# October 2021 Groundwater Monitoring Report

**Triple Stop Chevron**

**1034 West Gentile Street, Layton, Utah**

**Facility ID No. 3000500, Release Site NUB**

November 23, 2021

Terracon Project No. 61197153


**Prepared for:**

Utah Department of Environmental Quality
Division of Environmental Response and Remediation
Salt Lake City, Utah

**Prepared by:**

Terracon Consultants, Inc.
Midvale, Utah

terracon.com

Terracon

Environmental ■ Facilities ■ Geotechnical ■ Materials

November 23, 2021

Utah Department of Environmental Quality
Division of Environmental Response and Remediation
195 North 1950 West
PO Box 144840
Salt Lake City, Utah 84114-4840

Attn: Mr. Kevin Beery
P: 801.536.4214
E: kbeery@utah.gov

**Re: October 2021 Groundwater Monitoring Report**
**Triple Stop Chevron**
**1034 West Gentile Street, Layton, Utah**
**Facility ID No. 3000500, Release Site NUB**
**Terracon Project No. 61197153**

Dear Mr. Beery:

Terracon is pleased to provide this report documenting the October 2021 groundwater monitoring event. The report also discusses installation of three new monitor wells in the Angel Crossing Subdivision.

We appreciate the opportunity to have performed these services for you. Please contact our office at [801] 545-8500 if you have questions regarding this information or if we can provide any other services.

Sincerely,

**Terracon Consultants, Inc.**

Curt Stripeika
Senior Project Manager
UST Certified Consultant #CC0003

For:

Erik Gessert
Authorized Project Reviewer

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## APPENDICES



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# October 2021 Groundwater Monitoring
# Triple Stop Chevron
# 1034 West Gentile Street, Layton, Utah
# Facility ID No. 3000500, Release Site NUB

Terracon Project No. 61197153
November 23, 2021

## 1.0 INTRODUCTION

### 1.1 Site Description

| | |
|---|---|
| **Site Name** | Triple Stop Chevron |
| **Site Location/Address** | 1034 West Gentile Street, Layton, Utah |
| **Site Improvements** | The site operates as a convenience store and retail gas station. |

**Exhibit 1** (**Appendix A**) presents the general location, shows locations of the wells in relation to pertinent site features, and depicts groundwater elevations and elevation contours based on measurements collected during this sampling event. **Exhibits 2, 3,** and **4** displays the benzene isocontour maps for October, July and April of 2021, respectively.

### 1.2 Project Background

On February 14, 2019, Layton City reported petroleum odors in the basement of a home near the intersection of Gentile and Angel streets (Angel Crossing Subdivision). On February 16, 2019, two other homeowners reported gasoline vapors in their basements. This prompted an investigation initiated by the Utah Division of Environmental Response and Remediation (DERR). The nearby Triple Stop Chevron (Chevron) gas station was identified as a suspect source of the petroleum vapors.

An analysis of inventory control records in November of 2019 by the DERR revealed that from March of 2013 to March of 2019, Chevron lost between 22,000 to 23,000 gallons of unleaded fuel. The cause of the release was attributed to a crack in the downtube below the spill bucket. The release is believed to have occurred at a rate of 20 gallons per load of unleaded fuel delivered. The downtube was repaired in April of 2019 and it is presumed the release has stopped.

At the request of DERR and the Owner of Triple Stop Chevron, Mr. Mark Smith, Terracon prepared a Work Plan to assist with development of a strategy for containment and remediation of the release. As a response to the release, CalClean (a mobile high vacuum extraction unit) was brought to the site for the purpose of removing impacted groundwater and recovery of light non-aqueous phase liquid (LNAPL). The unit operated on the Chevron site for five weeks and for one week on the south side of Gentile Street, directly south of the Chevron. During that time, 194,760 gallons of water was recovered and discharged under permit to the South Davis Sewer

District Reclamation Plant. During that time, it was estimated that 2,545 gallons of light non-aqueous phase liquid (LNAPL) was recovered.

Terracon subsequently submitted a Corrective Action Plan (CAP) for a vapor extraction system (SVE) for source reduction and vapor mitigation at the Chevron. The system has been in operation since July 2020. As of August 4, 2021, the system has recovered 2,252 equivalent gallons of gasoline in the vapor phase plus the 2,545 gallons from CalClean system for a total of 4,797 gallons equivalent of gasoline recovered. Additionally, approximately 30 gallons of LNAPL has been recovered from MW-10 through manual bailing of the well.

Additional remedial measures are being implemented at the source of contamination (Triple Stop Chevron) to include an air sparge system that will operate 6 sparge wells, four located in Gentile Street and two on the Chevron property. The purpose is to further remove dissolved and absorbed phase that is contributing to the mass flux of contamination flowing into the neighborhood. This work is being performed under workplan NUB 17 and NUB 19. The system is expected to be operational in early 2022.

## 1.3 Scope of Work

This report documents the groundwater sampling event conducted in October of 2021 to evaluate concentrations of dissolved petroleum hydrocarbons and determine groundwater elevations at the Site for evaluation of present groundwater conditions. Additionally three monitoring wells were installed in the Angel Crossing subdivision. Well construction details and soil sample results are presented within this report.

## 1.4 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, express or implied, regarding the findings, conclusions, or recommendations. Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report.

## 1.5 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work. Such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during our investigation. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests,

assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

### 1.6 Reliance

This report has been prepared for the exclusive use and reliance of Triple Stop Chevron, Inc. and authorized regulatory agencies having jurisdiction over the release case file. Use or reliance by any other party is prohibited without the written authorization of Triple Stop Chevron, Inc. and Terracon.

Reliance on the report by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, report, and Terracon's Terms and Conditions. The limitation of liability defined in the Terms and Conditions is the aggregate limit of Terracon's liability to the client and all relying parties.

## 2.0 MONITOR WELL INSTALLATION

### 2.1 Preliminaries

The public utility location service (Blue Stakes) was notified at least 48 hours prior to drilling, as required by law. Terracon also arranged for a private utility locating company to clear boring locations.

### 2.2 Soil Sampling

Terracon advanced three vertical soil borings (MW-40, 41 and 42) on October 5, 2021 within the centerline of the plume in the Angel Crossing Subdivision as shown on **Exhibit 1** (**Appendix A**). The soil borings for the monitor wells were advanced using a track-mounted direct-push drilling rig to a maximum depth of approximately 20 feet below the ground surface (bgs). Drilling equipment was cleaned, using a high-pressure washer prior to beginning the project and before beginning each boring. Non-dedicated sampling equipment was cleaned using an Alconox® detergent wash and potable water rinse prior to commencement of the project and between the collection of each sample.

Three soil samples were collected from each monitor well boring based on observed petroleum hydrocarbon impacts (e.g., PID readings, staining and odors). Detailed soil descriptions and PID readings are included on the soil boring logs provided in **Appendix C**.

### 2.3 Monitoring Well Installation

The soil borings were converted into permanent groundwater monitoring wells. The monitoring wells were constructed as follows:

- Installation of 15 feet of 2-inch diameter, 0.010-inch machine slotted polyvinyl chloride (PVC) well screen with a threaded bottom cap from 5 to 20 feet bgs.
- Installation of 2-inch diameter, threaded, flush-joint PVC riser pipe to the surface.
- Addition of pre-sieved 10/20 grade silica sand for annular sand pack around the well screen from the bottom of the boring to approximately 2 feet above the top of the well screen.
- Placement of 2 feet of hydrated bentonite pellets above the sand pack.
- Addition of cement/bentonite slurry to the surface.
- Installation of a 7-inch diameter, circular, bolt-down, steel, monitoring well cover with a locking well cap inset in a flush-mount concrete well pad.

### 2.4 Groundwater Sampling

The newly installed monitor wells MW-40, 41 and 42 were developed using a new disposable bailer for each well and were allowed to equilibrate overnight. Terracon returned to the site to collect one groundwater sample from each of the three newly installed monitoring wells (MW-40, 41 and 42) as described in Section 3 of this report.

### 2.5 Groundwater Elevation Survey

The elevation of the top of the monitor well casings were surveyed relative to an existing common benchmark and connected to the monitoring well network. Groundwater levels were measured in the monitoring wells prior to groundwater sampling. The measured water levels were used in combination with the casing elevations to evaluate groundwater elevations, direction of groundwater flow, and gradient.

### 2.6 Investigation-derived Waste

Soil cuttings were not generated during installation of the monitoring wells using direct push technology. Monitoring well purge water was surface-applied in the vicinity of the well that generated the water and was allowed to infiltrate and/or evaporate. Care was taken not to allow purge water to affect nearby receptors (e.g., storm water catch basins, utilities, property boundaries, etc.). Purge and development water from wells exhibiting LNAPL were drummed for off-site disposal by STC of Salt Lake City, Utah.

## 3.0 GROUNDWATER MONITORING

Terracon conducted the groundwater sampling event from October 5 through October 7, 2021. Terracon collected depth-to-water measurements and groundwater samples from 24 monitoring wells.

The list of wells and rationale for sampling is listed below:

| Wells | Location | Rationale |
|---|---|---|
| MW-8 | Chevron | Upgradient |
| MW-10, MW-13 & 14 | Chevron | Source |
| RW-2, MW-22, 23, 24, & 35 | Gentile Street | In plume |
| MW-1, 2, 4, 18, 19 , 20, & 30 | Residential neighborhood | In plume |
| MW-31, 32, 37, 38, 39, 40, 41 & 42 | Residential neighborhood | Downgradient plume edge |
| Total number of wells to be sampled - **24** | | |
| Wells for MNA samples – MW-8, MW-13, MW-24, MW-1, MW-19, MW-20, MW-31, MW-32, MW-37, 40, 41 &42 | | |

The wells were sampled by a Utah-certified UST Groundwater and Soil Sampler (Roy McDonald, GS 0097) with oversight from a Utah-certified UST Consultant (Curt Stripeika, CC 0003). Terracon sampled the wells following low flow sampling standard operating procedures for well sampling, which included using a peristaltic pump, new Teflon tubing per well and using a YSI water quality meter. Wells were sampled when field parameters stabilized as defined by three consecutive readings were within 10 percent of each other.

### 3.1 Site Observations

**Exhibit 1** (**Appendix A**) shows the calculated groundwater elevation and inferred groundwater flow direction. The groundwater flow direction was toward the southwest. A groundwater gradient was calculated as 0.011 feet/foot between the MW-8 and MW-32. **Table 1** (**Appendix B**) presents a summary of the gauging data. Comparing the gauging data collected in July 2021 to this gauging event shows a groundwater elevation decrease of approximately 0.36 feet in MW-8 at the upgradient side of the plume to a decrease of 0.19 feet in MW-32 at the downgradient edge.

### 3.2 Investigation-derived Waste

Monitoring well purge water was surface applied in the vicinity of the well that generated the water and was allowed to infiltrate and/or evaporate. Care was taken to not allow purge water to affect nearby receptors (e.g., storm water catch basins, utilities, property boundaries, etc.).

## 4.0 LABORATORY ANALYTICAL PROGRAM

The groundwater and soil samples were submitted to Pace Analytical National for analyses of methyl tert-butyl ether, benzene, toluene, ethyl benzene, xylenes, and naphthalene (MBTEXN); total petroleum hydrocarbons – gasoline range organics (TPH-GRO), using EPA Method 8260; and total petroleum hydrocarbons – diesel range organics (TPH-DRO) with silica gel treatment (SGT), using EPA Method 8015. Additionally, natural attenuation parameters ferrous iron,

dissolved iron, dissolved manganese, nitrate, sulfate, were also analyzed in select wells. The executed chain-of-custody records and laboratory data sheets are provided in **Appendix D**.

# 5.0 DATA EVALUATION

Refer to **Table 1** (**Appendix B**) for a summary of the groundwater laboratory analytical results. The analytical data are compared to regulatory screening levels, including the Initial Screening Levels (ISL) and Tier 1 Screening Criteria established by the DERR. **Table 2** (**Appendix A**) summarizes presents the natural attenuation parameters and **Table 3** (**Appendix A**) summarizes soil analytical data collected during the installation of the most recent monitor wells MW-38, 39 40, 41 and 42.

**Exhibits 2, 3** and **4** (**Appendix A**) shows benzene concentrations and inferred isoconcentration contours for the October, July, and April 2021 groundwater sampling events.

## 5.1 Groundwater Sample Results

**Triple Stop Chevron**

Monitor wells MW-8, MW-13, and MW-14 were sampled on the Triple Stop Chevron. Monitor well MW-8 (upgradient of presumed release location) had very low detections of naphthalene above laboratory reporting limits. MW- 14 reported detections of petroleum but below the ISLs. MW-13 had detections of petroleum above the ISLs.

**Off-Site Groundwater Sample Results (Gentile Street)**

**Gentile Street**

Groundwater samples were collected from wells MW-22, MW-23, MW-24, and MW-35 located along the right of way of Gentile Street and RW-2 in the street adjacent to the sanitary sewer line. Multiple petroleum hydrocarbons were above the laboratory detection limit. The benzene concentration in groundwater collected from RW-2 was 0.982 mg/L, a significant decrease from 11.60 mg/L that was detected in September 2019 when the well was installed. Monitor wells MW-22 and 23 had detections of petroleum but all below the the ISL. Monitor well MW-24 had a benzene detection of 0.0438 mg/L and TPH GRO of 3.69 mg/l, both above the ISL.

**Residential Neighborhood**

Groundwater samples were collected from wells MW-1, MW-2, MW-4, MW-18, MW-19, MW-20, MW-30, MW-31, MW-32, MW-37,MW-38, MW-39, MW-40, MW-41 and MW-42 within the subdivision. Monitor wells MW-1, MW-2, MW-4, MW-19, MW-20, MW-40, MW-41 and MW-42 reported petroleum concentrations that exceeded ISL and/or Tier 1 Screening Levels. Monitoring wells MW-37, MW-38 and MW-39 did not report petroleum hydrocarbons above the laboratory detection limit. Monitor wells MW-31 and MW-32 had detections of petroleum but below the ISLs.

### 5.2 Summary of Natural Attenuation Parameters

In general, pH throughout the plume appears to be neutral, ORP is predominantly negative, and oxygen concentrations are inadequate for aerobic degradation. In wells with significant dissolved iron, the dominating species is ferrous iron. Nitrate appears to be depleted throughout the plume (low residual values as compared to upgradient well MW-8). Sulfate concentrations in the plume are reduced as compared to upgradient levels, however, sulfate has not been fully consumed and significant sulfate remains in the system for further reduction. Based on these lines of evidence, the system is reducing at the sulfate reduction stage (moderately low ORP, depleted nitrate, depleted ferric iron, partially depleted sulfate and some methane production) along the plume centerline and emanating slightly outward from the centerline (between MW-19 north towards RW-02 and MW-13). Obstacles to further microbial reduction could be due to benzene toxicity, a lack of nutrients, or lack of ubiquitous microbes.

### 5.3 Summary of Soil Analytical Results

Soil analytical results for the three monitoring wells MW-40, MW-41 and MW-42 show low levels of petroleum was detected but all detections were below the ISL's.

## 6.0 FINDINGS, CONCLUSIONS

Groundwater monitoring data show the following:

- Groundwater elevations have decreased across most of the project site between approximately 0.25 feet since the previous sampling event in July 2021.
- The overall groundwater concentrations have continued to decrease at the source (Triple Stop Chevron).
- The new monitor well MW-42 had the highest benzene concentration of 6.57 mg/l.
- No LNAPL was observed in the wells during this sampling round.
- Soil samples collected from the three new monitoring wells MW-40, MW-41 and MW-42 showed little adsorbed phase is present in the soils. Concentration detected were below the ISLs.

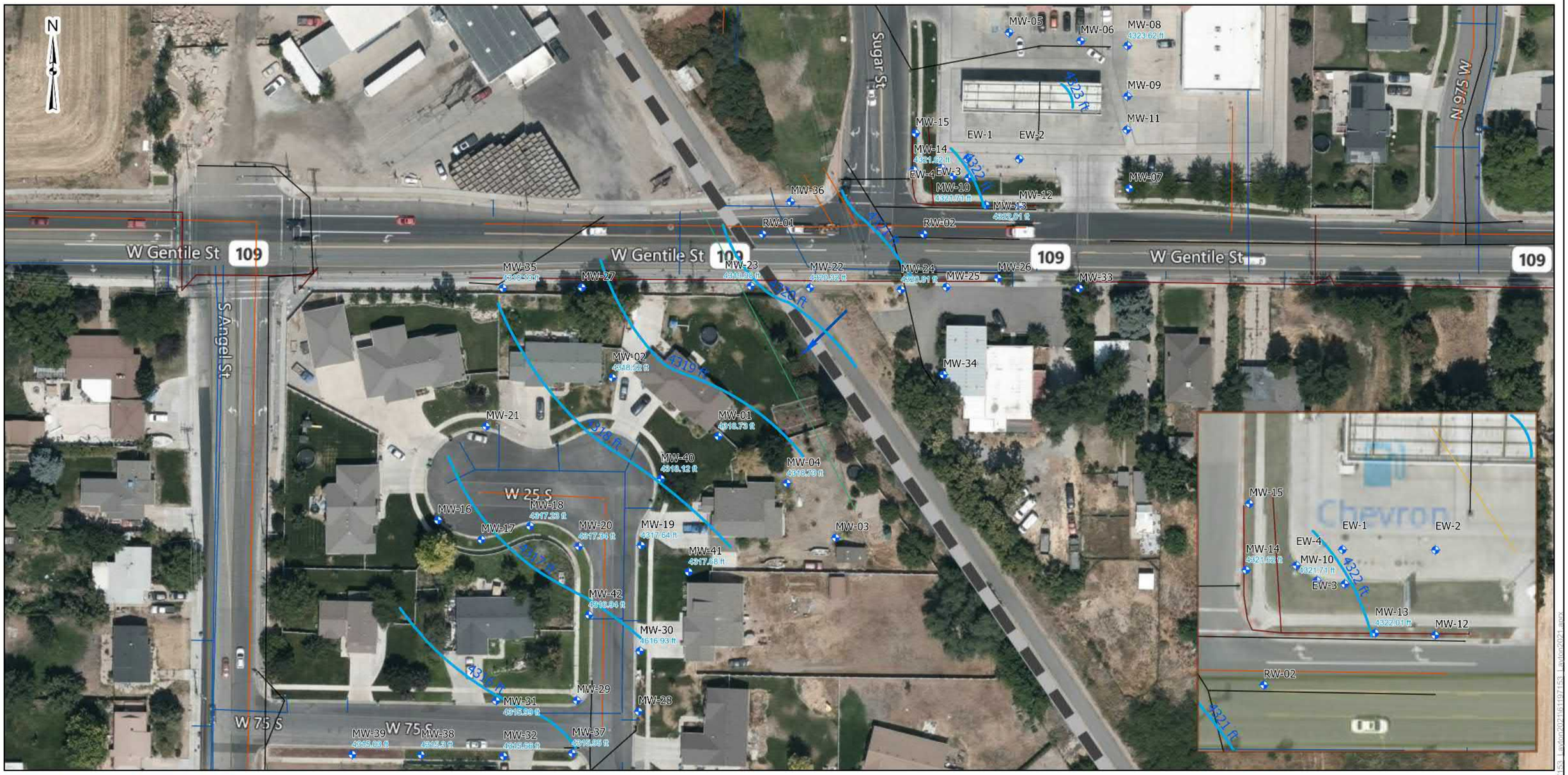
## 7.0 FUTURE WORK

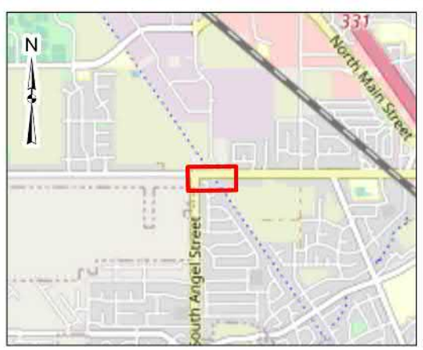
It is proposed to continue quarterly monitoring of the groundwater with the purpose of evaluating the dissolved phase plume stability and the aquifer's ability to naturally degrade the petroleum contamination.

Additional remedial measures are being implemented at the source of contamination (Triple Stop Chevron) to include an air sparge system that will operate 6 sparge wells, four located in Gentile Street and two on the Chevron property. The purpose is to further remove dissolved and

absorbed phase mass that is contributing to the mass flux of contamination flowing into the neighborhood. This work is being performed under workplan NUB 17, and NUB 19. The system is expected to be operational in early 2022.

# APPENDIX A
# Exhibits




- Groundwater Elevation (ft), October 2021
- Approximate Groundwater Flow Direction
- Monitoring Well
- Monitoring Well
- D&RGW Rail Line
- Storm Drain Lines
- UTOPIA AsBuilt Lines
- Waterlines
- Sanitary Sewer Lines
- Andeavor Pipeline

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 50 100 200 Feet

| | |
|---|---|
| Project No.: | 61197153 |
| Date: | Nov 2021 |
| Drawn By: | AST |
| Reviewed By: | ERG |

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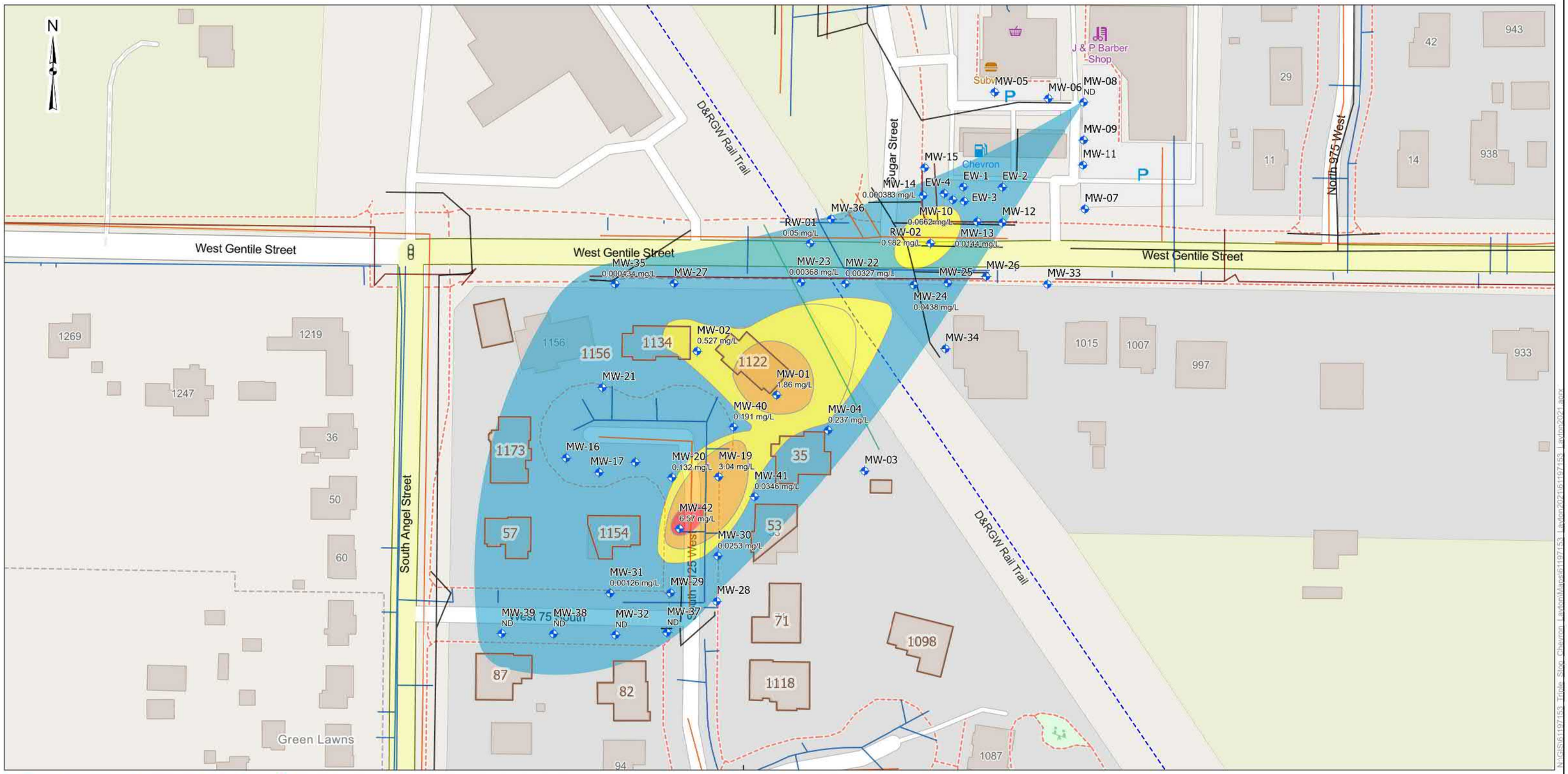
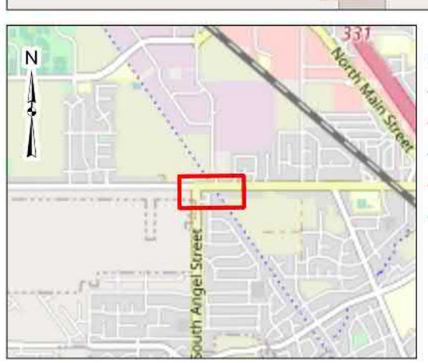
**Groundwater Elevation Map, October 2021**

TSC - Layton Chevron
Triple Stop Chevron Inc.
1034 West Gentile Street
Layton, UT 84041

**Exhibit**

**1**




- Monitoring Well with Benzene Concentration (mg/L)
- D&RGW Rail Line
- Storm Drain Lines
- UTOPIA AsBuilt Lines
- Waterlines
- Sanitary Sewer Lines
- Andeavor Pipeline

Benzene Concentrations (mg/L), October 2021

- >5
- 1 - <5
- 0.3 - <1
- 0 - <0.3

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 80 160 320

| | |
|---|---|
| Project No.: | 61197153 |
| Date: | Nov 2021 |
| Drawn By: | AST |
| Reviewed By: | ERG |

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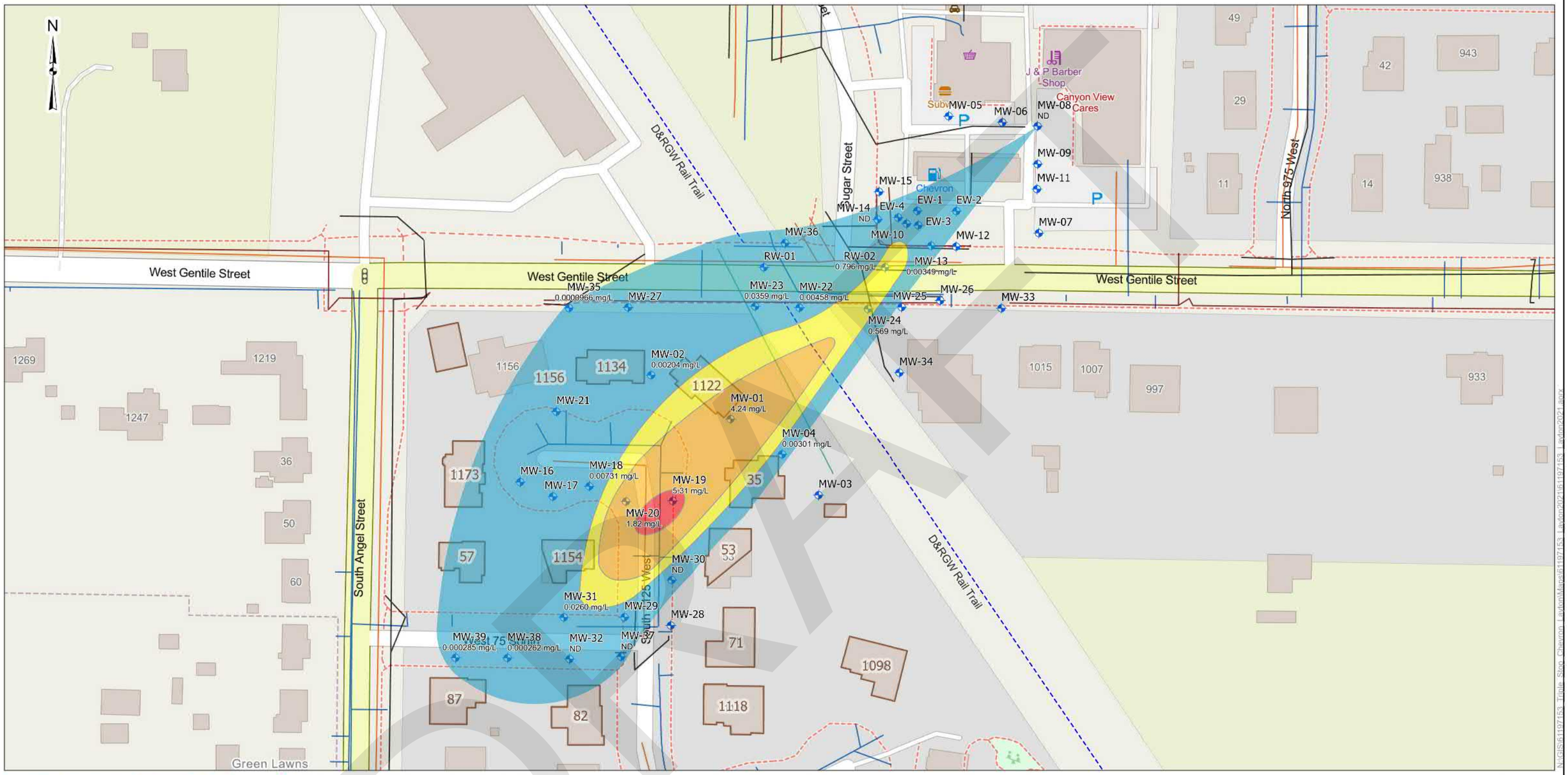
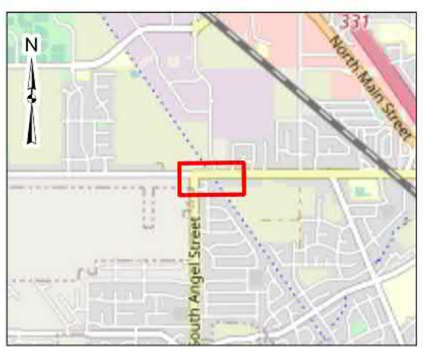
**Benzene Concentrations, October 2021**

