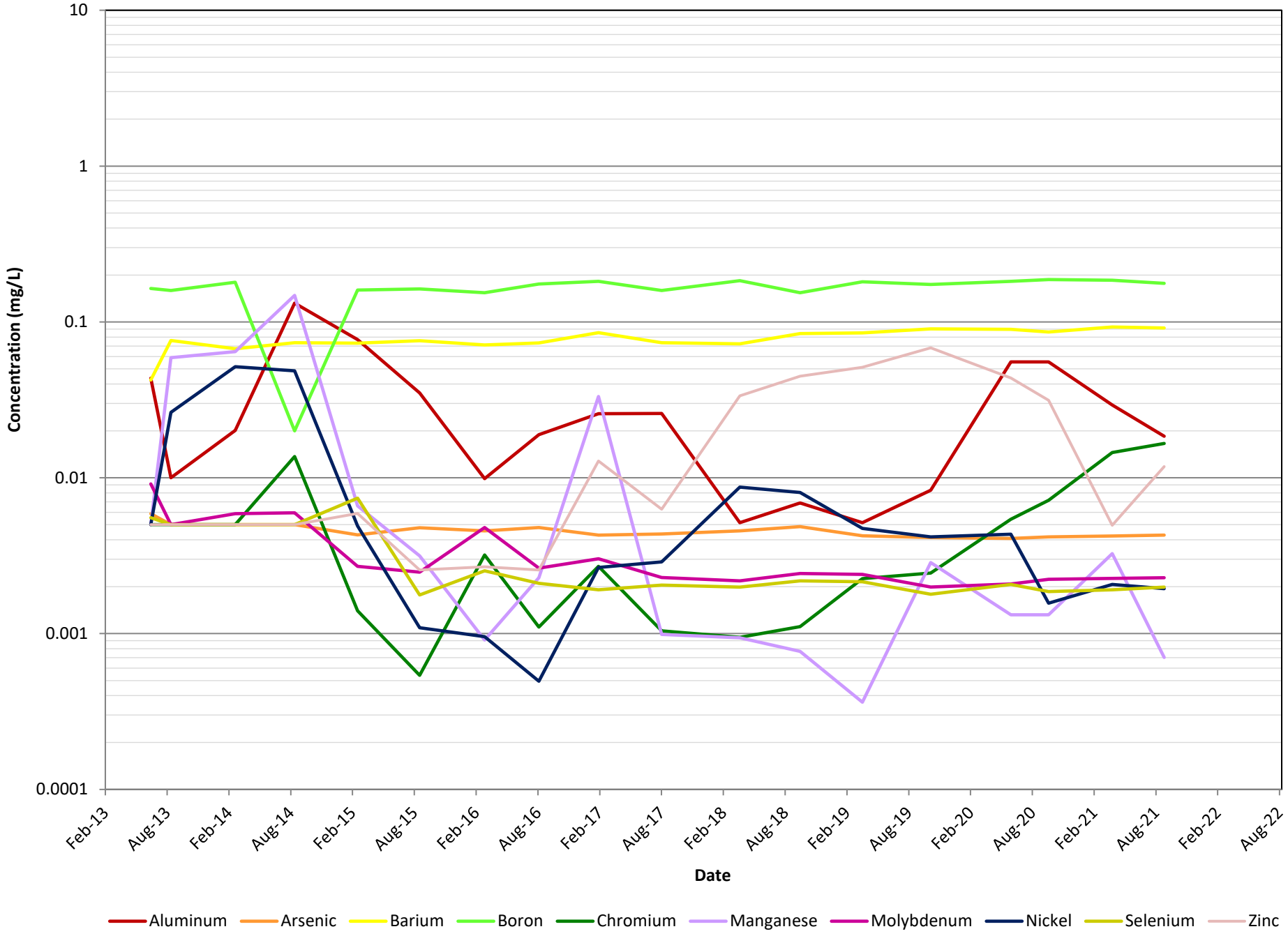
MW-30: ANION CONCENTRATIONS OVER TIME



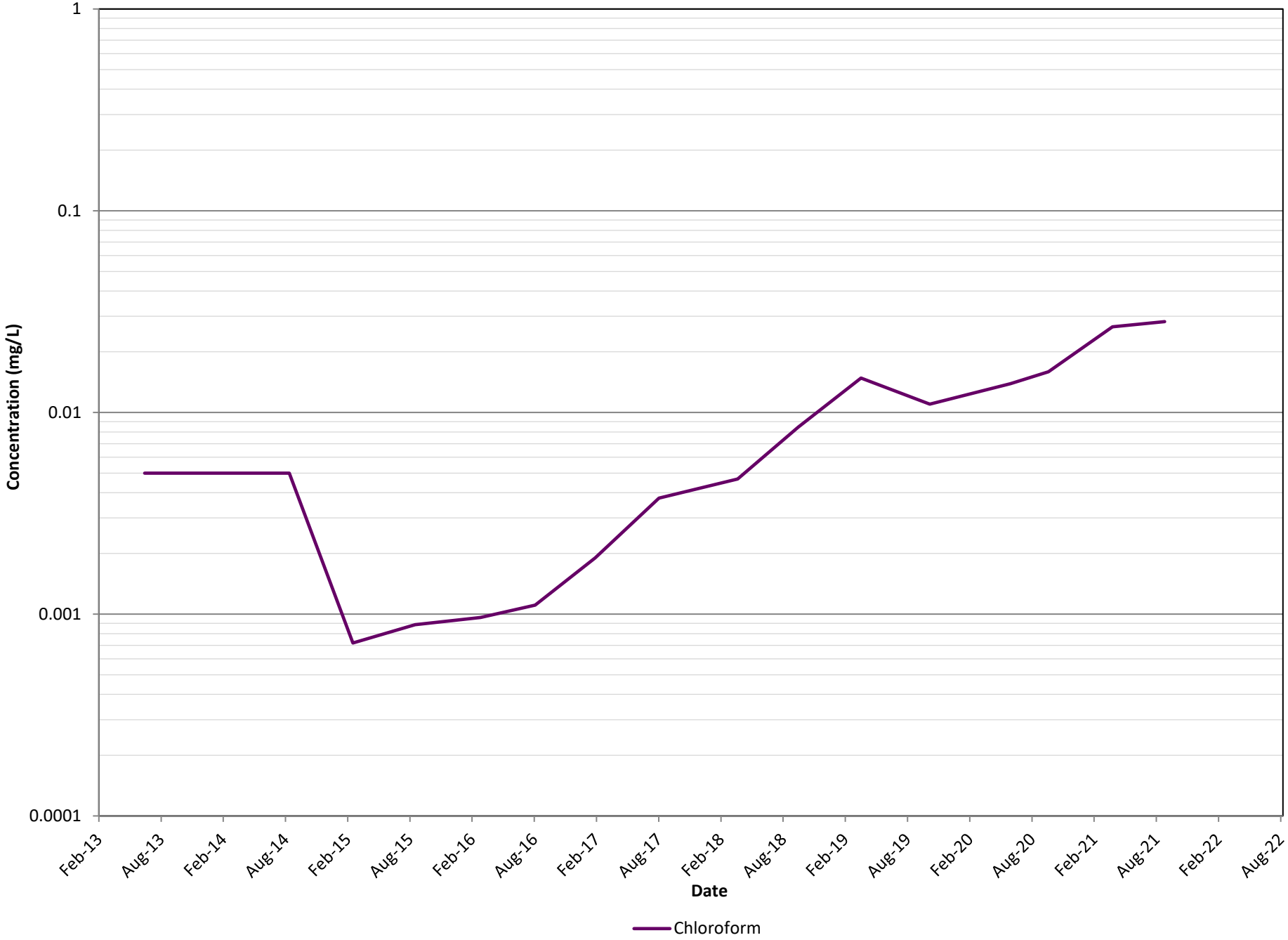
MW-30: TDS CONCENTRATIONS OVER TIME



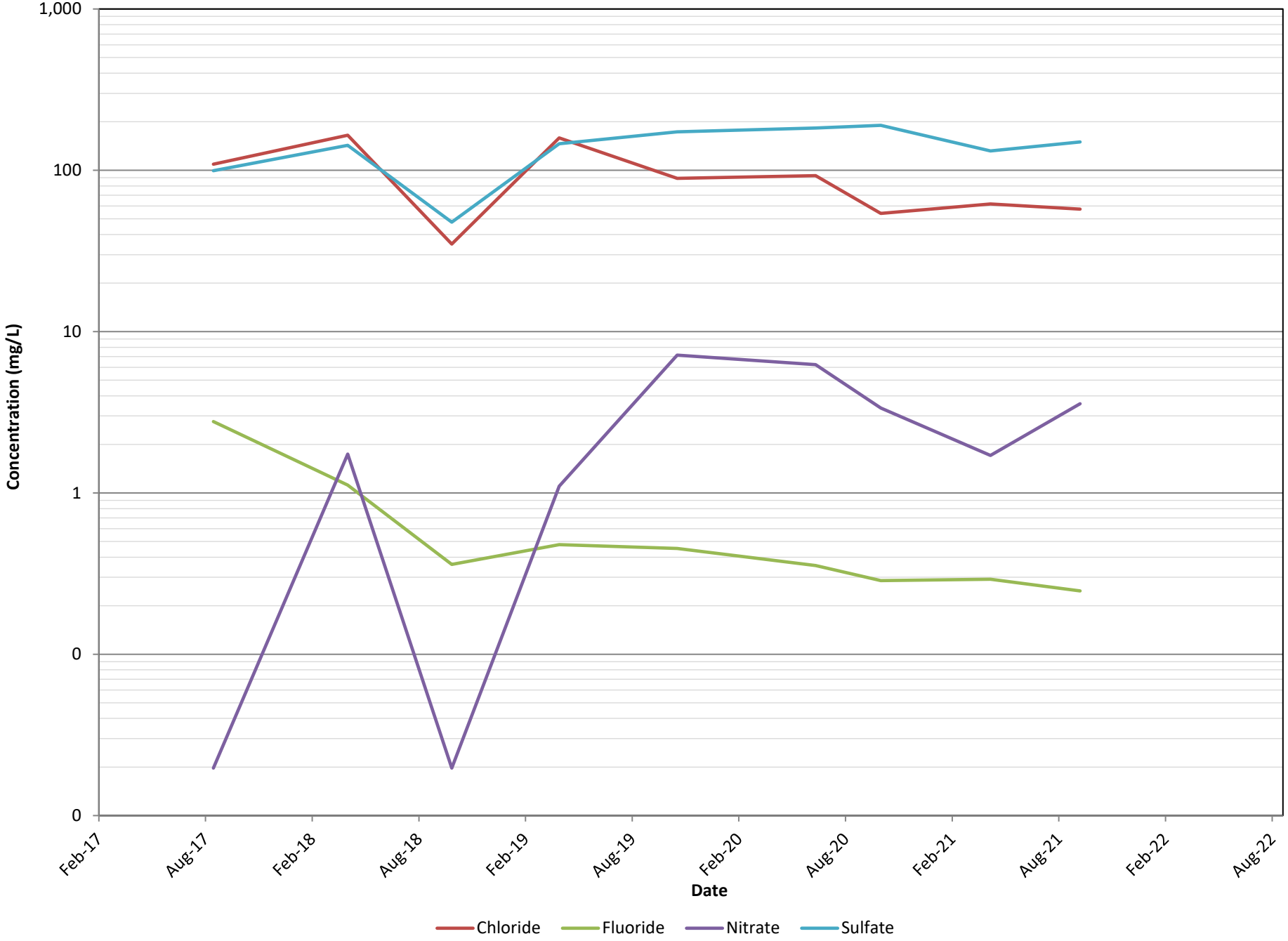
MW-30: METAL CONCENTRATIONS OVER TIME



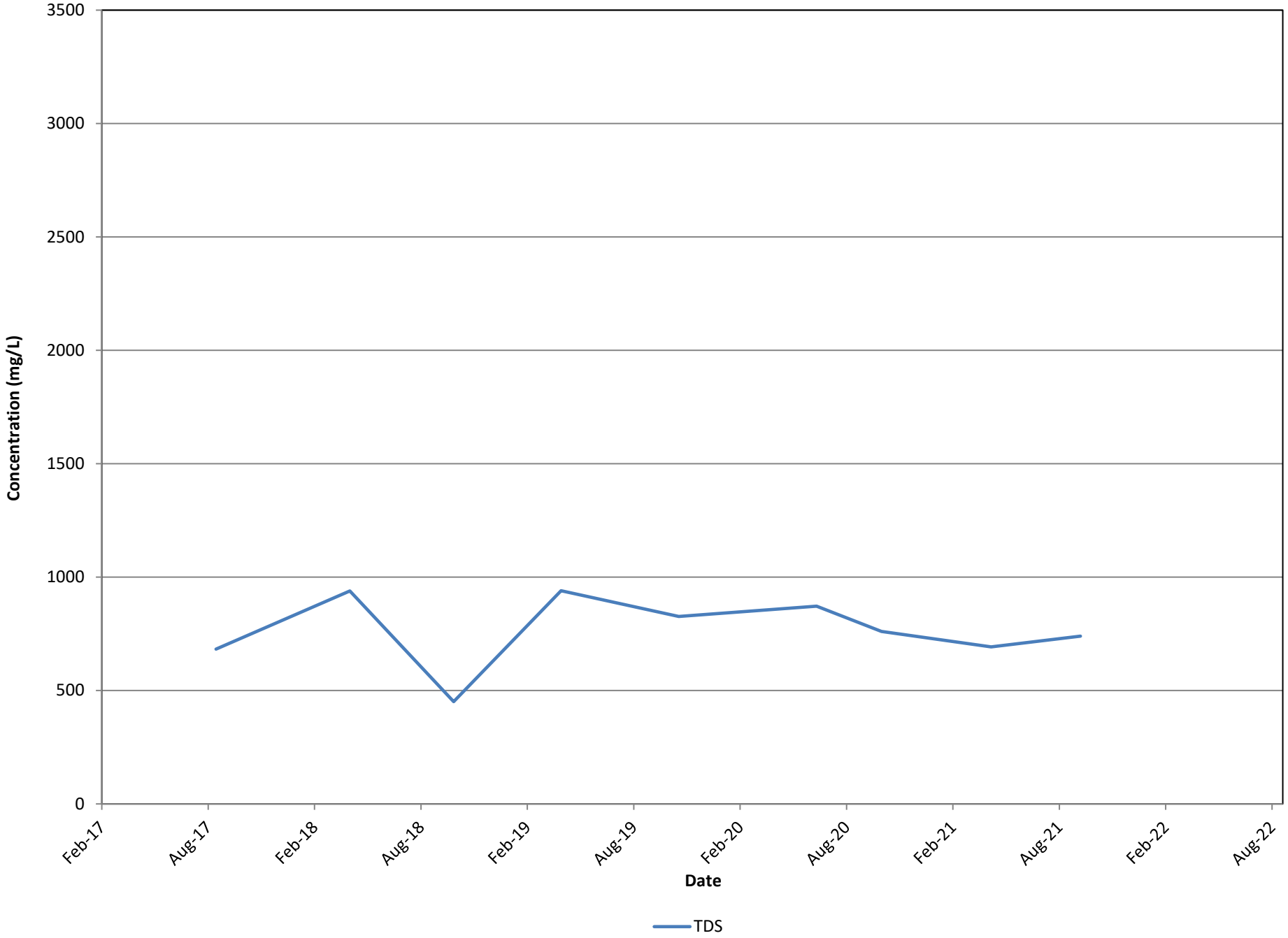
MW-30: VOC CONCENTRATIONS OVER TIME



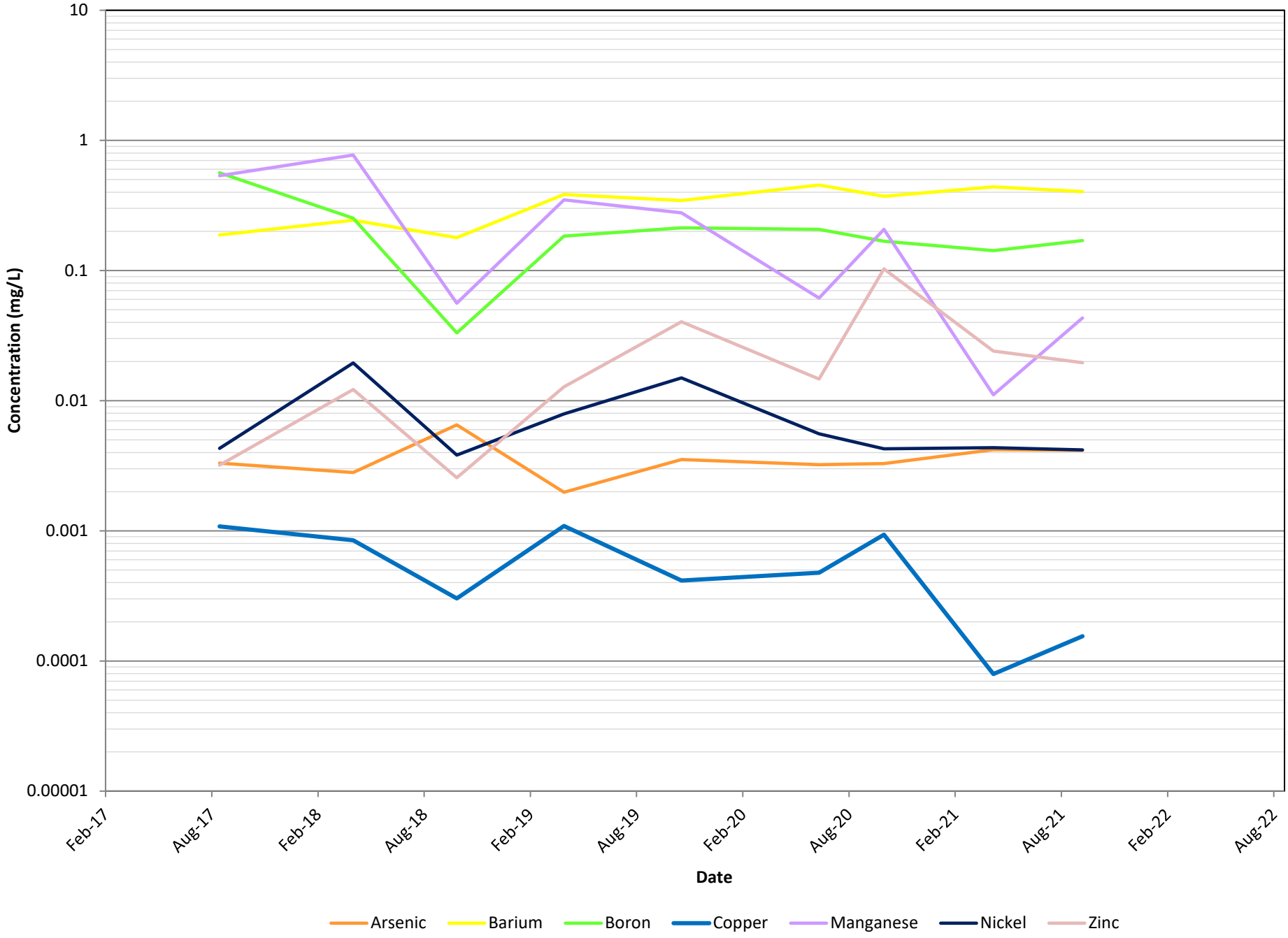
MW-32: ANION CONCENTRATIONS OVER TIME

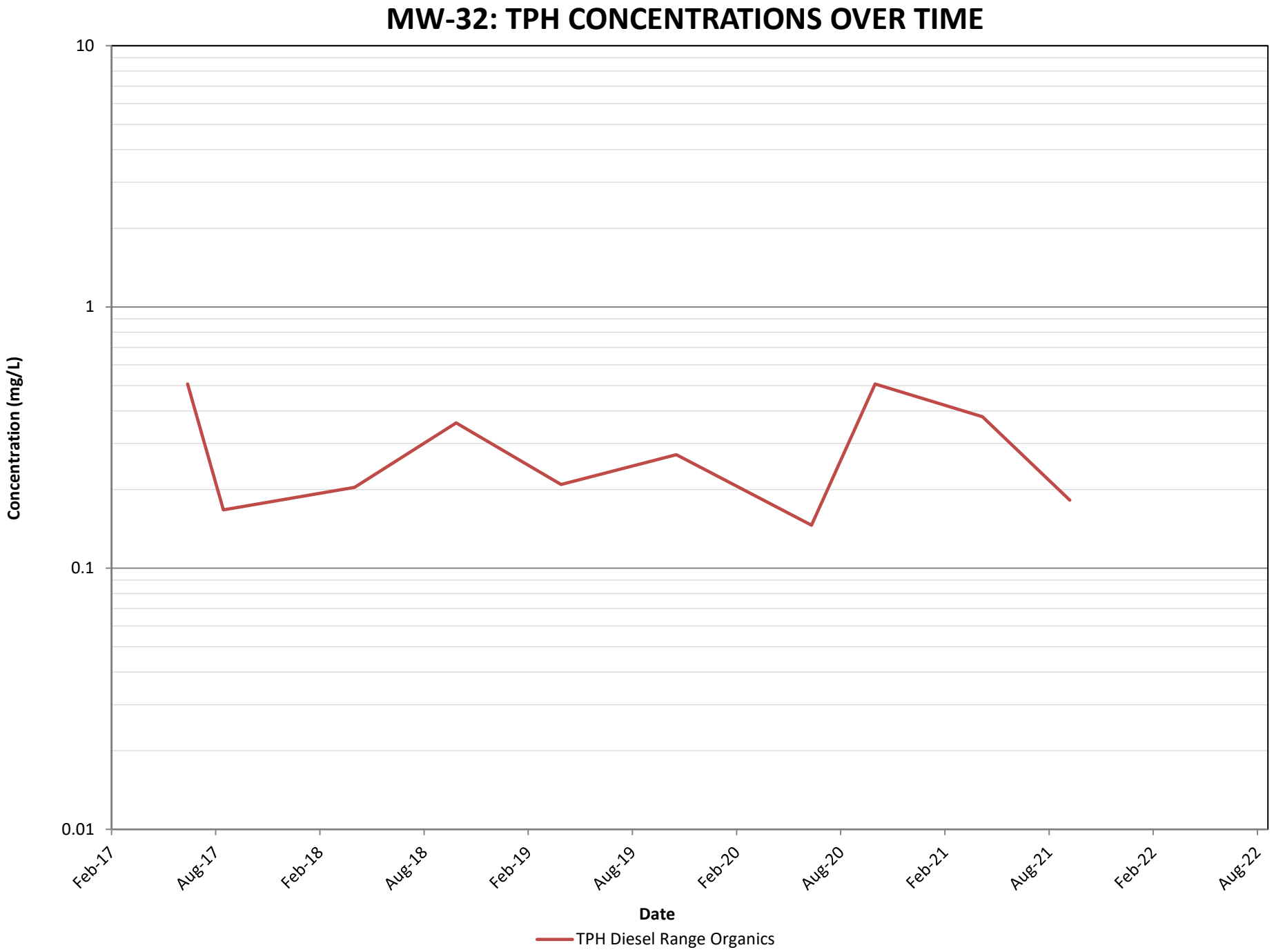


MW-32: TDS CONCENTRATIONS OVER TIME

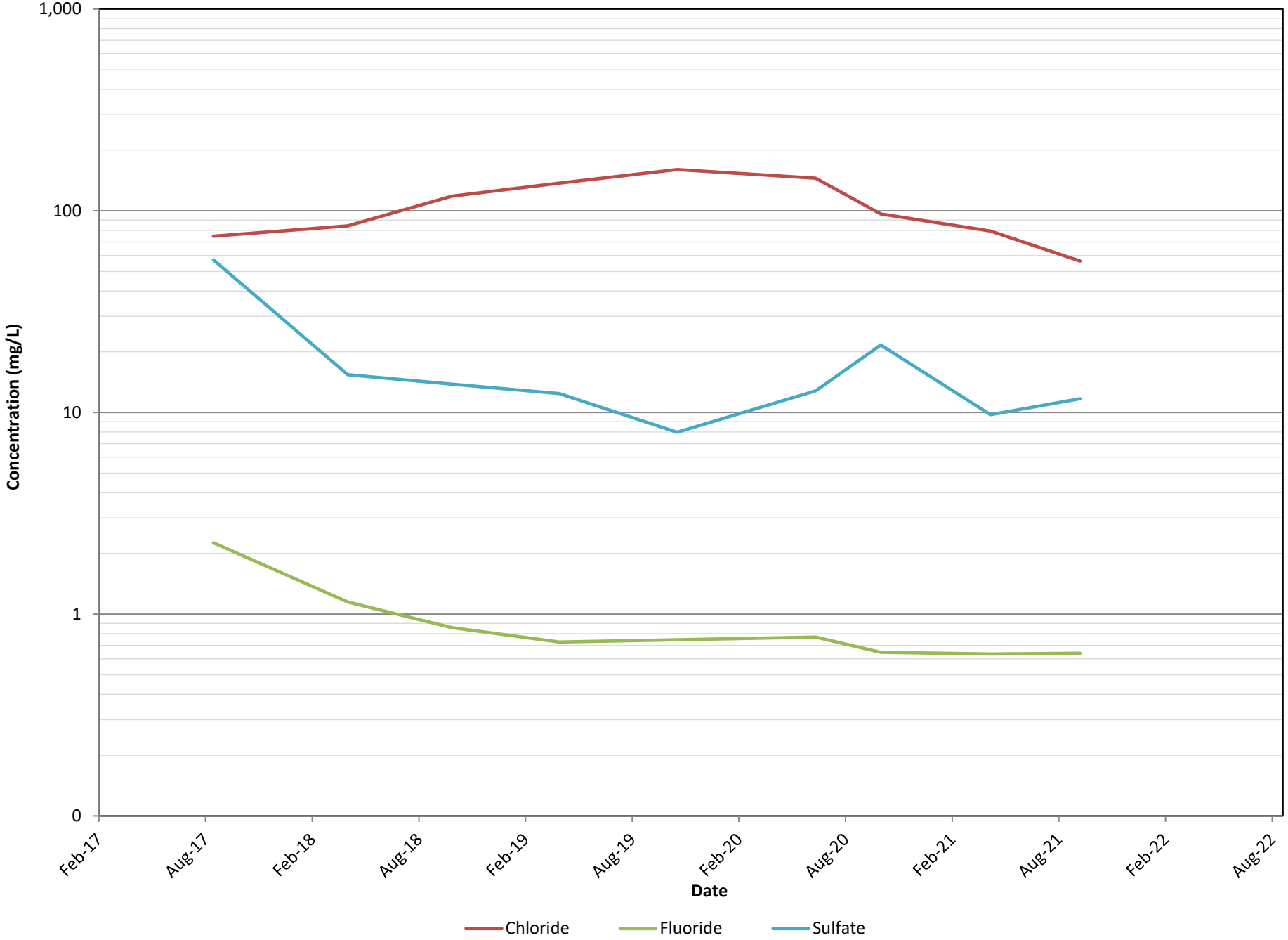


MW-32: METAL CONCENTRATIONS OVER TIME

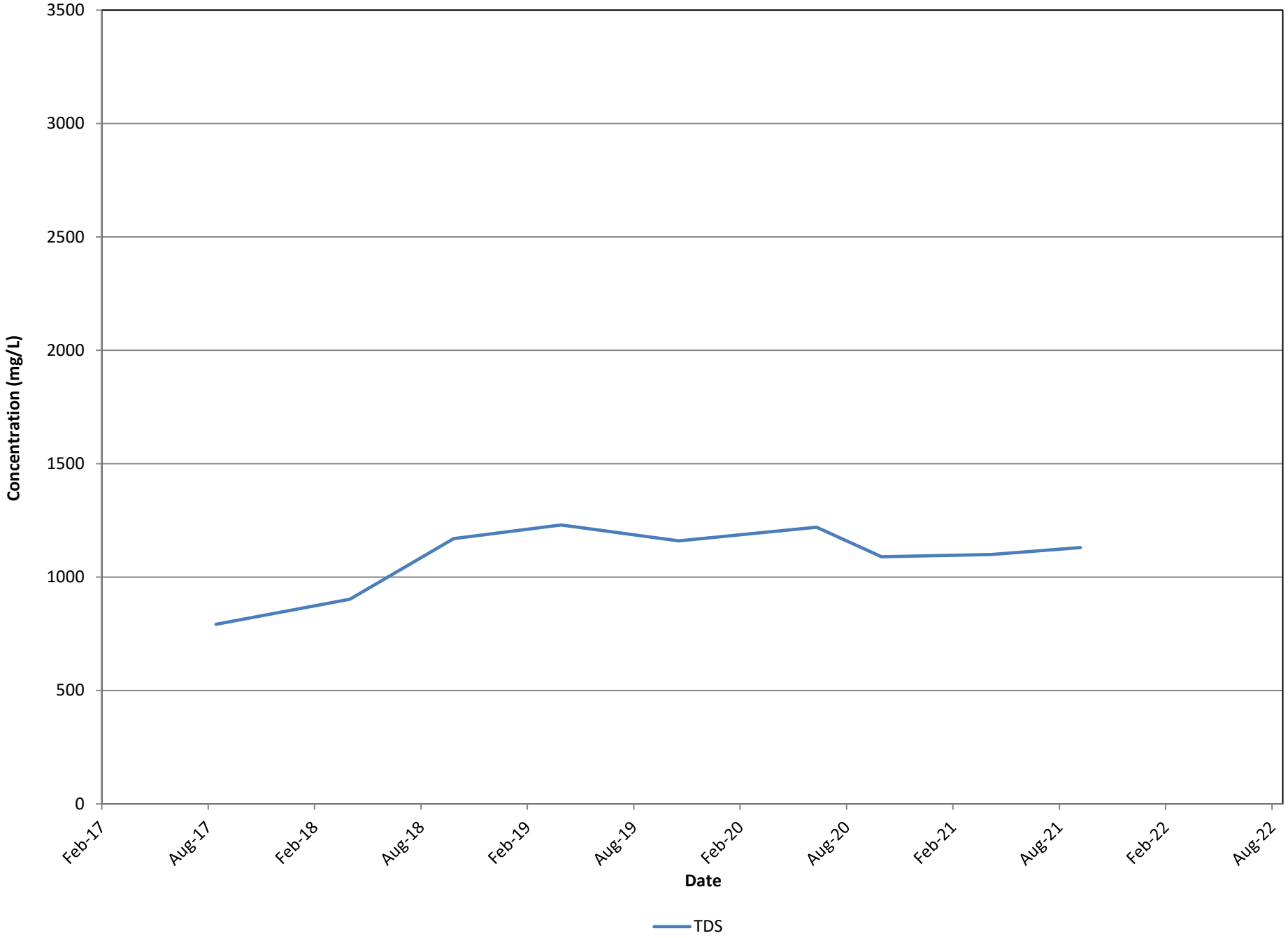



MW-32: TPH CONCENTRATIONS OVER TIME
10
1
0.1
0.01
Concentration (mg/L)
Feb-17
Aug-17
Feb-18
Aug-18
Feb-19
Aug-19
Feb-20
Aug-20
Feb-21
Aug-21
Feb-22
Aug-22
Date
TPH Diesel Range Organics