TSC - Layton Chevron
Triple Shop Chevron Inc.
1034 West Gentile Street
Layton, UT 84041

**Exhibit**

**2**




Monitoring Well with Benzene Concentration (mg/L)
D&RGW Rail Line
Storm Drain Lines
UTOPIA AsBuilt Lines
Waterlines
Sanitary Sewer Lines
Andeavor Pipeline

Benzene Concentrations (mg/L), July 2021
- >5
- 1 - <5
- 0.3 - <1
- 0 - <0.3

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 80 160 320

| | |
|---|---|
| Project No.: | 61197153 |
| Date: | Aug 2021 |
| Drawn By: | AST |
| Reviewed By: | JRG |

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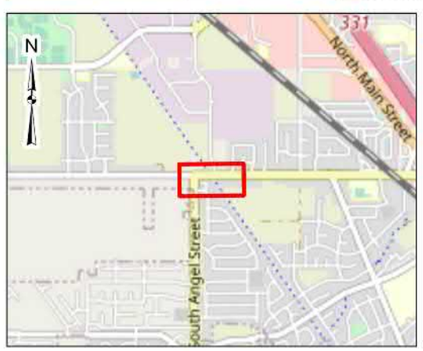
**Benzene Concentrations, July 2021**

TSC - Layton Chevron
Triple Shop Chevron Inc.
1034 West Gentile Street
Layton, UT 84041

**Exhibit**

3

DRAFT


Monitoring Well with Benzene Concentration (mg/L)
D&RGW Rail Line
Storm Drain Lines
UTOPIA AsBuilt Lines
Waterlines
Sanitary Sewer Lines
Andeavor Pipeline

## Benzene Concentrations (mg/L), April 2021

- >5
- 1 - <5
- 0.3 - <1
- 0 - <0.3

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 80 160 320

| | |
|---|---|
| Project No.: | 61197153 |
| Date: | May 2021 |
| Drawn By: | AST |
| Reviewed By: | JRG |

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**Benzene Concentrations, April 2021**

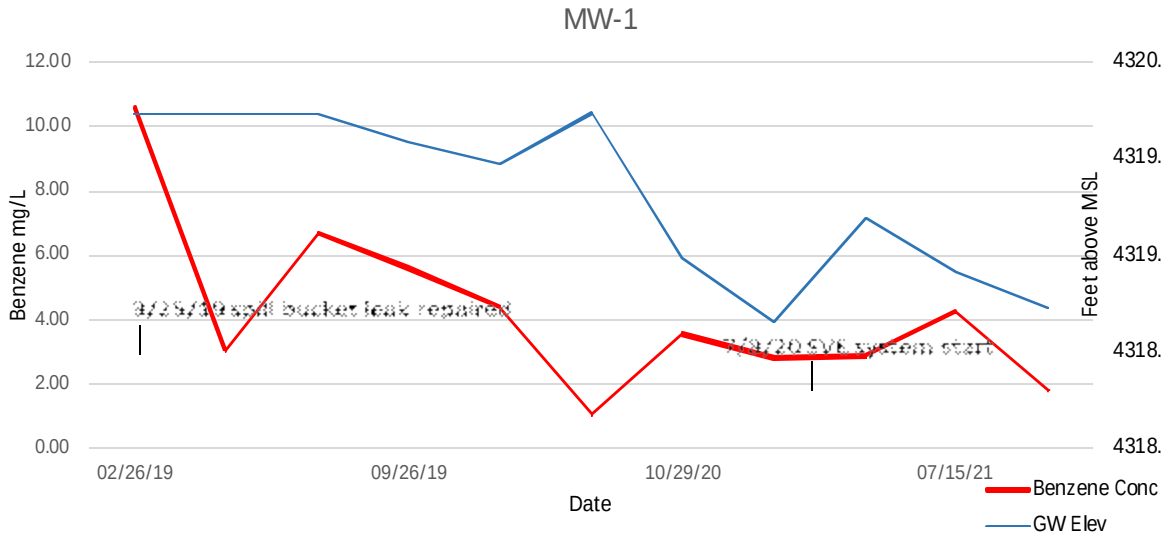
TSC - Layton Chevron
Triple Shop Chevron Inc.
1034 West Gentile Street
Layton, UT 84041

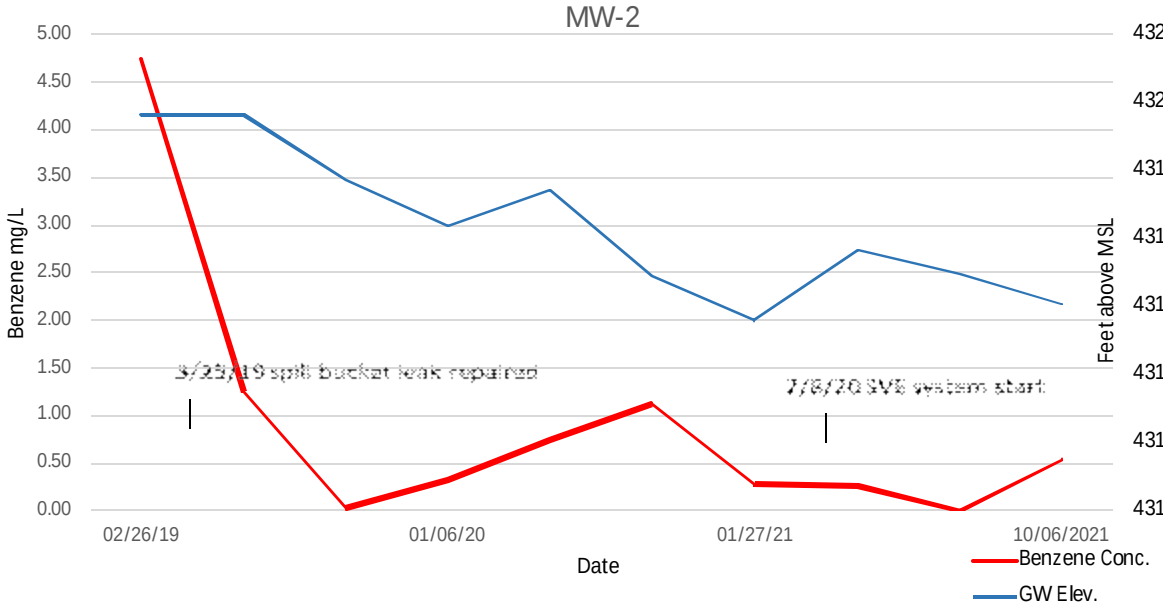
**Exhibit**

4

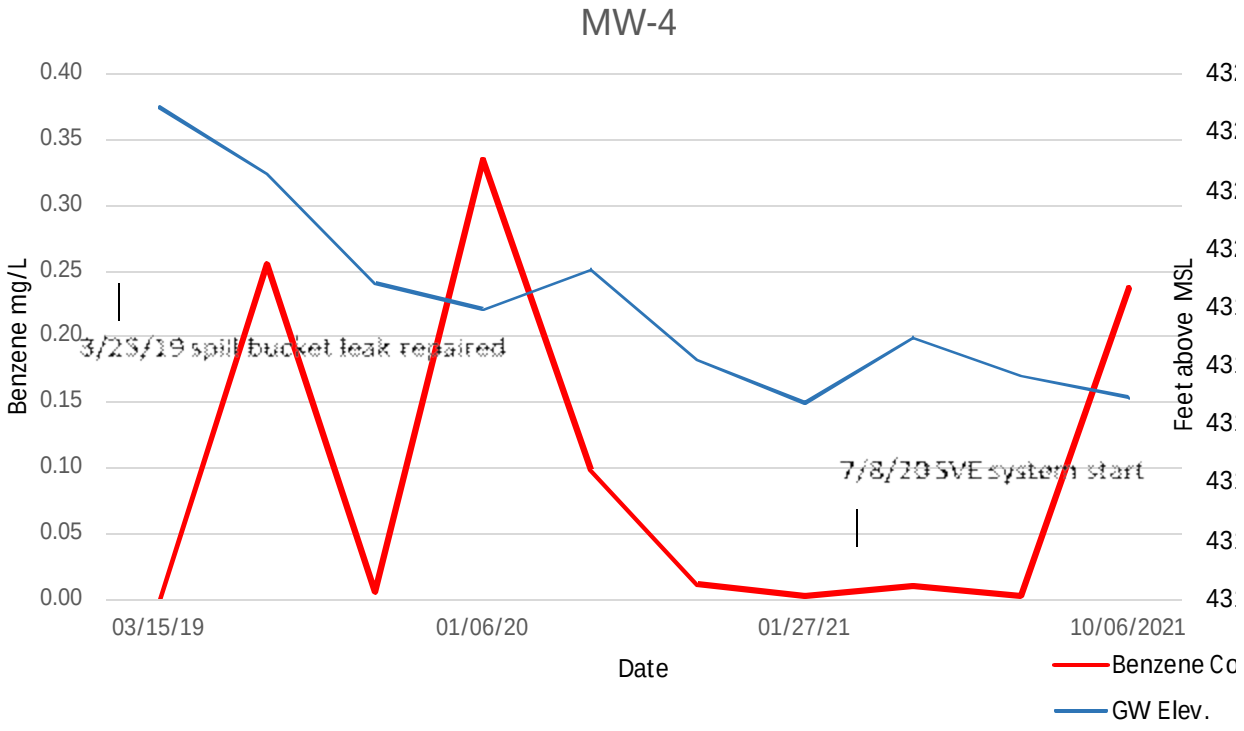
DRAFT

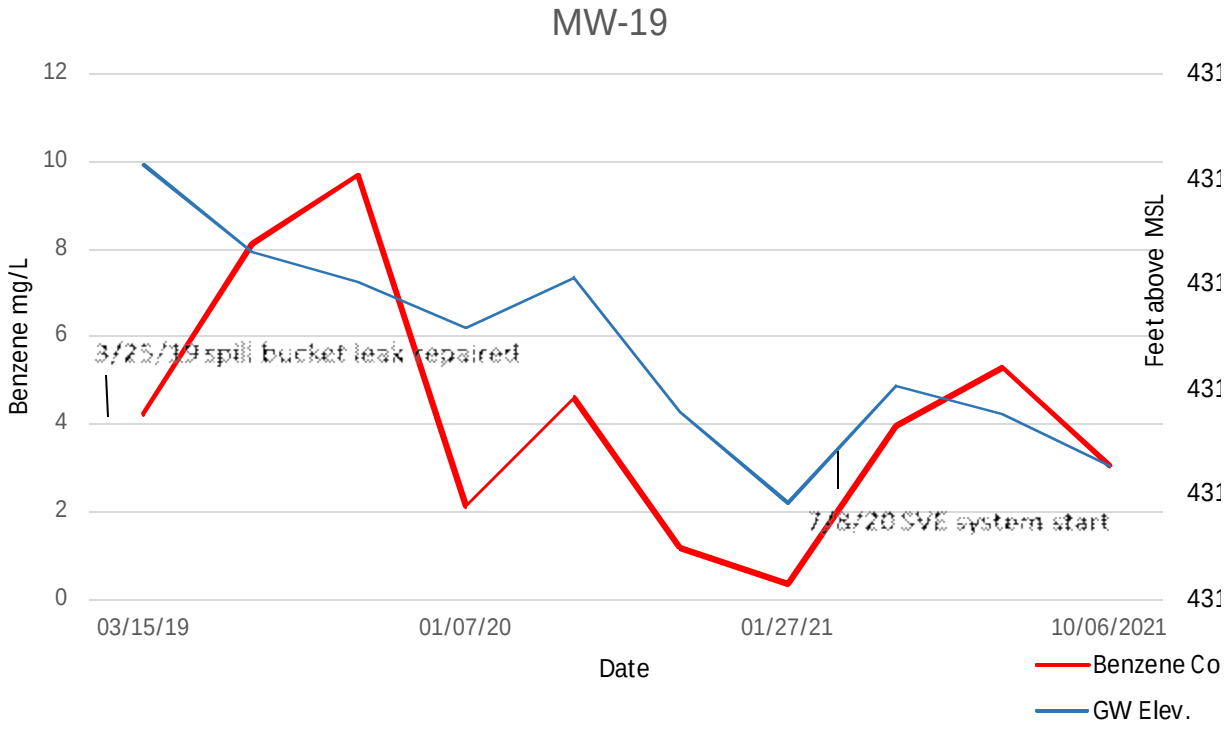
Hydrograph showing benzene concentration relative to groundwater elevation



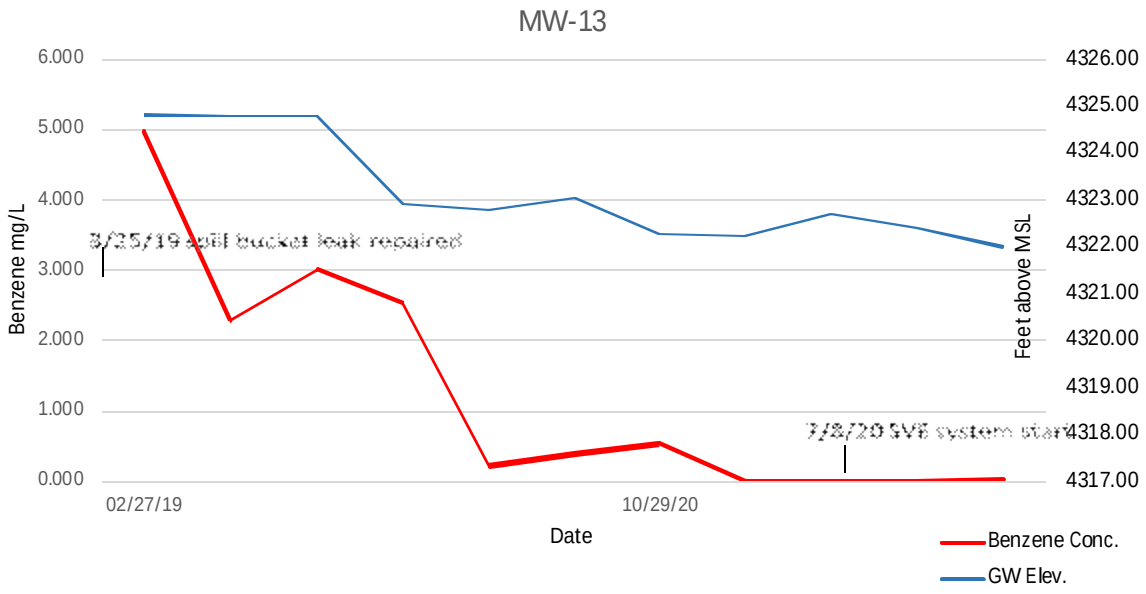



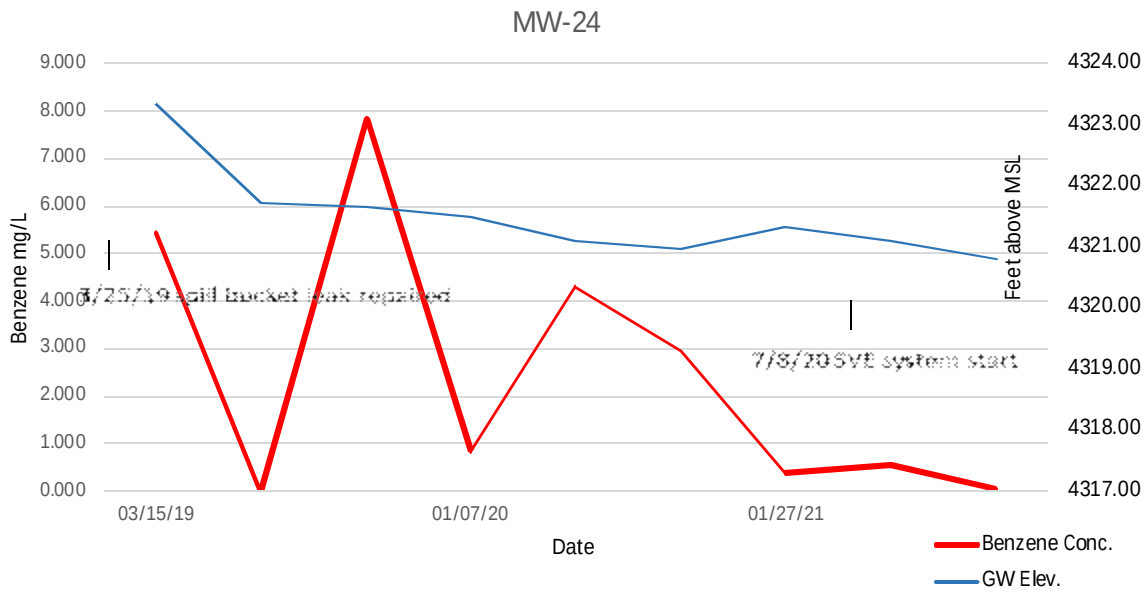
Hydrograph showing benzene concentration relative to groundwater elevation



Hydrograph showing benzene concentration relative to groundwater elevation



# APPENDIX B
# Analytical Data Tables

**Table 1**
**Monitoring Well Data and Analytical Results**
**Triple Stop Chevron**
**1034 West Gentile Street, Layton, Utah**
**Release NUB; Facility ID 3000500**
**Terracon Project 61197153**

| Sample ID | DATE | TPH-DRO | TPH-GRO | BENZENE | ETHYL-BENZENE | MTBE | NAPH-THALENE | TOLUENE | XYLENES | FPT | DTW | Groundwater Elevation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MM/DD/YY | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (feet) | (feet) | (feet) |
| DERR ISL | | 1 | 1 | 0.005 | 0.7 | 0.2 | 0.7 | 1 | 10 | | | |
| DERR Tier 1 | | 10 | 10 | 0.30 | 4 | 0.2 | 0.7 | 3 | 10 | | | |
| **MW-1** | 02/26/19 | 1.3 | 17.6 | 10.60 | 1.28 | <0.005 | 0.101 | 0.416 | 1.63 | NM | NM | 4319.73 |
| | 03/15/19 | 1.1 | 7.67 | 3.06 | 0.377 | <0.005 | 0.037 | 0.595 | 1.41 | 0.00 | 9.77 | 4319.73 |
| | 09/04/19 | 1.06 | 18.00 | 6.70 | 0.551 | <0.00100 | 0.0440 | 2.41 | 3.18 | 0.00 | 10.46 | 4319.73 |
| | 09/26/19 | 1.73 | 11.00 | 5.63 | 0.475 | <0.100 | <0.100 | 2.06 | 2.53 | 0.00 | 10.60 | 4319.59 |
| | 01/06/20 | 0.912 | 25.50 | 4.38 | 0.578 | <0.100 | 0.0773 | 2.08 | 3.28 | 0.00 | 10.71 | 4319.48 |
| | 04/01/20 | 0.440 | <100 | 1.08 | 0.167 | <0.200 | <1.00 | 0.337 | 0.688 | 0.00 | 10.45 | 4319.74 |
| | 10/29/20 | 0.737 | 15.10 | 3.59 | 0.484 | <0.002 | 0.0385 | 2.040 | 2.110 | 0.00 | 11.20 | 4318.99 |
| | 01/27/21 | 1.10 | 13.1 | 2.84 | 0.565 | <0.0250 | 0.0451 | 0.463 | 1.75 | 0.00 | 11.53 | 4318.66 |
| | 04/07/21 | 1.50 | 2.79 | 2.89 | 0.0644 | <0.00500 | 0.00837 | 1.12 | 0.396 | 0.00 | 10.99 | 4319.20 |
| | 07/15/21 | 1.17 | 132 | 4.24 | 0.781 | <0.200 | <1.00 | 1.3 | 5.58 | 0.00 | 11.27 | 4318.92 |
| | 10/06/2021 | 0.784 | 7.68 | 1.86 | 0.386 | <0.0250 | 0.073 | 0.253 | 2.27 | 0.00 | 11.46 | 4318.73 |
| **MW-2** | 02/26/19 | <1.0 | 6.95 | 4.74 | <0.012 | <0.005 | 0.053 | <0.012 | 0.106 | NM | NM | 4319.91 |
| | 03/15/19 | <1.0 | 2.4 | 1.24 | 0.03 | <0.005 | 0.028 | 0.018 | 0.086 | 0.00 | 10.10 | 4319.91 |
| | 09/04/19 | <0.100 | 0.430 | 0.02 | 0.00398 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.58 | 4319.43 |
| | 01/06/20 | 0.0807 | 1.760 | 0.33 | 0.0522 | <0.00100 | 0.00473 | 0.000562 | 0.0182 | 0.00 | 10.92 | 4319.09 |
| | 04/01/20 | 0.383 | 4.480 | 0.76 | 0.132 | <0.0100 | 0.0309 | 0.0134 | 0.6320 | 0.00 | 10.65 | 4319.36 |
| | 10/29/20 | 0.636 | 9.050 | 1.12 | 0.370 | <0.001 | 0.0532 | 0.0226 | 1.2 | 0.00 | 11.28 | 4318.73 |
| | 01/27/21 | 0.139 | 2.92 | 0.282 | 0.115 | <0.0100 | <0.0500 | 0.3220 | 0.584 | 0.00 | 11.61 | 4318.40 |
| | 04/07/21 | 0.418 | 1.45 | 0.264 | 0.0441 | <0.0100 | <0.0500 | 0.0102 | 0.121 | 0.00 | 11.10 | 4318.91 |
| | 07/15/21 | <0.100 | 0.575 | 0.00204 | 0.000733 | <0.00100 | <0.00500 | <0.00100 | 0.000697 | 0.00 | 11.27 | 4318.74 |
| | 10/06/2021 | 0.403 | 7.67 | 0.527 | 0.307 | <0.0100 | 0.0492 | 0.0519 | 2.32 | 0.00 | 11.49 | 4318.52 |
| **MW-3*** | 03/15/19 | <1.0 | 2.71 | 0.550 | 0.073 | <0.005 | <0.012 | 0.027 | 0.813 | 0.00 | 9.51 | 4319.78 |
| **MW-3** | 03/19/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.72 | 4320.57 |
| | 09/04/19 | <0.100 | 0.327 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 9.74 | 4319.55 |
| | 01/06/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 9.84 | 4319.45 |
| | 04/01/20 | <0.100 | <0.500 | 0.00 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00100 | 0.00 | 9.54 | 4319.75 |
| **MW-4*** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.83 | 4321.22 |
| **MW-4** | 03/19/19 | <1.0 | 1.23 | 0.2560 | 0.020 | <0.005 | <0.012 | <0.012 | 0.302 | 0.00 | 9.40 | 4320.65 |
| | 09/04/19 | <0.100 | 0.351 | 0.0050 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 10.35 | 4319.70 |
| | 01/06/20 | <0.100 | 1.680 | 0.3350 | 0.00165 | <0.00100 | <0.00100 | 0.0149 | 0.0103 | 0.00 | 10.56 | 4319.49 |
| | 04/01/20 | <0.100 | 0.259 | 0.09860 | <0.00100 | <0.00100 | <0.00500 | 0.00319 | <0.00300 | 0.00 | 10.22 | 4319.83 |
| | 10/29/20 | <0.100 | 0.0598 | 0.0110 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.00 | 4319.05 |
| | 01/27/21 | <0.100 | <0.500 | 0.00222 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.37 | 4318.68 |
| | 04/07/21 | 0.0421 | <0.500 | 0.0101 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | 0.000772 | 0.00 | 10.80 | 4319.25 |
| | 07/15/21 | <0.100 | <0.500 | 0.00301 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.13 | 4318.92 |
| | 10/06/2021 | <0.100 | 1 | 0.237 | 0.00154 | <0.00100 | <0.00500 | 0.00752 | 0.0413 | 0.00 | 11.32 | 4318.73 |
| **MW-5** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.65 | 4325.22 |
| **MW-6** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.50 | 4325.62 |
| **MW-7** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.51 | 4325.45 |
| **MW-8** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 9.07 | 4325.81 |
| | 09/04/19 | <0.100 | 0.33 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 10.31 | 4324.57 |
| | 01/06/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 10.16 | 4324.72 |
| | 03/31/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 9.96 | 4324.92 |
| | 10/29/20 | <0.0247 | <0.100 | <0.00100 | <0.00100 | <0.0001 | 0.00101 | <0.00100 | <0.00300 | 0.00 | 10.96 | 4323.92 |
| | 01/27/21 | <0.100 | <0.500 | 0.000136 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.04 | 4323.84 |
| | 04/08/21 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.49 | 4324.39 |
| | 07/13/21 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.90 | 4323.98 |
| | 10/07/2021 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | 0.0171 | <0.00100 | <0.00300 | 0.00 | 11.26 | 4323.62 |
| **MW-9** | 03/15/19 | 0.0379 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.95 | 4325.62 |
| **MW-10** | 03/12/19 | 13.2 | 33.1 | 9.32 | 1.12 | <0.005 | 0.221 | 4.65 | 7.72 | 0.09 | 10.10 | 4324.43 |
| | 03/15/19 | 11.8 | 78.0 | 14.5 | 2.32 | <0.005 | 0.394 | 25.1 | 18.1 | 0.00 | 10.00 | 4324.46 |
| | 03/20/19 | 13.3 | 68.7 | 13.8 | 2.13 | <0.100 | 0.598 | 17.9 | 16.2 | 0.00 | 9.98 | 4324.48 |
| | 04/08/21 | 10.8 | 23.1 | 0.0662 | 0.119 | <0.050 | 0.177 | 0.710 | 6.88 | 0.00 | 12.10 | 4322.36 |
| | 10/08/2021 | 10.8 | 23.1 | 0.0662 | 0.309 | <0.0500 | 0.153 | 1.64 | 4.36 | 0.01 | 12.86 | 4321.71 |

**Table 1**
**Monitoring Well Data and Analytical Results**
**Triple Stop Chevron**
**1034 West Gentile Street, Layton, Utah**
**Release NUB; Facility ID 3000500**
**Terracon Project 61197153**

| Sample ID | DATE | TPH-DRO | TPH-GRO | BENZENE | ETHYL-BENZENE | MTBE | NAPH-THALENE | TOLUENE | XYLENES | FPT | DTW | Groundwater Elevation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MM/DD/YY | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (feet) | (feet) | (feet) |
| DERR ISL | | 1 | 1 | 0.005 | 0.7 | 0.2 | 0.7 | 1 | 10 | | | |
| DERR Tier 1 | | 10 | 10 | 0.30 | 4 | 0.2 | 0.7 | 3 | 10 | | | |
| **MW-11** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 9.16 | 4325.53 |
| **MW-12** | 02/27/19 | <1.0 | 4.54 | 0.32 | 0.019 | <0.005 | <0.012 | 0.125 | 0.069 | NM | NM | -- |
| | 03/15/19 | <1.0 | 4.92 | 0.1580 | 0.012 | <0.005 | <0.012 | 0.082 | 0.044 | 0.00 | 7.46 | 4325.03 |
| | 09/05/19 | 0.0562 | 2.11 | 0.0746 | 0.00274 | <0.00100 | <0.00500 | 0.00673 | 0.0107 | 0.00 | 10.57 | 4321.92 |
| | 01/08/20 | <0.100 | 0.193 | 0.0076 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | 0.00110 | 0.00 | 9.49 | 4323.00 |
| | 03/31/20 | <0.100 | 0.159 | 0.0036 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | 0.00172 | 0.00 | 9.23 | 4323.26 |
| **MW-13** | 02/27/19 | 4.4 | 19.0 | 4.980 | 1.06 | <0.200 | <0.500 | 4.57 | 8.38 | NM | NM | 4324.82 |
| | 03/15/19 | 2.1 | 10.7 | 2.29 | 0.464 | <0.005 | 0.039 | 1.27 | 3.06 | 0.00 | 8.00 | 4324.82 |
| | 03/20/18 | 2.9 | 17.0 | 3.020 | 0.635 | <0.005 | 0.045 | 1.97 | 4.42 | 0.00 | 8.01 | 4324.81 |
| | 09/05/19 | 2.5 | 57.3 | 2.530 | 1.53 | <0.00100 | 0.171 | 1.47 | 11.50 | 0.00 | 9.88 | 4322.94 |
| | 01/08/20 | 0.655 | 4.09 | 0.225 | 0.133 | <0.100 | 0.0298 | 0.0127 | 0.756 | 0.00 | 10.02 | 4322.80 |
| | 03/31/20 | 1.270 | 4.38 | 0.402 | 0.220 | <0.0100 | 0.0383 | 0.0317 | 1.340 | 0.00 | 9.78 | 4323.04 |
| | 10/29/20 | 0.762 | 4.19 | 0.532 | 0.191 | <0.001 | 0.0688 | 0.0573 | 0.876 | 0.00 | 10.53 | 4322.29 |
| | 01/27/21 | 0.146 | <0.500 | 0.00343 | 0.00280 | <0.001 | 0.00195 | <0.00100 | 0.00209 | 0.00 | 10.56 | 4322.26 |
| | 04/08/21 | 0.267 | 0.272 | 0.00200 | 0.00305 | <0.00100 | <0.00500 | <0.00100 | 0.000462 | 0.00 | 10.12 | 4322.70 |
| | 07/13/21 | 1.6 | 8.52 | 0.00349 | 0.524 | <0.00100 | 0.0881 | 0.091 | 3.88 | 0.00 | 10.39 | 4322.43 |
| | 10/08/2021 | 3.35 | 9.96 | 0.0144 | 0.771 | <0.0500 | 0.146 | 0.214 | 4.83 | 0.00 | 10.81 | 4322.01 |
| **MW-14** | 02/27/19 | 3.3 | 13.5 | 2.090 | 0.511 | <0.005 | 0.046 | 0.804 | 3.44 | NM | NM | -- |
| | 03/15/19 | 2.5 | 9.21 | 1.16 | 0.365 | <0.005 | 0.039 | 0.765 | 2.56 | 0.00 | 8.77 | 4324.09 |
| | 03/20/19 | 2.1 | 11.0 | 2.380 | 0.341 | <0.005 | 0.034 | 1.44 | 2.43 | 0.00 | 8.77 | 4324.09 |
| | 09/05/19 | 0.415 | 6.3 | 0.798 | 0.082 | <0.00100 | 0.0204 | 0.485 | 0.428 | 0.00 | 10.22 | 4322.64 |
| | 01/08/20 | <0.100 | 1.02 | 0.018 | 0.00143 | <0.00100 | <0.00500 | 0.000857 | 0.00136 | 0.00 | 10.30 | 4322.56 |
| | 03/31/20 | <0.100 | 0.811 | 0.032 | 0.00282 | <0.00100 | <0.00100 | 0.00119 | 0.00383 | 0.00 | 10.05 | 4322.81 |
| | 10/29/20 | <0.247 | 0.375 | 0.000960 | 0.00019 | <0.0001 | <0.0050 | <0.00100 | 0.00048 | 0.00 | 11.01 | 4321.85 |
| | 01/27/21 | <0.100 | <0.500 | 0.000308 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.25 | 4321.61 |
| | 04/08/21 | 0.0247 | 0.292 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.71 | 4310.90 |
| | 07/13/21 | 0.0601 | 0.596 | <0.00100 | <0.00100 | <0.00100 | 0.00242 | <0.00100 | <0.00300 | 0.00 | 10.90 | 4321.96 |
| | 10/08/2021 | <0.100 | <0.500 | 0.000383 | <0.00100 | <0.00100 | 0.013 | <0.00100 | <0.00300 | 0.00 | 11.24 | 4321.62 |
| **MW-15** | 02/27/19 | <1.0 | 3.28 | 0.3180 | <0.012 | <0.005 | <0.012 | <0.012 | 0.031 | NM | NM | -- |
| | 03/15/19 | <1.0 | 0.334 | 0.038 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 9.43 | 4323.99 |
| | 09/05/19 | <0.100 | 0.217 | 0.0018 | <0.00100 | <0.00100 | <0..00500 | <0.00100 | <0.00300 | 0.00 | 10.56 | 4322.86 |
| | 01/08/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0..00500 | <0.00100 | <0.00300 | 0.00 | 10.60 | 4322.82 |
| | 03/31/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0..00500 | <0.00100 | <0.00300 | 0.00 | 10.37 | 4323.05 |
| **MW-16** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 10.10 | 4318.11 |
| | 09/04/19 | <0.100 | 0.323 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.30 | 4317.91 |
| | 01/06/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.02 | 4317.19 |
| | 04/01/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.71 | 4317.50 |
| **MW-17** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 9.62 | 4318.29 |
| **MW-18** | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 9.12 | 4318.62 |
| | 09/04/19 | <0.100 | 0.324 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 9.45 | 4318.29 |
| | 01/06/20 | <0.100 | <0.500 | 0.00159 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.01 | 4317.73 |
| | 04/01/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 9.71 | 4318.03 |
| | 04/07/21 | 0.0531 | 0.150 | 0.0181 | <0.00100 | 0.000169 | <0.00100 | <0.00100 | 0.00117 | 0.00 | 10.26 | 4317.48 |
| | 07/15/21 | <0.100 | <0.500 | 0.00731 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.26 | 4317.48 |
| | 10/06/2021 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.51 | 4317.23 |
| **MW-19** | 03/15/19 | <1.0 | 6.29 | 4.23 | 0.423 | <0.005 | 0.040 | 0.085 | 0.333 | 0.00 | 8.05 | 4319.07 |
| | 09/04/19 | 1.47 | 10.30 | 8.130 | 0.81 | <0.00100 | 0.0548 | 0.0589 | 0.0589 | 0.00 | 8.46 | 4318.66 |
| | 09/27/19 | 1.68 | 12.50 | 9.700 | 0.746 | <0.0400 | 0.0862 | 0.0464 | 1.51 | 0.00 | 8.61 | 4318.51 |
| | 01/07/20 | 0.198 | 4.56 | 2.140 | 0.0558 | <0.00100 | 0.00401 | 0.00165 | <0.00300 | 0.00 | 8.83 | 4318.29 |
| | 04/01/20 | 0.559 | 14.20 | 4.580 | 0.3720 | <0.00500 | <0.250 | <0.0500 | 0.0569 | 0.00 | 8.59 | 4318.53 |
| | 10/29/20 | 0.371 | 5.59 | 1.190 | 0.2240 | <0.005 | <0.05 | 0.08530 | 0.517 | 0.00 | 9.23 | 4317.89 |
| | 01/27/21 | 0.313 | 1.47 | 0.340 | 0.156 | <0.0100 | <0.0500 | 0.00886 | 0.00742 | 0.00 | 9.66 | 4317.46 |
| | 04/07/21 | 2.04 | 36.4 | 3.98 | 0.998 | <0.00500 | 0.0521 | 4.06 | 4.22 | 0.00 | 9.10 | 4318.02 |
| | 07/14/21 | 1.09 | 48.3 | 5.31 | 0.938 | <0.0500 | 0.0731 | 0.526 | 3.18 | 0.00 | 9.24 | 4317.88 |

**Table 1**
**Monitoring Well Data and Analytical Results**
**Triple Stop Chevron**
**1034 West Gentile Street, Layton, Utah**
**Release NUB; Facility ID 3000500**
**Terracon Project 61197153**

| Sample ID | DATE | TPH-DRO | TPH-GRO | BENZENE | ETHYL-BENZENE | MTBE | NAPH-THALENE | TOLUENE | XYLENES | FPT | DTW | Groundwater Elevation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MM/DD/YY | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (feet) | (feet) | (feet) |
| DERR ISL | | 1 | 1 | 0.005 | 0.7 | 0.2 | 0.7 | 1 | 10 | | | |
| DERR Tier 1 | | 10 | 10 | 0.30 | 4 | 0.2 | 0.7 | 3 | 10 | | | |
| | 10/06/2021 | 0.861 | 11.6 | 3.04 | 0.593 | <0.0100 | 0.0762 | 0.319 | 1.5 | 0.00 | 9.48 | 4317.64 |
| MW-20 | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.75 | 4318.61 |
| | 04/07/21 | 0.0686 | 3.36 | 1.43 | 0.0210 | <0.0100 | 0.00222 | 0.0127 | 0.0169 | 0.00 | 9.72 | 4317.64 |
| | 07/14/21 | 0.268 | 15.9 | 1.82 | 0.161 | <0.0200 | 0.0359 | 0.136 | 0.0888 | 0.00 | 9.76 | 4317.60 |
| | 10/06/2021 | 0.117 | 0.598 | 0.132 | 0.0868 | <0.00100 | 0.00653 | 0.00223 | 0.00159 | 0.00 | 10.02 | 4317.34 |
| MW-21 | 03/15/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 9.55 | 4318.77 |
| | 09/04/19 | <0.100 | 0.361 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 9.73 | 4318.59 |
| | 01/06/20 | 0.19 | <0.500 | 0.00 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.35 | 4317.97 |
| | 04/01/20 | <0.100 | <0.500 | 0.01 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.09 | 4318.23 |
| MW-22 | 02/27/19 | 6.7 | 41.4 | 6.32 | 2.12 | <0.200 | <0.500 | 10.4 | 16.9 | NM | NM | -- |
| | 03/20/19 | 1.1 | 2.35 | 0.42 | 0.116 | <0.005 | 0.016 | 0.182 | 0.665 | 0.00 | 11.60 | 4322.30 |
| | 09/04/19 | 1.08 | 7.40 | 0.25 | 0.180 | <0.00100 | 0.0286 | 0.462 | 1.280 | 0.00 | 12.70 | 4321.20 |
| | 01/07/20 | 1.85 | 29.50 | 6.81 | 1.11 | <0.00100 | 0.144 | 1.06 | 2.06 | 0.00 | 12.83 | 4321.07 |
| | 03/31/20 | 1.45 | 15.90 | 3.62 | 0.495 | <0.100 | <0.500 | 1.58 | 2.08 | 0.00 | 12.59 | 4321.31 |
| | 10/29/20 | 0.394 | 3.09 | 0.12 | 0.136 | <0.0001 | 0.02 | 0.0212 | 0.366 | 0.00 | 13.29 | 4320.61 |
| | 04/08/21 | 0.664 | 0.997 | 0.00627 | 0.0408 | <0.00100 | 0.00714 | 0.0212 | 0.134 | 0.00 | 13.08 | 4320.82 |
| | 07/16/21 | 0.207 | 1.46 | 0.00458 | 0.0328 | <0.00100 | 0.00335 | 0.00405 | 0.0429 | 0.00 | 13.35 | 4320.55 |
| | 10/07/2021 | 0.0847 | 0.342 | 0.00327 | 0.00528 | <0.00100 | 0.00205 | 0.00103 | 0.00749 | 0.00 | 13.58 | 4320.32 |
| MW-23 | 02/27/19 | 5.2 | 21.5 | 5.850 | 1.09 | <0.005 | <0.012 | 5.96 | 8.56 | NM | NM | -- |
| | 03/20/19 | <1.0 | 1.02 | 0.184 | 0.048 | <0.005 | <0.012 | 0.231 | 0.270 | 0.00 | 11.90 | 4321.77 |
| | 09/26/19 | 0.917 | 1.96 | 0.728 | 0.143 | <0.00200 | 0.0668 | 0.417 | 0.382 | 0.00 | 11.92 | 4321.75 |
| | 01/08/20 | 0.311 | 6.26 | 1.180 | 0.188 | <0.00100 | <0.00100 | 0.0602 | 0.412 | 0.00 | 13.02 | 4320.65 |
| | 03/31/20 | 0.363 | 8.90 | 2.24 | 0.177 | <0.0250 | <0.125 | 0.971 | 0.538 | 0.00 | 12.75 | 4320.92 |
| | 10/29/20 | <0.100 | 0.404 | 0.0151 | 0.0232 | <0.0001 | 0.00374 | 0.00058 | 0.00752 | 0.00 | 13.36 | 4320.31 |
| | 01/28/21 | <0.100 | <0.500 | 0.000372 | 0.0014 | <0.00100 | <0.00500 | <0.00100 | 0.000610 | 0.00 | 13.72 | 4319.95 |
| | 04/08/21 | 0.260 | 0.437 | 0.00889 | 0.0266 | <0.00100 | 0.00190 | 0.000575 | 0.0450 | 0.00 | 13.23 | 4320.44 |
| | 07/16/21 | 0.453 | 15.7 | 0.0359 | 0.224 | <0.0250 | <0.125 | <0.0250 | 0.565 | 0.00 | 13.45 | 4320.22 |
| | 10/07/2021 | 0.0533 | 0.116 | 0.00368 | 0.0272 | <0.00100 | 0.00168 | <0.00100 | 0.00234 | 0.00 | 13.69 | 4319.98 |
| MW-24 | 03/20/19 | 4.9 | 18.6 | 5.420 | 0.942 | <0.005 | 0.132 | 0.233 | 7.11 | 0.00 | 9.98 | 4323.34 |
| | 09/04/19 | 0.0394 | 0.390 | 0.005 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.61 | 4321.71 |
| | 01/07/20 | 1.35 | 20.3 | 7.860 | 1.27 | <0.00100 | 0.0705 | 0.0304 | 1.18 | 0.00 | 11.66 | 4321.66 |
| | 03/31/20 | 1.10 | <12.5 | 0.853 | 0.258 | <0.0250 | 0.0309 | 0.0161 | 0.754 | 0.00 | 11.42 | 4321.49 |
| | 10/29/20 | 2.6 | 36.6 | 4.320 | 0.506 | <0.002 | 0.0942 | 0.32 | 5.660 | 0.00 | 12.22 | 4321.10 |
| | 02/04/21 | 4.2 | 19.6 | 2.940 | 0.717 | <0.0250 | 0.120 | 0.241 | 4.28 | 0.00 | 12.35 | 4320.97 |
| | 04/08/21 | 5.96 | 7.15 | 0.374 | 0.0891 | <0.0250 | 0.0379 | 0.0152 | 0.445 | 0.00 | 11.98 | 4321.34 |
| | 07/13/21 | 1.07 | 16.8 | 0.569 | 0.206 | <0.0250 | 0.028 | 0.0533 | 0.708 | 0.00 | 12.22 | 4321.10 |
| | 10/7/2021 | _ | 3.69 | 0.0438 | 0.548 | <0.0250 | 0.0649 | 0.0212 | 1.7 | 0.00 | 12.51 | 4320.81 |
| MW-25 | 03/20/19 | 1.5 | 5.53 | 1.25 | 0.298 | <0.005 | 0.028 | 0.243 | 2.06 | 0.00 | 9.01 | 4323.90 |
| | 09/04/19 | <0.100 | 0.351 | 0.000668 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.88 | 4322.03 |
| | 01/07/20 | <0.100 | <0.500 | 0.00182 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.94 | 4321.97 |
| | 03/31/20 | <0.100 | <0.500 | 0.00136 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.68 | 4322.23 |
| | 04/08/21 | 0.0501 | <0.500 | 0.000130 | 0.00348 | <0.00100 | <0.00500 | 0.000415 | 0.00809 | 0.00 | 11.21 | 4321.70 |
| MW-26 | 03/19/19 | <1.0 | 0.991 | 0.127 | <0.012 | <0.005 | <0.012 | 0.012 | 0.033 | 0.00 | 8.31 | 4324.36 |
| MW-27 | 03/20/19 | <1.0 | 1.44 | 0.2810 | 0.056 | <0.005 | <0.012 | 0.618 | 0.334 | 0.00 | 13.37 | 4319.95 |
| MW-28 | 03/20/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | NM | NM | -- |
| MW-29 | 03/20/19 | <1.0 | <0.125 | 0.1200 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | NM | NM | -- |
| MW-30 | 03/20/19 | <1.0 | 0.978 | 0.8200 | 0.076 | <0.005 | <0.012 | 0.014 | 0.068 | NM | NM | -- |
| | 09/04/19 | 0.0784 | 0.516 | 0.1390 | 0.0584 | <0.00100 | <0.0050 | <0.00100 | <0.00100 | 0.00 | 8.88 | 4317.98 |
| | 01/07/20 | <0.100 | <0.500 | 0.0098 | <0.00100 | <0.00100 | <0.0050 | <0.00100 | <0.00300 | 0.00 | 9.28 | 4317.58 |
| | 04/01/20 | <0.100 | <0.500 | 0.00348 | <0.00100 | <0.00100 | <0.0050 | <0.00100 | <0.00300 | 0.00 | 9.03 | 4317.83 |
| | 10/29/20 | <0.0247 | 0.0932 | 0.02040 | <0.00100 | <0.0001 | <0.0050 | <0.00100 | <0.00300 | 0.00 | 9.68 | 4317.18 |
| | 01/27/21 | <0.100 | <0.500 | 0.000131 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | 0.003000 | 0.00 | 10.15 | 4316.71 |
| | 04/07/21 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | 0.003000 | 0.00 | 9.62 | 4317.24 |
| | 07/15/21 | 0.0295 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 9.71 | 4317.15 |

**Table 1**
**Monitoring Well Data and Analytical Results**
**Triple Stop Chevron**
**1034 West Gentile Street, Layton, Utah**
**Release NUB; Facility ID 3000500**
**Terracon Project 61197153**

| Sample ID | DATE | TPH-DRO | TPH-GRO | BENZENE | ETHYL-BENZENE | MTBE | NAPH-THALENE | TOLUENE | XYLENES | FPT | DTW | Groundwater Elevation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MM/DD/YY | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (feet) | (feet) | (feet) |
| DERR ISL | | 1 | 1 | 0.005 | 0.7 | 0.2 | 0.7 | 1 | 10 | | | |
| DERR Tier 1 | | 10 | 10 | 0.30 | 4 | 0.2 | 0.7 | 3 | 10 | | | |
| | 10/06/2021 | <0.100 | <0.500 | 0.0253 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 9.93 | 4316.93 |
| MW-31 | 03/27/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.36 | 4317.50 |
| | 09/04/19 | <0.100 | 0.34 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 8.85 | 4317.01 |
| | 01/06/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 9.42 | 4316.44 |
| | 04/01/20 | <0.100 | 0.134 | 0.0342 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 9.13 | 4316.73 |
| | 10/29/20 | <0.02 | 0.385 | 0.3850 | <0.00100 | <0.0001 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 9.70 | 4316.16 |
| | 01/27/21 | <0.100 | 0.836 | 0.2480 | 0.00355 | <0.00100 | <0.00500 | <0.00100 | 0.000244 | 0.00 | 10.23 | 4315.63 |
| | 04/07/21 | 0.0609 | 1.030 | 0.3540 | 0.000428 | 0.000123 | <0.00500 | <0.00100 | 0.000794 | 0.00 | 9.74 | 4316.12 |
| | 07/14/21 | 0.0297 | 0.709 | 0.0260 | 0.00074 | 0.000248 | <0.00500 | <0.00100 | 0.00146 | 0.00 | 9.66 | 4316.20 |
| | 10/04/2021 | <0.100 | <0.500 | 0.00126 | 0.00148 | 0.00021 | 0.00195 | <0.00100 | 0.000354 | 0.00 | 9.87 | 4315.99 |
| MW-32 | 03/27/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.74 | 4317.15 |
| | 01/27/21 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.61 | 4315.28 |
| | 04/07/21 | 0.0383 | <0.500 | 0.000110 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.15 | 4315.74 |
| | 07/14/21 | <0.100 | <0.500 | <0.00100 | <0.00100 | 0.000175 | <0.00500 | <0.00100 | 0.00037 | 0.00 | 10.04 | 4315.85 |
| | 10/04/2021 | <0.100 | <0.500 | <0.00100 | <0.00100 | 0.000194 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.23 | 4315.66 |
| MW-33 | 03/27/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | 0.00 | 8.06 | 4324.93 |
| MW-34 | 03/27/19 | <1.0 | <0.125 | <0.005 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | NM | NM | - |
| | 09/04/19 | <0.100 | 0.336 | 0.00253 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.48 | 4321.30 |
| | 01/07/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.45 | 4321.33 |
| | 03/31/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.19 | 4321.59 |
| MW-35 | 04/02/19 | <1.0 | 1.84 | 0.9270 | <0.012 | <0.005 | 0.017 | 0.078 | 0.258 | NM | NM | -- |
| | 09/04/19 | 0.262 | 5.81 | 1.5200 | 0.0931 | <0.00100 | 0.0121 | 0.140 | 0.558 | 0.00 | 13.37 | 4318.82 |
| | 01/08/20 | 0.161 | 4.70 | 1.0600 | 0.0735 | <0.00100 | 0.0255 | 0.199 | 0.203 | 0.00 | 13.72 | 4318.47 |
| | 03/31/20 | 0.0710 | 0.62 | 0.0789 | 0.0292 | <0.00100 | 0.0125 | 0.00267 | 0.0673 | 0.00 | 13.44 | 4318.75 |
| | 07/16/21 | <0.100 | <0.500 | 0.0000966 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | | | |
| | 10/07/2021 | <0.100 | <0.500 | 0.000434 | 0.00117 | <0.00100 | 0.00385 | <0.00100 | 0.000651 | 0.00 | 14.00 | 4318.19 |
| MW-36 | 04/02/19 | <1.0 | <0.125 | 0.026 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | NM | NM | - |
| | 09/04/19 | <0.100 | 1.31 | 0.193 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | 0.00352 | 0.00 | 11.60 | 4321.66 |
| | 01/07/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.74 | 4321.52 |
| | 03/31/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 11.50 | 4321.76 |
| MW-37 | 04/02/19 | <1.0 | <0.125 | 0.0860 | <0.012 | <0.005 | <0.012 | <0.012 | <0.012 | NM | NM | - |
| | 09/04/19 | <0.105 | 0.334 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 9.58 | 4316.90 |
| | 01/06/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 10.10 | 4316.38 |
| | 04/01/20 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 9.84 | 4316.64 |
| | 10/29/20 | <0.0329 | <0.100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 0.00 | 10.36 | 4316.12 |
| | 01/27/21 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.79 | 4315.69 |
| | 04/07/21 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.40 | 4316.08 |
| | 07/14/21 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.37 | 4316.11 |
| | 10/04/2021 | <0.100 | <0.500 | <0.00100 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.53 | 4315.95 |
| MW-38 | 07/15/21 | <0.100 | <0.500 | 0.000262 | <0.00100 | 0.000402 | <0.00500 | <0.00100 | 0.000332 | 0.00 | 10.32 | 4315.53 |
| | 10/04/2021 | <0.100 | <0.500 | <0.00100 | <0.00100 | 0.000765 | <0.00500 | <0.00100 | 0.000397 | 0.00 | 10.55 | 4315.30 |
| MW-39 | 07/15/21 | <0.100 | <0.500 | 0.000285 | <0.00100 | <0.00100 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.20 | 4315.29 |
| | 10/04/2021 | <0.100 | <0.500 | <0.00100 | <0.00100 | 0.000286 | <0.00500 | <0.00100 | <0.00300 | 0.00 | 10.46 | 4315.03 |
| MW-40 | 10/07/2021 | 0.0794 | 1.11 | 0.191 | 0.064 | <0.00100 | 0.0134 | 0.023 | 0.245 | 0.00 | 9.35 | 4318.12 |
| MW-41 | 10/07/2021 | <0.200 | 0.135 | 0.0346 | 0.00186 | <0.00100 | 0.0283 | 0.000321 | 0.00284 | 0.00 | 11.15 | 4317.68 |
| MW-42 | 10/07/2021 | 0.61 | 13.3 | 6.57 | 0.576 | <0.00100 | 0.0593 | 1.06 | 1.62 | 0.00 | 9.90 | 4316.94 |
| EW-3 | 03/31/20 | 12.2 | 82.8 | 4.14 | 1.87 | <0.0500 | 0.458 | 4.290 | 23.600 | 0.00 | 10.43 | 4323.67 |
| | 04/08/21 | 8.00 | 20.4 | 0.0123 | 0.346 | <0.0500 | 0.0777 | 0.271 | 2.11 | 0.00 | 11.04 | 4323.06 |
| EW-4 | 04/08/21 | 7.38 | 38.9 | <0.100 | 0.462 | <0.100 | 0.181 | 0.129 | 6.860 | 0.00 | 11.74 | - |
| RW-1 | 09/18/19 | 5.81 | 54.3 | 1.21 | 1.22 | <0.100 | 0.246 | 3.53 | 10.6 | 0.00 | NM | - |
| | 04/02/20 | 2.49 | 14.4 | <0.100 | 0.36 | <0.100 | <0.500 | 0.644 | 3.14 | 0.00 | NM | - |
| RW-2 | 09/18/19 | 6.23 | 143 | 11.60 | 2.20 | <0.500 | 0.303 | 18.5 | 16.7 | 0.00 | NM | - |
| | 04/02/20 | 3.81 | 79.7 | 4.08 | 1.51 | <0.0500 | 0.148 | 13.2 | 12.9 | 0.00 | NM | - |
| | 04/08/21 | 13.7 | 86.3 | 2.43 | 1.16 | <0.100 | 0.384 | 9.98 | 17.4 | 0.00 | NM | - |

**Table 1**
**Monitoring Well Data and Analytical Results**
**Triple Stop Chevron**
**1034 West Gentile Street, Layton, Utah**
**Release NUB; Facility ID 3000500**
**Terracon Project 61197153**

| Sample ID | DATE | TPH-DRO | TPH-GRO | BENZENE | ETHYL-BENZENE | MTBE | NAPH-THALENE | TOLUENE | XYLENES | FPT | DTW | Groundwater Elevation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MM/DD/YY | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (feet) | (feet) | (feet) |
| DERR ISL | | 1 | 1 | 0.005 | 0.7 | 0.2 | 0.7 | 1 | 10 | | | |
| DERR Tier 1 | | 10 | 10 | 0.30 | 4 | 0.2 | 0.7 | 3 | 10 | | | |
| **RW-2** | 07/13/21 | 3.52 | 76.2 | 0.796 | 0.422 | <0.100 | 0.199 | 4.49 | 4.38 | 0.00 | NM | - |
| | 10/08/2021 | 6.57 | 31.2 | 0.982 | 1.04 | <0.100 | 0.363 | 7.04 | 7.95 | | | |

**Notes:**
*** The sample labels for MW-3 & MW-4 were reversed on 3/15/19. Resampled on 3/19/19.**
**TPH-GRO = Total Petroleum Hydrocarbons as Gasoline**
**TPH--DRO = Total Petroleum Hydrocarbons as Diesel**
**DTW = Depth to groundwater**
**FPT = Free Product Thickness**
**DERR = Utah Division of Environmental Response and Remediation**
**ISL = Initial Screening Level**
**Tier 1 = Tier 1 Screening Level**
**mg/l = milligram/liter**