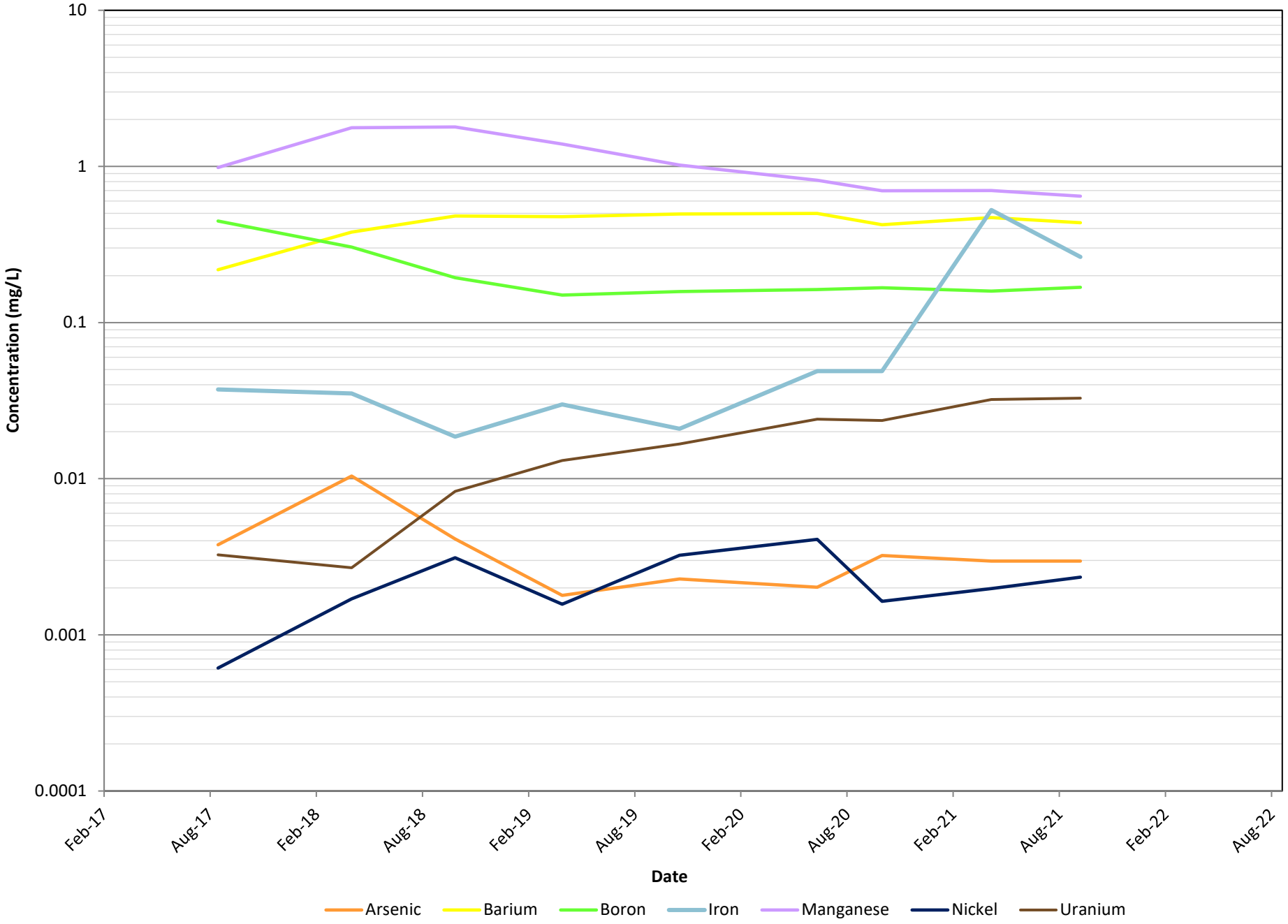
MW-33: ANION CONCENTRATIONS OVER TIME



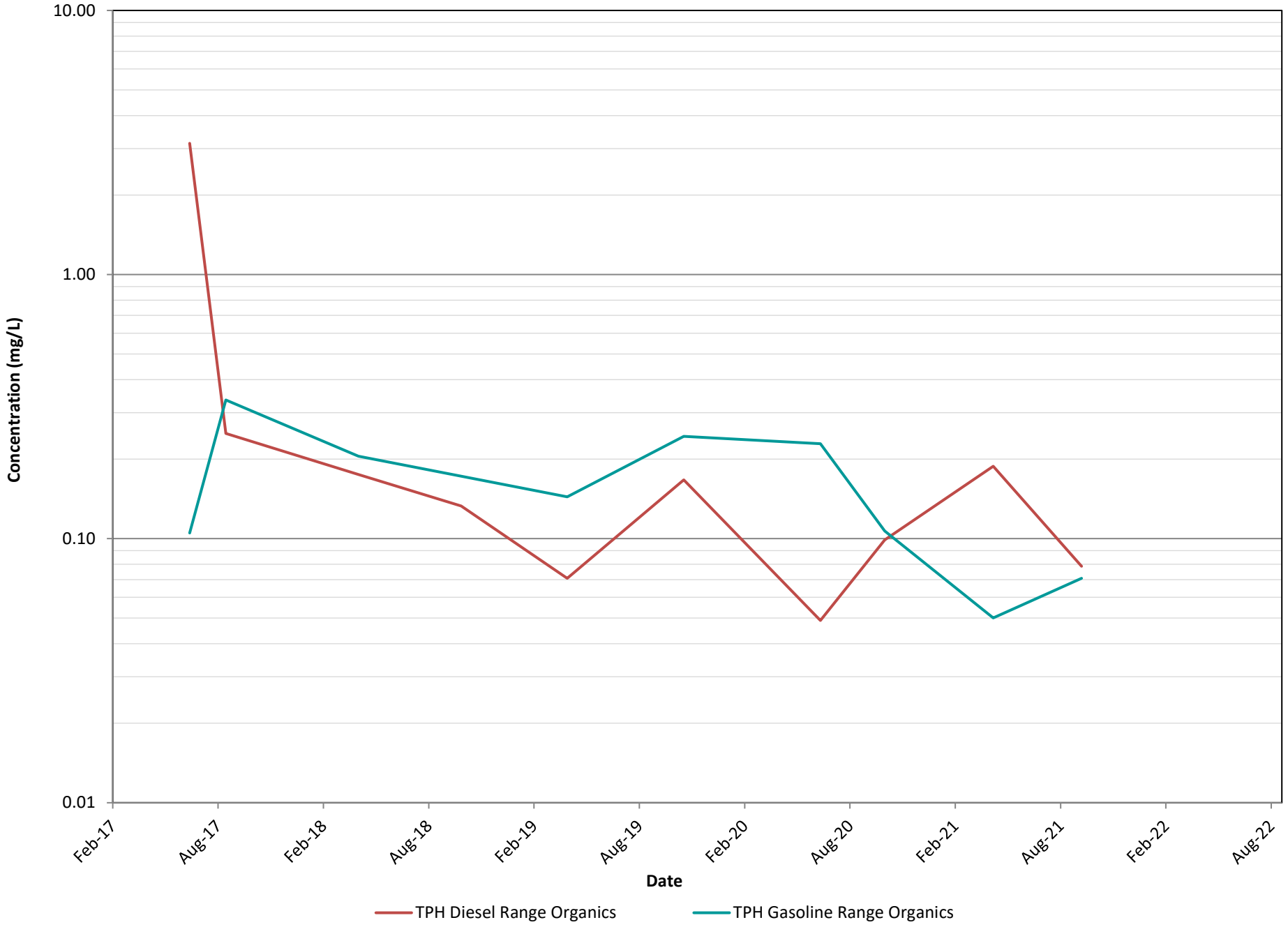
MW-33: TDS CONCENTRATIONS OVER TIME



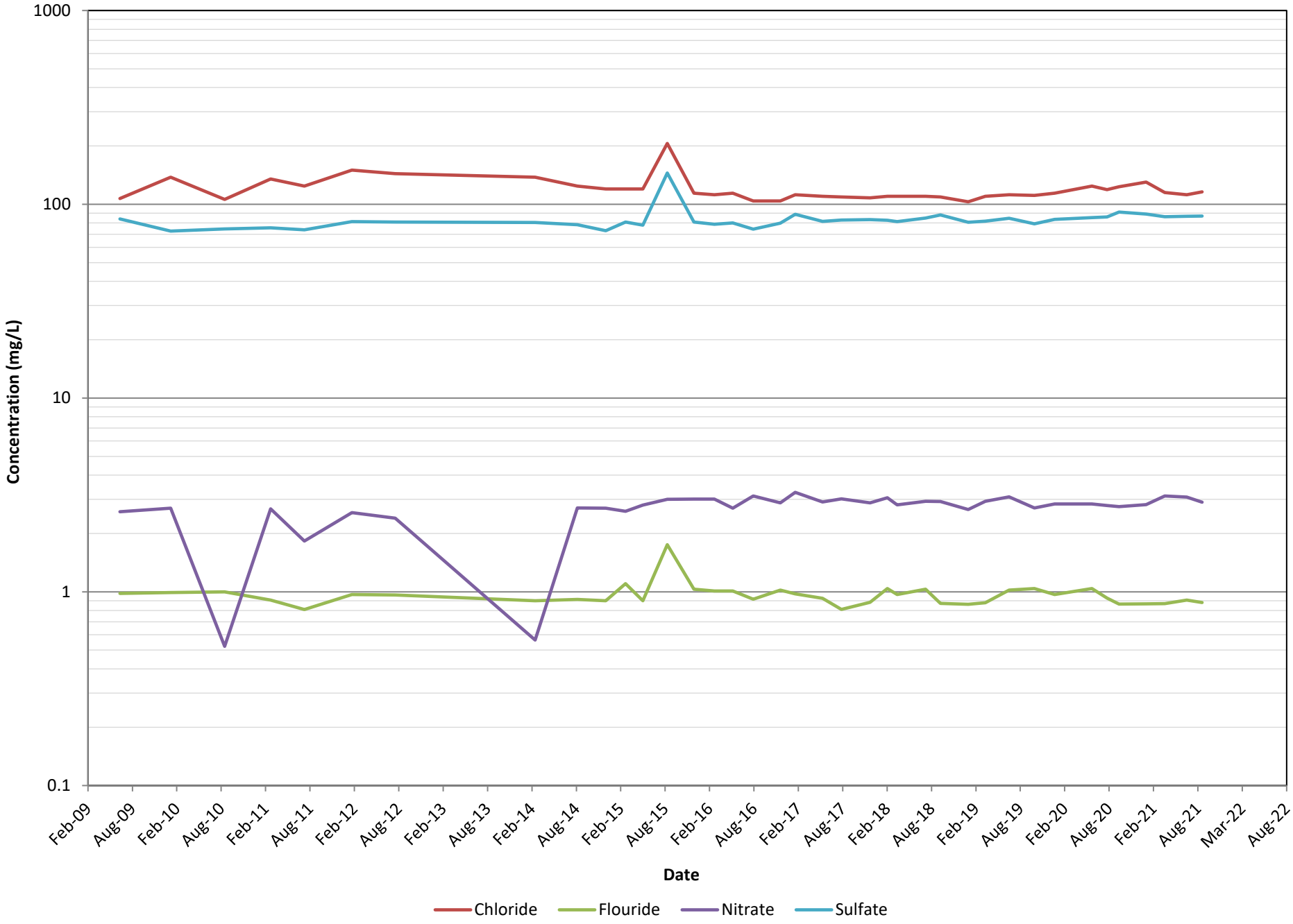
MW-33: METAL CONCENTRATIONS OVER TIME



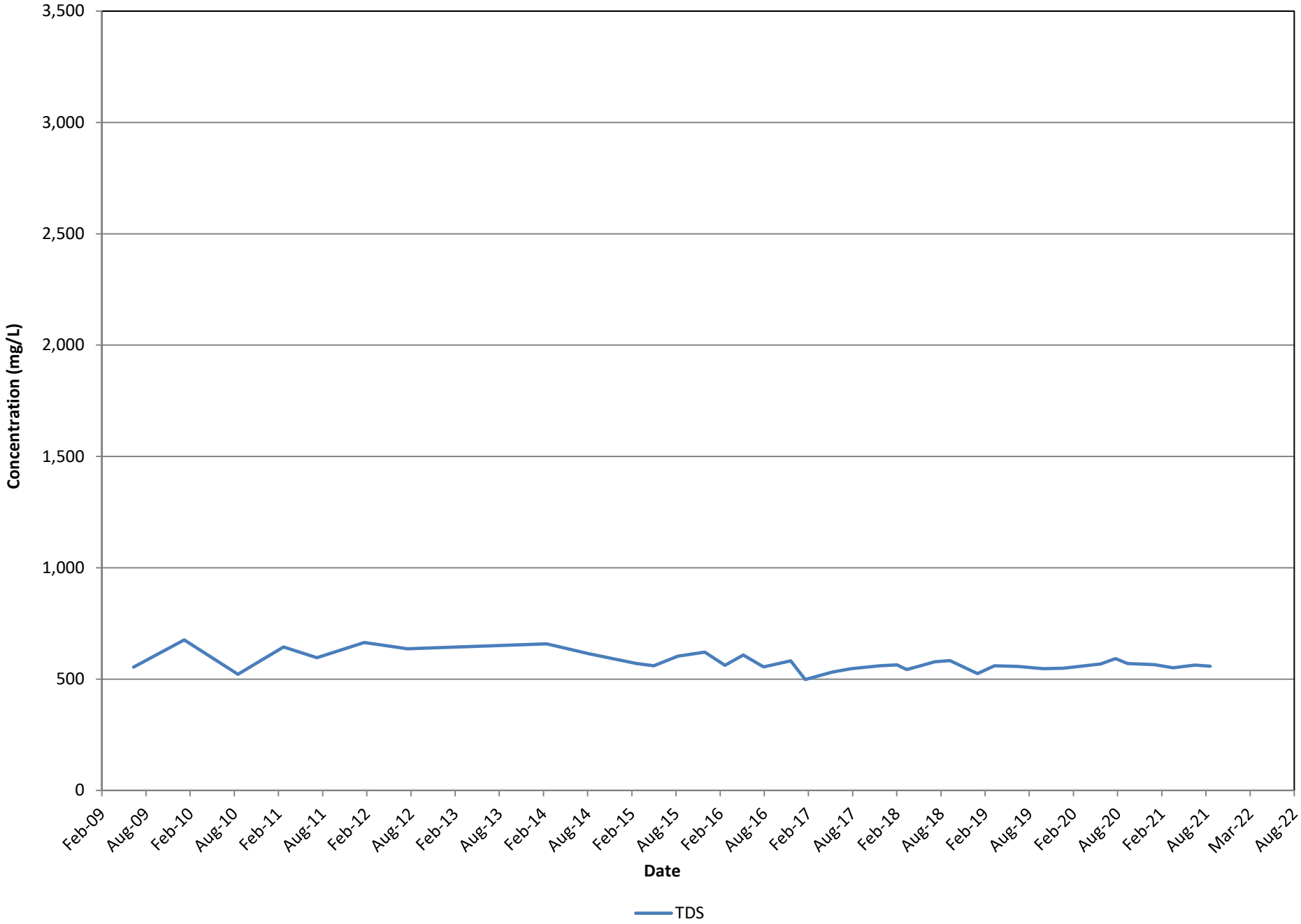
MW-33: TPH CONCENTRATIONS OVER TIME



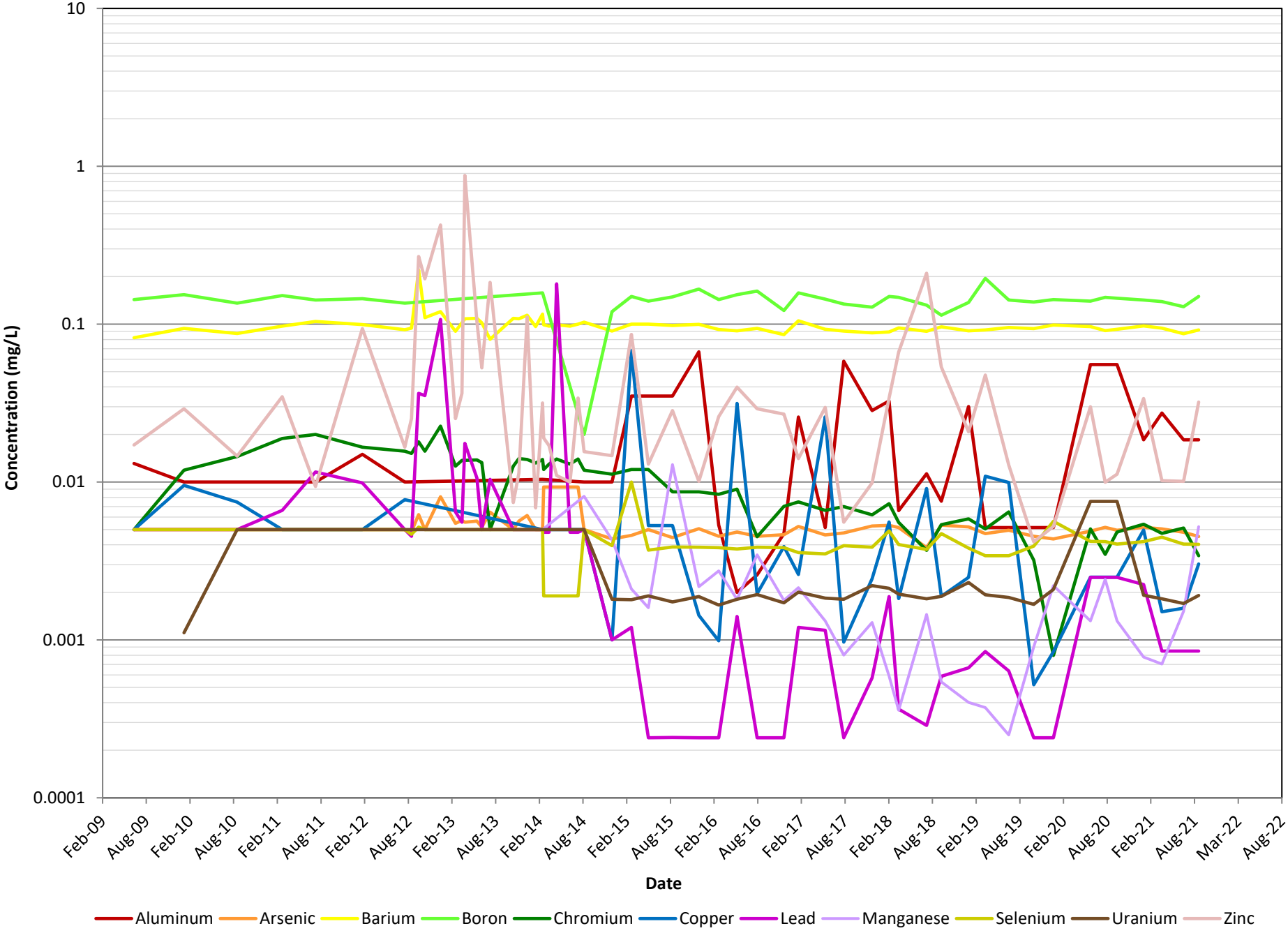
EAST WELL (WW-EAST): ANION CONCENTRATIONS OVER TIME



EAST WELL (WW-EAST): TDS CONCENTRATIONS OVER TIME



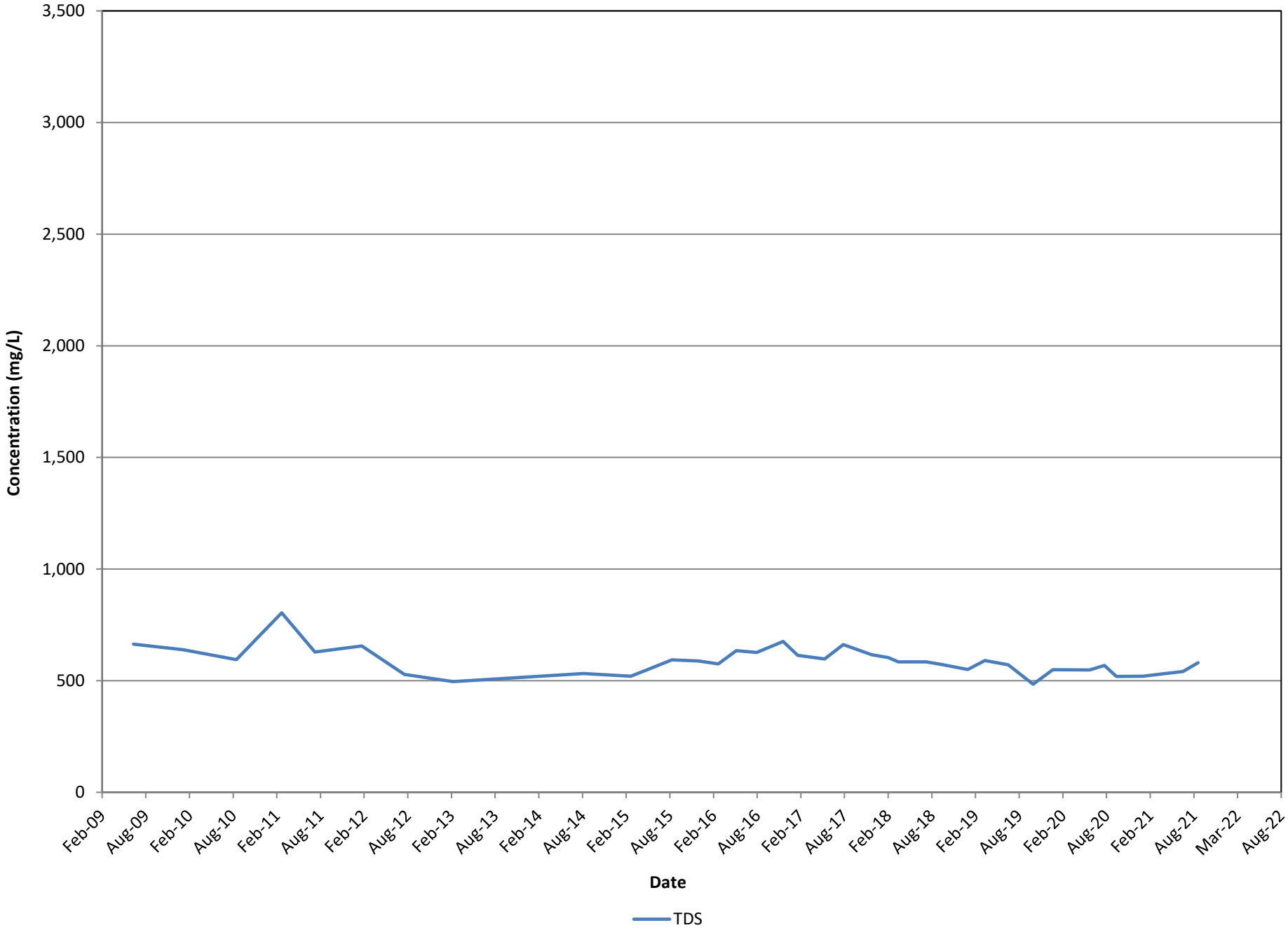
EAST WELL (WW-EAST): METAL CONCENTRATIONS OVER TIME



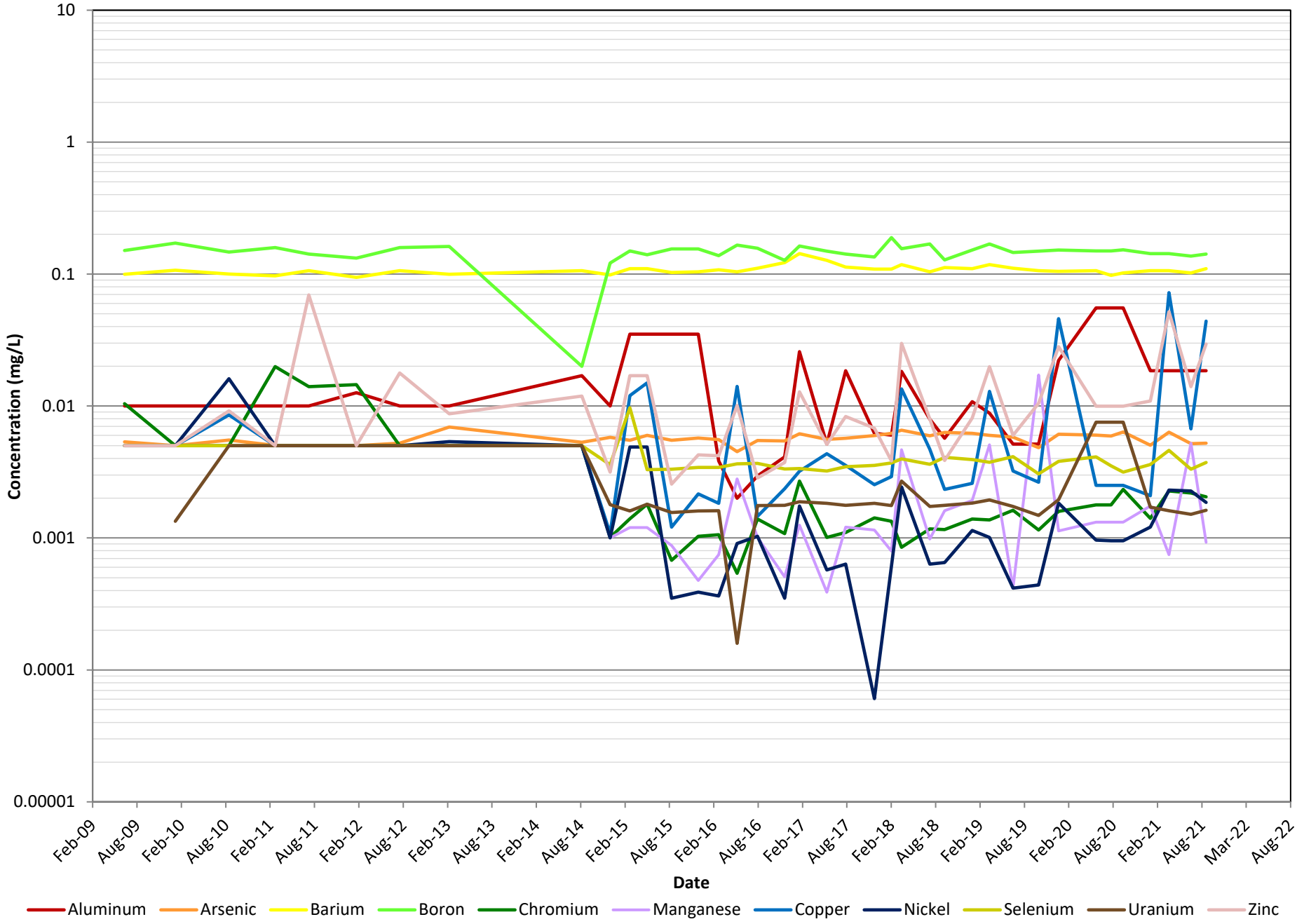
NORTH WELL (WW-NORTH): ANION CONCENTRATIONS OVER TIME