**Table 3**
**Groundwater Natural Attenuation Parameters**
**Table 2**
**Triple Stop Chevron**
**1034 West Gentile Street, Layton, Utah**
**Release NUB; Facility ID 3000500**
**Terracon Project 61197153**

| Analytical Method | | | | | | | 3500Fe B-2011 | | 6010B | | 6010B | | 9056A | | 9056A | | RSK175 | | RSK175 | | RSK175 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | Temp | D.O. | Cond. | pH | ORP | FERROUS IRON | | IRON, DISSOLVED | | MANGANESE, DISSOLVED | | NITRATE | | SULFATE | | METHANE | | ETHANE | | ETHENE | |
| Units | | °C | mg/l | µS/cm | - | mV | mg/l | | mg/l | | mg/l | | mg/l | | mg/l | | mg/l | | mg/l | | mg/l | |
| Client Sample ID | Date Collected | | | | | | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| MW-1 | 07/15/2021 | 15.5 | 0.28 | 1734 | 7.11 | -151 | 15 | T8 | 16.6 | | 0.744 | | <0.100 | | 7 | | 4.48 | | <0.0130 | | <0.0130 | |
| | 10/06/2021 | 16.8 | 0.31 | 1986 | 7.44 | -140.9 | 12 | T8 | <0.100 | | 0.73 | | <0.0100 | | 6.26 | | NA | | NA | | NA | |
| MW-2 | 7/15/2021 | 16.4 | 0.35 | 1344 | 7.07 | -95.1 | | | | | | | | | | | | | | | | |
| | 10/06/2021 | 18.1 | 0.43 | 2042 | 7.07 | -127 | | | | | | | | | | | | | | | | |
| MW-4 | 7/15/2021 | 16 | 0.33 | 1419 | 7.2 | -124.8 | | | | | | | | | | | | | | | | |
| | 10/06/2021 | 16.9 | 0.29 | 1817 | 7.38 | -119.5 | | | | | | | | | | | | | | | | |
| MW-8 | 07/13/2021 | 18.6 | 0.87 | 1890 | 7.14 | 82.4 | <0.0500 | T8 | <0.100 | | <0.0100 | | 6.45 | | 49.8 | | <0.0100 | | <0.0130 | | <0.0130 | |
| MW-13 | 07/13/2021 | 21.9 | 0.34 | 973 | 6.92 | -114.1 | 4.97 | T8 | 4.85 | | 0.367 | | <0.100 | | 19.6 | | 1.89 | | <0.0130 | | <0.0130 | |
| | 10/8/2021 | 20.7 | 0.22 | 1236 | 6.8 | -150.1 | | | | | | | <0.0100 | | | | | | | | | |
| MW-14 | 07/13/2021 | 22.9 | 0.29 | 1552 | 7.08 | -46.2 | 0.14 | T8 | 0.635 | | 1.15 | | 9.26 | | 42.3 | | <0.0100 | | <0.0130 | | <0.0130 | |
| MW-18 | 7/15/2021 | 20.7 | 0.30 | 1668 | 7.19 | 4.8 | | | | | | | | | | | | | | | | |
| | 10/06/2021 | 21.0 | 0.30 | 1794 | 7.03 | 22.9 | | | | | | | | | | | | | | | | |
| MW-19 | 07/14/2021 | 18.6 | 0.24 | 2134 | 7.21 | -155.3 | 8.22 | T8 | 8.45 | | 1.09 | | <0.100 | | 9.62 | | 7.49 | | <0.0130 | | <0.0130 | |
| | 10/06/2021 | 20.1 | 0.22 | 1974 | 7.18 | -163.2 | 9.78 | T8 | <0.100 | | 0.942 | | <0.0100 | | 10.1 | | NA | | NA | | NA | |
| MW-20 | 07/14/2021 | 20 | 0.24 | 1831 | 7.04 | -38.8 | 0.02 | J T8 | 0.409 | | 2.2 | | 0.552 | | 30.5 | | 0.871 | | <0.0130 | | <0.0130 | |
| | 10/06/2021 | 21.6 | 0.25 | 1851 | 6.91 | -29.9 | 0.056 | T8 | <0.100 | | 2.13 | | 1.35 | | 30.4 | | NA | | NA | | NA | |
| MW-22 | 7/16/2021 | 19.2 | 0.25 | 2404 | 6.96 | -129.5 | | | | | | | | | | | | | | | | |
| MW-23 | 7/16/2021 | 18.1 | 0.38 | 2685 | 6.89 | -126.4 | | | | | | | | | | | | | | | | |
| MW-24 | 07/13/2021 | 20.1 | 0.32 | 2235 | 7.02 | -140.6 | 27.5 | T8 | 29.5 | | 0.35 | | <0.100 | | 28.4 | | 1.67 | | <0.0130 | | <0.0130 | |
| MW-31 | 07/14/2021 | 18.1 | 0.24 | 2206 | 6.98 | -7.8 | 0.146 | T8 | 0.129 | | 1.54 | | 0.45 | | 32.3 | | 1.2 | | <0.0130 | | <0.0130 | |
| | 10/04/2021 | 20.6 | 0.33 | 1811 | 6.85 | -31.3 | 0.465 | T8 | <0.100 | | 1.31 | | 0.0106 | | 16.2 | | NA | | NA | | NA | |
| MW-32 | 07/14/2021 | 18.5 | 0.45 | 1972 | 6.99 | 35.8 | <0.0500 | T8 | 0.0313 | J | 0.108 | | 0.197 | | 24.6 | | 0.605 | | <0.0130 | | <0.0130 | |
| | 10/04/2021 | 21.4 | 0.32 | 1974 | 6.84 | 23.3 | 0.049 | J T8 | <0.100 | | 0.125 | | 0.0213 | | 14.6 | | NA | | NA | | NA | |
| MW-37 | 07/14/2021 | 20.3 | 0.55 | 1913 | 7.05 | 50.7 | <0.0500 | T8 | <0.100 | | 0.0338 | | 1.7 | | 25.4 | | <0.0100 | | <0.0130 | | <0.0130 | |
| | 10/04/2021 | 22.2 | 0.45 | 1691 | 6.94 | 36.1 | <0.0500 | T8 | <0.100 | | 0.0133 | | 1.11 | | 42.2 | | NA | | NA | | NA | |
| MW-38 | 10/04/2021 | 21 | 0.34 | 1942 | 6.97 | -54.8 | | | | | | | | | | | | | | | | |
| MW-39 | 10/04/2021 | 21.3 | 0.37 | 1699 | 6.84 | 87.8 | | | | | | | | | | | | | | | | |
| MW-40 | 10/7/2021 | 17.1 | 0.30 | 1646 | 7.18 | -195.7 | | | | | | | | | | | | | | | | |
| MW-41 | 10/7/2021 | 16.5 | 0.40 | 1610 | 7.20 | -197.2 | | | | | | | | | | | | | | | | |
| MW-42 | 10/7/2021 | 21.0 | 0.23 | 2394 | 7.4 | -189.4 | | | | | | | | | | | | | | | | |
| RW-2 | 07/13/2021 | 26.4 | 0.20 | 2019 | 7.08 | -154.4 | 15 | T8 | 15.1 | | 0.252 | | <0.100 | | 17.1 | | 1.77 | | <0.0130 | | <0.0130 | |
| | 10/8/2021 | 21.7 | 0.24 | 1550 | 6.87 | -138.4 | | | | | | | | | | | | | | | | |

**Qualifiers: B:** The same analyte is found in the associated blank.
**J:** The identification of the analyte is acceptable; the reported value is a
**J4:** The associated batch QC was outside the established quality control range for accuracy
**T8:** Sample(s) received past/too close to holding time expiration.

**mg/l** milligram/liter
**µS/cm** micro siemens/centimeter
**mV** millivolts

**Table 3**
**Summary of Soil Analytical Data**
**Triple Stop Chevron**
**1034 West Gentile Street, Layton, Utah**
**Release NUB; Facility ID 3000500**
**Terracon Project 61197153**

| Method | | | | 8015 | | 8260B | | 8260B | | 8260B | | 8260B | | 8260B | | 8260B | | 8260B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | | | TPH (GC/FID) HIGH FRACTION | | TPH (GC/MS) LOW FRACTION | | BENZENE | | ETHYLBENZENE | | METHYL TERT-BUTYL ETHER | | NAPHTHALENE | | TOLUENE | | XYLENES, TOTAL | |
| Units | | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| DERR ISL | | | | 500 | | 150 | | 0.2 | | 5 | | | | 51 | | 9 | | 142 | |
| DERR Tier 1 | | | | 5000 | | 1500 | | 0.9 | | 23 | | | | 51 | | 25 | | 142 | |
| Lab Sample ID | Client Sample ID | Date Collected | Depth (feet) | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| L1332099-01 | HRSC1 S-1 | 03/27/2021 | 9.5-10 | **3.29** | J | <0.535 | | **0.00255** | | **0.000852** | J | | | <0.00535 | | **0.00509** | J | **0.00498** | B |
| L1332099-02 | HRSC1 S-2 | 03/27/2021 | 14-15 | **762** | | **7760** | | **2.85** | | **97.3** | | | | **28.6** | | **212** | | **898** | |
| L1332099-03 | HRSC1 S-3 | 03/27/2021 | 19.5-20 | <4.60 | | <0.575 | | **0.00225** | | **0.00137** | | | | <0.00575 | | **0.0052** | J | **0.00934** | |
| L1332099-04 | HRSC2 S-1 | 03/27/2021 | 12.5 | **587** | | <1320 | | <2.63 | | <2.63 | | | | <13.2 | | <13.2 | | **33.4** | |
| L1332099-05 | HRSC2 S-2 | 03/27/2021 | 17-17.5 | <4.85 | | <0.606 | | **0.0029** | | **0.000998** | J | | | <0.00606 | | **0.00522** | J | **0.00586** | B |
| L1371653-01 | AS01SS-01@10' | 06/24/2021 | 10 | **2.86** | J | <0.542 | | **0.00358** | | **0.00141** | | <0.00108 | | <0.00542 | | **0.00673** | | **0.01** | |
| L1371653-02 | AS01SS-02@13' | 06/24/2021 | 13 | **35.5** | | **1.07** | | **0.00333** | | **0.00241** | | <0.00115 | | **0.118** | | **0.00517** | J | **0.109** | |
| L1371653-03 | AS01SS-03@19' | 06/24/2021 | 19 | <4.68 | | <0.585 | | **0.00207** | | **0.000779** | J | <0.00117 | | <0.00585 | | **0.00401** | J | **0.0048** | |
| L1371653-04 | AS02SS-05@11.5' | 06/24/2021 | 11.5 | **4610** | | **2900** | | **1.52** | | **29.1** | | <0.623 | | **17.1** | | **64.9** | | **309** | |
| L1371653-05 | AS02SS-06@14' | 06/24/2021 | 14 | **1.59** | J | **0.554** | J | **0.0027** | | **0.00345** | | <0.00117 | | **0.0506** | | **0.00687** | | **0.0931** | |
| L1371653-06 | AS02SS-07@19' | 06/24/2021 | 19 | **1.39** | J | <0.595 | | **0.00497** | V3 | **0.00259** | V3 | <0.00119 | | <0.00595 | | **0.00979** | V3 | **0.00948** | V3 |
| L1371655-01 | MW-39SS@9.5-10' | 06/24/2021 | 9.5-10 | <4.65 | | <0.582 | | **0.00219** | V3 | <0.00116 | | <0.00116 | | <0.00582 | | **0.00532** | J V3 | **0.00476** | V3 |
| L1371655-02 | MW-38SS@9-9.5' | 06/24/2021 | 9-9.5 | <4.74 | | <0.592 | | **0.00288** | | **0.00103** | J | <0.00118 | | <0.00592 | | **0.00528** | J | **0.00563** | |
| L1415181-01 | MW-40 (8.5) | 10/05/2021 | 8.5 | **2.7** | J | <0.584 | | **0.00411** | | **0.00154** | | <0.00117 | | <0.00584 | | **0.0075** | | **0.00708** | |
| L1415181-02 | MW-40 (9.5) | 10/05/2021 | 9.5 | <4.85 | | <0.607 | | **0.00578** | | **0.00336** | | <0.00121 | | <0.00607 | | **0.00615** | J4 | **0.0161** | |
| L1415181-03 | MW-40 (12) | 10/05/2021 | 12 | <4.96 | | <0.620 | | **0.00341** | | **0.00115** | J | <0.00124 | | <0.00620 | | **0.00564** | J | **0.00529** | |
| L1415181-05 | MW-41 (10) | 10/05/2021 | 10 | **2.55** | J | <0.577 | | **0.00297** | | **0.00102** | J | <0.00115 | | <0.00577 | | **0.00563** | J | **0.00546** | |
| L1415181-06 | MW-41 (11.5) | 10/05/2021 | 11.5 | **2.39** | J | <0.616 | | **0.00298** | | **0.000976** | J | <0.00123 | | <0.00616 | | **0.00544** | J J4 | **0.00605** | |
| L1415181-07 | MW-41 (13) | 10/05/2021 | 13 | **2.91** | J | <0.589 | | **0.00354** | | **0.00101** | J | <0.00118 | | <0.00589 | | **0.00498** | J | **0.00564** | |
| L1415181-08 | MW-42 (9) | 10/05/2021 | 9 | **3.68** | J | <0.577 | | **0.00231** | | **0.000787** | J | <0.00115 | | <0.00577 | | **0.00475** | J | **0.00454** | |
| L1415181-09 | MW-42 (13) | 10/05/2021 | 13 | **2.38** | J | <0.595 | | **0.0077** | | **0.00388** | | <0.00119 | | <0.00595 | | **0.00867** | J4 | **0.0183** | |
| L1415181-10 | MW-42 (15) | 10/05/2021 | 15 | **3.49** | J | <0.608 | | **0.00496** | | **0.00114** | J | <0.00122 | | <0.00608 | | **0.00494** | J J4 | **0.00417** | |

**Qualifiers: B: The same analyte is found in the associated blank. J: The identification of the analyte is acceptable; the reported value is an estimate.**

**DERR** State of Utah Division of Environmental Response and Remediation
**ISL** Initial Screenining Level
**Tier 1** Tier 1 Screening Level
**mg/kg** milligram/kilogram

# APPENDIX C
# Boring Logs

# WELL LOG NO. MW-40



**PROJECT:** Triple Stop Chevron

**CLIENT:** Triple Stop Chevron

**SITE:** 1034 West Gentile Street
Layton, Utah

LOCATION See Exhibit 2

Latitude: 41.059670° Longitude: -111.986731°

INSTALLATION DETAILS

Well Completion: Surface Mount

| DEPTH | MATERIAL DESCRIPTION | INSTALLATION DETAILS | DEPTH (ft) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | RECOVERY (%) | PID (ppm) | Sample |
|---|---|---|---|---|---|---|---|---|
| 0.5 | **FILL - GRASS SURFACE & TOPSOIL**, trace gravel, low plasticity, reddish dark brown, moist | Well completed with traffic-rated well box and 7-inch well cover. Hydrated bentonite, 1'-3' | | | | | | |
| 2.5 | **LEAN CLAY WITH GRAVEL (CL)**, reddish dark brown, moist, 1': 2 inch white gravel layer. | | | | | | 0.9 | |
| 4.0 | **CLAYEY SILT**, tan, moist | | | | | 78 | 1.0 | |
| 7.5 | **WELL GRADED SAND WITH SILT (SW-SM)**, light yellowish brown, moist | 16/30 Silica Sand Pack, 3'-20' | 5 | | | | 0.9 | |
| 10.5 | **SILTY SAND (SM)**, trace gravel, brown to trace black, moist, dense | | | | | 83 | 0.8 | |
| | | | | | | | 1.8 | MW-40 (8.5') |
| | | | 10 | | | | 81.6 | MW-40 (9.5') |
| 14.0 | **WELL GRADED SAND WITH SILT (SW-SM)**, light yellowish brown, wet, medium dense, 12.5-14': Free water | 2" Slotted (0.010) PVC Screen, 5'-20' | | | | | 22.1 | MW-40 (11') |
| | | | | | | 100 | 11.3 | TOC only |
| | | | | | | | 53.2 | MW-40 (12') |
| | | | | | | | 8.4 | |
| 14.5 | **SILTY CLAY (CL)**, low to medium plasticity, light yellowish brown, wet, soft to medium stiff | | | | | | 9.2 | |
| 16.0 | **WELL GRADED SAND WITH SILT (SW-SM)**, light yellowish brown, wet, medium dense | | 15 | | | | | |
| 18.0 | **SILTY CLAY (CL)**, light brown, wet, medium stiff | | | | | | 6.1 | |
| | | | | | | | 2.3 | |
| | | | | | | 100 | 5.3 | |
| 19.5 | **COARSE SAND (SW)**, light yellowish brown, wet, medium dense | | | | | | 2.1 | |
| | | | | | | | 3.7 | |
| 20.0 | **SILTY CLAY (CL)**, light brown, wet, medium stiff | | 20 | | | | | |
| | ***Boring Terminated at 20 Feet*** | | | | | | | |

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Direct Push

Abandonment Method:

Notes:
MW-40 (8.5'), 1132
MW-40 (9.5'), 1134
MW-40 (12'), 1140

**WATER LEVEL OBSERVATIONS**

*GW Encountered While Drilling*

*Static Water*

Terracon
6949 S High Tech Dr Ste 100
Midvale, UT

Well Started: 10-05-2021 | Well Completed: 10-05-2021

Drill Rig: Geoprobe | Driller: DPS

Project No.: 61197153 | Exhibit: C-1

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 61197153 STM BH 40-42 GINT -10-5-21.GPJ TERRACON_DATATEMPLATE.GDT 11/15/21

# WELL LOG NO. MW-41



**PROJECT:** Triple Stop Chevron

**CLIENT:** Triple Stop Chevron

**SITE:** 1034 West Gentile Street
Layton, Utah

LOCATION See Exhibit 2

Latitude: 41.059462° Longitude: -111.986628°

INSTALLATION DETAILS

Well Completion: Surface Mount

| DEPTH | MATERIAL DESCRIPTION | INSTALLATION DETAILS | DEPTH (ft) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | RECOVERY (%) | PID (ppm) | Sample |
|---|---|---|---|---|---|---|---|---|
| | **FILL - GRASS SURFACE & TOPSOIL**, trace gravel, low plasticity, dark brown, moist | Well completed with traffic-rated well box and 7-inch well cover. Hydrated bentonite, 1'-3' | | | | | | |
| 2.0 | **SILTY CLAY (CL)**, dark brown, moist, medium stiff | | | | | 78 | 0.2<br>0.1 | |
| 3.0 | **SILTY CLAY (CL)**, low to medium plasticity, light yellowish brown, moist, medium stiff | 16/30 Silica Sand Pack, 3'-20' | | | | | 0.4 | |
| 4.5 | **WELL GRADED SAND WITH SILT (SW-SM)**, light yellowish brown to with some redddish black staining, moist, loose to medium dense | | 5 | | | | | |
| 6.0 | **WELL GRADED SAND WITH SILT (SW-SM)**, light yellowish brown, moist, medium dense to dense | | | | | 65 | 0.2<br>3.2<br>5.0 | |
| 10.5 | **WELL GRADED SAND WITH SILT (SW-SM)**, light yellowish brown, wet, dense | 2" Slotted (0.010) PVC Screen, 5'-20' | 10 | ▽<br>▽ | | 67 | 0.9<br>1.2<br>1.7<br>7.8<br>3.9 | MW-41 (11.5')<br>MW-41 (10')<br>MW-41 (13') |
| 18.0 | **SILTY CLAY (CL)**, medium plasticity, light brown, wet, medium stiff | | 15 | | | 100 | 0.9<br>1.2<br>0.9 | |
| 19.0 | **CLAYEY SAND (SC)**, nonplastic, light brown, wet, medium dense | | | | | 100 | 0.6<br>0.6<br>0.3 | |
| 20.0 | ***Boring Terminated at 20 Feet*** | | 20 | | | | | |

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Direct Push

Abandonment Method:

Notes:
MW-41 (10'), 1444
MW-41 (11.5'), 1446
MW-41 (13'), 1450

**WATER LEVEL OBSERVATIONS**

▽ *GW Encountered While Drilling*

▽ *Static Water*

Terracon
6949 S High Tech Dr Ste 100
Midvale, UT

Well Started: 10-05-2021 | Well Completed: 10-05-2021

Drill Rig: Geoprobe | Driller: DPS

Project No.: 61197153 | Exhibit: C-2

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 61197153 STM BH 40-42 GINT -10-5-21.GPJ TERRACON_DATATEMPLATE.GDT 11/15/21

# WELL LOG NO. MW-42



**PROJECT:** Triple Stop Chevron

**CLIENT:** Triple Stop Chevron

**SITE:** 1034 West Gentile Street
Layton, Utah

LOCATION See Exhibit 2

Latitude: 41.059384° Longitude: -111.986927°

INSTALLATION DETAILS

Well Completion: Surface Mount

| DEPTH | MATERIAL DESCRIPTION | INSTALLATION DETAILS | DEPTH (ft) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | RECOVERY (%) | PID (ppm) | Sample |
|---|---|---|---|---|---|---|---|---|
| 0.8 | **FILL - GRASS SURFACE & TOPSOIL**, trace gravel to cobbles, yellowish light brown, moist | Well completed with traffic-rated well box and 7-inch well cover. Hydrated bentonite, 1'-3' | | | | | | |
| 4.0 | **LEAN CLAY WITH GRAVEL (CL)**, yellowish light brown, moist, medium dense | 16/30 Silica Sand Pack, 3'-20' | | | | 78 | 0.3<br>0.2<br>0.1 | |
| 7.5 | **WELL GRADED SAND WITH SILT (SW-SM)**, yellowish brown, moist, loose | | 5 | | | | 0.2 | |
| 8.5 | **WELL GRADED SAND WITH SILT (SW-SM)**, lgith brown to dark brown, moist, medium dense | | | | | 83 | 1.1 | |
| 11.0 | **WELL GRADED SAND WITH SILT AND GRAVEL (SW-SM)**, lgith brown to dark brown, moist, medium dense | | 10 | | | | 10.6 | MW-42 (9') |
| 13.0 | **WELL GRADED SAND WITH SILT (SW-SM)**, yellowish brown, moderate odor, moist to wet, medium dense | 2" Slotted (0.010) PVC Screen, 5'-20' | | | | 95 | 96.2<br>194.3<br>79.3<br>110.0 | MW-42 (13') |
| 15.5 | **SILTY CLAYEY SAND (SC-SM)**, yellowish brown to with brown seams, wet, stiff, 13': Flowing sands<br>14': Dark brown well graded sand seam. | | 15 | | | | 71.3 | |
| 16.5 | **WELL GRADED SAND WITH SILT (SW-SM)**, light yellowish brown, moderate odor, wet, dense | | | | | | 11.6 | |
| 17.0 | **SANDY LEAN CLAY**, low to medium plasticity, light brown, wet, very stiff | | | | | | 1.6 | |
| 19.0 | **SANDY LEAN CLAY (CL)**, yellowish light brown, wet, stiff | | | | | 100 | 32.8<br>2.9 | MW-42 (15') |
| 20.0 | **SANDY LEAN CLAY (CL)**, yellowish light brown, very stiff | | | | | | 2.0 | |
| | ***Boring Terminated at 20 Feet*** | | 20 | | | | | |

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Direct Push

Abandonment Method:

Notes:
MW-42 (9'), 945
MW-42 (13'), 958
MW-42 (15'), 1006

**WATER LEVEL OBSERVATIONS**

*GW Encountered While Drilling*

*Static Water*

Terracon
6949 S High Tech Dr Ste 100
Midvale, UT

Well Started: 10-05-2021 | Well Completed: 10-05-2021

Drill Rig: Geoprobe | Driller: DPS

Project No.: 61197153 | Exhibit: C-3

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 61197153 STM BH 40-42 GINT -10-5-21.GPJ TERRACON_DATATEMPLATE.GDT 11/15/21

# APPENDIX D

## Chain of Custody and Laboratory Data Sheets

American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer

Curt Stripeika
Terracon Consultants, Inc.
6949 S High Tech Drive, Suite 100
Midvale, UT 84047
TEL: (801) 545-8500

RE: Triple Stop Chevron / 61197153 Task 9.2

Dear Curt Stripeika: Lab Set ID: 2110068

American West Analytical Laboratories received sample(s) on 10/4/2021 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

Approved by: _____
Laboratory Director or designee



All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYTICAL REPORT

**Client:** Terracon Consultants, Inc. **Contact:** Curt Stripeika
**Project:** Triple Stop Chevron / 61197153 Task 9.2
**Lab Sample ID:** 2110068-001
**Client Sample ID:** MW-32
**Collection Date:** 10/4/2021 1417h
**Received Date:** 10/4/2021 1717h

**Analytical Results**

| Compound | Units | Date Prepared | Date Analyzed | Method Used | Reporting Limit | Analytical Result | Qual |
|---|---|---|---|---|---|---|---|
| Nitrate (as N) | mg/L | | 10/6/2021 1025h | E353.2 | 0.0100 | **0.0213** | |

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer



All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYTICAL REPORT

**Client:** Terracon Consultants, Inc. **Contact:** Curt Stripeika
**Project:** Triple Stop Chevron / 61197153 Task 9.2
**Lab Sample ID:** 2110068-002
**Client Sample ID:** MW-37
**Collection Date:** 10/4/2021 1526h
**Received Date:** 10/4/2021 1717h

**Analytical Results**

| Compound | Units | Date Prepared | Date Analyzed | Method Used | Reporting Limit | Analytical Result | Qual |
|---|---|---|---|---|---|---|---|
| Nitrate (as N) | mg/L | | 10/6/2021 1026h | E353.2 | 0.0100 | **1.11** | |

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
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e-mail: awal@awal-labs.com

web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer



All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYTICAL REPORT

**Client:** Terracon Consultants, Inc. **Contact:** Curt Stripeika
**Project:** Triple Stop Chevron / 61197153 Task 9.2
**Lab Sample ID:** 2110068-003
**Client Sample ID:** MW-31
**Collection Date:** 10/4/2021 1620h
**Received Date:** 10/4/2021 1717h

**Analytical Results**

| Compound | Units | Date Prepared | Date Analyzed | Method Used | Reporting Limit | Analytical Result | Qual |
|---|---|---|---|---|---|---|---|
| Nitrate (as N) | mg/L | | 10/6/2021 1028h | E353.2 | 0.0100 | **0.0106** | |

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687
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web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer



All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# American West Analytical Laboratories

Rpt Emailed: UL

## WORK ORDER Summary

Work Order: **2110068** 

**Client:** Terracon Consultants, Inc.

Due Date: 10/18/2021

**Client ID:** TER200

**Contact:** Curt Stripeika

**Project:** **Triple Stop Chevron / 61197153 Task 9.2**

**QC Level:** I

WO Type: Standard

| Sample ID | Client Sample ID | Collected Date | Received Date | Test Code | Matrix | Sel | Storage | |
|---|---|---|---|---|---|---|---|---|
| 2110068-001A | **MW-32** | 10/4/2021 1417h | 10/4/2021 1717h | **NO3-W-353.2** | Aqueous | ☐ | DF-NO3 | 1 |
| 2110068-002A | **MW-37** | 10/4/2021 1526h | 10/4/2021 1717h | **NO3-W-353.2** | Aqueous | ☐ | DF-NO3 | 1 |
| 2110068-003A | **MW-31** | 10/4/2021 1620h | 10/4/2021 1717h | **NO3-W-353.2** | Aqueous | ☐ | DF-NO3 | 1 |



LABORATORY CHECK: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ LUO ☐ HOK_____ HOK_____ HOK_____ COC Emailed_____

**American West Analytical Laboratories**
3440 S. 700 W. Salt Lake City, UT 84119
Phone # (801) 263-8686 Toll Free # (888) 263-8686
Fax # (801) 263-8687 Email awal@awal-labs.com
www.awal-labs.com

# CHAIN OF CUSTODY

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

AWAL Lab Sample Set # 2110068
Page 1 of 1

QC Level: 1 2 2+ 3 3+

Turn Around Time: 1 2 3 4 5 Stnd

Unless other arrangements have been made, signed reports will be emailed by **5:00 pm** on the day they are due.