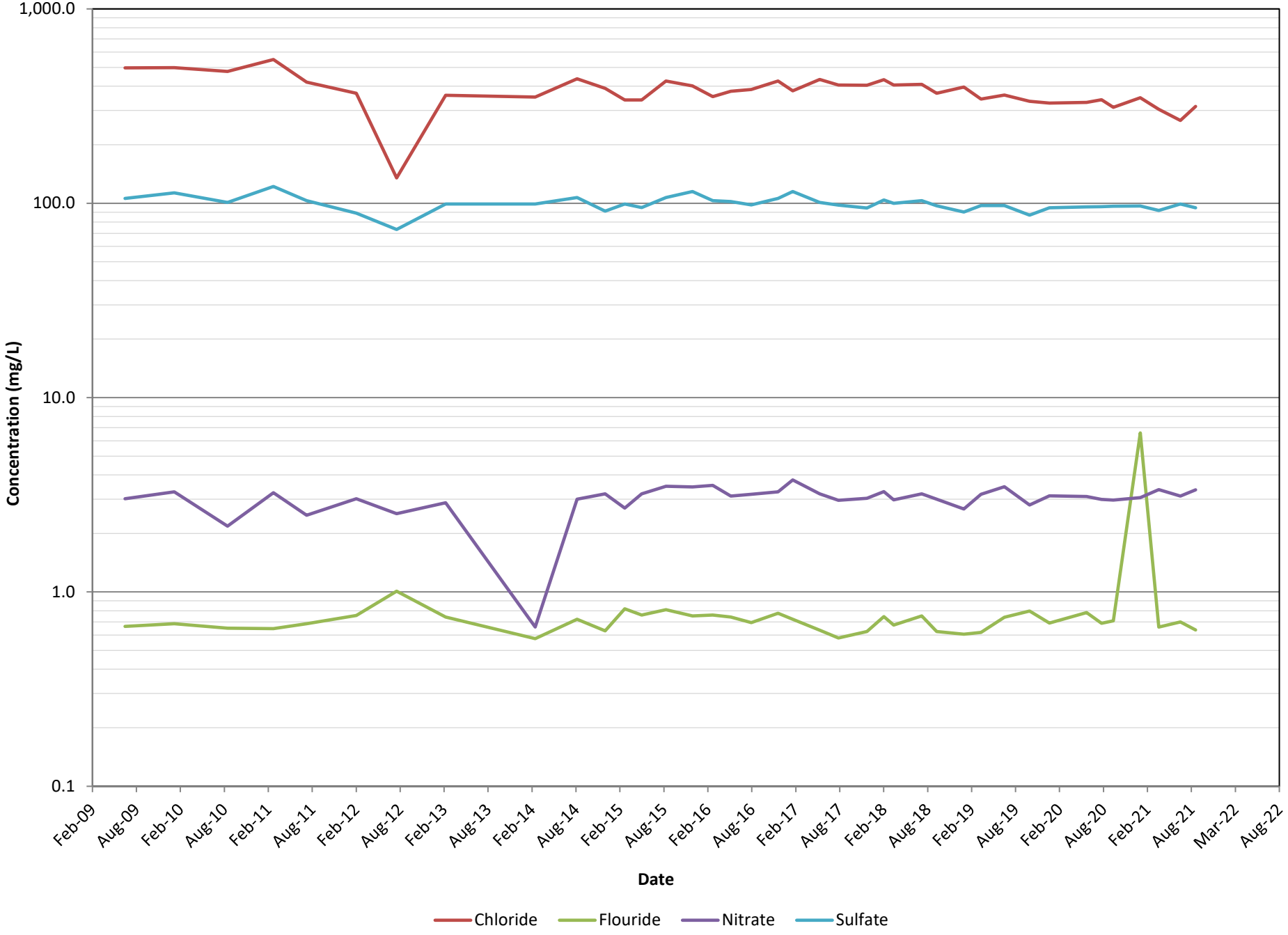
NORTH WELL (WW-NORTH): TDS CONCENTRATIONS OVER TIME



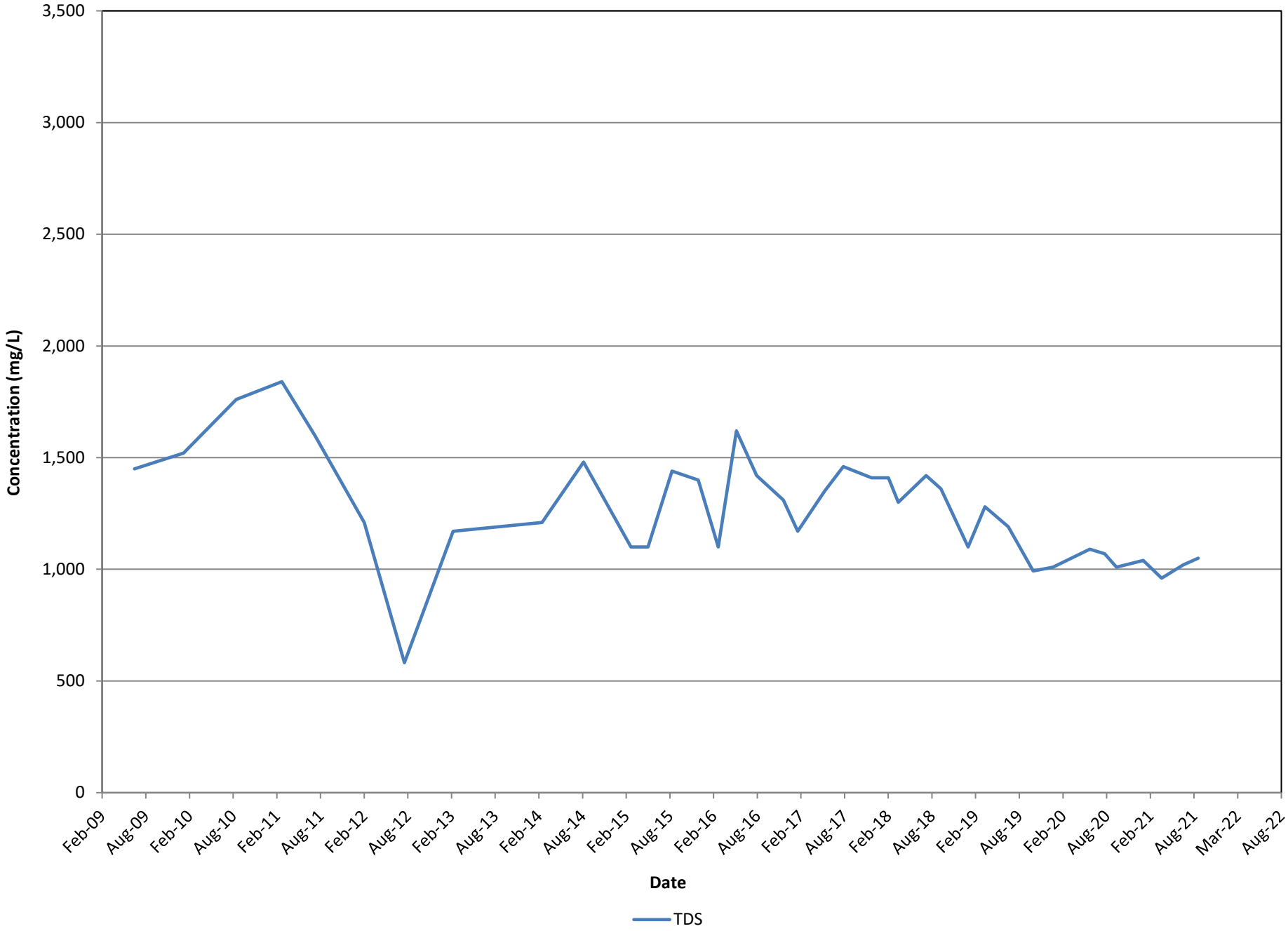
NORTH WELL (WW-NORTH): METAL CONCENTRATIONS OVER TIME



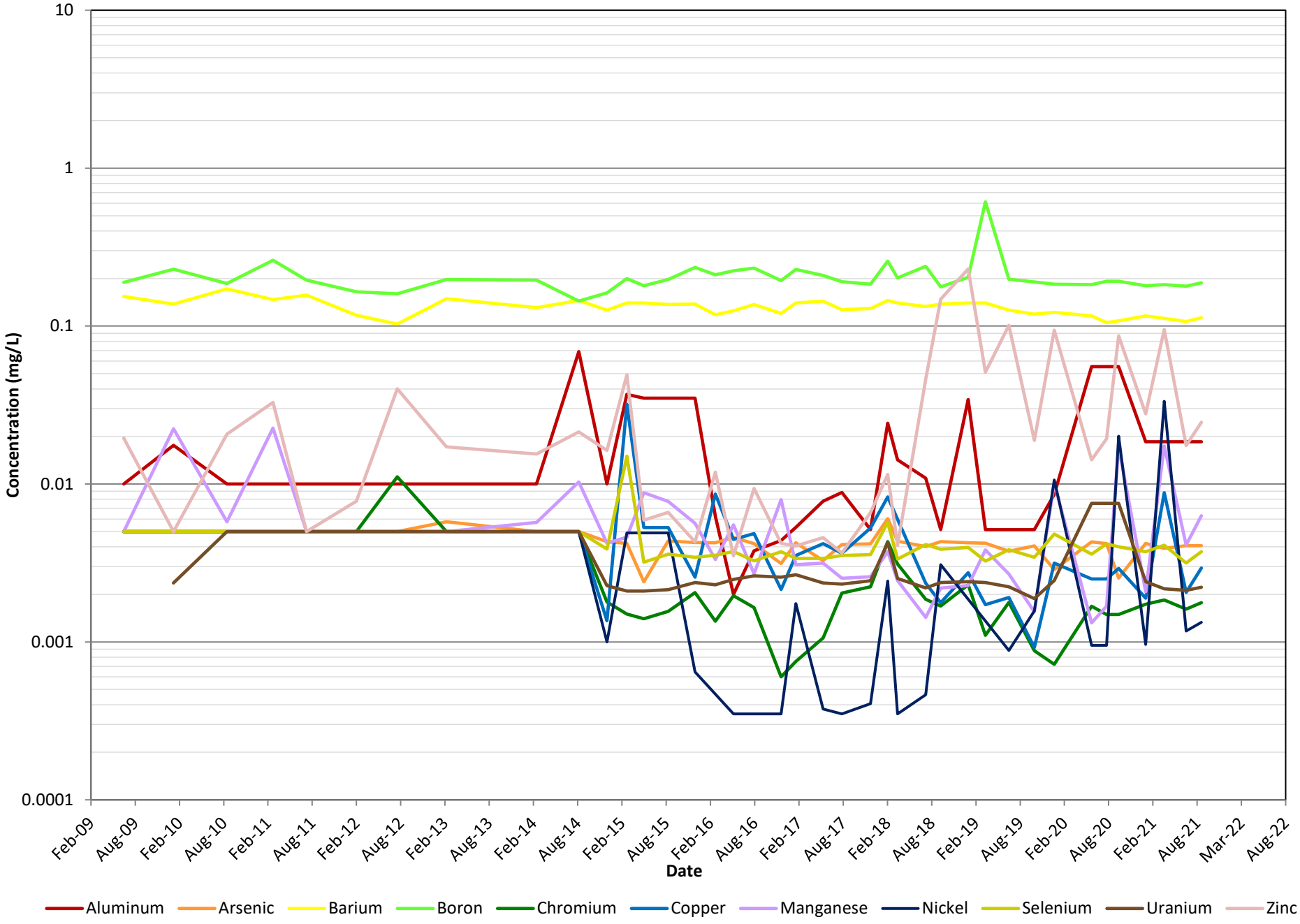
SOUTH WELL (WW-SOUTH): ANION CONCENTRATIONS OVER TIME



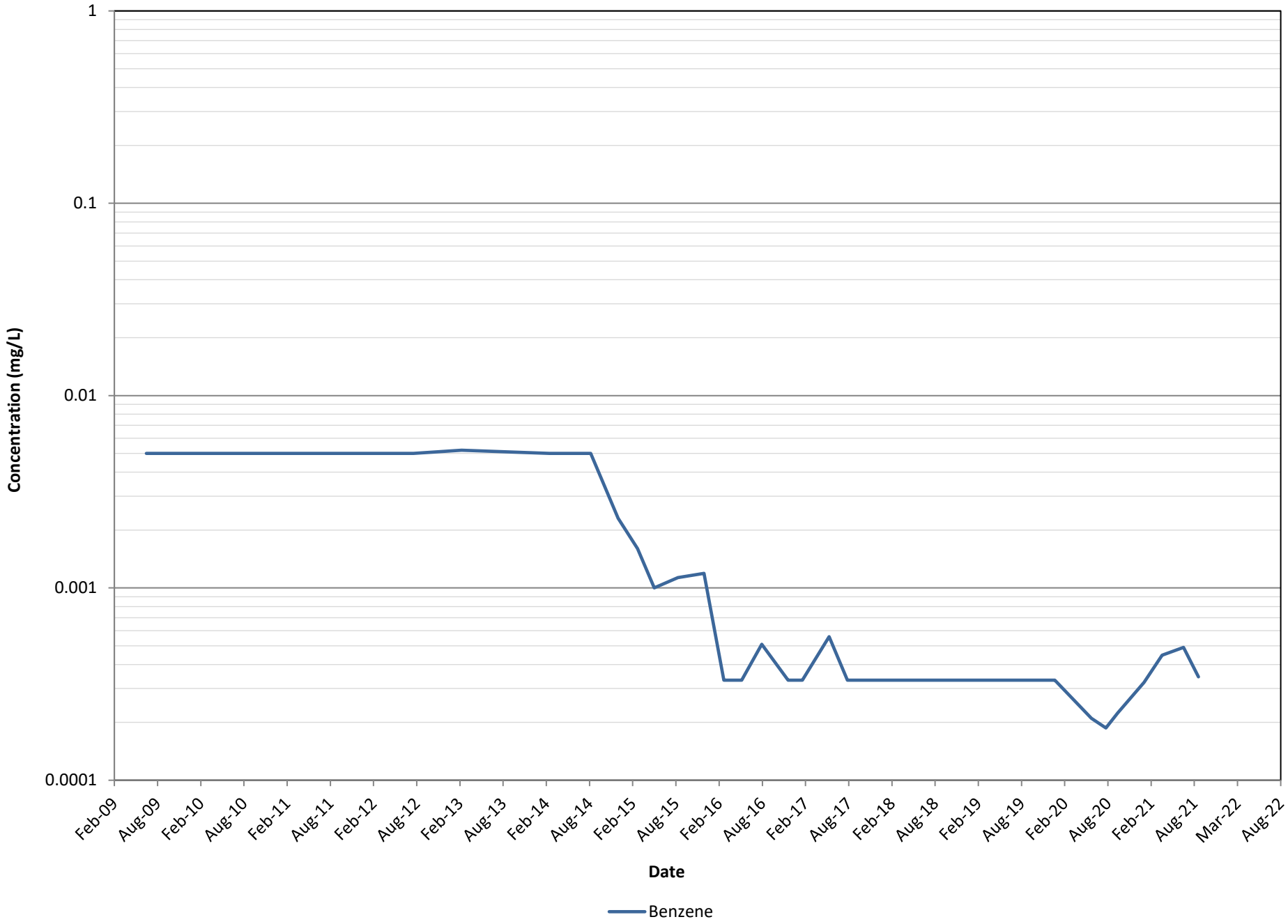
SOUTH WELL (WW-SOUTH): TDS CONCENTRATIONS OVER TIME



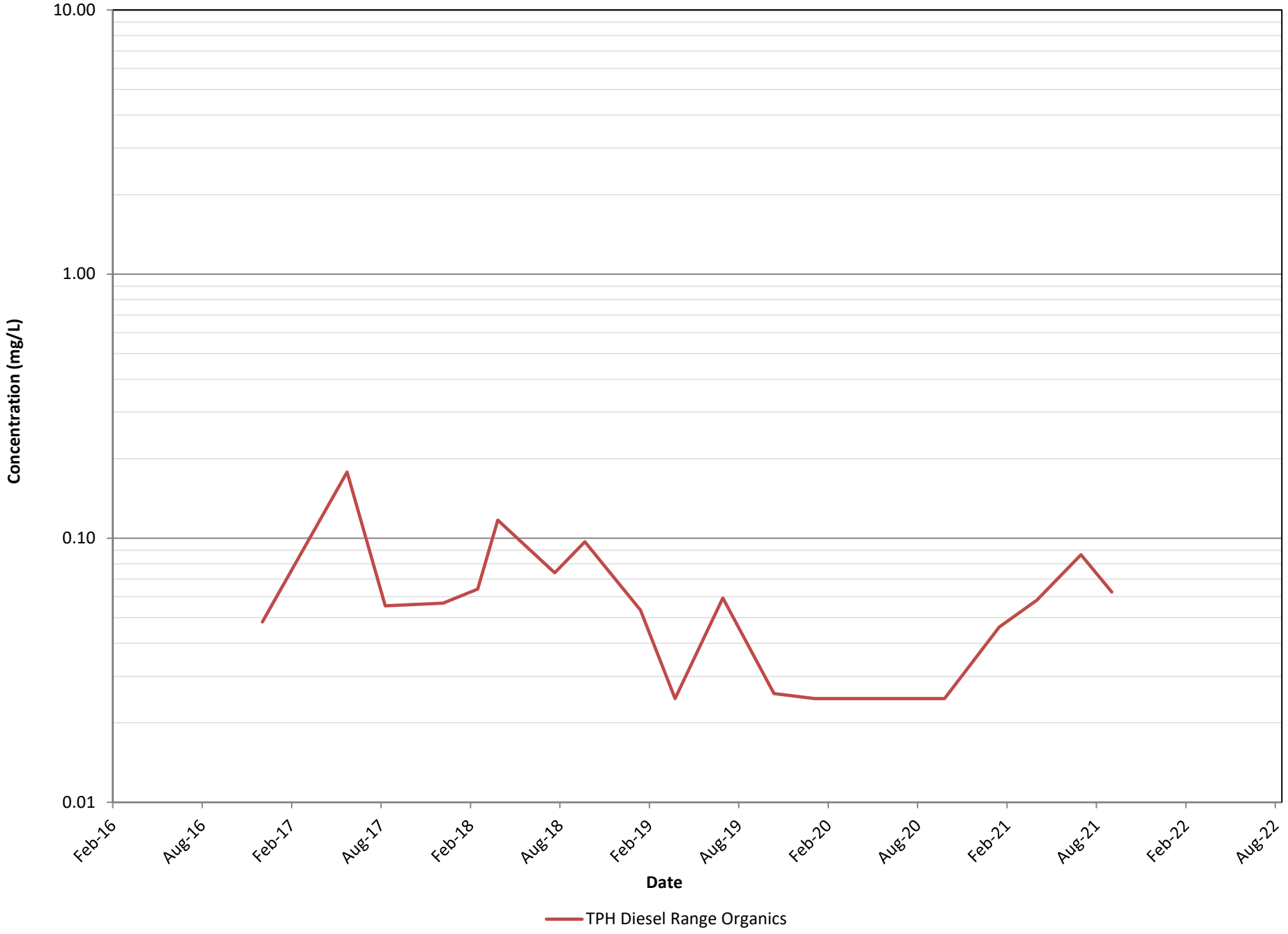
SOUTH WELL (WW-SOUTH): METAL CONCENTRATIONS OVER TIME