Due Date: 10/18

Client: TERRACON
Address: 6949 S. HIGH TECH DR. MIDVALE, UT 84047
Contact: CURT STRIPEIKA
Phone #: Cell #:
Email: CURT.STRIPEIKA@TERRACON.COM
Project Name: TRIPLE STOP CHEVRON
Project #: 61197153 TASK 9.2
PO #:
Sampler Name: Roy McDonald

☐ Report down to the MDL
☐ Include EDD:
☐ Lab Filter for:
☐ Field Filtered For:

For Compliance With:
☐ NELAP
☐ RCRA
☐ CWA
☐ SDWA
☐ ELAP / A2LA
☐ NLLAP
☐ Non-Compliance
☐ Other:

| | Sample ID: | Date Sampled | Time Sampled | # of Containers | Sample Matrix | NITRATE | Known Hazards & Sample Comments |
|---|---|---|---|---|---|---|---|
| 1 | MW-32 | 10/4/21 | 1417 | 1 | W | X | |
| 2 | MW-37 | 10/4/21 | 1526 | 1 | W | X | |
| 3 | MW-31 | 10/4/21 | 1620 | 1 | X | X | |
| 4 | | | | | | | |
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| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |

**Laboratory Use Only**

Samples Were:
1 Shipped or Hand delivered
2 Ambient or Chilled on ice
3 Temperature 12.7 °C
4 Received Broken/Leaking (Improperly Sealed) Y N
5 Properly Preserved Y N Checked at bench
6 Received Within Holding Times Y N

COC Tape Was:
1 Present on Outer Package Y N NA
2 Unbroken on Outer Package Y N NA
3 Present on Sample Y N NA
4 Unbroken on Sample Y N NA

Discrepancies Between Sample Labels and COC Record? Y N

| Relinquished by: | Date: | Received by: | Date: |
|---|---|---|---|
| Signature: Roy McDonald | 10/4/21 | Signature: Colde Rhodes | 10/4/21 |
| Print Name: | Time: 1717 | Print Name: Colde Rhodes | Time: 1717 |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |

Special Instructions:

3440 South 700 West
Salt Lake City, UT 84119

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e-mail: awal@awal-labs.com

web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer

Curt Stripeika
Terracon Consultants, Inc.
6949 S High Tech Drive, Suite 100
Midvale, UT 84047
TEL: (801) 545-8500

RE: Triple Stop Chevron / 61197153 Task 9.2

Dear Curt Stripeika: Lab Set ID: 2110162

American West Analytical Laboratories received sample(s) on 10/6/2021 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

This is a revision to a report originally issued 10/8/2021. Information herein supersedes that of the previously issued reports. Pages 1 and 3 have been revised. The sample ID for 2110162-002A has been corrected.

Thank You,

Approved by: _____
Laboratory Director or designee



All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYTICAL REPORT

**Client:** Terracon Consultants, Inc. **Contact:** Curt Stripeika
**Project:** Triple Stop Chevron / 61197153 Task 9.2
**Lab Sample ID:** 2110162-001
**Client Sample ID:** MW-1
**Collection Date:** 10/6/2021 1330h
**Received Date:** 10/6/2021 1722h

**Analytical Results**

| Compound | Units | Date Prepared | Date Analyzed | Method Used | Reporting Limit | Analytical Result | Qual |
|---|---|---|---|---|---|---|---|
| Nitrate (as N) | mg/L | | 10/7/2021 1657h | E353.2 | 0.0100 | < 0.0100 | |

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
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web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer



All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYTICAL REPORT

**Client:** Terracon Consultants, Inc. **Contact:** Curt Stripeika
**Project:** Triple Stop Chevron / 61197153 Task 9.2
**Lab Sample ID:** 2110162-002
**Client Sample ID:** MW-19
**Collection Date:** 10/6/2021 1453h
**Received Date:** 10/6/2021 1722h

**Analytical Results**

| Compound | Units | Date Prepared | Date Analyzed | Method Used | Reporting Limit | Analytical Result | Qual |
|---|---|---|---|---|---|---|---|
| Nitrate (as N) | mg/L | | 10/7/2021 1658h | E353.2 | 0.0100 | < 0.0100 | |

3440 South 700 West
Salt Lake City, UT 84119

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Toll Free: (888) 263-8686
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e-mail: awal@awal-labs.com

web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer



All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYTICAL REPORT

**Client:** Terracon Consultants, Inc. **Contact:** Curt Stripeika
**Project:** Triple Stop Chevron / 61197153 Task 9.2
**Lab Sample ID:** 2110162-003
**Client Sample ID:** MW-20
**Collection Date:** 10/6/2021 1611h
**Received Date:** 10/6/2021 1722h

**Analytical Results**

| Compound | Units | Date Prepared | Date Analyzed | Method Used | Reporting Limit | Analytical Result | Qual |
|---|---|---|---|---|---|---|---|
| Nitrate (as N) | mg/L | | 10/7/2021 1659h | E353.2 | 0.0100 | **1.35** | |

3440 South 700 West
Salt Lake City, UT 84119

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Toll Free: (888) 263-8686
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e-mail: awal@awal-labs.com

web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer



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# American West Analytical Laboratories

Rev or Add Emailed: UL

## WORK ORDER Summary

Work Order: **2110162** 

**Client:** Terracon Consultants, Inc.

Due Date: 10/20/2021

**Client ID:** TER200

**Contact:** Curt Stripeika

**Project:** **Triple Stop Chevron / 61197153 Task 9.2**

**QC Level:** I

WO Type: Standard

(DB)

| Sample ID | Client Sample ID | Collected Date | Received Date | Test Code | Matrix | Sel | Storage | |
|---|---|---|---|---|---|---|---|---|
| 2110162-001A | **MW-1** | 10/6/2021 1330h | 10/6/2021 1722h | **NO3-W-353.2** | Aqueous | ☐ | df - no3 | 1 |
| 2110162-002A | **MW-19** | 10/6/2021 1453h | 10/6/2021 1722h | **NO3-W-353.2** | Aqueous | ☐ | df - no3 | 1 |
| 2110162-003A | **MW-20** | 10/6/2021 1611h | 10/6/2021 1722h | **NO3-W-353.2** | Aqueous | ☐ | df - no3 | 1 |



LABORATORY CHECK: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ LUO ☐ HOK_____ HOK_____ HOK_____ COC Emailed_____

American West
Analytical Laboratories
3440 S. 700 W. Salt Lake City, UT 84119
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# CHAIN OF CUSTODY

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

2110162
AWAL Lab Sample Set #
Page ____ of ____

QC Level: 1 2 2+ 3 3+

Turn Around Time: 1 2 3 4 5 Stnd

Unless other arrangements have been made, signed reports will be emailed by **5:00 pm** on the day they are due.

Due Date: 10/20/21

Client: TERRACON
Address: 6949 S. HIGH TECH DR. MIDVALE, UT 84047
Contact: CURT STRIPEIKA
Phone #: Cell #:
Email: CURT.STRIPEIKA@TERRACON.COM
Project Name: TRIPLE STOP CHEVRON
Project #: 61197153 TASK 9.2
PO #:
Sampler Name: Roy McDonald

☐ Report down to the MDL
☐ Include EDD:
☐ Lab Filter for:
☐ Field Filtered For:

For Compliance With:
☐ NELAP
☐ RCRA
☐ CWA
☐ SDWA
☐ ELAP / A2LA
☐ NLLAP
☐ Non-Compliance
☐ Other:

| | Sample ID: | Date Sampled | Time Sampled | # of Containers | Sample Matrix | NITRATE | Known Hazards & Sample Comments |
|---|---|---|---|---|---|---|---|
| 1 | MW-1 | 10/6/21 | 1330 | 1 | W | X | |
| 2 | MW-19 | ↓ | 1453 | 1 | W | X | |
| 3 | MW-20 | ↓ | 1611 | 1 | W | X | |
| 4 | | | | | | | |
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| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |

Laboratory Use Only

Samples Were:
1 Shipped or Hand delivered
2 Ambient or Chilled
3 Temperature 8.1 °C
4 Received Broken/Leaking (Improperly Sealed) Y N
5 Properly Preserved Y N Checked at bench
6 Received Within Holding Times Y N

COC Tape Was:
1 Present on Outer Package Y N NA
2 Unbroken on Outer Package Y N NA
3 Present on Sample Y N NA
4 Unbroken on Sample Y N NA

Discrepancies Between Sample Labels and COC Record? Y N

| Relinquished by: | Date: | Received by: | Date: |
|---|---|---|---|
| Signature: [signature] | 10/6/21 | Signature: [signature] | 10/6/21 |
| Print Name: Roy McDonald | Time: 1722 | Print Name: Denise Brown | Time: 1722 |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |

Special Instructions:

American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687
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Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer

Curt Stripeika
Terracon Consultants, Inc.
6949 S High Tech Drive, Suite 100
Midvale, UT 84047
TEL: (801) 545-8500

RE: Triple Stop Chevron / 61197153 Task 9.2

Dear Curt Stripeika: Lab Set ID: 2110238

American West Analytical Laboratories received sample(s) on 10/8/2021 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

Approved by: _____
Laboratory Director or designee

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# INORGANIC ANALYTICAL REPORT

**Client:** Terracon Consultants, Inc. **Contact:** Curt Stripeika
**Project:** Triple Stop Chevron / 61197153 Task 9.2
**Lab Sample ID:** 2110238-001
**Client Sample ID:** MW-13
**Collection Date:** 10/8/2021 905h
**Received Date:** 10/8/2021 1412h

**Analytical Results**

| Compound | Units | Date Prepared | Date Analyzed | Method Used | Reporting Limit | Analytical Result | Qual |
|---|---|---|---|---|---|---|---|
| Nitrate (as N) | mg/L | | 10/8/2021 1725h | E353.2 | 0.0100 | < 0.0100 | |

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687
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web: www.awal-labs.com

Jennifer Osborn
Laboratory Director

Jose Rocha
QA Officer

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

# American West Analytical Laboratories

Rpt Emailed: UL

## WORK ORDER Summary

Work Order: **2110238** 

**Client:** Terracon Consultants, Inc.

Due Date: 10/22/2021

**Client ID:** TER200

**Contact:** Curt Stripeika

**Project:** **Triple Stop Chevron / 61197153 Task 9.2**

**QC Level:** I

WO Type: Standard

AL

| Sample ID | Client Sample ID | Collected Date | Received Date | Test Code | Matrix | Sel | Storage | |
|---|---|---|---|---|---|---|---|---|
| 2110238-001A | **MW-13** | 10/8/2021 0905h | 10/8/2021 1412h | **NO3-W-353.2** | Aqueous | ☐ | DF-NO3 | 1 |

Printed: 10/08/21 14:36

LABORATORY CHECK: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ LUO ☐ HOK_____ HOK_____ HOK_____ COC Emailed_____

American West
Analytical Laboratories
3440 S. 700 W. Salt Lake City, UT 84119
Phone # (801) 263-8686 Toll Free # (888) 263-8686
Fax # (801) 263-8687 Email awal@awal-labs.com
www.awal-labs.com

# CHAIN OF CUSTODY

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

AWAL Lab Sample Set # 2110238
Page _____ of _____

QC Level: 1 2 2+ 3 3+

Turn Around Time: 1 2 3 4 5 Stnd

Unless other arrangements have been made, signed reports will be emailed by **5:00 pm** on the day they are due.

Due Date:

Client: TERRACON
Address: 6949 S. HIGH TECH DR.
MIDVALE, UT 84047
Contact: CURT STRIPEIKA
Phone #: Cell #:
Email: CURT.STRIPEIKA@TERRACON.COM
Project Name: TRIPLE STOP CHEVRON
Project #: 61197153 TASK 9.2
PO #:
Sampler Name: Roy McDONALD

☐ Report down to the MDL
☐ Include EDD:
☐ Lab Filter for:
☐ Field Filtered For:

For Compliance With:
☐ NELAP
☐ RCRA
☐ CWA
☐ SDWA
☐ ELAP / A2LA
☐ NLLAP
☐ Non-Compliance
☐ Other:

| | Sample ID: | Date Sampled | Time Sampled | # of Containers | Sample Matrix | NITRATE | | | | | | | | | | Known Hazards & Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-13 | 10/8/21 | 905 | 1 | W | X | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | |
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| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |

Laboratory Use Only

Samples Were:
1 Shipped or hand delivered
2 Ambient or Chilled on ice
3 Temperature 6.0 °C
4 Received Broken/Leaking (Improperly Sealed)? Y N
5 Properly Preserved Y N Checked at bench
6 Received Within Holding Times Y N

COC Tape Was:
1 Present on Outer Package Y N NA
2 Unbroken on Outer Package Y N NA
3 Present on Sample Y N NA
4 Unbroken on Sample Y N NA

Discrepancies Between Sample Labels and COC Record? Y N

| Relinquished by: | Date: | Received by: | Date: |
|---|---|---|---|
| Signature | 10/8/21 | Signature | 10/8/21 |
| Print Name: Roy McDONALD | Time: 1412 | Print Name: Aimee Rust | Time: 1412 |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |
| Relinquished by: Signature | Date: | Received by: Signature | Date: |
| Print Name: | Time: | Print Name: | Time: |

Special Instructions:

# ANALYTICAL REPORT

February 08, 2021



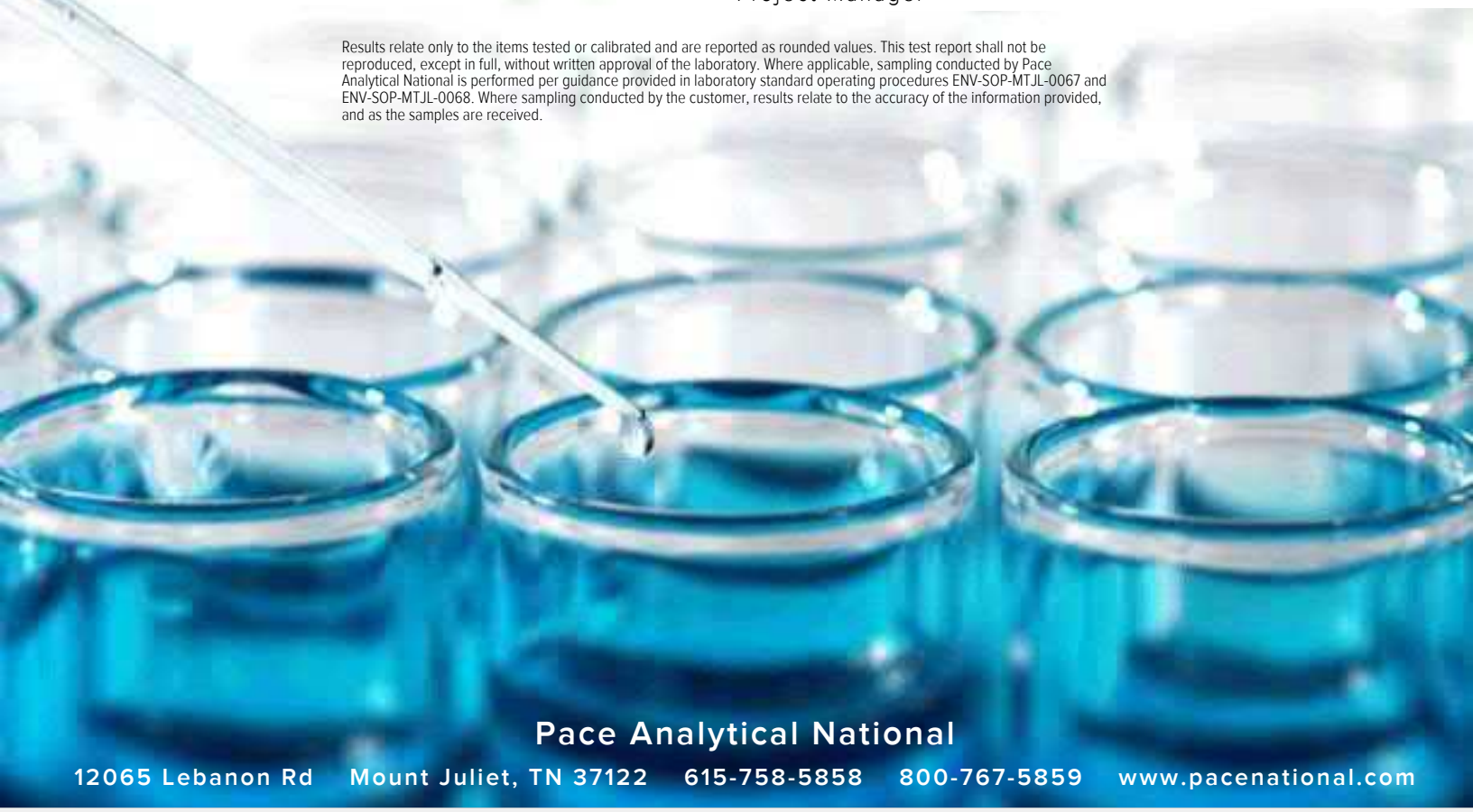
## Terracon - Salt Lake City, UT

| | |
|---|---|
| Sample Delivery Group: | L1312207 |
| Samples Received: | 01/30/2021 |
| Project Number: | 61197153 TASK 9.2 |
| Description: | Triple Stop Chevron |
| Report To: | Curt Stripeika<br>6949 South High Tech Drive<br>Midvale, UT 84047 |

Entire Report Reviewed By: Chris Ward

Chris Ward
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

# TABLE OF CONTENTS

## MW-13 L1312207-01 GW

Collected by: Alayna Thompson | Collected date/time: 01/27/21 11:00 | Received date/time: 01/30/21 08:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617147 | 1 | 02/06/21 00:54 | 02/06/21 00:54 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1614810 | 1 | 02/02/21 09:43 | 02/02/21 20:50 | WCR | Mt. Juliet, TN |

## MW-33 L1312207-02 GW

Collected by: Alayna Thompson | Collected date/time: 01/27/21 11:10 | Received date/time: 01/30/21 08:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1614718 | 1 | 02/01/21 22:33 | 02/01/21 22:33 | JHH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/04/21 01:30 | DMG | Mt. Juliet, TN |

## MW-31 L1312207-03 GW

Collected by: Alayna Thompson | Collected date/time: 01/27/21 14:15 | Received date/time: 01/30/21 08:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1614718 | 1 | 02/01/21 22:55 | 02/01/21 22:55 | JHH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617464 | 10 | 02/06/21 14:16 | 02/06/21 14:16 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 17:13 | DMG | Mt. Juliet, TN |

## MW-19 L1312207-04 GW

Collected by: Alayna Thompson | Collected date/time: 01/27/21 15:40 | Received date/time: 01/30/21 08:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617464 | 10 | 02/06/21 14:38 | 02/06/21 14:38 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 17:38 | DMG | Mt. Juliet, TN |

## MW-08 L1312207-05 GW

Collected by: Alayna Thompson | Collected date/time: 01/27/21 10:00 | Received date/time: 01/30/21 08:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1614718 | 1 | 02/01/21 23:16 | 02/01/21 23:16 | JHH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617147 | 1 | 02/06/21 07:24 | 02/06/21 07:24 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 18:04 | DMG | Mt. Juliet, TN |

## MW-14 L1312207-06 GW

Collected by: Alayna Thompson | Collected date/time: 01/27/21 11:45 | Received date/time: 01/30/21 08:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1614718 | 1 | 02/01/21 23:38 | 02/01/21 23:38 | JHH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 18:30 | DMG | Mt. Juliet, TN |

## MW-37 L1312207-07 GW

Collected by: Alayna Thompson | Collected date/time: 01/27/21 13:30 | Received date/time: 01/30/21 08:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617147 | 1 | 02/06/21 07:45 | 02/06/21 07:45 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 19:02 | DMG | Mt. Juliet, TN |

## MW-30 L1312207-08 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Alayna Thompson | 01/27/21 15:00 | 01/30/21 08:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617147 | 1 | 02/06/21 08:07 | 02/06/21 08:07 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 19:28 | DMG | Mt. Juliet, TN |

## MW-23 L1312207-09 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Alayna Thompson | 01/28/21 10:25 | 01/30/21 08:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617147 | 1 | 02/06/21 08:29 | 02/06/21 08:29 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 19:54 | DMG | Mt. Juliet, TN |

## MW-43 L1312207-10 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Alayna Thompson | 01/28/21 10:30 | 01/30/21 08:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617147 | 1 | 02/06/21 08:50 | 02/06/21 08:50 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 20:20 | DMG | Mt. Juliet, TN |

## MW-32 L1312207-11 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Alayna Thompson | 01/27/21 12:30 | 01/30/21 08:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617147 | 1 | 02/06/21 09:12 | 02/06/21 09:12 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 20:46 | DMG | Mt. Juliet, TN |

## MW-01 L1312207-12 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Alayna Thompson | 01/27/21 14:10 | 01/30/21 08:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617464 | 25 | 02/06/21 15:00 | 02/06/21 15:00 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 21:11 | DMG | Mt. Juliet, TN |

## MW-02 L1312207-13 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Alayna Thompson | 01/27/21 13:30 | 01/30/21 08:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617464 | 10 | 02/06/21 15:21 | 02/06/21 15:21 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 21:37 | DMG | Mt. Juliet, TN |

## MW-04 L1312207-14 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Alayna Thompson | 01/27/21 14:30 | 01/30/21 08:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1617147 | 1 | 02/06/21 09:34 | 02/06/21 09:34 | JAH | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 3511/8015 | WG1615486 | 1 | 02/03/21 07:42 | 02/03/21 22:03 | DMG | Mt. Juliet, TN |

## TRIP BLANK L1312207-15 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Alayna Thompson | 01/27/21 00:00 | 01/30/21 08:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1614718 | 1 | 02/01/21 19:36 | 02/01/21 19:36 | BMB | Mt. Juliet, TN |

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

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

Chris Ward

Chris Ward
Project Manager

## Sample Delivery Group (SDG) Narrative

Analyzed from headspace vial.