SOUTH WELL (WW-SOUTH): VOC CONCENTRATIONS OVER TIME



SOUTH WELL (WW-SOUTH): TPH CONCENTRATIONS OVER TIME



APPENDIX E

QUALITY ASSURANCE/QUALITY CONTROL DATA SUMMARY

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APPENDIX E – QUALITY ASSURANCE/QUALITY CONTROL DATA SUMMARY

1.1 Semi-Annual and Quarterly Groundwater Samples

Data reported by Pace National in Mount Juliet, Tennessee for the groundwater samples collected in January, April, July, September, and November 2021 were reviewed in accordance with the United States Environmental Protection Agency (USEPA) *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, November 2020), and *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, November 2020), modified for the individual methods, as applicable. Three water samples, one duplicate, and one trip blank were collected on January 28, 2021. Twenty water samples, three field duplicates, two equipment blanks, and two trip blanks were collected on April 15, 2021. Three water samples, one field duplicate, and one trip blank were collected on July 15, 2021. Thirty-three water samples, four field duplicates, two equipment blanks, and two trip blanks were collected on September 16, 2021. One water sample and one duplicate were collected on November 10, 2021, as a confirmation sample for the WW-EAST sample from September 2021. Samples were submitted for one or more of the following parameters:

- Dissolved solids by Standard Method (SM) 2540C-2011
- Alkalinity by SM 2320B-2011
- Nitrate-nitrite by EPA Method 353.2
- Chloride, fluoride, and sulfate by SW-846 Method 9056A
- Total mercury by SW-846 Method 7470A
- Dissolved boron by SW-846 Method 6010B
- Dissolved metals by SW-846 Method 6020
- Total Petroleum Hydrocarbons (TPH) Low Fraction by SW-846 Method 8015D
- Volatile organic compounds (VOCs) by SW-846 Method 8260B
- TPH High Fraction by SW-846 Methods 3511/8015
- Semi-volatile organic compounds (SVOCs) by SW-846 Method 8270C

TRC Quality Assurance (QA) staff reviewed the data. Five data packages identified as L1311938, L1340101, L1379618, L1404888, and L1430167 were reviewed. Data were reviewed for compliance with the analytical protocols used for sample analysis and laboratory-defined quality control (QC) limits. Items reviewed during the data evaluation process included the following:

- Sample integrity, preservation, and holding times
- Blank analyses
- Surrogate recoveries
- Matrix spike and matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs)
- Laboratory control sample and laboratory control sample duplicate (LCS/LCSD) recoveries and RPDs
- Field duplicate and laboratory duplicate RPDs
- Sample documentation

Data interpretation issues are identified in the following subsections. Alkalinity was analyzed in select samples but is not discussed in this summary other than in Section 1.1 above since the analyte is not required to be reported per the approved *Revised Facility-Wide Groundwater Monitoring Work Plan* (November 2017). QC data indicate that measurement data are sufficient to meet method quality objectives, reported data are defensible, and QC mechanisms were generally effective in ensuring measurement data reliability within the expected limits of sampling and analytical error with one exception. **Due to lack of preservation, the nondetect results for nitrate-nitrite in samples collected in April 2021, MW-33, DUP-03, EB-01, and EB-02, are not useable for project objectives.**

Several dilutions and/or reduced volumes were performed by the laboratory on select samples likely due to elevated concentrations of target and/or non-target analytes or matrix interferences; therefore, reported method detection limits (MDL) and method quantitation limits (MQL) may be elevated in some cases.

1.1.1 Sample Integrity, Preservation, and Holding Times

Samples were received at the laboratory properly preserved and in good condition with the following exceptions:

- For all samples submitted for dissolved metals analysis in 2021, the laboratory did not filter the samples until 7 to 12 days after collection. Further, the laboratory did not acid-preserve the filtered aliquots prior to digestion; the laboratory proceeded directly to digestion after filtration. Therefore, the positive and nondetect results for dissolved metals, where reported, for all samples collected in 2021 are potentially uncertain.

- In April 2021, samples MW-33 and DUP-03 (MW-33) for TPH High Fraction were received with a pH >2. Therefore, potential low bias exists for the positive TPH High Fraction results in these samples.
- In April 2021, all nitrate-nitrite analyses were performed from an unpreserved sample container more than 24 hours after collection since the preservative in the nitrate-nitrate sample containers were contaminated with excess preservative by the supplier, as indicated by the laboratory. Therefore, the positive nitrate-nitrite results for samples collected in April 2021 have a potential low bias and the nondetect results for nitrate-nitrite in samples MW-33, DUP-03, EB-01, and EB-02 are not useable for project objectives.
- In September 2021, sample MW-33 for TPH Low Fraction was received with a pH >2 thus reducing the holding time to seven days; this sample was analyzed two days past the seven-day holding time for TPH Low Fraction. Therefore, potential low bias exists for the positive TPH Low Fraction result in sample MW-33.

Samples collected during January, April, July, September, and November 2021 were prepared and/or analyzed within holding time except as noted above for nitrate-nitrite and below for dissolved solids.

- In September 2021, several samples were prepared for dissolved solids analysis on the seventh day after collection, but more than seven days (168 hours) after the sample-specific collection times. Since the dissolved solids analyses were performed on the seventh day after sample collection, there is no adverse impact to the data usability due to this issue.

In September 2021, the laboratory noted that an aliquot was taken from the SVOC containers for samples MW-17R, MW-18R, MW-20R, MW-21, MW-22, MW-27, MW-28, MW-29, and MW-32 due to the level of sediment present in the sample; the sediment was not extracted. The laboratory also stated that the original sample container was not rinsed during sample extraction as a result of the sediment present in these samples. Therefore, potential low bias exists for the positive and nondetect SVOC results in these samples.

Also, the trip blank in data package L1379618 was transcribed as TRP BLANK instead of TRIP BLANK-01 as written in the chain of custody.

1.1.2 Surrogates

In January, April, July, September, and November 2021, there were no surrogate recovery nonconformances in the VOC, SVOC, TPH Low Fraction, and/or TPH High Fraction analyses.

1.1.3 Laboratory Method Blanks

Sample results were compared to associated blank results using a five times rule rather than the applicable USEPA guidance in order to remain consistent with historical evaluations. Note that sample results for analytes that were either greater than five times the method blank concentration or nondetect were not impacted by the method blank results and therefore are not discussed below.

- In January 2021, dissolved zinc was detected in the laboratory method blank at a concentration of 0.00605 J mg/L in QC batch WG1614800. Dissolved zinc was detected in associated samples WW-NORTH, WW-SOUTH, and DUP-01 (WW-SOUTH) at concentrations less than five times the method blank concentrations; therefore, the dissolved zinc results in samples WW-NORTH, WW-SOUTH, and DUP-01 (WW-SOUTH) may include measurement contributions from laboratory sources.

- In January 2021, TPH Low Fraction was detected in the laboratory method blank at a concentration of 0.0345 J mg/L in QC batch WG1614916. The detected TPH Low Fraction result in associated sample WW-NORTH was less than five times the method blank concentration. Therefore, the TPH Low Fraction result in sample WW- NORTH may include measurement contributions from laboratory sources.

- In January 2021, TPH High Fraction was detected in the laboratory method blank at a concentration of 0.0731 J mg/L in QC batch WG1615839. TPH High Fraction results in associated samples WW-NORTH, WW-SOUTH, WW-EAST, and DUP-01 (WW-SOUTH) were less than five times the method blank concentration. Therefore, the TPH High Fraction results in samples WW-NORTH, WW-SOUTH, WW-EAST, and DUP-01 (WW-SOUTH) may include measurement contributions from laboratory sources.

- In April 2021, chloride was detected in the laboratory method blank at a concentration of 0.385 J mg/L in QC batch WG1657223. Chloride was not detected in the associated sample EB-02; therefore, no data interpretation issues were noted.

- In April 2021, dissolved zinc was detected in the laboratory method blank at a concentration of 0.00324 J mg/L in QC batch WG1656515. The detected dissolved zinc results in associated samples MW-1, MW-11R, MW-12R2, MW-13R, MW-17R, MW-25, MW-29, MW-30, and MW-33 were less than five times the method blank concentration. Therefore, the dissolved zinc results in samples MW-1, MW-11R, MW-12R2, MW-13R, MW-17R, MW-25, MW-29, MW-30, and MW-33 may include measurement contributions from laboratory sources.

- In April 2021, dissolved barium, dissolved chromium, dissolved copper, and dissolved lead were detected in the laboratory method blank at concentrations of 0.000626 J

mg/L, 0.00154 J mg/L, 0.00213 J mg/L, and 0.00116 J mg/L, respectively, in QC batch WG1656517. The detected dissolved barium results in associated samples EB-01 and EB-02, dissolved chromium in samples WW-NORTH, WW-SOUTH, and WW-EAST, dissolved copper in samples WW-SOUTH, DUP-01 (WW-SOUTH), DUP-02 (MW-32), DUP-03 (MW-33), and EB-01, and dissolved lead in sample WW-NORTH were less than five times the method blank concentrations. Therefore, these sample results may include measurement contributions from laboratory sources. The remaining results were either greater than five times the method blank concentrations or not detected in the associated samples; therefore, no data interpretation issues were noted.

- In April 2021, hexachloro-1,3-butadiene was detected in the laboratory method blank at a concentration of 0.000358 J mg/L in QC batch WG1654740. Results for hexachloro-1,3-butadiene in samples associated with this batch were nondetect; therefore, no data interpretation issues were noted for hexachloro-1,3-butadiene.

- In July 2021, dissolved barium, dissolved copper, dissolved manganese, dissolved nickel, and dissolved zinc were detected in the laboratory method blank at concentrations of 0.000823 J mg/L, 0.00170 J mg/L, 0.00342 J mg/L, 0.00105 J mg/L, and 0.00705 J mg/L, respectively, in QC batch WG1709961. The detected dissolved copper, dissolved manganese, dissolved nickel, and dissolved zinc results in associated samples WW-NORTH, WW-SOUTH, WW-EAST, and DUP-01 (WW-SOUTH) were less than five times the method blank concentrations. Therefore, these sample results may include measurement contributions from laboratory sources. The detected dissolved barium results were greater than five times the method blank concentration; therefore, no data interpretation issues were noted for dissolved barium.

- In July 2021, TPH Low Fraction was detected in the laboratory method blank at a concentration of 0.0568 J mg/L in QC batch WG1707499. Results for TPH Low Fraction in samples associated with this batch were nondetect; therefore, no data interpretation issues were noted for TPH Low Fraction.

- In September 2021, dissolved copper was detected in the laboratory method blank at a concentration of 0.00320 J mg/L in QC batch WG1744466. The detected dissolved copper results in associated samples MW-2, MW-4, MW-5, MW-6, MW-8, MW-13R, MW-15R, MW-16R, MW-17R, MW-18R, MW-19R, MW-20R, MW-22, MW-24R, MW-28, and MW-29 were less than five times the method blank concentrations. Therefore, these sample results may include measurement contributions from laboratory sources.

- In September 2021, dissolved aluminum and dissolved molybdenum were detected in the laboratory method blank at concentrations of 0.0274 J mg/L and 0.000625 J mg/L,

respectively, in QC batch WG1744922. The detected dissolved aluminum result in associated sample EB-02 and dissolved molybdenum in associated samples WW-NORTH, WW-SOUTH, WW-EAST, DUP-01 (WW-SOUTH), DUP-03 (MW-33), and DUP-04 (MW-13R) were less than five times the method blank concentrations. Therefore, these sample results may include measurement contributions from laboratory sources.

1.1.4 Equipment Blanks

Sample results for analytes that were either greater than five times the equipment blank concentration or nondetect were not impacted by the equipment blank results and therefore are not discussed below. Samples collected from the water wells (WW-SOUTH, WW-NORTH, or WW-EAST) are not associated with equipment blanks.

- In April 2021, chloride, dissolved barium, dissolved copper, dissolved manganese, and TPH high fraction were detected in equipment blank EB-01 at concentrations of 0.384 J mg/L, 0.00256 J mg/L, 0.00265 J mg/L, 0.00165 J mg/L, and 0.0422 J mg/L, respectively. Dissolved aluminum, dissolved barium, and methylene chloride were detected in equipment blank EB-02 at concentrations of 0.0236 J mg/L, 0.00119 J mg/L, and 0.00134 J mg/L, respectively. As discussed in Section 1.1.3, dissolved barium in EB-01 and EB-02, and dissolved copper in EB-01 were detected at concentrations less than five times the associated method blank sample concentrations; therefore, the presence of dissolved barium in EB-01 and EB-02, and dissolved copper in EB-01 were not used to evaluate the associated sample results. Chloride was not detected at concentrations below five times the equipment blank concentration and methylene chloride was not detected in the associated samples; therefore, there are no data interpretation issues associated with the detections of chloride and methylene chloride in EB-01 and/or EB-02. Dissolved aluminum in sample MW-30, TPH high fraction in MW-33 and its duplicate DUP-03, and dissolved manganese in MW-6, MW-11R, MW-12R2, MW-15, MW-30, and MW-32 were detected at concentrations less than five times the equipment blank concentrations. Therefore, these results may include measurement contributions from inadequate decontamination of field equipment.

- In September 2021, dissolved barium, benzaldehyde, benzo(b)fluoranthene, benzo(a)pyrene, diethyl phthalate, 2-methylphenol, and 3&4-methyl phenol were detected in equipment blank EB-01 at concentrations of 0.00104 J mg/L, 0.00348 J mg/L, 0.000151 J mg/L, 0.0000981 J mg/L, 0.000800 J mg/L, 0.000194 J mg/L, and 0.000230 J mg/L, respectively. Dissolved aluminum, dissolved barium, dissolved iron, benzene, benzaldehyde, 2-methylphenol, and 3&4 methyl phenol were detected in equipment blank EB-02 at concentrations of 0.129 mg/L, 0.00113 J mg/L, 0.0538 J

mg/L, 0.000117 J mg/L, 0.00823 J mg/L, 0.000226 J mg/L, and 0.000285 J mg/L, respectively. As discussed in Section 1.1.3, dissolved aluminum in EB-02 was detected at a concentration less than five times the associated method blank concentration; therefore, the presence of dissolved aluminum in EB-02 was not used to evaluate the associated sample results. Dissolved barium was not detected at concentrations below five times the equipment blank concentrations and benzaldehyde was not detected in the associated samples; therefore, there are no data interpretation issues associated with the detections of dissolved barium and benzaldehyde in EB-01 and EB-02. Dissolved iron in MW-28 and DUP-03 (MW-33), benzene in MW-1, MW-11R, MW-15R, MW-24R, MW-33, and DUP-03 (MW-33), benzo(b)fluoranthene in MW-30, benzo(a)pyrene in MW-12R2, MW-16R, and MW-17R, diethyl phthalate in MW-21, MW-24R, MW-27, MW-28, and MW-29, and 2-methylphenol and 3&4-methyl phenol in DUP-02 (MW-32) and DUP-04 (MW-13R) were detected at concentrations less than five times the equipment blank concentrations. Therefore, these results may include measurement contributions from inadequate decontamination of field equipment.

1.1.5 Trip Blanks

Sample results for analytes that were either greater than five times the trip blank concentration or nondetect were not impacted by the trip blank results and therefore are not discussed below. In January and April 2021, no target analytes were detected in the trip blanks.

- In July 2021, carbon disulfide and total xylenes were detected in the trip blank at a concentration of 0.000102 J mg/L and 0.000207 J mg/L, respectively. Carbon disulfide and total xylenes were not detected in the associated samples; therefore, there are no data interpretation issues associated due to the detection of carbon disulfide and total xylenes in this trip blank.

- In September 2021, carbon disulfide was detected in one of the trip blank samples (TRIP BLANK-01) at a concentration of 0.000133 J mg/L. Carbon disulfide was not detected in the associated samples; therefore, there are no data interpretation issues associated due to the detection of carbon disulfide in this trip blank.

1.1.6 LCS/LCSDs

- In April 2021, LCS recoveries for bromodichloromethane (135%), carbon tetrachloride (129%), chloroethane (153%), trans-1,2-dichloroethene (121%), and 1,1,1-trichloroethane (131%) were above the laboratory-defined limits (75.0-120%, 68.0-126%, 47.0-150%, 73.0-120%, and 73.0-124%, respectively) in QC batch WG1654140. There are no data interpretation issues for bromodichloromethane, chloroethane, trans-1,2-dichloroethene, and 1,1,1-trichloroethane because these

analytes were not detected in the associated samples or since the compounds were reported from a different QC batch with acceptable LCS recoveries. The detected carbon tetrachloride results in samples MW-30, WW-SOUTH, and DUP-01 (WW-SOUTH) may be biased high; there are no data interpretation issues for the nondetect carbon tetrachloride results.

- In April 2021, the LCS recoveries for bromoform (64.0%) and 2-hexanone (66.4%), and the LCS/LCSD recoveries for chloroethane (177%/183%) were outside the laboratory-defined limits (68.0-132%, 67.0-149%, and 47.0-150%, respectively) in QC batch WG1654740. Chloroethane was not detected in the associated samples; therefore, there are no data interpretation issues for chloroethane. Bromoform and 2-hexanone were not detected in the associated equipment blank samples EB-01 and EB-02 and trip blank samples TRIP BLANK-01 and TRIP BLANK-02; therefore, the nondetect results for bromoform and 2-hexanone in these four samples may be biased low.