| Batch | Method | Lab Sample ID |
|---|---|---|
| WG1617147 | 8260B | L1312207-07, 09 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/06/2021 00:54 | WG1617147 |
| Benzene | 0.00343 | | 0.0000941 | 0.00100 | 1 | 02/06/2021 00:54 | WG1617147 |
| Ethylbenzene | 0.00280 | | 0.000137 | 0.00100 | 1 | 02/06/2021 00:54 | WG1617147 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/06/2021 00:54 | WG1617147 |
| Naphthalene | 0.00195 | J | 0.00100 | 0.00500 | 1 | 02/06/2021 00:54 | WG1617147 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/06/2021 00:54 | WG1617147 |
| Xylenes, Total | 0.00209 | J | 0.000174 | 0.00300 | 1 | 02/06/2021 00:54 | WG1617147 |
| *(S) Toluene-d8* | *96.6* | | | *80.0-120* | | *02/06/2021 00:54* | WG1617147 |
| *(S) 4-Bromofluorobenzene* | *88.7* | | | *77.0-126* | | *02/06/2021 00:54* | WG1617147 |
| *(S) 1,2-Dichloroethane-d4* | *92.2* | | | *70.0-130* | | *02/06/2021 00:54* | WG1617147 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | 0.146 | | 0.0247 | 0.100 | 1 | 02/02/2021 20:50 | WG1614810 |
| *(S) o-Terphenyl* | *71.6* | | | *52.0-156* | | *02/02/2021 20:50* | WG1614810 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 0.109 | J | 0.108 | 0.500 | 1 | 02/01/2021 22:33 | WG1614718 |
| Benzene | 0.00382 | | 0.0000941 | 0.00100 | 1 | 02/01/2021 22:33 | WG1614718 |
| Ethylbenzene | 0.00359 | | 0.000137 | 0.00100 | 1 | 02/01/2021 22:33 | WG1614718 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/01/2021 22:33 | WG1614718 |
| Naphthalene | 0.00229 | J | 0.00100 | 0.00500 | 1 | 02/01/2021 22:33 | WG1614718 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/01/2021 22:33 | WG1614718 |
| Xylenes, Total | 0.00112 | J | 0.000174 | 0.00300 | 1 | 02/01/2021 22:33 | WG1614718 |
| *(S) Toluene-d8* | *99.7* | | | *80.0-120* | | *02/01/2021 22:33* | WG1614718 |
| *(S) 4-Bromofluorobenzene* | *91.8* | | | *77.0-126* | | *02/01/2021 22:33* | WG1614718 |
| *(S) 1,2-Dichloroethane-d4* | *92.7* | | | *70.0-130* | | *02/01/2021 22:33* | WG1614718 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | 0.172 | | 0.0247 | 0.100 | 1 | 02/04/2021 01:30 | WG1615486 |
| *(S) o-Terphenyl* | *97.9* | | | *52.0-156* | | *02/04/2021 01:30* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 0.836 | | 0.108 | 0.500 | 1 | 02/01/2021 22:55 | WG1614718 |
| Benzene | 0.248 | | 0.000941 | 0.0100 | 10 | 02/06/2021 14:16 | WG1617464 |
| Ethylbenzene | 0.00355 | | 0.000137 | 0.00100 | 1 | 02/01/2021 22:55 | WG1614718 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/01/2021 22:55 | WG1614718 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/01/2021 22:55 | WG1614718 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/01/2021 22:55 | WG1614718 |
| Xylenes, Total | 0.000244 | J | 0.000174 | 0.00300 | 1 | 02/01/2021 22:55 | WG1614718 |
| *(S) Toluene-d8* | *101* | | | *80.0-120* | | *02/01/2021 22:55* | WG1614718 |
| *(S) Toluene-d8* | *101* | | | *80.0-120* | | *02/06/2021 14:16* | WG1617464 |
| *(S) 4-Bromofluorobenzene* | *94.1* | | | *77.0-126* | | *02/01/2021 22:55* | WG1614718 |
| *(S) 4-Bromofluorobenzene* | *91.5* | | | *77.0-126* | | *02/06/2021 14:16* | WG1617464 |
| *(S) 1,2-Dichloroethane-d4* | *91.3* | | | *70.0-130* | | *02/01/2021 22:55* | WG1614718 |
| *(S) 1,2-Dichloroethane-d4* | *88.5* | | | *70.0-130* | | *02/06/2021 14:16* | WG1617464 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 17:13 | WG1615486 |
| *(S) o-Terphenyl* | *88.4* | | | *52.0-156* | | *02/03/2021 17:13* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 1.47 | J | 1.08 | 5.00 | 10 | 02/06/2021 14:38 | WG1617464 |
| Benzene | 0.340 | | 0.000941 | 0.0100 | 10 | 02/06/2021 14:38 | WG1617464 |
| Ethylbenzene | 0.156 | | 0.00137 | 0.0100 | 10 | 02/06/2021 14:38 | WG1617464 |
| Methyl tert-butyl ether | U | | 0.00101 | 0.0100 | 10 | 02/06/2021 14:38 | WG1617464 |
| Naphthalene | U | | 0.0100 | 0.0500 | 10 | 02/06/2021 14:38 | WG1617464 |
| Toluene | 0.00886 | J | 0.00278 | 0.0100 | 10 | 02/06/2021 14:38 | WG1617464 |
| Xylenes, Total | 0.00742 | J | 0.00174 | 0.0300 | 10 | 02/06/2021 14:38 | WG1617464 |
| *(S) Toluene-d8* | *98.8* | | | *80.0-120* | | *02/06/2021 14:38* | WG1617464 |
| *(S) 4-Bromofluorobenzene* | *90.5* | | | *77.0-126* | | *02/06/2021 14:38* | WG1617464 |
| *(S) 1,2-Dichloroethane-d4* | *88.1* | | | *70.0-130* | | *02/06/2021 14:38* | WG1617464 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | 0.313 | | 0.0247 | 0.100 | 1 | 02/03/2021 17:38 | WG1615486 |
| *(S) o-Terphenyl* | *94.2* | | | *52.0-156* | | *02/03/2021 17:38* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/01/2021 23:16 | WG1614718 |
| Benzene | 0.000136 | J | 0.0000941 | 0.00100 | 1 | 02/06/2021 07:24 | WG1617147 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 02/01/2021 23:16 | WG1614718 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/01/2021 23:16 | WG1614718 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/01/2021 23:16 | WG1614718 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/01/2021 23:16 | WG1614718 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 02/01/2021 23:16 | WG1614718 |
| *(S) Toluene-d8* | *101* | | | *80.0-120* | | *02/01/2021 23:16* | WG1614718 |
| *(S) Toluene-d8* | *102* | | | *80.0-120* | | *02/06/2021 07:24* | WG1617147 |
| *(S) 4-Bromofluorobenzene* | *90.7* | | | *77.0-126* | | *02/01/2021 23:16* | WG1614718 |
| *(S) 4-Bromofluorobenzene* | *90.4* | | | *77.0-126* | | *02/06/2021 07:24* | WG1617147 |
| *(S) 1,2-Dichloroethane-d4* | *90.8* | | | *70.0-130* | | *02/01/2021 23:16* | WG1614718 |
| *(S) 1,2-Dichloroethane-d4* | *92.5* | | | *70.0-130* | | *02/06/2021 07:24* | WG1617147 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 18:04 | WG1615486 |
| *(S) o-Terphenyl* | *88.9* | | | *52.0-156* | | *02/03/2021 18:04* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/01/2021 23:38 | WG1614718 |
| Benzene | 0.000308 | J | 0.0000941 | 0.00100 | 1 | 02/01/2021 23:38 | WG1614718 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 02/01/2021 23:38 | WG1614718 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/01/2021 23:38 | WG1614718 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/01/2021 23:38 | WG1614718 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/01/2021 23:38 | WG1614718 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 02/01/2021 23:38 | WG1614718 |
| *(S) Toluene-d8* | *99.1* | | | *80.0-120* | | *02/01/2021 23:38* | WG1614718 |
| *(S) 4-Bromofluorobenzene* | *90.3* | | | *77.0-126* | | *02/01/2021 23:38* | WG1614718 |
| *(S) 1,2-Dichloroethane-d4* | *94.4* | | | *70.0-130* | | *02/01/2021 23:38* | WG1614718 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 18:30 | WG1615486 |
| *(S) o-Terphenyl* | *91.6* | | | *52.0-156* | | *02/03/2021 18:30* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/06/2021 07:45 | WG1617147 |
| Benzene | U | | 0.0000941 | 0.00100 | 1 | 02/06/2021 07:45 | WG1617147 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 02/06/2021 07:45 | WG1617147 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/06/2021 07:45 | WG1617147 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/06/2021 07:45 | WG1617147 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/06/2021 07:45 | WG1617147 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 02/06/2021 07:45 | WG1617147 |
| *(S) Toluene-d8* | *102* | | | *80.0-120* | | *02/06/2021 07:45* | WG1617147 |
| *(S) 4-Bromofluorobenzene* | *92.3* | | | *77.0-126* | | *02/06/2021 07:45* | WG1617147 |
| *(S) 1,2-Dichloroethane-d4* | *92.9* | | | *70.0-130* | | *02/06/2021 07:45* | WG1617147 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 19:02 | WG1615486 |
| *(S) o-Terphenyl* | *94.2* | | | *52.0-156* | | *02/03/2021 19:02* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/06/2021 08:07 | WG1617147 |
| Benzene | 0.000131 | J | 0.0000941 | 0.00100 | 1 | 02/06/2021 08:07 | WG1617147 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 02/06/2021 08:07 | WG1617147 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/06/2021 08:07 | WG1617147 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/06/2021 08:07 | WG1617147 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/06/2021 08:07 | WG1617147 |
| Xylenes, Total | 0.000209 | J | 0.000174 | 0.00300 | 1 | 02/06/2021 08:07 | WG1617147 |
| *(S) Toluene-d8* | *104* | | | *80.0-120* | | *02/06/2021 08:07* | WG1617147 |
| *(S) 4-Bromofluorobenzene* | *93.0* | | | *77.0-126* | | *02/06/2021 08:07* | WG1617147 |
| *(S) 1,2-Dichloroethane-d4* | *92.9* | | | *70.0-130* | | *02/06/2021 08:07* | WG1617147 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 19:28 | WG1615486 |
| *(S) o-Terphenyl* | *97.4* | | | *52.0-156* | | *02/03/2021 19:28* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/06/2021 08:29 | WG1617147 |
| Benzene | 0.000372 | J | 0.0000941 | 0.00100 | 1 | 02/06/2021 08:29 | WG1617147 |
| Ethylbenzene | 0.00140 | | 0.000137 | 0.00100 | 1 | 02/06/2021 08:29 | WG1617147 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/06/2021 08:29 | WG1617147 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/06/2021 08:29 | WG1617147 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/06/2021 08:29 | WG1617147 |
| Xylenes, Total | 0.000610 | J | 0.000174 | 0.00300 | 1 | 02/06/2021 08:29 | WG1617147 |
| *(S) Toluene-d8* | *101* | | | *80.0-120* | | *02/06/2021 08:29* | WG1617147 |
| *(S) 4-Bromofluorobenzene* | *90.8* | | | *77.0-126* | | *02/06/2021 08:29* | WG1617147 |
| *(S) 1,2-Dichloroethane-d4* | *92.6* | | | *70.0-130* | | *02/06/2021 08:29* | WG1617147 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 19:54 | WG1615486 |
| *(S) o-Terphenyl* | *96.3* | | | *52.0-156* | | *02/03/2021 19:54* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/06/2021 08:50 | WG1617147 |
| Benzene | 0.000500 | J | 0.0000941 | 0.00100 | 1 | 02/06/2021 08:50 | WG1617147 |
| Ethylbenzene | 0.00303 | | 0.000137 | 0.00100 | 1 | 02/06/2021 08:50 | WG1617147 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/06/2021 08:50 | WG1617147 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/06/2021 08:50 | WG1617147 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/06/2021 08:50 | WG1617147 |
| Xylenes, Total | 0.000869 | J | 0.000174 | 0.00300 | 1 | 02/06/2021 08:50 | WG1617147 |
| *(S) Toluene-d8* | *98.2* | | | *80.0-120* | | *02/06/2021 08:50* | WG1617147 |
| *(S) 4-Bromofluorobenzene* | *90.3* | | | *77.0-126* | | *02/06/2021 08:50* | WG1617147 |
| *(S) 1,2-Dichloroethane-d4* | *91.8* | | | *70.0-130* | | *02/06/2021 08:50* | WG1617147 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 20:20 | WG1615486 |
| *(S) o-Terphenyl* | *101* | | | *52.0-156* | | *02/03/2021 20:20* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/06/2021 09:12 | WG1617147 |
| Benzene | U | | 0.0000941 | 0.00100 | 1 | 02/06/2021 09:12 | WG1617147 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 02/06/2021 09:12 | WG1617147 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/06/2021 09:12 | WG1617147 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/06/2021 09:12 | WG1617147 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/06/2021 09:12 | WG1617147 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 02/06/2021 09:12 | WG1617147 |
| *(S) Toluene-d8* | *103* | | | *80.0-120* | | *02/06/2021 09:12* | WG1617147 |
| *(S) 4-Bromofluorobenzene* | *90.3* | | | *77.0-126* | | *02/06/2021 09:12* | WG1617147 |
| *(S) 1,2-Dichloroethane-d4* | *94.6* | | | *70.0-130* | | *02/06/2021 09:12* | WG1617147 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 20:46 | WG1615486 |
| *(S) o-Terphenyl* | *91.6* | | | *52.0-156* | | *02/03/2021 20:46* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 13.1 | | 2.70 | 12.5 | 25 | 02/06/2021 15:00 | WG1617464 |
| Benzene | 2.84 | | 0.00235 | 0.0250 | 25 | 02/06/2021 15:00 | WG1617464 |
| Ethylbenzene | 0.565 | | 0.00343 | 0.0250 | 25 | 02/06/2021 15:00 | WG1617464 |
| Methyl tert-butyl ether | U | | 0.00253 | 0.0250 | 25 | 02/06/2021 15:00 | WG1617464 |
| Naphthalene | 0.0451 | J | 0.0250 | 0.125 | 25 | 02/06/2021 15:00 | WG1617464 |
| Toluene | 0.463 | | 0.00695 | 0.0250 | 25 | 02/06/2021 15:00 | WG1617464 |
| Xylenes, Total | 1.75 | | 0.00435 | 0.0750 | 25 | 02/06/2021 15:00 | WG1617464 |
| *(S) Toluene-d8* | *99.0* | | | *80.0-120* | | *02/06/2021 15:00* | WG1617464 |
| *(S) 4-Bromofluorobenzene* | *90.3* | | | *77.0-126* | | *02/06/2021 15:00* | WG1617464 |
| *(S) 1,2-Dichloroethane-d4* | *89.4* | | | *70.0-130* | | *02/06/2021 15:00* | WG1617464 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | 1.10 | | 0.0247 | 0.100 | 1 | 02/03/2021 21:11 | WG1615486 |
| *(S) o-Terphenyl* | *97.9* | | | *52.0-156* | | *02/03/2021 21:11* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 2.92 | J | 1.08 | 5.00 | 10 | 02/06/2021 15:21 | WG1617464 |
| Benzene | 0.282 | | 0.000941 | 0.0100 | 10 | 02/06/2021 15:21 | WG1617464 |
| Ethylbenzene | 0.115 | | 0.00137 | 0.0100 | 10 | 02/06/2021 15:21 | WG1617464 |
| Methyl tert-butyl ether | U | | 0.00101 | 0.0100 | 10 | 02/06/2021 15:21 | WG1617464 |
| Naphthalene | U | | 0.0100 | 0.0500 | 10 | 02/06/2021 15:21 | WG1617464 |
| Toluene | 0.322 | | 0.00278 | 0.0100 | 10 | 02/06/2021 15:21 | WG1617464 |
| Xylenes, Total | 0.584 | | 0.00174 | 0.0300 | 10 | 02/06/2021 15:21 | WG1617464 |
| *(S) Toluene-d8* | *99.1* | | | *80.0-120* | | *02/06/2021 15:21* | WG1617464 |
| *(S) 4-Bromofluorobenzene* | *91.4* | | | *77.0-126* | | *02/06/2021 15:21* | WG1617464 |
| *(S) 1,2-Dichloroethane-d4* | *89.3* | | | *70.0-130* | | *02/06/2021 15:21* | WG1617464 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | 0.139 | | 0.0247 | 0.100 | 1 | 02/03/2021 21:37 | WG1615486 |
| *(S) o-Terphenyl* | *95.8* | | | *52.0-156* | | *02/03/2021 21:37* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/06/2021 09:34 | WG1617147 |
| Benzene | 0.00222 | | 0.0000941 | 0.00100 | 1 | 02/06/2021 09:34 | WG1617147 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 02/06/2021 09:34 | WG1617147 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/06/2021 09:34 | WG1617147 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/06/2021 09:34 | WG1617147 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 02/06/2021 09:34 | WG1617147 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 02/06/2021 09:34 | WG1617147 |
| *(S) Toluene-d8* | *101* | | | *80.0-120* | | *02/06/2021 09:34* | WG1617147 |
| *(S) 4-Bromofluorobenzene* | *89.8* | | | *77.0-126* | | *02/06/2021 09:34* | WG1617147 |
| *(S) 1,2-Dichloroethane-d4* | *93.3* | | | *70.0-130* | | *02/06/2021 09:34* | WG1617147 |

## 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 |
|---|---|---|---|---|---|---|---|
| DRO w/ SGT | U | | 0.0247 | 0.100 | 1 | 02/03/2021 22:03 | WG1615486 |
| *(S) o-Terphenyl* | *91.1* | | | *52.0-156* | | *02/03/2021 22:03* | WG1615486 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 02/01/2021 19:36 | WG1614718 |
| Benzene | 0.000158 | J | 0.0000941 | 0.00100 | 1 | 02/01/2021 19:36 | WG1614718 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 02/01/2021 19:36 | WG1614718 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 02/01/2021 19:36 | WG1614718 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 02/01/2021 19:36 | WG1614718 |
| Toluene | 0.000381 | J | 0.000278 | 0.00100 | 1 | 02/01/2021 19:36 | WG1614718 |
| Xylenes, Total | 0.000439 | J | 0.000174 | 0.00300 | 1 | 02/01/2021 19:36 | WG1614718 |
| *(S) Toluene-d8* | *102* | | | *80.0-120* | | *02/01/2021 19:36* | WG1614718 |
| *(S) 4-Bromofluorobenzene* | *92.9* | | | *77.0-126* | | *02/01/2021 19:36* | WG1614718 |
| *(S) 1,2-Dichloroethane-d4* | *89.6* | | | *70.0-130* | | *02/01/2021 19:36* | WG1614718 |

## Method Blank (MB)

(MB) R3618333-3 02/01/21 13:04

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 |
| Benzene | U | | 0.0000941 | 0.00100 |
| Ethylbenzene | U | | 0.000137 | 0.00100 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 |
| Naphthalene | U | | 0.00100 | 0.00500 |
| Toluene | U | | 0.000278 | 0.00100 |
| Xylenes, Total | U | | 0.000174 | 0.00300 |
| *(S) Toluene-d8* | *98.3* | | | *80.0-120* |
| *(S) 4-Bromofluorobenzene* | *93.0* | | | *77.0-126* |
| *(S) 1,2-Dichloroethane-d4* | *91.8* | | | *70.0-130* |

## Laboratory Control Sample (LCS)

(LCS) R3618333-1 02/01/21 12:00

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Benzene | 0.00500 | 0.00451 | 90.2 | 70.0-123 | |
| Ethylbenzene | 0.00500 | 0.00470 | 94.0 | 79.0-123 | |
| Methyl tert-butyl ether | 0.00500 | 0.00452 | 90.4 | 68.0-125 | |
| Naphthalene | 0.00500 | 0.00498 | 99.6 | 54.0-135 | |
| Toluene | 0.00500 | 0.00500 | 100 | 79.0-120 | |
| Xylenes, Total | 0.0150 | 0.0141 | 94.0 | 79.0-123 | |
| *(S) Toluene-d8* | | | *97.5* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *90.4* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *96.7* | *70.0-130* | |

## Laboratory Control Sample (LCS)

(LCS) R3618333-2 02/01/21 12:21

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 5.00 | 4.68 | 93.6 | 66.0-132 | |
| *(S) Toluene-d8* | | | *96.7* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *95.8* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *95.8* | *70.0-130* | |

## Method Blank (MB)

(MB) R3620153-4 02/06/21 00:11

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 |
| Benzene | U | | 0.0000941 | 0.00100 |
| Ethylbenzene | U | | 0.000137 | 0.00100 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 |
| Naphthalene | U | | 0.00100 | 0.00500 |
| Toluene | U | | 0.000278 | 0.00100 |
| Xylenes, Total | U | | 0.000174 | 0.00300 |
| *(S) Toluene-d8* | *101* | | | *80.0-120* |
| *(S) 4-Bromofluorobenzene* | *89.7* | | | *77.0-126* |
| *(S) 1,2-Dichloroethane-d4* | *93.8* | | | *70.0-130* |

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

(LCS) R3620153-1 02/05/21 22:05 • (LCSD) R3620153-2 02/05/21 22:27

| 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 | 0.00437 | 0.00435 | 87.4 | 87.0 | 70.0-123 | | | 0.459 | 20 |
| Ethylbenzene | 0.00500 | 0.00433 | 0.00441 | 86.6 | 88.2 | 79.0-123 | | | 1.83 | 20 |
| Methyl tert-butyl ether | 0.00500 | 0.00441 | 0.00447 | 88.2 | 89.4 | 68.0-125 | | | 1.35 | 20 |
| Naphthalene | 0.00500 | 0.00469 | 0.00477 | 93.8 | 95.4 | 54.0-135 | | | 1.69 | 20 |
| Toluene | 0.00500 | 0.00467 | 0.00472 | 93.4 | 94.4 | 79.0-120 | | | 1.06 | 20 |
| Xylenes, Total | 0.0150 | 0.0128 | 0.0131 | 85.3 | 87.3 | 79.0-123 | | | 2.32 | 20 |
| *(S) Toluene-d8* | | | | *96.7* | *97.6* | *80.0-120* | | | | |
| *(S) 4-Bromofluorobenzene* | | | | *90.9* | *89.9* | *77.0-126* | | | | |
| *(S) 1,2-Dichloroethane-d4* | | | | *98.4* | *95.9* | *70.0-130* | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3620153-3 02/05/21 22:48

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 5.00 | 5.01 | 100 | 66.0-132 | |
| *(S) Toluene-d8* | | | *101* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *101* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *95.4* | *70.0-130* | |

## Method Blank (MB)

(MB) R3620148-3 02/06/21 13:55

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 |
| Benzene | U | | 0.0000941 | 0.00100 |
| Ethylbenzene | U | | 0.000137 | 0.00100 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 |
| Naphthalene | U | | 0.00100 | 0.00500 |
| Toluene | U | | 0.000278 | 0.00100 |
| Xylenes, Total | U | | 0.000174 | 0.00300 |
| *(S) Toluene-d8* | *100* | | | *80.0-120* |
| *(S) 4-Bromofluorobenzene* | *89.9* | | | *77.0-126* |
| *(S) 1,2-Dichloroethane-d4* | *90.1* | | | *70.0-130* |

## Laboratory Control Sample (LCS)

(LCS) R3620148-1 02/06/21 12:28

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Benzene | 0.00500 | 0.00470 | 94.0 | 70.0-123 | |
| Ethylbenzene | 0.00500 | 0.00489 | 97.8 | 79.0-123 | |
| Methyl tert-butyl ether | 0.00500 | 0.00440 | 88.0 | 68.0-125 | |
| Naphthalene | 0.00500 | 0.00416 | 83.2 | 54.0-135 | |
| Toluene | 0.00500 | 0.00511 | 102 | 79.0-120 | |
| Xylenes, Total | 0.0150 | 0.0142 | 94.7 | 79.0-123 | |
| *(S) Toluene-d8* | | | *98.3* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *93.1* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *94.3* | *70.0-130* | |

## Laboratory Control Sample (LCS)

(LCS) R3620148-2 02/06/21 12:50

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 5.00 | 5.00 | 100 | 66.0-132 | |
| *(S) Toluene-d8* | | | *95.4* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *96.9* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *96.9* | *70.0-130* | |

## Method Blank (MB)

(MB) R3618741-1 02/02/21 13:12

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| DRO W/ SGT | U | | 0.0247 | 0.100 |
| *(S) o-Terphenyl* | *78.0* | | | *52.0-156* |

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

(LCS) R3618741-2 02/02/21 13:34 • (LCSD) R3618741-3 02/02/21 13:54

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|
| DRO W/ SGT | 1.50 | 1.30 | 1.27 | 86.7 | 84.7 | 50.0-150 | | | 2.33 | 20 |
| *(S) o-Terphenyl* | | | | *84.0* | *81.0* | *52.0-156* | | | | |

## Method Blank (MB)

(MB) R3618994-1 02/03/21 11:56

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| DRO W/ SGT | U | | 0.0247 | 0.100 |
| *(S) o-Terphenyl* | *96.0* | | | *52.0-156* |

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

(LCS) R3618994-2 02/03/21 12:21 • (LCSD) R3618994-3 02/03/21 12:47

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|
| DRO W/ SGT | 1.50 | 1.34 | 1.29 | 89.3 | 86.0 | 50.0-150 | | | 3.80 | 20 |
| *(S) o-Terphenyl* | | | | *114* | *112* | *52.0-156* | | | | |

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

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

| | |
|---|---|
| MDL | Method Detection Limit. |
| RDL | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| (S) | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media. |
| 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 |
|---|---|
| J | The identification of the analyte is acceptable; the reported value is an estimate. |

# ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.



## 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 | LAO00356 |
| 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 | | |

## Pace Analytical National 1313 Point Mallard Parkway SE Suite B Decatur, AL, 35601

| | |
|---|---|
| Alabama | 40160 |
| ANSI National Accreditation Board | L2239 |

## Pace Analytical National 660 Bercut Dr. Ste. C Sacramento, CA, 95811

| | | | |
|---|---|---|---|
| California | 2961 | Oregon | CA300002 |
| Minnesota | 006-999-465 | Washington | C926 |
| North Dakota | R-214 | | |

## Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

| | |
|---|---|
| Nevada | NV009412021-1 |

## Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

| | |
|---|---|
| Texas | T104704328-20-18 |

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

TERRDUT
Terracon SLC

Billing Information:
TERRDUT
Terracon
6949 High Tech Drive
SLC Utah 84047

Report to: Curt Stripeika

Email To: curt.stripeika@terracon.com

Project Description: TSC Layton

City/State Collected: Layton, Utah

Phone:
Fax:

Client Project # 61197153 task 9.2

Lab Project #

Collected by (print): Alayna Thompson

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: 5 Day TAT (Terracon standard)

Immediately Packed on Ice N ___ Y ✓

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

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National Center for Testing & Innovation

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

L# L1312207

C041

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | TPH-GRO/MBTEXN 8260B | TPH-DRO 8015B w/ SGT | | | | | | | | | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-13 | grab | GW | – | 1-27-21 | 1100 | 5 | X | X | | | | | | | | | | -01 |
| MW-33 | | | – | | 1110 | 5 | X | X | | | | | | | | | | 02 |
| MW-31 | | | – | | 1415 | 2 | X | X | | | | | | | | | | 03 |
| MW-19 | | | – | | 1540 | 5 | X | X | | | | | | | | | | 04 |
| MW-08 | | | – | | 1000 | 3 | X | X | | | | | | | | | | 05 |
| MW-14 | | | – | | 1145 | 3 | X | X | | | | | | | | | | 06 |
| MW-37 | | | – | | 1330 | 3 | X | X | | | | | | | | | | 07 |
| MW-30 | | | – | | 1500 | 5 | X | X | | | | | | | | | | 08 |
| MW-23 | | | – | 1-28-21 | 1025 | 2 | X | X | | | | | | | | | | 09 |
| MW-43 | | | – | 1-28-21 | 1030 | 3 | X | X | | | | | | | | | | 10 |

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

Remarks:

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: 1-29-21 ~~1-28-2021~~ AO | Time: 9:10 ~~17:15~~ AO | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| Relinquished by : (Signature) PNSLCUT | Date: 1/29/21 | Time: 1700 | Received by: (Signature) | Temp: 8.0-8 °C Bottles Received: 57 |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 1/30/21 Time: 9:00 |

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

page 2 same info as page 1

Billing Information:

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

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

Report to: Curt Stripeika

Email To: Curt.Stripeika@terracon.com

Project Description: TSC Cheron

City/State Collected: Layton, UT

Phone:
Fax:

Client Project # 61197153 Task 9.2

Lab Project #

L# L1312207

Table #

Collected by (print): Alayna Thompson

Site/Facility ID #

P.O. #

Acctnum:

Template:

Prelogin:

TSR:

PB:

Collected by (signature): AT

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: 5 Day Terracon std TAT

Shipped Via:

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | TPH-GRO / MBTEXN 8260B | TPH-DRO 8015B w/ SGT | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|
| MW-32 | grab | GW | – | 1-28-21 | 12:30 | ~~3~~ 4 | X | X | | -11 |
| MW-01 | ↓ | ↓ | – | ↓ | 1410 | 5 | X | X | | 12 |
| MW-02 | ↓ | ↓ | – | ↓ | 1330 | 4 | X | X | | 13 |
| MW-04 | ↓ | ↓ | – | ↓ | 1430 | 5 | X | X | | 14 |
| Trip Blank | – | – | – | – | – | | X | X | | 15 |

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

**Remarks:**

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 |
|---|---|---|---|---|
| AT | 1-29-21 ~~1-28-2021~~ AT | 9:10 ~~1715~~ AT | [signature] | 1 3 |

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C | Bottles Received: | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|---|
| [signature] PNSLCUT | 1/29/21 | 1700 | | ~~1.8~~ 9.0-.8 | 57 | |

| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: | Time: | Hold: | Condition: |
|---|---|---|---|---|---|---|---|
| | | | [signature] | 1/30/21 | 9:~~00~~ | | NCF / OK |

## L1312207 TERRDUT NCF

R5

**Time estimate:** oh **Time spent:** oh

**Members**

Jeremy Watkins (responsible) Chris Ward

- [ ] Parameter(s) past holding time
- [ ] Temperature not in range
- [ ] Improper container type
- [ ] pH not in range
- [ ] Insufficient sample volume
- [ ] Sample is biphasic
- [ ] Vials received with headspace
- [x] Broken container
- [x] Sufficient sample remains
- [ ] If broken container: Insufficient packing material around container
- [ ] If broken container: Insufficient packing material inside cooler
- [ ] If broken container: Improper handling by carrier:_____
- [x] If broken container: Sample was frozen
- [ ] If broken container: Container lid not intact
- [ ] Client informed by Call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____
- [x] PM initials:____CMW_____
- [ ] Client Contact:_____

**Comments**

*Jeremy Watkins* *30 January 2021 4:15 PM*

1. 3 of 5 vials broken/Frozen for MW-31, MW-23
2. 2 of 5 vials broken/Frozen for MW-08, MW-37, MW-43 and MW-32
3. 1 of 5 vials broken/Frozen for MW-02
4. Received MW-22 @ 1055. 3 of 5 vials broken.

*Chris Ward* *1 February 2021 10:08 AM*

Please proceed. Note limited volume on the effected samples.

*Matthew Shacklock* *1 February 2021 11:15 AM*

Done

# ANALYTICAL REPORT

October 20, 2021

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

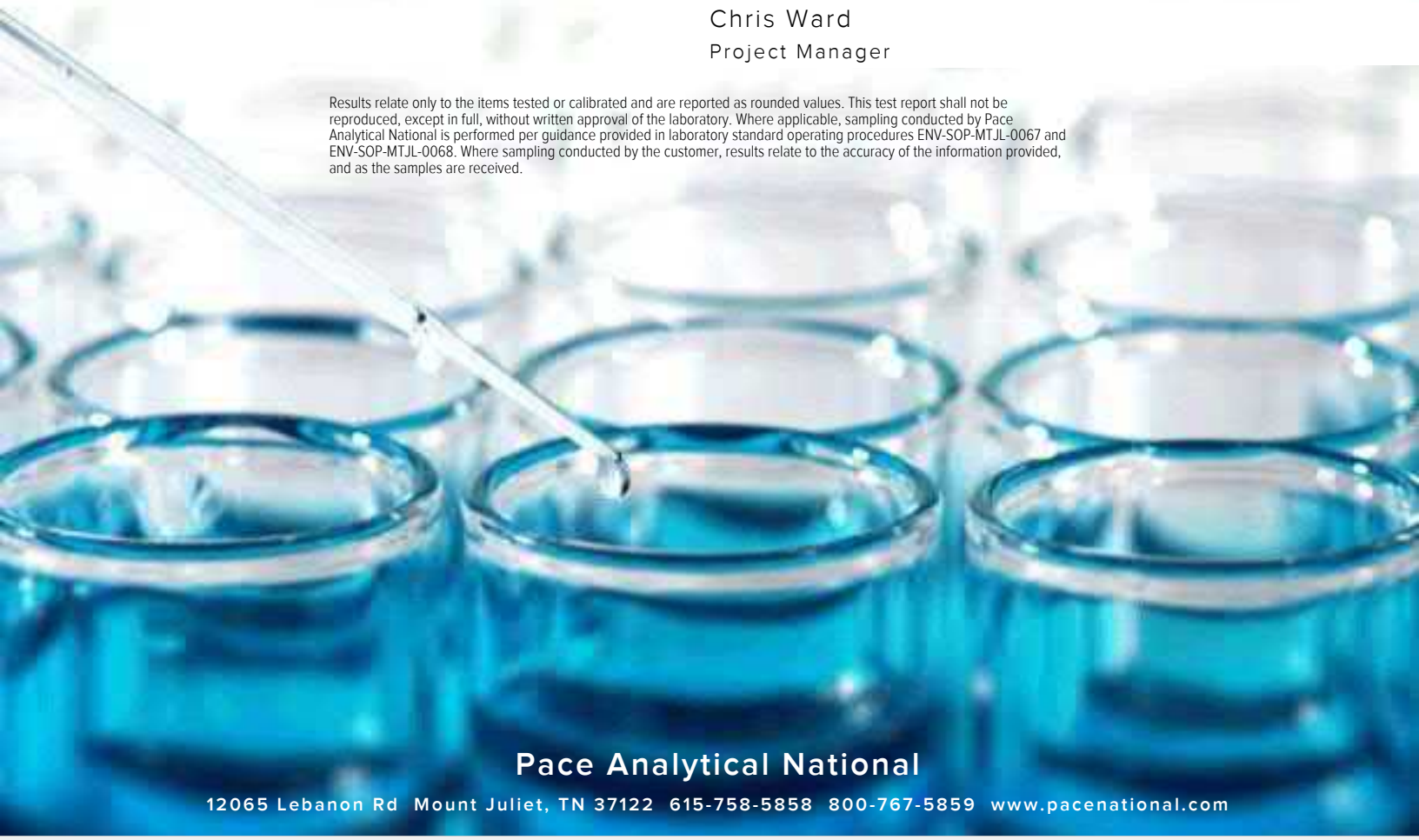
## Terracon - Salt Lake City, UT

| | |
|---|---|
| Sample Delivery Group: | L1415684 |
| Samples Received: | 10/08/2021 |
| Project Number: | 61197153 TASK 9.2 |
| Description: | Triple Stop Chevron |
| Report To: | Curt Stripeika<br>6949 South High Tech Drive<br>Midvale, UT 84047 |

Entire Report Reviewed By: Chris Ward

Chris Ward
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

# TABLE OF CONTENTS

## MW-39 L1415684-01 GW

Collected by: Roy McDonald | Collected date/time: 10/04/21 12:13 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 1 | 10/15/21 03:15 | 10/15/21 03:15 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757580 | 1 | 10/14/21 08:55 | 10/14/21 16:11 | DMG | Mt. Juliet, TN |

## MW-38 L1415684-02 GW

Collected by: Roy McDonald | Collected date/time: 10/04/21 13:11 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 1 | 10/15/21 03:35 | 10/15/21 03:35 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757580 | 1 | 10/14/21 08:55 | 10/14/21 16:38 | DMG | Mt. Juliet, TN |

## MW-32 L1415684-03 GW

Collected by: Roy McDonald | Collected date/time: 10/04/21 14:17 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1756874 | 1 | 10/16/21 15:53 | 10/16/21 15:53 | MRM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1756392 | 1 | 10/14/21 12:06 | 10/14/21 12:06 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756817 | 1 | 10/14/21 08:27 | 10/14/21 17:30 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 1 | 10/15/21 03:55 | 10/15/21 03:55 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757580 | 1 | 10/14/21 08:55 | 10/14/21 17:04 | DMG | Mt. Juliet, TN |

## MW-37 L1415684-04 GW

Collected by: Roy McDonald | Collected date/time: 10/04/21 15:26 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1756874 | 1 | 10/16/21 15:54 | 10/16/21 15:54 | MRM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1756392 | 1 | 10/14/21 12:37 | 10/14/21 12:37 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756817 | 1 | 10/14/21 08:27 | 10/14/21 17:38 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 1 | 10/15/21 04:15 | 10/15/21 04:15 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757580 | 1 | 10/14/21 08:55 | 10/14/21 17:29 | DMG | Mt. Juliet, TN |

## MW-2 L1415684-05 GW

Collected by: Roy McDonald | Collected date/time: 10/06/21 09:11 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 10 | 10/15/21 06:14 | 10/15/21 06:14 | DWR | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1759103 | 10 | 10/19/21 14:28 | 10/19/21 14:28 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 01:07 | DMG | Mt. Juliet, TN |

## MW-18 L1415684-06 GW

Collected by: Roy McDonald | Collected date/time: 10/06/21 10:20 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 1 | 10/15/21 04:35 | 10/15/21 04:35 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 01:27 | DMG | Mt. Juliet, TN |

## MW-30 L1415684-07 GW

Collected by: Roy McDonald | Collected date/time: 10/06/21 11:21 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 1 | 10/15/21 04:54 | 10/15/21 04:54 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 01:47 | DMG | Mt. Juliet, TN |

## MW-4 L1415684-08 GW

Collected by: Roy McDonald | Collected date/time: 10/06/21 12:28 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 1 | 10/15/21 05:14 | 10/15/21 05:14 | DWR | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1759103 | 5 | 10/19/21 14:48 | 10/19/21 14:48 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 02:07 | DMG | Mt. Juliet, TN |

## MW-1 L1415684-09 GW

Collected by: Roy McDonald | Collected date/time: 10/06/21 13:30 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1756874 | 30 | 10/16/21 15:55 | 10/16/21 15:55 | MRM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1756392 | 1 | 10/14/21 12:53 | 10/14/21 12:53 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756817 | 1 | 10/14/21 08:27 | 10/14/21 17:41 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 25 | 10/15/21 06:33 | 10/15/21 06:33 | DWR | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1759103 | 25 | 10/19/21 15:09 | 10/19/21 15:09 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 02:27 | DMG | Mt. Juliet, TN |

## MW-19 L1415684-10 GW

Collected by: Roy McDonald | Collected date/time: 10/06/21 14:53 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1756874 | 30 | 10/16/21 15:55 | 10/16/21 15:55 | MRM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1756392 | 1 | 10/14/21 13:09 | 10/14/21 13:09 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756817 | 1 | 10/14/21 08:27 | 10/14/21 17:44 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 10 | 10/15/21 06:53 | 10/15/21 06:53 | DWR | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1759103 | 25 | 10/19/21 15:29 | 10/19/21 15:29 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 02:47 | DMG | Mt. Juliet, TN |

## MW-20 L1415684-11 GW

Collected by: Roy McDonald | Collected date/time: 10/06/21 16:11 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1756874 | 1 | 10/16/21 15:56 | 10/16/21 15:56 | MRM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1756392 | 1 | 10/14/21 13:25 | 10/14/21 13:25 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756817 | 1 | 10/14/21 08:27 | 10/14/21 17:46 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1759103 | 1 | 10/19/21 13:47 | 10/19/21 13:47 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 10:15 | DMG | Mt. Juliet, TN |

## DUP#1 L1415684-12 GW

Collected by: Roy McDonald | Collected date/time: 10/05/21 00:00 | Received date/time: 10/08/21 08:30

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1757362 | 1 | 10/15/21 05:34 | 10/15/21 05:34 | DWR | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1759103 | 20 | 10/19/21 15:49 | 10/19/21 15:49 | DWR | Mt. Juliet, TN |

## MW-31 L1415684-13 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Roy McDonald | 10/04/21 16:20 | 10/08/21 08:30 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1756874 | 1 | 10/16/21 15:57 | 10/16/21 15:57 | MRM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1756392 | 1 | 10/14/21 14:45 | 10/14/21 14:45 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756817 | 1 | 10/14/21 08:27 | 10/14/21 17:49 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1759103 | 1 | 10/19/21 14:08 | 10/19/21 14:08 | DWR | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757580 | 1 | 10/14/21 08:55 | 10/14/21 17:56 | DMG | Mt. Juliet, TN |

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

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

Chris Ward

Chris Ward
Project Manager

## Sample Delivery Group (SDG) Narrative

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

| Batch | Method | Lab Sample ID |
|---|---|---|
| WG1756874 | 3500Fe B-2011 | L1415684-03, 04, 09, 10, 11, 13 |

## Wet Chemistry by Method 9056A

The sample concentration is too high to evaluate accurate spike recoveries.

| Batch | Lab Sample ID | Analytes |
|---|---|---|
| WG1756392 | (MS) R3716774-7 | Sulfate |

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

The associated batch QC was outside the established quality control range for precision.

| Batch | Lab Sample ID | Analytes |
|---|---|---|
| WG1759103 | (LCSD) R3718733-2, L1415684-11, 13 | Naphthalene |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/15/2021 03:15 | WG1757362 |
| Benzene | U | | 0.0000941 | 0.00100 | 1 | 10/15/2021 03:15 | WG1757362 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 10/15/2021 03:15 | WG1757362 |
| Methyl tert-butyl ether | 0.000286 | J | 0.000101 | 0.00100 | 1 | 10/15/2021 03:15 | WG1757362 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 10/15/2021 03:15 | WG1757362 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/15/2021 03:15 | WG1757362 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 10/15/2021 03:15 | WG1757362 |
| *(S) Toluene-d8* | *109* | | | *80.0-120* | | *10/15/2021 03:15* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *97.4* | | | *77.0-126* | | *10/15/2021 03:15* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *104* | | | *70.0-130* | | *10/15/2021 03:15* | WG1757362 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/14/2021 16:11 | WG1757580 |
| *(S) o-Terphenyl* | *119* | | | *52.0-156* | | *10/14/2021 16:11* | WG1757580 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/15/2021 03:35 | WG1757362 |
| Benzene | U | | 0.0000941 | 0.00100 | 1 | 10/15/2021 03:35 | WG1757362 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 10/15/2021 03:35 | WG1757362 |
| Methyl tert-butyl ether | 0.000765 | J | 0.000101 | 0.00100 | 1 | 10/15/2021 03:35 | WG1757362 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 10/15/2021 03:35 | WG1757362 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/15/2021 03:35 | WG1757362 |
| Xylenes, Total | 0.000397 | J | 0.000174 | 0.00300 | 1 | 10/15/2021 03:35 | WG1757362 |
| *(S) Toluene-d8* | *112* | | | *80.0-120* | | *10/15/2021 03:35* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *99.0* | | | *77.0-126* | | *10/15/2021 03:35* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *105* | | | *70.0-130* | | *10/15/2021 03:35* | WG1757362 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/14/2021 16:38 | WG1757580 |
| *(S) o-Terphenyl* | *118* | | | *52.0-156* | | *10/14/2021 16:38* | WG1757580 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 0.0490 | J T8 | 0.0150 | 0.0500 | 1 | 10/16/2021 15:53 | WG1756874 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 14.6 | | 0.594 | 5.00 | 1 | 10/14/2021 12:06 | WG1756392 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 17:30 | WG1756817 |
| Manganese,Dissolved | 0.125 | | 0.000934 | 0.0100 | 1 | 10/14/2021 17:30 | WG1756817 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/15/2021 03:55 | WG1757362 |
| Benzene | U | | 0.0000941 | 0.00100 | 1 | 10/15/2021 03:55 | WG1757362 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 10/15/2021 03:55 | WG1757362 |
| Methyl tert-butyl ether | 0.000194 | J | 0.000101 | 0.00100 | 1 | 10/15/2021 03:55 | WG1757362 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 10/15/2021 03:55 | WG1757362 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/15/2021 03:55 | WG1757362 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 10/15/2021 03:55 | WG1757362 |
| *(S) Toluene-d8* | *108* | | | *80.0-120* | | *10/15/2021 03:55* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *95.3* | | | *77.0-126* | | *10/15/2021 03:55* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *99.9* | | | *70.0-130* | | *10/15/2021 03:55* | WG1757362 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/14/2021 17:04 | WG1757580 |
| *(S) o-Terphenyl* | *108* | | | *52.0-156* | | *10/14/2021 17:04* | WG1757580 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | U | T8 | 0.0150 | 0.0500 | 1 | 10/16/2021 15:54 | WG1756874 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 42.2 | | 0.594 | 5.00 | 1 | 10/14/2021 12:37 | WG1756392 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 17:38 | WG1756817 |
| Manganese,Dissolved | 0.0133 | | 0.000934 | 0.0100 | 1 | 10/14/2021 17:38 | WG1756817 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/15/2021 04:15 | WG1757362 |
| Benzene | U | | 0.0000941 | 0.00100 | 1 | 10/15/2021 04:15 | WG1757362 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 10/15/2021 04:15 | WG1757362 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/15/2021 04:15 | WG1757362 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 10/15/2021 04:15 | WG1757362 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/15/2021 04:15 | WG1757362 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 10/15/2021 04:15 | WG1757362 |
| *(S) Toluene-d8* | *111* | | | *80.0-120* | | *10/15/2021 04:15* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *97.6* | | | *77.0-126* | | *10/15/2021 04:15* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *99.6* | | | *70.0-130* | | *10/15/2021 04:15* | WG1757362 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/14/2021 17:29 | WG1757580 |
| *(S) o-Terphenyl* | *126* | | | *52.0-156* | | *10/14/2021 17:29* | WG1757580 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 7.67 | | 1.08 | 5.00 | 10 | 10/19/2021 14:28 | WG1759103 |
| Benzene | 0.527 | | 0.000941 | 0.0100 | 10 | 10/15/2021 06:14 | WG1757362 |
| Ethylbenzene | 0.307 | | 0.00137 | 0.0100 | 10 | 10/15/2021 06:14 | WG1757362 |
| Methyl tert-butyl ether | U | | 0.00101 | 0.0100 | 10 | 10/15/2021 06:14 | WG1757362 |
| Naphthalene | 0.0492 | J | 0.0100 | 0.0500 | 10 | 10/15/2021 06:14 | WG1757362 |
| Toluene | 0.0519 | | 0.00278 | 0.0100 | 10 | 10/15/2021 06:14 | WG1757362 |
| Xylenes, Total | 2.32 | | 0.00174 | 0.0300 | 10 | 10/15/2021 06:14 | WG1757362 |
| *(S) Toluene-d8* | *105* | | | *80.0-120* | | *10/15/2021 06:14* | WG1757362 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* | | *10/19/2021 14:28* | WG1759103 |
| *(S) 4-Bromofluorobenzene* | *99.1* | | | *77.0-126* | | *10/15/2021 06:14* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *103* | | | *77.0-126* | | *10/19/2021 14:28* | WG1759103 |
| *(S) 1,2-Dichloroethane-d4* | *95.7* | | | *70.0-130* | | *10/15/2021 06:14* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *111* | | | *70.0-130* | | *10/19/2021 14:28* | WG1759103 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 0.403 | | 0.0294 | 0.100 | 1 | 10/18/2021 01:07 | WG1757823 |
| *(S) o-Terphenyl* | *60.0* | | | *52.0-156* | | *10/18/2021 01:07* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/15/2021 04:35 | WG1757362 |
| Benzene | U | | 0.0000941 | 0.00100 | 1 | 10/15/2021 04:35 | WG1757362 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 10/15/2021 04:35 | WG1757362 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/15/2021 04:35 | WG1757362 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 10/15/2021 04:35 | WG1757362 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/15/2021 04:35 | WG1757362 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 10/15/2021 04:35 | WG1757362 |
| *(S) Toluene-d8* | *112* | | | *80.0-120* | | *10/15/2021 04:35* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *101* | | | *77.0-126* | | *10/15/2021 04:35* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *101* | | | *70.0-130* | | *10/15/2021 04:35* | WG1757362 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/18/2021 01:27 | WG1757823 |
| *(S) o-Terphenyl* | *82.1* | | | *52.0-156* | | *10/18/2021 01:27* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/15/2021 04:54 | WG1757362 |
| Benzene | 0.0253 | | 0.0000941 | 0.00100 | 1 | 10/15/2021 04:54 | WG1757362 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 10/15/2021 04:54 | WG1757362 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/15/2021 04:54 | WG1757362 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 10/15/2021 04:54 | WG1757362 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/15/2021 04:54 | WG1757362 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 10/15/2021 04:54 | WG1757362 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* | | *10/15/2021 04:54* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *98.4* | | | *77.0-126* | | *10/15/2021 04:54* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *102* | | | *70.0-130* | | *10/15/2021 04:54* | WG1757362 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/18/2021 01:47 | WG1757823 |
| *(S) o-Terphenyl* | *75.8* | | | *52.0-156* | | *10/18/2021 01:47* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 1.00 | J | 0.540 | 2.50 | 5 | 10/19/2021 14:48 | WG1759103 |
| Benzene | 0.237 | | 0.000471 | 0.00500 | 5 | 10/19/2021 14:48 | WG1759103 |
| Ethylbenzene | 0.00154 | | 0.000137 | 0.00100 | 1 | 10/15/2021 05:14 | WG1757362 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/15/2021 05:14 | WG1757362 |
| Naphthalene | U | | 0.00100 | 0.00500 | 1 | 10/15/2021 05:14 | WG1757362 |
| Toluene | 0.00752 | | 0.000278 | 0.00100 | 1 | 10/15/2021 05:14 | WG1757362 |
| Xylenes, Total | 0.0413 | | 0.000174 | 0.00300 | 1 | 10/15/2021 05:14 | WG1757362 |
| *(S) Toluene-d8* | *107* | | | *80.0-120* | | *10/15/2021 05:14* | WG1757362 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* | | *10/19/2021 14:48* | WG1759103 |
| *(S) 4-Bromofluorobenzene* | *93.8* | | | *77.0-126* | | *10/15/2021 05:14* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *97.1* | | | *77.0-126* | | *10/19/2021 14:48* | WG1759103 |
| *(S) 1,2-Dichloroethane-d4* | *101* | | | *70.0-130* | | *10/15/2021 05:14* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *109* | | | *70.0-130* | | *10/19/2021 14:48* | WG1759103 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/18/2021 02:07 | WG1757823 |
| *(S) o-Terphenyl* | *83.7* | | | *52.0-156* | | *10/18/2021 02:07* | WG1757823 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 12.0 | T8 | 0.450 | 1.50 | 30 | 10/16/2021 15:55 | WG1756874 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 6.26 | | 0.594 | 5.00 | 1 | 10/14/2021 12:53 | WG1756392 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 17:41 | WG1756817 |
| Manganese,Dissolved | 0.730 | | 0.000934 | 0.0100 | 1 | 10/14/2021 17:41 | WG1756817 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 7.68 | J | 2.70 | 12.5 | 25 | 10/19/2021 15:09 | WG1759103 |
| Benzene | 1.86 | | 0.00235 | 0.0250 | 25 | 10/15/2021 06:33 | WG1757362 |
| Ethylbenzene | 0.386 | | 0.00343 | 0.0250 | 25 | 10/15/2021 06:33 | WG1757362 |
| Methyl tert-butyl ether | U | | 0.00253 | 0.0250 | 25 | 10/15/2021 06:33 | WG1757362 |
| Naphthalene | 0.0730 | J | 0.0250 | 0.125 | 25 | 10/15/2021 06:33 | WG1757362 |
| Toluene | 0.253 | | 0.00695 | 0.0250 | 25 | 10/15/2021 06:33 | WG1757362 |
| Xylenes, Total | 2.27 | | 0.00435 | 0.0750 | 25 | 10/15/2021 06:33 | WG1757362 |
| *(S) Toluene-d8* | *106* | | | *80.0-120* | | *10/15/2021 06:33* | WG1757362 |
| *(S) Toluene-d8* | *112* | | | *80.0-120* | | *10/19/2021 15:09* | WG1759103 |
| *(S) 4-Bromofluorobenzene* | *95.6* | | | *77.0-126* | | *10/15/2021 06:33* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *100* | | | *77.0-126* | | *10/19/2021 15:09* | WG1759103 |
| *(S) 1,2-Dichloroethane-d4* | *99.9* | | | *70.0-130* | | *10/15/2021 06:33* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *111* | | | *70.0-130* | | *10/19/2021 15:09* | WG1759103 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 0.784 | | 0.0294 | 0.100 | 1 | 10/18/2021 02:27 | WG1757823 |
| *(S) o-Terphenyl* | *89.5* | | | *52.0-156* | | *10/18/2021 02:27* | WG1757823 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 9.78 | T8 | 0.450 | 1.50 | 30 | 10/16/2021 15:55 | WG1756874 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 10.1 | | 0.594 | 5.00 | 1 | 10/14/2021 13:09 | WG1756392 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 17:44 | WG1756817 |
| Manganese,Dissolved | 0.942 | | 0.000934 | 0.0100 | 1 | 10/14/2021 17:44 | WG1756817 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 11.6 | J | 2.70 | 12.5 | 25 | 10/19/2021 15:29 | WG1759103 |
| Benzene | 3.04 | | 0.00235 | 0.0250 | 25 | 10/19/2021 15:29 | WG1759103 |
| Ethylbenzene | 0.593 | | 0.00137 | 0.0100 | 10 | 10/15/2021 06:53 | WG1757362 |
| Methyl tert-butyl ether | U | | 0.00101 | 0.0100 | 10 | 10/15/2021 06:53 | WG1757362 |
| Naphthalene | 0.0762 | | 0.0100 | 0.0500 | 10 | 10/15/2021 06:53 | WG1757362 |
| Toluene | 0.319 | | 0.00278 | 0.0100 | 10 | 10/15/2021 06:53 | WG1757362 |
| Xylenes, Total | 1.50 | | 0.00174 | 0.0300 | 10 | 10/15/2021 06:53 | WG1757362 |
| *(S) Toluene-d8* | *107* | | | *80.0-120* | | *10/15/2021 06:53* | WG1757362 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* | | *10/19/2021 15:29* | WG1759103 |
| *(S) 4-Bromofluorobenzene* | *103* | | | *77.0-126* | | *10/15/2021 06:53* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *102* | | | *77.0-126* | | *10/19/2021 15:29* | WG1759103 |
| *(S) 1,2-Dichloroethane-d4* | *92.1* | | | *70.0-130* | | *10/15/2021 06:53* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *110* | | | *70.0-130* | | *10/19/2021 15:29* | WG1759103 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 0.861 | | 0.0294 | 0.100 | 1 | 10/18/2021 02:47 | WG1757823 |
| *(S) o-Terphenyl* | *87.4* | | | *52.0-156* | | *10/18/2021 02:47* | WG1757823 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 0.0560 | T8 | 0.0150 | 0.0500 | 1 | 10/16/2021 15:56 | WG1756874 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 30.4 | | 0.594 | 5.00 | 1 | 10/14/2021 13:25 | WG1756392 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 17:46 | WG1756817 |
| Manganese,Dissolved | 2.13 | | 0.000934 | 0.0100 | 1 | 10/14/2021 17:46 | WG1756817 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 0.598 | | 0.108 | 0.500 | 1 | 10/19/2021 13:47 | WG1759103 |
| Benzene | 0.132 | | 0.0000941 | 0.00100 | 1 | 10/19/2021 13:47 | WG1759103 |
| Ethylbenzene | 0.0868 | | 0.000137 | 0.00100 | 1 | 10/19/2021 13:47 | WG1759103 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/19/2021 13:47 | WG1759103 |
| Naphthalene | 0.00653 | J3 | 0.00100 | 0.00500 | 1 | 10/19/2021 13:47 | WG1759103 |
| Toluene | 0.00223 | | 0.000278 | 0.00100 | 1 | 10/19/2021 13:47 | WG1759103 |
| Xylenes, Total | 0.00159 | J | 0.000174 | 0.00300 | 1 | 10/19/2021 13:47 | WG1759103 |
| *(S) Toluene-d8* | *113* | | | *80.0-120* | | *10/19/2021 13:47* | WG1759103 |
| *(S) 4-Bromofluorobenzene* | *98.2* | | | *77.0-126* | | *10/19/2021 13:47* | WG1759103 |
| *(S) 1,2-Dichloroethane-d4* | *110* | | | *70.0-130* | | *10/19/2021 13:47* | WG1759103 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 0.117 | | 0.0294 | 0.100 | 1 | 10/18/2021 10:15 | WG1757823 |
| *(S) o-Terphenyl* | *86.8* | | | *52.0-156* | | *10/18/2021 10:15* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 11.1 | | 2.16 | 10.0 | 20 | 10/19/2021 15:49 | WG1759103 |
| Benzene | 1.99 | | 0.00188 | 0.0200 | 20 | 10/19/2021 15:49 | WG1759103 |
| Ethylbenzene | 0.508 | | 0.00274 | 0.0200 | 20 | 10/19/2021 15:49 | WG1759103 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/15/2021 05:34 | WG1757362 |
| Naphthalene | 0.0567 | | 0.00100 | 0.00500 | 1 | 10/15/2021 05:34 | WG1757362 |
| Toluene | 0.319 | | 0.00556 | 0.0200 | 20 | 10/19/2021 15:49 | WG1759103 |
| Xylenes, Total | 2.83 | | 0.00348 | 0.0600 | 20 | 10/19/2021 15:49 | WG1759103 |
| *(S) Toluene-d8* | *103* | | | *80.0-120* | | *10/15/2021 05:34* | WG1757362 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* | | *10/19/2021 15:49* | WG1759103 |
| *(S) 4-Bromofluorobenzene* | *106* | | | *77.0-126* | | *10/15/2021 05:34* | WG1757362 |
| *(S) 4-Bromofluorobenzene* | *100* | | | *77.0-126* | | *10/19/2021 15:49* | WG1759103 |
| *(S) 1,2-Dichloroethane-d4* | *106* | | | *70.0-130* | | *10/15/2021 05:34* | WG1757362 |
| *(S) 1,2-Dichloroethane-d4* | *107* | | | *70.0-130* | | *10/19/2021 15:49* | WG1759103 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 0.465 | T8 | 0.0150 | 0.0500 | 1 | 10/16/2021 15:57 | WG1756874 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 16.2 | | 0.594 | 5.00 | 1 | 10/14/2021 14:45 | WG1756392 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 17:49 | WG1756817 |
| Manganese,Dissolved | 1.31 | | 0.000934 | 0.0100 | 1 | 10/14/2021 17:49 | WG1756817 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/19/2021 14:08 | WG1759103 |
| Benzene | 0.00126 | | 0.0000941 | 0.00100 | 1 | 10/19/2021 14:08 | WG1759103 |
| Ethylbenzene | 0.00148 | | 0.000137 | 0.00100 | 1 | 10/19/2021 14:08 | WG1759103 |
| Methyl tert-butyl ether | 0.000205 | J | 0.000101 | 0.00100 | 1 | 10/19/2021 14:08 | WG1759103 |
| Naphthalene | 0.00195 | J J3 | 0.00100 | 0.00500 | 1 | 10/19/2021 14:08 | WG1759103 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/19/2021 14:08 | WG1759103 |
| Xylenes, Total | 0.000354 | J | 0.000174 | 0.00300 | 1 | 10/19/2021 14:08 | WG1759103 |
| *(S) Toluene-d8* | *113* | | | *80.0-120* | | *10/19/2021 14:08* | WG1759103 |
| *(S) 4-Bromofluorobenzene* | *99.4* | | | *77.0-126* | | *10/19/2021 14:08* | WG1759103 |
| *(S) 1,2-Dichloroethane-d4* | *110* | | | *70.0-130* | | *10/19/2021 14:08* | WG1759103 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/14/2021 17:56 | WG1757580 |
| *(S) o-Terphenyl* | *118* | | | *52.0-156* | | *10/14/2021 17:56* | WG1757580 |

# QUALITY CONTROL SUMMARY

L1415684-03,04,09,10,11,13



## Method Blank (MB)

(MB) R3717356-1 10/16/21 15:47

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| Ferrous Iron | U | | 0.0150 | 0.0500 |

## L1415552-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1415552-03 10/16/21 15:51 • (DUP) R3717356-3 10/16/21 15:51

| Analyte | Original Result mg/l | DUP Result mg/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Ferrous Iron | U | U | 1 | 0.000 | | 20 |

## L1415793-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1415793-03 10/16/21 16:00 • (DUP) R3717356-6 10/16/21 16:01

| Analyte | Original Result mg/l | DUP Result mg/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Ferrous Iron | 0.0510 | 0.0500 | 1 | 1.98 | | 20 |

## Laboratory Control Sample (LCS)

(LCS) R3717356-2 10/16/21 15:47

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Ferrous Iron | 1.00 | 0.997 | 99.7 | 85.0-115 | |

## L1415552-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1415552-03 10/16/21 15:51 • (MS) R3717356-4 10/16/21 15:52 • (MSD) R3717356-5 10/16/21 15:52

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ferrous Iron | 1.00 | U | 1.01 | 0.992 | 101 | 99.2 | 1 | 80.0-120 | | | 1.50 | 20 |

# QUALITY CONTROL SUMMARY

L1415684-03,04,09,10,11,13



## Method Blank (MB)

(MB) R3716774-1 10/14/21 10:42

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| Sulfate | U | | 0.594 | 5.00 |

## L1415684-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1415684-03 10/14/21 12:06 • (DUP) R3716774-3 10/14/21 12:21

| Analyte | Original Result mg/l | DUP Result mg/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Sulfate | 14.6 | 14.5 | 1 | 0.120 | | 15 |

## L1414978-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1414978-08 10/14/21 22:15 • (DUP) R3716774-8 10/14/21 22:31

| Analyte | Original Result mg/l | DUP Result mg/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Sulfate | 3900 | 3930 | 100 | 0.907 | | 15 |

## Laboratory Control Sample (LCS)

(LCS) R3716774-2 10/14/21 10:58

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Sulfate | 40.0 | 39.5 | 98.8 | 80.0-120 | |

## L1415684-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1415684-11 10/14/21 13:25 • (MS) R3716774-4 10/14/21 13:41 • (MSD) R3716774-5 10/14/21 13:57

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 50.0 | 30.4 | 82.9 | 84.9 | 105 | 109 | 1 | 80.0-120 | | | 2.30 | 15 |

## L1414978-10 Original Sample (OS) • Matrix Spike (MS)

(OS) L1414978-10 10/14/21 18:15 • (MS) R3716774-7 10/14/21 18:31

| Analyte | Spike Amount mg/l | Original Result mg/l | MS Result mg/l | MS Rec. % | Dilution | Rec. Limits % | MS Qualifier |
|---|---|---|---|---|---|---|---|
| Sulfate | 50.0 | 1380 | 1320 | 0.000 | 1 | 80.0-120 | E V |