- In April 2021, the LCS recoveries for acenaphthene (40.8%), 4-chlorophenyl-phenylether (43.4%), and fluorene (44.8%) were below the laboratory-defined limits (41.0-120%, 44.0-120%, and 47.0-120%, respectively) in QC batch WG1655270. Acenaphthene, 4-chlorophenyl-phenylether, and fluorene were not detected in the associated samples, equipment blanks EB-01 and EB-02, and DUP-03 (MW-33); therefore, the nondetect results for acenaphthene, 4-chlorophenyl-phenylether, and fluorene in these three samples may be biased low.

- In April 2021, the LCS/LCSD recoveries for acetophenone (125%/130%), benzaldehyde (228%/232%), and 4-chloro-3-methylphenol (39.6%/39.6%) were outside the laboratory-defined limits (29.0-120%, 10.0-160%, and 40.0-120%, respectively) in QC batch WG1655273. Acetophenone, benzaldehyde, and 4-chloro-3-methylphenol were not detected in the associated sample WW-NORTH; therefore, the nondetect results for 4-chloro-3-methylphenol in WW-NORTH may be biased low and there are no data interpretation issues for the nondetect acetophenone and benzaldehyde results.

- In April 2021, the LCS recoveries for acenaphthene (38.0%), acenaphthylene (40.6%), 4-chlorophenyl-phenylether (41.8%), dibenzofuran (41.8%), fluorene (42.2%), 1-methylnaphthalene (32.6%), 2-methylnapthalene (31.6%), 4-chloro-3-methylphenol (35.2%), and 2,4-dichlorophenol (35.2%) were below the laboratory-defined limits (41.0-120%, 43.0-120%, 44.0-120%, 44.0-120%, 47.0-120%, 33.0-120%, 33.0-120%, 40.0-120%, and 36.0-120%, respectively) in QC batch WG1655274. These compounds were not detected in the associated samples, WW-SOUTH, WW-EAST, DUP-01 (WW-SOUTH), and DUP-02 (MW-32); therefore, the nondetect results for acenaphthene, acenaphthylene, 4-chlorophenyl-phenylether, dibenzofuran, fluorene, 1-

methylnaphthalene, 2-methylnapthalene, 4-chloro-3-methylphenol, and 2,4-dichlorophenol in these four samples may be biased low.

- In July 2021, the LCS/LCSD RPD for acetone (39.1%) in QC batch WG1707858 was above the laboratory-defined limit (27%). Acetone was not detected in the associated samples; therefore, there are no data interpretation issues due to this nonconformance.
- In July 2021, the LCS/LCSD recoveries for benzaldehyde (182%/172%) in QC batch WG1709606 were above the laboratory-defined limits (10.0-160%). Benzaldehyde was not detected in the associated samples; therefore, there are no data interpretation issues due to this nonconformance.
- In September 2021, the LCS/LCSD recoveries for acetone (172%/170%) in QC batch WG1742804 and the LCS recovery for acetone (166%) in QC batch WG1742806 were above the laboratory-defined limits (19.0-160%). Acetone was not detected in the associated samples; therefore, there are no data interpretation issues. The LCS recovery for naphthalene (VOC) (49.2%) also in QC batch WG1742806 recovered below the laboratory-defined limits (54.0-135%). Naphthalene (VOC) was not detected in the associated samples, MW-29, MW-30, MW-32, MW-33, WW-NORTH, WW-SOUTH, WW-EAST, DUP-01 (WW-SOUTH), DUP-02 (MW-32), DUP-03 (MW-33), DUP-04 (MW-13R), EB-01, EB-02, Trip Blank-01, and Trip Blank-02; therefore, the nondetect results for naphthalene (VOC) in these samples may be biased low.
- In September 2021, the LCS recovery for benzaldehyde (184%) in QC batch WG1743791 was above the laboratory-defined limits (10.0-160%). Benzaldehyde was not detected in the associated samples; therefore, there are no data interpretation issues due to this nonconformance.

1.1.7 MS/MSDs

The following table summarizes the MS and/or MSD analyses performed on samples in these data sets.

Sample ID	Analytical Parameters
April 2021	
MW-1	Fluoride, Chloride, Sulfate
MW-3	Nitrate-nitrite
MW-25	Total Mercury
MW-33	VOCs, SVOCs, TPH Low Fraction, TPH High Fraction, Nitrate-nitrite, Fluoride, Sulfate, Chloride, Total Mercury, Dissolved Metals
WW-NORTH	Dissolved Metals (excluding boron)
September 2021	
MW-1	Dissolved metals (except dissolved boron)
MW-5	Nitrate-nitrite

Sample ID	Analytical Parameters
MW-6	Fluoride
MW-10	Chloride, Sulfate, Fluoride
MW-16R	Total Mercury
MW-22	Chloride, Sulfate, Fluoride
MW-23R	Fluoride
MW-24R	Nitrate-nitrite
MW-33	Nitrate-nitrite, Chloride, Sulfate, Fluoride, Total Mercury, Dissolved metals, TPH Low Fraction, TPH High Fraction, VOCs, SVOCs
EB-02	Chloride, Sulfate, Fluoride

- In April 2021, the MS and/or MSD recoveries of select analytes did not meet laboratory-defined limits in the following samples, and therefore the results may be biased as specified below:

    - The MS recovery (76.4%) of nitrate-nitrite in the MS analysis performed on sample MW-3 was below the laboratory-defined limits (90.0-110%) in QC batch WG1661716. Therefore, the nondetect nitrate-nitrite results in sample MW-3 and the positive results for nitrate-nitrite in samples MW-1, MW-3, MW-6, MW-8, MW-12R2, MW-13R, MW-15, MW-17R, MW-25, MW-28, MW-30, MW-32, WW-SOUTH, WW-NORTH, WW-EAST, DUP-01, and DUP-02 may be biased low. The MS/MSD recoveries of nitrate-nitrite in the MS/MSD analysis performed on sample MW-33 in the same batch were within the laboratory-defined limits; however, the nondetect results for nitrate-nitrite in this sample and sample DUP-03 (MW-33) were subsequently deemed unusable for project objectives due to lack of preservation.

    - The MS/MSD recoveries for total mercury (73.3%/67.6%) in the MS/MSD analyses performed on sample MW-33 were below laboratory-defined limits (75.0-125%) in QC batch WG1654193. Therefore, the nondetect total mercury results in MW-29, MW-30, MW-32, MW-33, WW-NORTH, WW-SOUTH, WW-EAST, DUP-01 (WW-SOUTH), DUP-02 (MW-32), and DUP-03 (MW-33) may be biased low.

    - The MSD recovery for dissolved manganese in the MSD analysis performed on sample MW-33 was above laboratory-defined limits in QC batch WG1656515. However, the concentration of dissolved manganese in the unspiked sample was greater than four times the concentration spiked; therefore, the recovery of dissolved manganese was not used to evaluate potential matrix effects.

- The MS/MSD recoveries for TPH Low Fraction (12.6%/14.3%) in the MS/MSD analyses performed on sample MW-33 were within the laboratory's acceptance limits but were significantly below (<20%) the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review* criteria for VOCs. The detected result for TPH Low Fraction in this sample was also detected between the MDL and MQL. Therefore, the detected TPH Low Fraction result in sample MW-33 may be uncertain.

- In September 2021, the MSD recovery for acetone (162%) in the MSD analysis performed on sample MW-33 was above laboratory-defined limits (10.0-160%) in QC batch WG1742806. Acetone was not detected in sample MW-33, so there are no data interpretation issues due to this nonconformance.

- In September 2021, MS/MSD RPDs for several SVOCs in the MS/MSD performed on MW-33 in QC batch WG1744588 were outside laboratory-defined limits; MS/MSD recoveries were with the acceptance limits. No SVOCs were detected in sample MW-33, so there are no data interpretation issues due to this nonconformance and the actual RPDs and laboratory defined limits are not summarized.

1.1.8 Laboratory Duplicates

The following table summarizes the laboratory duplicate analyses performed with these data sets. All criteria were met.

Sample ID	Analytical Parameters
January 2021	
WW-NORTH	Nitrate-nitrite
WW-EAST	Dissolved Solids
April 2021	
MW-1	Chloride, Fluoride, Sulfate
MW-8	Dissolved Solids
MW-11R	Dissolved Solids
MW-17R	Nitrate-nitrite
MW-30	Chloride, Fluoride, Sulfate, Dissolved Solids
MW-32	Dissolved Solids
EB-01	Nitrate-nitrite
July 2021	
WW-NORTH	Nitrate-nitrite
WW-SOUTH	Dissolved Solids
DUP-01	Dissolved Solids
September 2021	
MW-4	Nitrate-nitrite
MW-6	Fluoride
MW-10	Chloride, Sulfate, Fluoride

Sample ID	Analytical Parameters
MW-11R	Dissolved Solids
MW-13R	Dissolved Solids
MW-22	Chloride, Sulfate, Fluoride
MW-23R	Nitrate-nitrite, Fluoride
MW-33	Dissolved solids
MW-32	Chloride, Sulfate, Fluoride
DUP-02	Nitrate-nitrite
DUP-03	Dissolved Solids
EB-01	Chloride, Sulfate, Fluoride

1.1.9 Field Duplicates

The following table lists the original sample and duplicate pairs for each data set.

Sample ID	Duplicate Sample ID
January 2021	
WW-SOUTH	DUP-01
April 2021	
WW-SOUTH	DUP-01
MW-32	DUP-02
MW-33	DUP-03
July 2021	
WW-SOUTH	DUP-01
September 2021	
WW-SOUTH	DUP-01
MW-32	DUP-02
MW-33	DUP-03
MW-13R	DUP-04
November 2021	
WW-EAST	DUP-01

Field duplicate acceptance criteria are as follows: RPD is <30% when both results are >5x the MQL, or when one or both the original and duplicate results are <5x the MQL, then the absolute difference must be < the MQL. Field duplicate data that did not meet acceptance criteria are discussed below:

- In April 2021, the calculated RPDs for dissolved copper (107.77%), dissolved manganese (104.60%), dissolved nickel (178.26%), and dissolved zinc (86.02%) in the duplicate pair WW-SOUTH and DUP-01 did not meet the acceptance limits (<30%). The original and duplicate result for dissolved copper, dissolved manganese, dissolved nickel, and dissolved zinc were less than five times the MQL in one or both of the two samples, but the absolute differences between the sample and duplicate results were greater than the MQL. The original and duplicate results for dissolved copper,

dissolved manganese, dissolved nickel, and dissolved zinc in the duplicate pair WW-SOUTH and DUP-01 may be considered estimated.

- In April 2021, the calculated RPDs for dissolved manganese (87.19%) in the duplicate pair MW-32 and DUP-02 did not meet the acceptance limits (<30%). The original and duplicate results for dissolved manganese were less than five times the MQL, but the absolute difference between the sample and duplicate results was greater than the MQL. The original and duplicate results for dissolved manganese in the duplicate pair MW-32 and DUP-02 may be considered estimated.
- In April 2021, the result for dissolved aluminum was detected above the MQL in sample MW-32 and was nondetect in sample DUP-2; the absolute difference for dissolved antimony was greater than the MQL. The original and duplicate results for dissolved aluminum in the duplicate pair MW-32 and DUP-02 may be considered estimated.
- In April 2021, the result for dissolved iron was detected above five times the MQL in sample MW-33 and was nondetect in sample DUP-03; the absolute difference for dissolved iron was greater than the MQL. The original and duplicate results for dissolved iron in the duplicate pair MW-33 and DUP-03 may be considered estimated.
- In September 2021, the results for dissolved iron and dissolved aluminum were nondetect in sample MW-33 and were detected below five times the MQL in sample DUP-03; the absolute differences for dissolved iron and dissolved aluminum were greater than their MQLs. The original and duplicate results for dissolved iron and dissolved aluminum in the duplicate pair MW-33 and DUP-03 may be considered estimated.

APPENDIX F

LNAPL GAUGING AND RECOVERY RESULTS, MONITORING WELL MW-31

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Appendix F - LNAPL Gauging and Recovery Results, Monitoring Well MW-31

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
2/9/2017	105.04	98.92	6.12	3,719.22	100.52	99.81	0.71	3,719.24	7.50	7.50
3/3/2017	102.71	99.39	3.32	3,719.22	100.30	99.90	0.40	3,719.20	3.28	10.8
3/8/2017	101.21	99.57	1.64	3,719.32	99.95	99.83	0.12	3,719.32	1.19	12.0
3/15/2017	101.48	99.45	2.03	3,719.38	99.98	99.82	0.16	3,719.32	1.59	13.5
3/22/2017	101.84	99.34	2.50	3,719.41	100.07	99.99	0.08	3,719.17	1.72	15.3
3/29/2017	101.73	99.42	2.31	3,719.36	100.47	100.37	0.10	3,718.78	1.72	17.0
4/4/2017	101.79	99.47	2.32	3,719.31	100.27	100.11	0.16	3,719.03	1.85	18.8
4/12/2017	101.77	99.37	2.40	3,719.40	100.30	100.10	0.20	3,719.04	1.85	20.7
4/19/2017	101.71	99.40	2.31	3,719.38	100.27	100.17	0.10	3,718.98	1.72	22.4
4/24/2017	101.48	99.45	2.03	3,719.38	100.09	99.77	0.32	3,719.35	1.66	24.1
4/25/2017	100.68	99.67	1.01	3,719.33	99.83	99.78	0.05	3,719.38	0.96	25.0
4/26/2017	100.82	99.56	1.26	3,719.40	100.02	99.75	0.27	3,719.37	2.50	27.5
4/27/2017	100.51	99.61	0.90	3,719.41	99.88	99.73	0.15	3,719.41	1.50	29.0
4/28/2017	100.73	99.55	1.18	3,719.42	99.68	99.59	0.09	3,719.56	1.00	30.0
5/4/2017	101.44	99.52	1.92	3,719.33	100.33	99.74	0.59	3,719.33	1.45	31.5
5/11/2017	101.59	99.59	2.00	3,719.24	100.00	99.89	0.11	3,719.26	1.85	33.3
5/16/2017	101.78	99.62	2.16	3,719.19	100.30	99.83	0.47	3,719.26	1.45	34.8
5/18/2017	101.73	99.58	2.15	3,719.23	100.37	99.43	0.94	3,719.58	1.32	36.1
5/24/2017	101.85	99.38	2.47	3,719.37	100.89	99.98	0.91	3,719.04	1.72	37.8
5/31/2017	101.49	99.55	1.94	3,719.29	100.26	99.38	0.88	3,719.64	1.19	39.0
6/12/2017	103.28	99.50	3.78	3,719.03	100.80	99.96	0.84	3,719.07	2.51	41.5
6/23/2017	101.78	99.61	2.17	3,719.19	100.04	99.83	0.21	3,719.30	1.32	42.8
6/26/2017	101.71	99.70	2.01	3,719.13	100.27	99.87	0.40	3,719.23	1.45	44.3
6/29/2017	101.59	99.54	2.05	3,719.28	100.56	99.89	0.67	3,719.17	1.45	45.7
7/6/2017	100.78	99.65	1.13	3,719.33	100.02	99.63	0.39	3,719.47	1.72	47.5
7/11/2017	101.48	99.59	1.89	3,719.26	100.37	99.67	0.70	3,719.38	1.32	48.8
7/13/2017	103.58	99.91	3.67	3,718.64	101.13	100.42	0.71	3,718.63	1.98	50.8
7/18/2017	102.90	99.98	2.92	3,718.70	101.11	100.32	0.79	3,718.72	1.72	52.5
7/21/2017	101.54	99.54	2.00	3,719.29	--	--	--	--	1.32	53.8
8/22/2017	101.03	100.41	0.62	3,718.66	--	--	--	--	0.26	54.1
8/23/2017	101.01	100.04	0.97	3,718.97	--	--	--	--	0.26	54.3
8/29/2017	101.46	100.36	1.10	3,718.62	--	--	--	--	0.26	54.6
8/31/2017	101.45	100.35	1.10	3,718.63	--	--	--	--	0.26	54.9
9/5/2017	101.35	100.31	1.04	3,718.68	--	--	--	--	0.26	55.1
9/7/2017	101.13	100.25	0.88	3,718.77	--	--	--	--	0.26	55.4
9/11/2017	101.47	100.36	1.11	3,718.62	--	--	--	--	0.26	55.6
9/12/2017	101.45	100.35	1.10	3,718.63	--	--	--	--	0.26	55.9
9/14/2017	101.44	100.36	1.08	3,718.63	--	--	--	--	0.26	56.2
9/18/2017	101.47	100.27	1.20	3,718.70	--	--	--	--	0.26	56.4
9/19/2017	101.38	100.23	1.15	3,718.75	--	--	--	--	0.26	56.7
9/20/2017	101.44	100.32	1.12	3,718.66	--	--	--	--	0.26	57.0
9/22/2017	101.40	100.28	1.12	3,718.70	--	--	--	--	0.26	57.2
9/25/2017	101.47	100.25	1.22	3,718.71	--	--	--	--	0.26	57.5

Appendix F - LNAPL Gauging and Recovery Results, Monitoring Well MW-31

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing					
Date	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
9/26/2017	101.45	100.36	1.09	3,718.63	--	--	--	--	0.26	57.8
9/27/2017	101.45	100.35	1.10	3,718.63	--	--	--	--	0.26	58.0
9/28/2017	101.13	100.20	0.93	3,718.81	--	--	--	--	0.26	58.3
10/2/2017	101.47	100.25	1.22	3,718.71	--	--	--	--	0.26	58.5
10/3/2017	101.45	100.36	1.09	3,718.63	--	--	--	--	0.26	58.8
10/4/2017	102.67	100.14	2.53	3,718.60	--	--	--	--	0.26	59.1
10/5/2017	102.73	100.10	2.63	3,718.63	--	--	--	--	0.26	59.3
10/9/2017	101.44	100.36	1.08	3,718.63	--	--	--	--	0.26	59.6
10/10/2017	101.46	100.36	1.10	3,718.62	--	--	--	--	0.26	59.9
10/12/2017	102.67	100.14	2.53	3,718.60	--	--	--	--	0.26	60.1
10/13/2017	102.50	100.05	2.45	3,718.71	--	--	--	--	0.26	60.4
10/16/2017	102.46	100.05	2.41	3,718.71	--	--	--	--	0.26	60.7
10/17/2017	102.56	100.23	2.33	3,718.55	--	--	--	--	0.26	60.9
10/18/2017	102.22	100.23	1.99	3,718.61	--	--	--	--	0.26	61.2
10/19/2017	102.71	99.89	2.82	3,718.81	--	--	--	--	0.26	61.5
10/23/2017	102.62	100.15	2.47	3,718.60	--	--	--	--	0.26	61.7
10/24/2017	101.87	99.57	2.30	3,719.21	--	--	--	--	0.26	62.0
10/25/2017	101.88	99.87	2.01	3,718.96	--	--	--	--	0.26	62.2
10/31/2017	102.82	100.00	2.82	3,718.70	--	--	--	--	0.26	62.5
11/1/2017	102.70	100.02	2.68	3,718.70	--	--	--	--	0.26	62.8
11/2/2017	102.72	100.00	2.72	3,718.71	--	--	--	--	0.26	63.0
11/3/2017	102.41	100.05	2.36	3,718.72	--	--	--	--	0.26	63.3
11/6/2017	102.44	100.13	2.31	3,718.65	--	--	--	--	0.26	63.6
11/7/2017	102.23	100.20	2.03	3,718.63	--	--	--	--	0.26	63.8
11/8/2017	102.43	100.25	2.18	3,718.55	--	--	--	--	0.26	64.1
11/13/2017	102.60	100.07	2.53	3,718.67	--	--	--	--	0.26	64.4
11/14/2017	102.35	100.12	2.23	3,718.67	--	--	--	--	0.26	64.6
11/15/2017	102.10	100.17	1.93	3,718.68	--	--	--	--	0.26	64.9
11/16/2017	101.88	100.21	1.67	3,718.68	--	--	--	--	0.26	65.2
11/17/2017	101.85	100.27	1.58	3,718.63	--	--	--	--	0.26	65.4
11/20/2017	102.05	100.15	1.90	3,718.70	101.12	100.40	0.72	3,718.65	1.45	66.9
11/22/2017	101.20	100.40	0.80	3,718.64	100.94	100.45	0.49	3,718.64	0.53	67.4
11/28/2017	101.05	100.47	0.58	3,718.60	--	--	--	--	0.26	67.7
11/29/2017	101.26	100.58	0.68	3,718.48	--	--	--	--	0.26	67.9
11/30/2017	101.27	100.56	0.71	3,718.49	--	--	--	--	0.26	68.2
12/1/2017	101.27	100.55	0.72	3,718.50	--	--	--	--	0.26	68.5
12/4/2017	101.30	100.67	0.63	3,718.39	--	--	--	--	0.26	68.7
12/5/2017	101.37	100.66	0.71	3,718.39	--	--	--	--	0.26	69.0
12/6/2017	101.23	100.50	0.73	3,718.55	--	--	--	--	0.26	69.2
12/7/2017	101.33	100.54	0.79	3,718.50	--	--	--	--	0.26	69.5
12/8/2017	101.28	100.56	0.72	3,718.49	--	--	--	--	0.26	69.8
12/12/2017	102.78	100.12	2.66	3,718.60	--	--	--	--	0.26	70.0
12/13/2017	102.75	100.09	2.66	3,718.63	--	--	--	--	0.26	70.3

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Appendix F - LNAPL Gauging and Recovery Results, Monitoring Well MW-31

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
12/14/2017	--	--	--	--	102.66	100.26	2.40	3,718.51	1.98	72.3
12/15/2017	101.28	100.48	0.80	3,718.56	--	--	--	--	0.26	72.6
12/18/2017	101.64	100.38	1.26	3,718.58	--	--	--	--	0.26	72.8
12/19/2017	101.60	100.34	1.26	3,718.62	--	--	--	--	0.26	73.1
12/21/2017	101.75	100.35	1.40	3,718.58	--	--	--	--	0.26	73.3
12/22/2017	101.66	100.43	1.23	3,718.53	--	--	--	--	0.26	73.6
1/2/2018	104.05	99.85	4.20	3,718.61	--	--	--	--	0.26	73.9
1/3/2018	104.10	99.93	4.17	3,718.54	--	--	--	--	0.26	74.1
1/4/2018	104.13	99.89	4.24	3,718.57	--	--	--	--	0.26	74.4
1/9/2018	104.14	99.88	4.26	3,718.57	--	--	--	--	0.26	74.7
1/12/2018	104.15	99.90	4.25	3,718.55	--	--	--	--	0.26	74.9
1/18/2018	104.63	99.82	4.81	3,718.54	--	--	--	--	0.26	75.2
1/19/2018	104.66	99.84	4.82	3,718.52	--	--	--	--	0.26	75.5
1/23/2018	104.68	99.93	4.75	3,718.44	--	--	--	--	0.26	75.7
1/26/2018	104.60	99.86	4.74	3,718.51	--	--	--	--	0.26	76.0
1/31/2018	105.51	99.70	5.81	3,718.49	--	--	--	--	0.26	76.2
2/2/2018	105.55	99.78	5.77	3,718.42	--	--	--	--	0.26	76.5
2/9/2018	--	--	--	--	105.68	99.35	6.33	3,718.75	1.72	78.2
2/14/2018	--	--	--	--	104.67	99.43	5.24	3,718.86	1.59	79.8
2/21/2018	--	--	--	--	105.51	99.73	5.78	3,718.47	1.45	81.3
3/6/2018	--	--	--	--	105.78	100.43	5.35	3,717.84	1.59	82.9
3/12/2018	--	--	--	--	105.77	100.35	5.42	3,717.91	1.32	84.2
3/16/2018	--	--	--	--	105.48	100.29	5.19	3,718.01	1.45	85.6
3/20/2018	--	--	--	--	106.26	99.75	6.51	3,718.32	1.06	86.7
3/21/2018	106.02	99.77	6.25	3,718.35	101.53	100.71	0.82	3,718.32	1.19	87.9
3/22/2018	102.04	100.06	1.98	3,718.78	101.38	100.78	0.60	3,718.29	1.32	89.2
3/26/2018	104.53	100.13	4.40	3,718.30	101.82	100.69	1.13	3,718.29	1.59	90.8
3/27/2018	102.45	100.06	2.39	3,718.71	101.53	100.79	0.74	3,718.26	1.19	92.0
3/28/2018	102.28	100.56	1.72	3,718.32	101.49	100.73	0.76	3,718.31	1.06	93.0
4/5/2018	105.55	100.05	5.50	3,718.19	101.34	100.90	0.44	3,718.20	5.00	98.0
4/11/2018	104.18	100.36	3.82	3,718.17	101.76	100.84	0.92	3,718.18	1.72	99.7
4/16/2018	105.03	100.26	4.77	3,718.11	101.73	100.89	0.84	3,718.14	3.70	103
4/19/2018	105.15	100.37	4.78	3,718.00	101.89	100.81	1.08	3,718.18	2.64	106
4/20/2018	104.05	100.32	3.73	3,718.22	101.53	100.73	0.80	3,718.31	2.77	109
4/24/2018	105.19	100.38	4.81	3,717.98	101.79	100.88	0.91	3,718.14	3.96	113
4/25/2018	104.20	100.29	3.91	3,718.22	101.39	100.79	0.60	3,718.28	3.43	116
4/30/2018	105.17	100.40	4.77	3,717.97	101.67	100.80	0.87	3,718.22	3.96	120
5/1/2018	104.67	100.52	4.15	3,717.95	101.49	100.03	1.46	3,718.89	2.77	123
5/3/2018	104.55	100.58	3.97	3,717.92	101.40	100.67	0.73	3,718.38	3.17	126
5/8/2018	105.09	100.41	4.68	3,717.97	101.77	100.08	1.69	3,718.81	1.59	128
5/9/2018	106.02	99.69	6.33	3,718.41	101.56	100.77	0.79	3,718.27	1.85	130
5/10/2018	105.67	99.70	5.97	3,718.47	101.64	100.71	0.93	3,718.30	2.25	132
5/14/2018	104.63	99.82	4.81	3,718.54	101.55	100.87	0.68	3,718.19	2.64	134

Appendix F - LNAPL Gauging and Recovery Results, Monitoring Well MW-31

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
5/16/2018	104.32	100.58	3.74	3,717.96	101.49	100.98	0.51	3,718.10	2.25	137
5/17/2018	102.54	99.39	3.15	3,719.25	100.77	99.90	0.87	3,719.12	1.85	139
5/18/2018	102.09	100.1	1.99	3,718.74	101.35	100.81	0.54	3,718.27	1.85	140
5/21/2018	102.77	99.39	3.38	3,719.21	100.37	99.98	0.39	3,719.12	4.09	145
5/23/2018	101.78	99.57	2.21	3,719.23	99.89	99.83	0.06	3,719.33	1.85	146
5/24/2018	101.48	99.47	2.01	3,719.36	99.95	99.88	0.07	3,719.28	1.85	148
5/25/2018	101.44	99.61	1.83	3,719.25	100.29	99.83	0.46	3,719.26	1.98	150
5/30/2018	102.71	99.37	3.34	3,719.24	101.31	99.79	1.52	3,719.12	1.72	152
6/1/2018	101.79	99.47	2.32	3,719.31	100.32	99.89	0.43	3,719.21	1.85	154
6/4/2018	104.18	100.36	3.82	3,718.17	101.76	100.84	0.92	3,718.18	1.45	155
6/6/2018	106.51	100.53	5.98	3,717.63	102.16	101.38	0.78	3,717.66	1.45	157
6/7/2018	104.18	100.36	3.82	3,718.17	101.76	100.84	0.92	3,718.18	1.59	158
6/12/2018	105.03	100.26	4.77	3,718.11	101.73	100.29	1.44	3,718.64	1.59	160
6/14/2018	102.73	99.42	3.31	3,719.19	101.73	100.47	1.26	3,718.49	1.59	161
6/19/2018	101.44	99.54	1.90	3,719.31	100.33	99.74	0.59	3,719.33	1.72	163
6/20/2018	101.48	99.45	2.03	3,719.38	99.98	99.82	0.16	3,719.32	1.85	165
6/25/2018	101.20	100.4	0.80	3,718.64	100.94	100.45	0.49	3,718.64	1.85	167
6/27/2018	101.77	99.37	2.40	3,719.40	100.27	100.07	0.20	3,719.07	1.32	168
6/29/2018	101.57	99.82	1.75	3,719.06	100.73	99.87	0.86	3,719.16	1.72	170
7/3/2018	101.66	99.92	1.74	3,718.96	100.64	100.10	0.54	3,718.98	1.32	171
7/5/2018	101.45	99.79	1.66	3,719.10	100.32	99.81	0.51	3,719.27	1.32	173
7/10/2018	101.47	99.69	1.78	3,719.18	100.27	99.88	0.39	3,719.22	1.06	174
7/20/2018	101.21	99.57	1.64	3,719.32	100.21	99.83	0.38	3,719.28	1.19	175
7/25/2018	101.77	99.37	2.40	3,719.40	100.30	100.10	0.20	3,719.04	1.45	176
7/27/2018	101.78	99.62	2.16	3,719.19	100.30	99.83	0.47	3,719.26	1.32	178
7/30/2018	106.75	100.90	5.85	3,717.29	101.99	101.75	0.24	3,717.38	9.25	187
8/7/2018	101.48	99.45	2.03	3,719.38	100.09	99.77	0.32	3,719.35	1.32	188
8/10/2018	100.78	99.65	1.13	3,719.33	100.02	99.63	0.39	3,719.47	1.45	190
8/14/2018	103.58	99.91	3.67	3,718.64	101.13	100.42	0.71	3,718.63	1.59	191
8/16/2018	104.18	100.36	3.82	3,718.17	101.76	100.84	0.92	3,718.18	1.32	192
8/22/2018	101.73	99.58	2.15	3,719.23	100.37	99.43	0.94	3,719.58	1.59	194
8/23/2018	101.59	99.54	2.05	3,719.28	101.56	99.89	1.67	3,719.00	1.45	196
8/31/2018	106.02	99.77	6.25	3,718.35	101.53	100.71	0.82	3,718.32	1.72	197
9/3/2018	104.67	100.52	4.15	3,717.95	101.49	100.03	1.46	3,718.89	1.59	199
9/6/2018	105.67	99.70	5.97	3,718.47	101.64	100.71	0.93	3,718.30	1.72	201
9/11/2018	102.71	99.29	3.42	3,719.30	100.30	99.90	0.40	3,719.20	1.98	203
9/12/2018	101.77	99.37	2.40	3,719.40	100.30	100.10	0.20	3,719.04	1.59	204
9/19/2018	106.59	101.30	5.29	3,716.98	101.77	100.08	1.69	3,718.81	1.85	206
9/26/2018	104.57	101.46	3.11	3,717.19	102.55	100.20	2.35	3,718.57	1.85	208
10/1/2018	106.82	101.07	5.75	3,717.13	--	--	--	--	0.26	208
10/4/2018	106.78	101.09	5.69	3,717.12	102.77	101.91	0.86	3,717.12	4.76	213
10/5/2018	104.15	101.69	2.46	3,717.07	102.44	101.98	0.46	3,717.11	2.51	215
10/9/2018	105.96	101.36	4.60	3,717.04	102.64	102.01	0.63	3,717.05	4.49	220

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Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
10/11/2018	105.12	101.55	3.57	3,717.02	102.57	102.10	0.47	3,716.99	3.43	223
10/16/2018	105.63	101.27	4.36	3,717.17	102.32	102.20	0.12	3,716.95	4.49	228
10/18/2018	106.58	101.63	4.95	3,716.71	102.87	102.53	0.34	3,716.58	3.70	231
10/23/2018	105.83	101.37	4.46	3,717.05	102.85	102.68	0.17	3,716.46	3.70	235
10/25/2018	105.67	101.73	3.94	3,716.78	101.86	101.53	0.33	3,717.58	4.49	240
10/30/2018	104.68	101.43	3.25	3,717.19	102.74	102.59	0.15	3,716.55	3.70	243
11/1/2018	105.23	101.77	3.46	3,716.82	102.56	101.98	0.58	3,717.09	3.70	247
11/6/2018	105.55	101.96	3.59	3,716.61	102.54	102.38	0.16	3,716.76	4.23	251
11/8/2018	105.78	101.68	4.10	3,716.80	102.68	102.53	0.15	3,716.61	2.64	254
11/13/2018	105.66	101.67	3.99	3,716.83	102.53	102.36	0.17	3,716.78	2.64	257
11/14/2018	105.23	101.78	3.45	3,716.81	102.47	102.26	0.21	3,716.87	3.96	260
11/20/2018	106.93	101.31	5.62	3,716.91	104.25	101.85	2.40	3,716.92	3.96	264
11/27/2018	106.59	101.4	5.19	3,716.90	102.55	101.78	0.77	3,717.26	3.96	268
11/29/2018	106.87	101.17	5.70	3,717.04	102.62	101.75	0.87	3,717.27	3.96	272
12/4/2018	105.87	101.36	4.51	3,717.05	102.59	101.83	0.76	3,717.21	2.64	275
12/5/2018	105.67	101.37	4.30	3,717.08	102.79	101.76	1.03	3,717.24	3.96	279
12/11/2018	106.48	101.66	4.82	3,716.70	102.86	101.82	1.04	3,717.17	3.96	283
12/12/2018	105.79	101.83	3.96	3,716.67	102.66	101.92	0.74	3,717.13	4.49	287
12/18/2018	105.87	101.56	4.31	3,716.88	102.55	101.36	1.19	3,717.61	3.96	291
12/20/2018	105.79	101.46	4.33	3,716.98	102.36	101.45	0.91	3,717.57	2.64	294
12/28/2018	107	101.2	5.80	3,716.99	103.59	101.90	1.69	3,716.99	5.28	299
1/8/2019	107.88	101.75	6.13	3,716.39	102.59	101.98	0.61	3,717.09	5.28	305
1/10/2019	106.86	101.68	5.18	3,716.62	102.76	101.73	1.03	3,717.27	6.60	311
1/15/2019	106.56	101.74	4.82	3,716.62	102.83	101.76	1.07	3,717.23	6.60	318
1/17/2019	106.78	101.62	5.16	3,716.68	102.62	101.86	0.76	3,717.18	5.28	323
1/23/2019	106.52	101.47	5.05	3,716.85	102.65	101.72	0.93	3,717.29	4.49	328
1/24/2019	106.72	101.45	5.27	3,716.83	102.73	101.82	0.91	3,717.20	5.28	333
1/30/2019	106.78	101.64	5.14	3,716.66	102.35	101.86	0.49	3,717.23	7.13	340
1/31/2019	105.89	101.63	4.26	3,716.82	102.72	101.84	0.88	3,717.18	4.49	345
2/5/2019	106.63	101.83	4.80	3,716.53	102.36	101.85	0.51	3,717.23	5.28	350
2/7/2019	105.87	101.63	4.24	3,716.83	102.83	101.86	0.97	3,717.15	4.49	354
2/12/2019	105.67	101.78	3.89	3,716.74	102.73	101.23	1.50	3,717.69	5.28	360
2/14/2019	105.73	101.63	4.10	3,716.85	102.82	101.93	0.89	3,717.09	3.96	364
2/20/2019	105.32	101.53	3.79	3,717.00	102.37	101.86	0.51	3,717.22	4.49	368
2/21/2019	105.33	101.86	3.47	3,716.73	102.83	102.46	0.37	3,716.65	3.96	372
2/26/2019	106.98	101.26	5.72	3,716.95	102.78	101.89	0.89	3,717.13	3.96	376
2/28/2019	105.86	101.75	4.11	3,716.73	102.63	101.64	0.99	3,717.36	2.64	379
3/7/2019	105.68	101.56	4.12	3,716.92	102.68	101.57	1.11	3,717.41	3.96	383
3/13/2019	105.47	101.56	3.91	3,716.95	102.56	101.57	0.99	3,717.43	3.96	387
3/14/2019	105.52	101.53	3.99	3,716.97	102.47	101.83	0.64	3,717.23	4.49	391
3/20/2019	105.63	101.58	4.05	3,716.91	102.76	101.89	0.87	3,717.13	5.28	396
3/21/2019	102.05	100.15	1.90	3,718.70	101.14	100.40	0.74	3,718.65	3.96	400
3/25/2019	102.77	99.88	2.89	3,718.80	101.30	99.96	1.34	3,718.98	3.96	404

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Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
3/27/2019	102.45	100.05	2.40	3,718.72	101.57	100.58	0.99	3,718.42	2.64	407
4/1/2019 [3]	107.98	102.33	5.65	3,715.89	--	--	--	--	--	--
5/22/2019	108.14	102.56	5.58	3,715.67	--	--	--	--	35.0	442
5/24/2019	--	--	--	--	--	--	--	--	2.00	444
5/29/2019	--	--	--	--	--	--	--	--	14.0	458
5/31/2019	--	--	--	--	--	--	--	--	6.00	464
6/3/2019	--	--	--	--	--	--	--	--	5.00	469
6/7/2019	--	--	--	--	--	--	--	--	6.50	475
6/12/2019	--	--	--	--	--	--	--	--	9.00	484
6/14/2019	--	--	--	--	--	--	--	--	3.50	488
6/17/2019	105.61	103.21	2.40	3,715.56	--	--	--	--	4.00	492
6/20/2019	--	--	--	--	--	--	--	--	4.00	496
6/26/2019	--	--	--	--	--	--	--	--	9.00	505
7/2/2019	--	--	--	--	--	--	--	--	7.00	512
7/5/2019	--	--	--	--	--	--	--	--	0.00	512
7/11/2019	108.33	102.96	5.37	3,715.31	--	--	--	--	3.00	515
7/12/2019	--	--	--	--	--	--	--	--	3.00	518
7/15/2019	--	--	--	--	--	--	--	--	2.00	520
7/19/2019	--	--	--	--	--	--	--	--	6.00	526
7/23/2019	--	--	--	--	--	--	--	--	6.00	532
7/26/2019	--	--	--	--	--	--	--	--	3.00	535
7/31/2019	--	--	--	--	--	--	--	--	1.00	536
8/2/2019	--	--	--	--	--	--	--	--	6.00	542
8/7/2019	--	--	--	--	--	--	--	--	4.00	546
8/9/2019	--	--	--	--	--	--	--	--	2.00	548
8/13/2019	--	--	--	--	--	--	--	--	3.00	551
8/15/2019	--	--	--	--	--	--	--	--	2.00	553
8/20/2019	--	--	--	--	--	--	--	--	3.00	556
8/22/2019	--	--	--	--	--	--	--	--	2.00	558
8/29/2019	105.78	103.79	1.99	3,715.05	--	--	--	--	4.00	562
8/30/2019	--	--	--	--	--	--	--	--	8.00	570
9/3/2019	--	--	--	--	--	--	--	--	24.0	594
9/6/2019	--	--	--	--	--	--	--	--	15.0	609
9/10/2019	104.95	104.08	0.87	3,714.94	--	--	--	--	0.00	609
9/12/2019	--	--	--	--	--	--	--	--	[4]	[4]
9/16/2019	--	--	--	--	--	--	--	--	35.0	644
9/20/2019	--	--	--	--	--	--	--	--	19.0	663
9/23/2019	--	--	--	--	--	--	--	--	21.0	684
9/27/2019	--	--	--	--	--	--	--	--	21.0	705
9/30/2019	--	--	--	--	--	--	--	--	17.0	722
10/3/2019	--	--	--	--	--	--	--	--	20.0	742
10/8/2019	--	--	--	--	--	--	--	--	30.0	772
10/10/2019	--	--	--	--	--	--	--	--	12.0	784

Appendix F - LNAPL Gauging and Recovery Results, Monitoring Well MW-31

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
10/14/2019	--	--	--	--	--	--	--	--	19.0	803
10/17/2019	--	--	--	--	--	--	--	--	2.25	805
10/21/2019	--	--	--	--	--	--	--	--	0.00	805
10/24/2019	104.97	104.32	0.65	3,715.77	--	--	--	--	0.00	805
11/15/2019	--	--	--	--	--	--	--	--	0.00	805
11/18/2019	--	--	--	--	--	--	--	--	0.00	805
11/22/2019	--	--	--	--	--	--	--	--	2.00	807
11/25/2019	--	--	--	--	--	--	--	--	4.00	811
11/26/2019	--	--	--	--	--	--	--	--	0.00	811
12/2/2019	--	--	--	--	--	--	--	--	4.00	815
12/6/2019	--	--	--	--	--	--	--	--	3.00	818
12/10/2019	--	--	--	--	--	--	--	--	4.00	822
12/13/2109	--	--	--	--	--	--	--	--	[4]	[4]
12/20/2019	--	--	--	--	--	--	--	--	[4]	[4]
12/23/2019	--	--	--	--	--	--	--	--	12.0	834
12/26/2019	--	--	--	--	--	--	--	--	3.00	837
1/6/2020	--	--	--	--	--	--	--	--	12.00	849
1/10/2020	--	--	--	--	--	--	--	--	7.00	856
1/13/2020	--	--	--	--	--	--	--	--	1.50	858
1/15/2020	104.87	104.51	0.36	3,714.60	--	--	--	--	2.50	860
1/20/2020	--	--	--	--	--	--	--	--	3.00	863
1/31/2020	--	--	--	--	--	--	--	--	9.00	872
2/4/2020	--	--	--	--	--	--	--	--	3.00	875
2/6/2020	--	--	--	--	--	--	--	--	2.00	877
2/12/2020	--	--	--	--	--	--	--	--	4.50	882
2/14/2020	--	--	--	--	--	--	--	--	1.00	883
2/17/2020	--	--	--	--	--	--	--	--	3.00	886
2/21/2020	--	--	--	--	--	--	--	--	3.00	889
2/24/2020	--	--	--	--	--	--	--	--	2.50	891
2/28/2020	--	--	--	--	--	--	--	--	3.50	895
3/2/2020	--	--	--	--	--	--	--	--	1.50	896
3/6/2020	--	--	--	--	--	--	--	--	2.00	898
3/9/2020	--	--	--	--	--	--	--	--	3.00	901
3/13/2020	--	--	--	--	--	--	--	--	3.00	904
3/17/2020	--	--	--	--	--	--	--	--	3.00	907
3/20/2020	--	--	--	--	--	--	--	--	2.00	909
3/30/2020	--	--	--	--	--	--	--	--	8.00	917
4/2/2020	--	--	--	--	--	--	--	--	2.00	919
4/7/2020	--	--	--	--	--	--	--	--	3.00	922
4/9/2020	--	--	--	--	--	--	--	--	1.00	923
4/13/2020	--	--	--	--	--	--	--	--	2.00	925
4/16/2020	--	--	--	--	--	--	--	--	2.00	927
4/20/2020	--	--	--	--	--	--	--	--	6.00	933

Appendix F - LNAPL Gauging and Recovery Results, Monitoring Well MW-31

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
4/24/2020	--	--	--	--	--	--	--	--	2.00	935
4/27/2020	--	--	--	--	--	--	--	--	3.00	938
5/1/2020	--	--	--	--	--	--	--	--	4.00	942
5/4/2020	--	--	--	--	--	--	--	--	3.00	945
5/8/2020	--	--	--	--	--	--	--	--	3.00	948
5/12/2020	--	--	--	--	--	--	--	--	4.00	952
5/15/2020	--	--	--	--	--	--	--	--	2.00	954
5/18/2020	--	--	--	--	--	--	--	--	4.00	958
5/22/2020	--	--	--	--	--	--	--	--	2.00	960
5/26/2020	--	--	--	--	--	--	--	--	3.00	963
5/29/2020	--	--	--	--	--	--	--	--	4.00	967
6/1/2020	--	--	--	--	--	--	--	--	2.00	969
6/5/2020	--	--	--	--	--	--	--	--	3.00	972
6/8/2020	--	--	--	--	--	--	--	--	2.00	974
6/15/2020	--	--	--	--	--	--	--	--	6.00	980
6/18/2020	107.28	104.41	2.87	3,714.28	--	--	--	--	3.00	983
6/23/2020	--	--	--	--	--	--	--	--	0.00	983
6/26/2020	--	--	--	--	--	--	--	--	1.00	984
6/29/2020	--	--	--	--	--	--	--	--	2.00	986
7/2/2020	--	--	--	--	--	--	--	--	3.00	989
7/7/2020	--	--	--	--	--	--	--	--	3.00	992
7/10/2020	--	--	--	--	--	--	--	--	2.00	994
7/13/2020	--	--	--	--	--	--	--	--	2.00	996
7/17/2020	--	--	--	--	--	--	--	--	(4)	(4)
7/20/2020	--	--	--	--	--	--	--	--	(4)	(4)
7/24/2020	--	--	--	--	--	--	--	--	(4)	(4)
7/27/2020	--	--	--	--	--	--	--	--	(4)	(4)
8/4/2020	--	--	--	--	--	--	--	--	(4)	(4)
8/11/2020	--	--	--	--	--	--	--	--	(4)	(4)
8/14/2020	--	--	--	--	--	--	--	--	(4)	(4)
8/17/2020	--	--	--	--	--	--	--	--	(4)	(4)
8/19/2020	109.32	104.43	4.89	3,713.92	--	--	--	--	(4)	(4)
8/24/2020	--	--	--	--	--	--	--	--	27.0	1,023
9/14/2020	--	--	--	--	--	--	--	--	26.0	1,049
9/23/2020	--	--	--	--	--	--	--	--	9.00	1,058
10/8/2020	108.59	105.09	3.50	3,713.49	--	--	--	--	27.0	1,085
10/12/2020	--	--	--	--	--	--	--	--	0.00	1,085
10/19/2020	--	--	--	--	--	--	--	--	5.00	1,090
10/26/2020	--	--	--	--	--	--	--	--	4.00	1,094
11/2/2020	--	--	--	--	--	--	--	--	4.00	1,098
11/10/2020	--	--	--	--	--	--	--	--	4.00	1,102
11/16/2020	--	--	--	--	--	--	--	--	6.00	1,108
11/24/2020	--	--	--	--	--	--	--	--	6.00	1,114

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Appendix F - LNAPL Gauging and Recovery Results, Monitoring Well MW-31

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
11/30/2020	--	--	--	--	--	--	--	--	2.00	1,116
12/7/2020	--	--	--	--	--	--	--	--	4.00	1,120
12/14/2020	--	--	--	--	--	--	--	--	6.00	1,126
12/21/2020	--	--	--	--	--	--	--	--	6.00	1,132
12/29/2020	--	--	--	--	--	--	--	--	5.00	1,137
1/4/2021	--	--	--	--	--	--	--	--	6.00	1,143
1/11/2021	--	--	--	--	--	--	--	--	4.00	1,147
1/18/2021	--	--	--	--	--	--	--	--	3.00	1,150
1/26/2021	--	--	--	--	--	--	--	--	5.00	1,155
1/28/2021	109.98	105.02	4.96	3,713.32	--	--	--	--	0.00	1,155
2/2/2021	--	--	--	--	--	--	--	--	9.00	1,164
2/8/2021	--	--	--	--	--	--	--	--	6.00	1,170
2/16/2021	--	--	--	--	--	--	--	--	[4]	[4]
2/22/2021	--	--	--	--	--	--	--	--	[4]	[4]
3/1/2021	--	--	--	--	--	--	--	--	7.00	1,177
3/9/2021	--	--	--	--	--	--	--	--	6.00	1,183
3/15/2021	--	--	--	--	--	--	--	--	6.00	1,189
3/22/2021	--	--	--	--	--	--	--	--	8.00	1,197
3/29/2021	--	--	--	--	--	--	--	--	7.00	1,204
4/5/2021	--	--	--	--	--	--	--	--	7.00	1,211
4/12/2021	--	--	--	--	--	--	--	--	7.00	1,218
4/15/2021	109.53	105.34	4.19	3,713.12	--	--	--	--	4.00	1,222
4/19/2021	--	--	--	--	--	--	--	--	4.00	1,226
4/26/2021	--	--	--	--	--	--	--	--	7.00	1,233
5/3/2021	--	--	--	--	--	--	--	--	7.00	1,240
5/10/2021	--	--	--	--	--	--	--	--	7.00	1,247
5/17/2021	--	--	--	--	--	--	--	--	7.00	1,254
5/24/2021	--	--	--	--	--	--	--	--	7.00	1,261
6/1/2021	--	--	--	--	--	--	--	--	6.00	1,267
6/8/2021	--	--	--	--	--	--	--	--	7.00	1,274
6/14/2021	--	--	--	--	--	--	--	--	5.00	1,279
6/21/2021	--	--	--	--	--	--	--	--	5.00	1,284
6/28/2021	--	--	--	--	--	--	--	--	6.00	1,290
7/6/2021	--	--	--	--	--	--	--	--	8.00	1,298
7/12/2021	--	--	--	--	--	--	--	--	8.00	1,306
7/15/2021	110.04	105.54	4.50	3712.87	--	--	--	--	1.00	1,307
7/19/2021	--	--	--	--	--	--	--	--	2.00	1,309
7/26/2021	--	--	--	--	--	--	--	--	5.00	1,314
8/2/2021	--	--	--	--	--	--	--	--	9.00	1,323
8/10/2021	--	--	--	--	--	--	--	--	8.00	1,331
8/16/2021	--	--	--	--	--	--	--	--	[4]	[4]
8/24/2021	--	--	--	--	--	--	--	--	[4]	[4]
8/30/2021	--	--	--	--	--	--	--	--	2.00	1,333

Appendix F - LNAPL Gauging and Recovery Results, Monitoring Well MW-31

HollyFrontier Navajo Refining LLC, AP-110, Lovington, New Mexico

Date	Prior to Bailing or After Removing Skimmer[1,3]				After Bailing				LNAPL Volume Recovered (gal)	Cumulative LNAPL Recovered (gal)
	Initial Depth to Water (ft btoc)	Initial Depth to LNAPL (ft btoc)	Initial Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)	Final Depth to Water (ft btoc)	Final Depth to LNAPL (ft btoc)	Final Apparent LNAPL Thickness (feet)	Corrected Groundwater Elevation[2] (ft amsl)		
9/8/2021	--	--	--	--	--	--	--	--	9.00	1,342
9/14/2021	--	--	--	--	--	--	--	--	7.00	1,349
9/16/2021	111.52	105.73	5.79	3712.47	--	--	--	--	3.00	1,352
9/21/2021	--	--	--	--	--	--	--	--	4.00	1,356
9/28/2021	--	--	--	--	--	--	--	--	5.00	1,361
10/13/2021	--	--	--	--	--	--	--	--	7.00	1,368
10/19/2021	--	--	--	--	--	--	--	--	5.00	1,373
10/27/2021	--	--	--	--	--	--	--	--	7.00	1,380
11/2/2021	--	--	--	--	--	--	--	--	6.00	1,386
11/8/2021	--	--	--	--	--	--	--	--	6.00	1,392
11/16/2021	--	--	--	--	--	--	--	--	7.00	1,399
11/22/2021	--	--	--	--	--	--	--	--	7.00	1,406
11/30/2021	--	--	--	--	--	--	--	--	8.00	1,414
12/6/2021	--	--	--	--	--	--	--	--	6.00	1,420
12/14/2021	--	--	--	--	--	--	--	--	8.00	1,428
12/21/2021	--	--	--	--	--	--	--	--	7.00	1,435
12/28/2021	--	--	--	--	--	--	--	--	8.00	1,443

Notes:

LNAPL = Light Non-Aqueous Phase Liquid

ft btoc = feet below top of casing

ft amsl = feet above mean sea level

-- = not measured

[1] Passive skimmer (Petro-Bailer™) installed in well on August 17, 2017. Passive skimmer prohibits fluid gauging prior to removal from well.

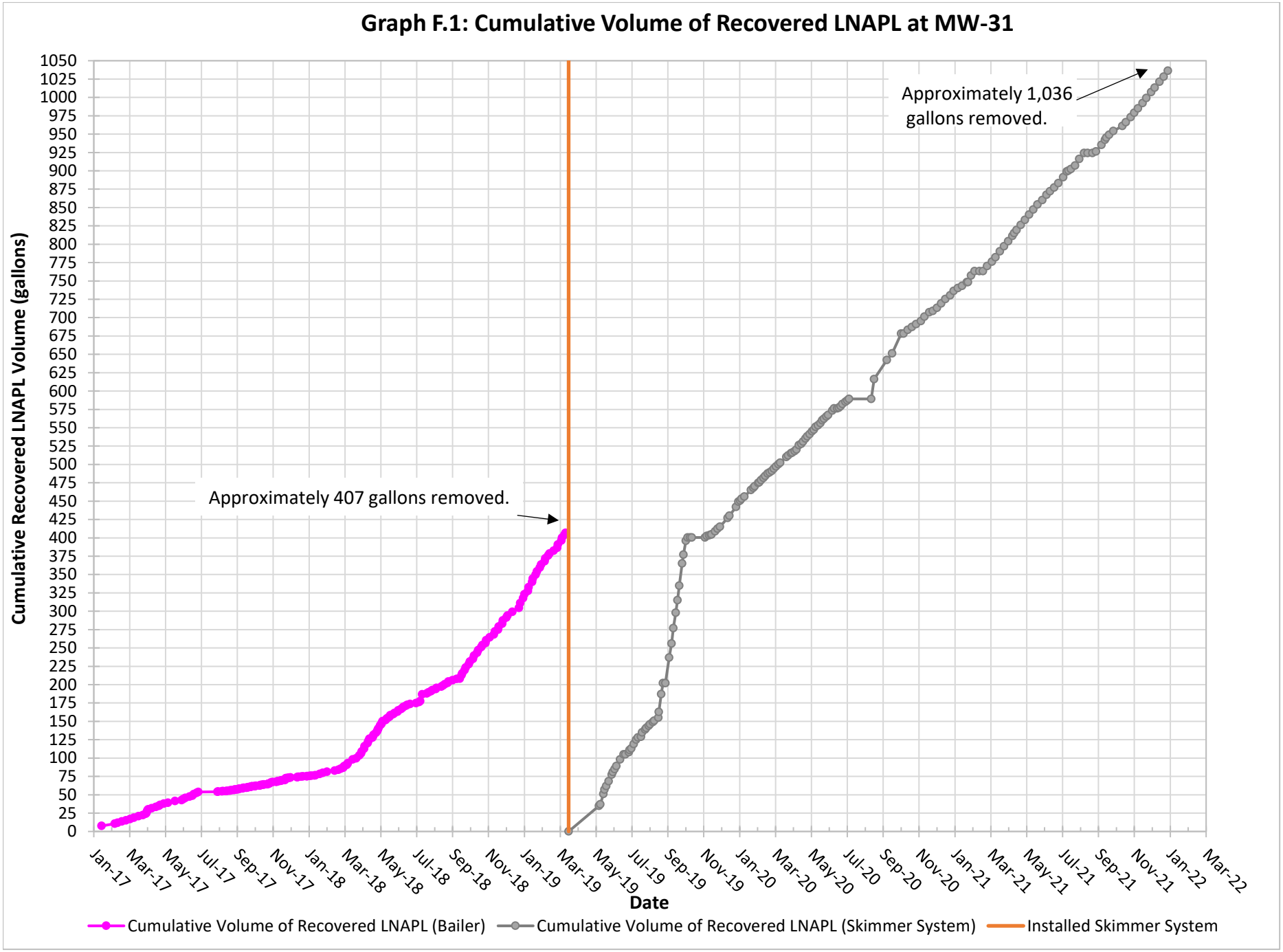
[2] Groundwater elevation corrected for the presence of LNAPL using a specific gravity of 0.8317. Top of well casing elevation = 3,819.17 feet amsl.

[3] Pneumatic skimmer pump system (Geotech SpOILer System) installed on April 1, 2019. Fluid gauging conducted after skimmer pump removed from well and well equilibrates.

[4] LNAPL volume recovered in tote too low to provide accurate estimate.

[5] Pneumatic skimmer pump system noted not operating from September 28, 2021, until October 8, 2021 when system was repaired.

Graph F.1: Cumulative Volume of Recovered LNAPL at MW-31



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 99552

CONDITIONS

Operator: NAVAJO REFINING COMPANY, L.L.C. P.O. Box 159 Artesia, NM 88211	OGRID: 15694
	Action Number: 99552
	Action Type: [UF-DP] NOI Discharge Permit (DISCHARGE PERMIT NOI)

CONDITIONS

Created By	Condition	Condition Date
swells	Accepted for retention purposes.	7/20/2022