# QUALITY CONTROL SUMMARY

L1415684-03,04,09,10,11,13

## Method Blank (MB)

(MB) R3716699-1 10/14/21 17:06

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 |
| Manganese,Dissolved | U | | 0.000934 | 0.0100 |

## Laboratory Control Sample (LCS)

(LCS) R3716699-2 10/14/21 17:08

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Iron,Dissolved | 10.0 | 9.52 | 95.2 | 80.0-120 | |
| Manganese,Dissolved | 1.00 | 0.968 | 96.8 | 80.0-120 | |

## L1414834-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1414834-01 10/14/21 17:11 • (MS) R3716699-4 10/14/21 17:16 • (MSD) R3716699-5 10/14/21 17:19

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Iron,Dissolved | 10.0 | 0.0304 | 9.59 | 9.61 | 95.6 | 95.8 | 1 | 75.0-125 | | | 0.267 | 20 |
| Manganese,Dissolved | 1.00 | 0.00259 | 0.967 | 0.965 | 96.5 | 96.2 | 1 | 75.0-125 | | | 0.274 | 20 |

## Method Blank (MB)

(MB) R3717977-4 10/15/21 01:56

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 |
| Benzene | U | | 0.0000941 | 0.00100 |
| Ethylbenzene | U | | 0.000137 | 0.00100 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 |
| Naphthalene | U | | 0.00100 | 0.00500 |
| Toluene | U | | 0.000278 | 0.00100 |
| Xylenes, Total | U | | 0.000174 | 0.00300 |
| *(S) Toluene-d8* | *109* | | | *80.0-120* |
| *(S) 4-Bromofluorobenzene* | *97.7* | | | *77.0-126* |
| *(S) 1,2-Dichloroethane-d4* | *102* | | | *70.0-130* |

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

(LCS) R3717977-1 10/15/21 00:18 • (LCSD) R3717977-2 10/15/21 00:37

| 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 | 0.00491 | 0.00533 | 98.2 | 107 | 70.0-123 | | | 8.20 | 20 |
| Ethylbenzene | 0.00500 | 0.00464 | 0.00520 | 92.8 | 104 | 79.0-123 | | | 11.4 | 20 |
| Methyl tert-butyl ether | 0.00500 | 0.00532 | 0.00537 | 106 | 107 | 68.0-125 | | | 0.935 | 20 |
| Naphthalene | 0.00500 | 0.00632 | 0.00550 | 126 | 110 | 54.0-135 | | | 13.9 | 20 |
| Toluene | 0.00500 | 0.00483 | 0.00509 | 96.6 | 102 | 79.0-120 | | | 5.24 | 20 |
| Xylenes, Total | 0.0150 | 0.0140 | 0.0149 | 93.3 | 99.3 | 79.0-123 | | | 6.23 | 20 |
| *(S) Toluene-d8* | | | | *101* | *105* | *80.0-120* | | | | |
| *(S) 4-Bromofluorobenzene* | | | | *97.3* | *96.5* | *77.0-126* | | | | |
| *(S) 1,2-Dichloroethane-d4* | | | | *105* | *99.7* | *70.0-130* | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3717977-3 10/15/21 00:57

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 5.00 | 6.54 | 131 | 66.0-132 | |
| *(S) Toluene-d8* | | | *108* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *109* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *103* | *70.0-130* | |

## Method Blank (MB)

(MB) R3718733-4 10/19/21 13:27

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 |
| Benzene | U | | 0.0000941 | 0.00100 |
| Ethylbenzene | U | | 0.000137 | 0.00100 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 |
| Naphthalene | U | | 0.00100 | 0.00500 |
| Toluene | U | | 0.000278 | 0.00100 |
| Xylenes, Total | U | | 0.000174 | 0.00300 |
| *(S) Toluene-d8* | *117* | | | *80.0-120* |
| *(S) 4-Bromofluorobenzene* | *99.2* | | | *77.0-126* |
| *(S) 1,2-Dichloroethane-d4* | *112* | | | *70.0-130* |

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

(LCS) R3718733-1 10/19/21 10:04 • (LCSD) R3718733-2 10/19/21 10:24

| 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 | 0.00499 | 0.00472 | 99.8 | 94.4 | 70.0-123 | | | 5.56 | 20 |
| Ethylbenzene | 0.00500 | 0.00539 | 0.00558 | 108 | 112 | 79.0-123 | | | 3.46 | 20 |
| Methyl tert-butyl ether | 0.00500 | 0.00454 | 0.00472 | 90.8 | 94.4 | 68.0-125 | | | 3.89 | 20 |
| Naphthalene | 0.00500 | 0.00407 | 0.00508 | 81.4 | 102 | 54.0-135 | | J3 | 22.1 | 20 |
| Toluene | 0.00500 | 0.00521 | 0.00517 | 104 | 103 | 79.0-120 | | | 0.771 | 20 |
| Xylenes, Total | 0.0150 | 0.0155 | 0.0160 | 103 | 107 | 79.0-123 | | | 3.17 | 20 |
| *(S) Toluene-d8* | | | | *112* | *113* | *80.0-120* | | | | |
| *(S) 4-Bromofluorobenzene* | | | | *97.6* | *98.2* | *77.0-126* | | | | |
| *(S) 1,2-Dichloroethane-d4* | | | | *119* | *120* | *70.0-130* | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3718733-3 10/19/21 10:44

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 5.00 | 5.75 | 115 | 66.0-132 | |
| *(S) Toluene-d8* | | | *111* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *112* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *117* | *70.0-130* | |

# QUALITY CONTROL SUMMARY

L1415684-01,02,03,04,13

## Method Blank (MB)

(MB) R3716693-1 10/14/21 15:20

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 |
| *(S) o-Terphenyl* | *94.5* | | | *52.0-156* |

## Laboratory Control Sample (LCS)

(LCS) R3716693-2 10/14/21 15:46

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 1.50 | 1.51 | 101 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *105* | *52.0-156* | |

# QUALITY CONTROL SUMMARY

L1415684-05,06,07,08,09,10,11

## Method Blank (MB)

(MB) R3717659-1 10/18/21 00:02

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 |
| *(S) o-Terphenyl* | *82.5* | | | *52.0-156* |

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

(LCS) R3717659-2 10/18/21 00:22 • (LCSD) R3717659-3 10/18/21 00:42

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 1.50 | 1.18 | 1.20 | 78.7 | 80.0 | 50.0-150 | | | 1.68 | 20 |
| *(S) o-Terphenyl* | | | | *73.0* | *54.0* | *52.0-156* | | | | |

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

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

| | |
|---|---|
| MDL | Method Detection Limit. |
| RDL | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| (S) | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media. |
| 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 |
|---|---|
| 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. |
| T8 | Sample(s) received past/too close to holding time expiration. |
| 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 | LAO000356 |
| 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:
**Terracon - Salt Lake City, UT**

**6949 South High Tech Drive**
**Midvale, UT 84047**

Billing Information:
**Accounts Payable**
**6949 South High Tech Drive**
**Midvale, UT 84047**

Pres Chk

Report to:
**Curt Stripeika**

Email To: **curt.stripeika@terracon.com**

Project Description:
**Triple Stop Chevron**

City/State Collected: Layton, UT

Please Circle: PT MT CT ET

Phone: 801-545-8500

Client Project # 61197153 Task 9.2

Lab Project # TERRDUT-61197153

Collected by (print): Royal Donald

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

*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: TERRACON STANDARD

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

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SDG # L415684

B056

Acctnum: TERRDUT
Template: T196409
Prelogin: P877592
PM: 824 - Chris Ward
PB:
Shipped Via: FedEx Ground

| Sample ID | Comp/Grab | Matrix* | Depth | Date | Time | No. of Cntrs | DROWY,TS 4ozClr-NoPres | DROWYLVI 40mlAmb-HCl-BT | Diss Fe,Mn 250mlHDPE-NoPres | FERUSFE 250mlAmb-HCl | SULFATE 125mlHDPE-NoPres | TOC 4ozClr-NoPres | V8260BTEXMN+GRO 40mlAmb-HCl | V8260TPHKS 2ozClr-NoPres | | | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-39 | GRAB | GW | — | 10/4/21 | 1213 | 5 | | X | | | | | X | | | | | -01 |
| MW-38 | | GW | — | | 1311 | 5 | | X | | | | | X | | | | | -02 |
| MW-32 | | GW | — | | 1417 | 8 | | X | X | X | X | | X | | | | | -03 |
| MW-37 | | GW | — | | 1526 | 8 | | X | X | X | X | | X | | | | | -04 |
| MW-2 | | GW | — | 10/6/21 | 911 | 5 | | X | | | | | X | | | | | -05 |
| MW-18 | | GW | — | | 1020 | 5 | | X | | | | | X | | | | | -06 |
| MW-30 | | GW | — | | 1121 | 5 | | X | | | | | X | | | | | -07 |
| MW-4 | | GW | — | | 1228 | 5 | | X | | | | | X | | | | | -08 |
| MW-1 | | GW | — | | 1330 | 8 | | X | X | X | X | | X | | | | | -09 |
| MW-19 | | GW | — | | 1453 | 8 | | 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:

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
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| | 10/7/21 | 09:45 | | |
| Relinquished by : (Signature) PNSLCUT | Date: 10/7/21 | Time: 17:00 | Received by: (Signature) | Temp: .1 to -1 °C Bottles Received: 83 |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 10/08/21 Time: 8:30 |

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Company Name/Address:
**Terracon - Salt Lake City, UT**

**6949 South High Tech Drive**
**Midvale, UT 84047**

Billing Information:
**Accounts Payable**
**6949 South High Tech Drive**
**Midvale, UT 84047**

Pres Chk

Report to:
**Curt Stripeika**

Email To: **curt.stripeika@terracon.com**

Project Description:
**Triple Stop Chevron**

City/State Collected:

Please Circle: PT (MT) CT ET

Phone: 801-545-8500

Client Project # **61197153** Task 9.2

Lab Project # **TERRDUT-61197153**

Collected by (print): Roy McDonald

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

***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: TERRACON STANDARD

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

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SDG #

Table #

Acctnum: **TERRDUT**
Template: **T196409**
Prelogin: **P877592**
PM: **824 - Chris Ward**
PB:

Shipped Via: **FedEX Ground**

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | DROWY,TS 4ozClr-NoPres | DROWYLVI 40mlAmb-HCl-BT | Diss Fe,Mn 250mlHDPE-NoPres | FERUSFE 250mlAmb-HCl | SULFATE 125mlHDPE-NoPres | TOC 4ozClr-NoPres | V8260BTEXMN+GRO 40mlAmb-HCl | V8260TPHKS 2ozClr-NoPres | | | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-20 | GRAB | GW | — | 10/6/21 | 1611 | 8 | | X | X | X | X | | X | | | | | -11 |
| DUP #1 | GRAB | GW | — | 10/5/21 | | 5 | | | | | | | X | | | | | -12 |
| MW-31 | GRAB | GW | — | 10/4/21 | 1620 | 8 | | X | X | X | X | | X | | | | | -13 |
| | | GW | | | | | | | | | | | | | | | | |
| | | GW | | | | | | | | | | | | | | | | |
| | | GW | | | | | | | | | | | | | | | | |
| | | GW | | | | | | | | | | | | | | | | |
| | | GW | | | | | | | | | | | | | | | | |
| | | GW | | | | | | | | | | | | | | | | |
| | | GW | | | | | | | | | | | | | | | | |

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

**Remarks:**

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
RAD Screen <0.5 mR/hr: ✓Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No (0) HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 10/7/21 | 09:45 | | | |
| Relinquished by: (Signature) PNSLCUT | Date: 10/7/21 | Time: 17:00 | Received by: (Signature) | Temp: -1+0=1 °C | Bottles Received: 83 |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 10/04/21 | Time: 8:30 |

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

# ANALYTICAL REPORT

October 21, 2021

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

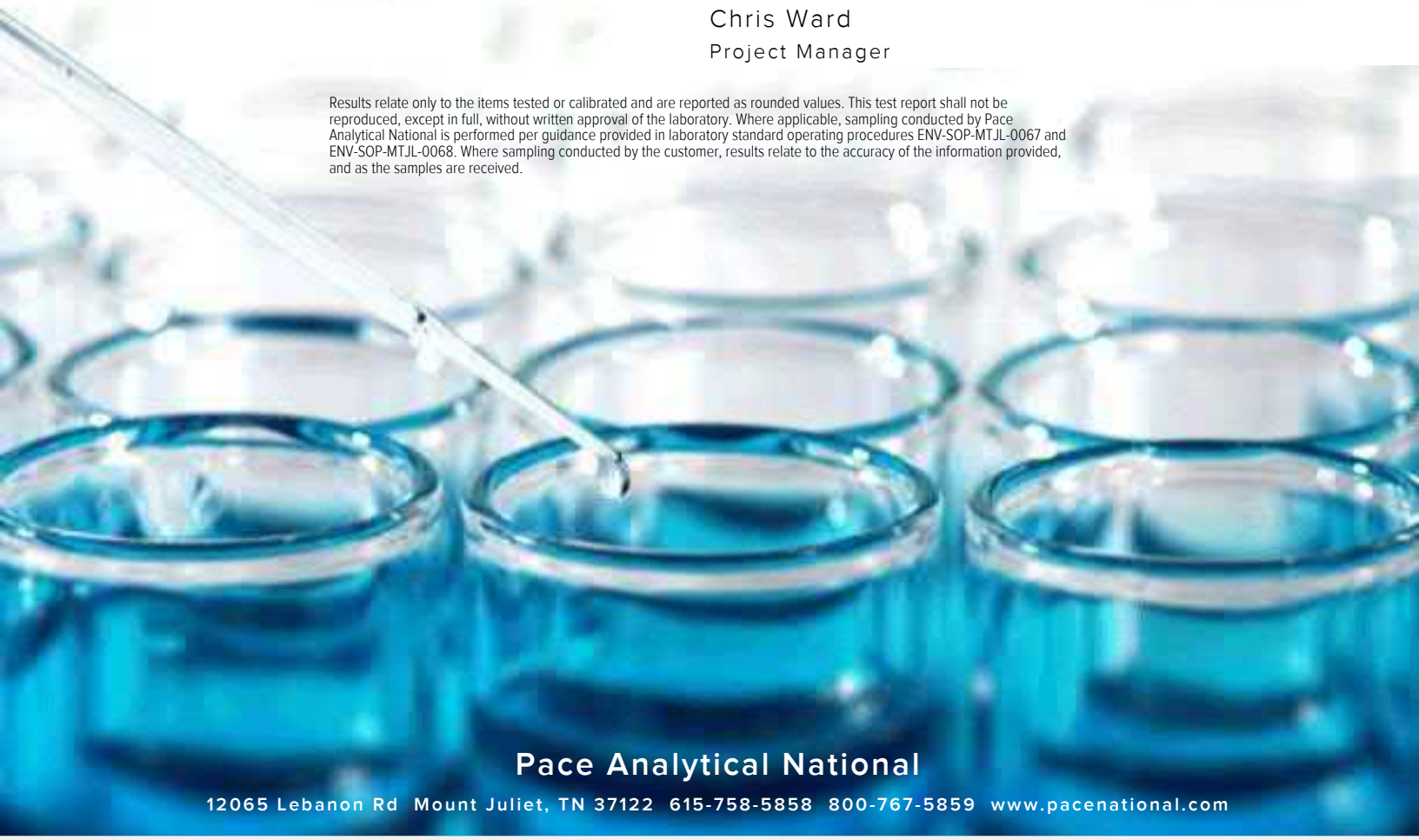
## Terracon - Salt Lake City, UT

| | |
|---|---|
| Sample Delivery Group: | L1416080 |
| Samples Received: | 10/09/2021 |
| Project Number: | 61197153 |
| Description: | Triple Stop Chevron |
| Report To: | Curt Stripeika<br>6949 South High Tech Drive<br>Midvale, UT 84047 |

Entire Report Reviewed By: Chris Ward

Chris Ward
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

# TABLE OF CONTENTS

## MW-41 L1416080-01 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 09:18 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1759058 | 5 | 10/19/21 16:24 | 10/19/21 16:24 | ARM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1758287 | 1 | 10/16/21 20:49 | 10/16/21 20:49 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756818 | 1 | 10/14/21 08:25 | 10/14/21 19:06 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 1 | 10/16/21 15:05 | 10/16/21 15:05 | ACG | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 2 | 10/17/21 08:38 | 10/18/21 03:28 | DMG | Mt. Juliet, TN |

## MW-40 L1416080-02 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 10:36 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1759058 | 5 | 10/19/21 16:25 | 10/19/21 16:25 | ARM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1758287 | 1 | 10/16/21 21:17 | 10/16/21 21:17 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756818 | 1 | 10/14/21 08:25 | 10/14/21 19:09 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 1 | 10/16/21 15:26 | 10/16/21 15:26 | ACG | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 03:48 | DMG | Mt. Juliet, TN |

## MW-42 L1416080-03 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 11:43 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1759058 | 5 | 10/19/21 16:25 | 10/19/21 16:25 | ARM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1758287 | 1 | 10/16/21 21:32 | 10/16/21 21:32 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756818 | 1 | 10/14/21 08:25 | 10/14/21 19:12 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 1 | 10/16/21 15:46 | 10/16/21 15:46 | ACG | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758809 | 200 | 10/18/21 18:06 | 10/18/21 18:06 | JCP | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 04:08 | DMG | Mt. Juliet, TN |

## MW-8 L1416080-04 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 13:32 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1759058 | 1 | 10/19/21 16:26 | 10/19/21 16:26 | ARM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1758287 | 1 | 10/16/21 21:46 | 10/16/21 21:46 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756818 | 1 | 10/14/21 08:25 | 10/14/21 19:15 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 1 | 10/16/21 16:06 | 10/16/21 16:06 | ACG | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758809 | 1 | 10/18/21 15:10 | 10/18/21 15:10 | JCP | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 04:28 | DMG | Mt. Juliet, TN |

## MW-35 L1416080-05 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 14:40 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 1 | 10/16/21 16:27 | 10/16/21 16:27 | ACG | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758809 | 1 | 10/18/21 16:04 | 10/18/21 16:04 | JCP | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 04:48 | DMG | Mt. Juliet, TN |

## MW-23 L1416080-06 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 15:30 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1759812 | 1 | 10/20/21 04:50 | 10/20/21 04:50 | ACG | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 05:08 | DMG | Mt. Juliet, TN |

## MW-24 L1416080-07 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 16:25 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1759058 | 10 | 10/19/21 16:26 | 10/19/21 16:26 | ARM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1758287 | 1 | 10/16/21 22:01 | 10/16/21 22:01 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756818 | 1 | 10/14/21 08:25 | 10/14/21 19:24 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 25 | 10/16/21 18:08 | 10/16/21 18:08 | ACG | Mt. Juliet, TN |

## MW-22 L1416080-08 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 15:46 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 1 | 10/16/21 16:47 | 10/16/21 16:47 | ACG | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 05:28 | DMG | Mt. Juliet, TN |

## DUP #2 L1416080-09 GW

Collected by: Roy McDonald | Collected date/time: 10/07/21 00:00 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 1 | 10/16/21 17:07 | 10/16/21 17:07 | ACG | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758809 | 20 | 10/18/21 18:27 | 10/18/21 18:27 | JCP | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 05:48 | DMG | Mt. Juliet, TN |

## MW-13 L1416080-10 GW

Collected by: Roy McDonald | Collected date/time: 10/08/21 09:05 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Wet Chemistry by Method 3500Fe B-2011 | WG1759058 | 5 | 10/19/21 16:27 | 10/19/21 16:27 | ARM | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1758287 | 1 | 10/16/21 22:44 | 10/16/21 22:44 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1756818 | 1 | 10/14/21 08:25 | 10/14/21 19:26 | CCE | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 50 | 10/16/21 18:29 | 10/16/21 18:29 | ACG | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 2 | 10/17/21 08:38 | 10/18/21 06:08 | DMG | Mt. Juliet, TN |

## RW-2 L1416080-11 GW

Collected by: Roy McDonald | Collected date/time: 10/08/21 10:08 | Received date/time: 10/09/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 100 | 10/16/21 18:49 | 10/16/21 18:49 | ACG | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 2 | 10/17/21 08:38 | 10/18/21 06:28 | DMG | Mt. Juliet, TN |

## MW-14 L1416080-12 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Roy McDonald | 10/08/21 11:05 | 10/09/21 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 1 | 10/16/21 17:28 | 10/16/21 17:28 | ACG | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758809 | 1 | 10/18/21 16:25 | 10/18/21 16:25 | JCP | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 1 | 10/17/21 08:38 | 10/18/21 06:48 | DMG | Mt. Juliet, TN |

## MW-10 L1416080-13 GW

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Roy McDonald | 10/08/21 12:00 | 10/09/21 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG1758248 | 50 | 10/16/21 19:10 | 10/16/21 19:10 | ACG | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015C | WG1757823 | 2 | 10/17/21 08:38 | 10/18/21 07:08 | DMG | Mt. Juliet, TN |

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

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

Chris Ward

Chris Ward
Project Manager

## Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

| Batch | Method | Lab Sample ID |
|---|---|---|
| WG1757823 | 8015C | L1416080-11 |

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

| Batch | Method | Lab Sample ID |
|---|---|---|
| WG1759058 | 3500Fe B-2011 | L1416080-01, 02, 03, 04, 07, 10 |

## Wet Chemistry by Method 9056A

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

| Batch | Lab Sample ID | Analytes |
|---|---|---|
| WG1758287 | (MS) R3717703-4, (MSD) R3717703-5 | Sulfate |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

Surrogate recovery limits have been exceeded; values are outside lower control limits.

| Batch | Analyte | Lab Sample ID |
|---|---|---|
| WG1757823 | o-Terphenyl | L1416080-01, 11 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 13.0 | T8 | 0.0750 | 0.250 | 5 | 10/19/2021 16:24 | WG1759058 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 33.4 | | 0.594 | 5.00 | 1 | 10/16/2021 20:49 | WG1758287 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 19:06 | WG1756818 |
| Manganese,Dissolved | 0.441 | | 0.000934 | 0.0100 | 1 | 10/14/2021 19:06 | WG1756818 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 0.135 | J | 0.108 | 0.500 | 1 | 10/16/2021 15:05 | WG1758248 |
| Benzene | 0.0346 | | 0.0000941 | 0.00100 | 1 | 10/16/2021 15:05 | WG1758248 |
| Ethylbenzene | 0.00186 | | 0.000137 | 0.00100 | 1 | 10/16/2021 15:05 | WG1758248 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/16/2021 15:05 | WG1758248 |
| Naphthalene | 0.0283 | | 0.00100 | 0.00500 | 1 | 10/16/2021 15:05 | WG1758248 |
| Toluene | 0.000321 | J | 0.000278 | 0.00100 | 1 | 10/16/2021 15:05 | WG1758248 |
| Xylenes, Total | 0.00284 | J | 0.000174 | 0.00300 | 1 | 10/16/2021 15:05 | WG1758248 |
| *(S) Toluene-d8* | *113* | | | *80.0-120* | | *10/16/2021 15:05* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *102* | | | *77.0-126* | | *10/16/2021 15:05* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *113* | | | *70.0-130* | | *10/16/2021 15:05* | WG1758248 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0588 | 0.200 | 2 | 10/18/2021 03:28 | WG1757823 |
| *(S) o-Terphenyl* | *48.3* | J2 | | *52.0-156* | | *10/18/2021 03:28* | WG1757823 |

Sample Narrative:

L1416080-01 WG1757823: Surrogate failure due to matrix interference

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 7.84 | T8 | 0.0750 | 0.250 | 5 | 10/19/2021 16:25 | WG1759058 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 33.8 | | 0.594 | 5.00 | 1 | 10/16/2021 21:17 | WG1758287 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 19:09 | WG1756818 |
| Manganese,Dissolved | 0.699 | | 0.000934 | 0.0100 | 1 | 10/14/2021 19:09 | WG1756818 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 1.11 | | 0.108 | 0.500 | 1 | 10/16/2021 15:26 | WG1758248 |
| Benzene | 0.191 | | 0.0000941 | 0.00100 | 1 | 10/16/2021 15:26 | WG1758248 |
| Ethylbenzene | 0.0640 | | 0.000137 | 0.00100 | 1 | 10/16/2021 15:26 | WG1758248 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/16/2021 15:26 | WG1758248 |
| Naphthalene | 0.0134 | | 0.00100 | 0.00500 | 1 | 10/16/2021 15:26 | WG1758248 |
| Toluene | 0.0230 | | 0.000278 | 0.00100 | 1 | 10/16/2021 15:26 | WG1758248 |
| Xylenes, Total | 0.245 | | 0.000174 | 0.00300 | 1 | 10/16/2021 15:26 | WG1758248 |
| *(S) Toluene-d8* | *112* | | | *80.0-120* | | *10/16/2021 15:26* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *98.6* | | | *77.0-126* | | *10/16/2021 15:26* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *112* | | | *70.0-130* | | *10/16/2021 15:26* | WG1758248 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 0.0794 | J | 0.0294 | 0.100 | 1 | 10/18/2021 03:48 | WG1757823 |
| *(S) o-Terphenyl* | *63.7* | | | *52.0-156* | | *10/18/2021 03:48* | WG1757823 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 7.02 | T8 | 0.0750 | 0.250 | 5 | 10/19/2021 16:25 | WG1759058 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 14.1 | | 0.594 | 5.00 | 1 | 10/16/2021 21:32 | WG1758287 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 19:12 | WG1756818 |
| Manganese,Dissolved | 1.03 | | 0.000934 | 0.0100 | 1 | 10/14/2021 19:12 | WG1756818 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 13.3 | | 0.108 | 0.500 | 1 | 10/16/2021 15:46 | WG1758248 |
| Benzene | 6.57 | | 0.0188 | 0.200 | 200 | 10/18/2021 18:06 | WG1758809 |
| Ethylbenzene | 0.576 | | 0.0274 | 0.200 | 200 | 10/18/2021 18:06 | WG1758809 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/16/2021 15:46 | WG1758248 |
| Naphthalene | 0.0593 | | 0.00100 | 0.00500 | 1 | 10/16/2021 15:46 | WG1758248 |
| Toluene | 1.06 | | 0.0556 | 0.200 | 200 | 10/18/2021 18:06 | WG1758809 |
| Xylenes, Total | 1.62 | | 0.0348 | 0.600 | 200 | 10/18/2021 18:06 | WG1758809 |
| *(S) Toluene-d8* | *112* | | | *80.0-120* | | *10/16/2021 15:46* | WG1758248 |
| *(S) Toluene-d8* | *96.8* | | | *80.0-120* | | *10/18/2021 18:06* | WG1758809 |
| *(S) 4-Bromofluorobenzene* | *101* | | | *77.0-126* | | *10/16/2021 15:46* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *89.6* | | | *77.0-126* | | *10/18/2021 18:06* | WG1758809 |
| *(S) 1,2-Dichloroethane-d4* | *114* | | | *70.0-130* | | *10/16/2021 15:46* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *119* | | | *70.0-130* | | *10/18/2021 18:06* | WG1758809 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 0.610 | | 0.0294 | 0.100 | 1 | 10/18/2021 04:08 | WG1757823 |
| *(S) o-Terphenyl* | *72.1* | | | *52.0-156* | | *10/18/2021 04:08* | WG1757823 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | U | T8 | 0.0150 | 0.0500 | 1 | 10/19/2021 16:26 | WG1759058 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 56.1 | | 0.594 | 5.00 | 1 | 10/16/2021 21:46 | WG1758287 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 | 1 | 10/14/2021 19:15 | WG1756818 |
| Manganese,Dissolved | U | | 0.000934 | 0.0100 | 1 | 10/14/2021 19:15 | WG1756818 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/16/2021 16:06 | WG1758248 |
| Benzene | U | | 0.0000941 | 0.00100 | 1 | 10/18/2021 15:10 | WG1758809 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 10/18/2021 15:10 | WG1758809 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/16/2021 16:06 | WG1758248 |
| Naphthalene | 0.0171 | | 0.00100 | 0.00500 | 1 | 10/16/2021 16:06 | WG1758248 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/18/2021 15:10 | WG1758809 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 10/18/2021 15:10 | WG1758809 |
| *(S) Toluene-d8* | *110* | | | *80.0-120* | | *10/16/2021 16:06* | WG1758248 |
| *(S) Toluene-d8* | *97.1* | | | *80.0-120* | | *10/18/2021 15:10* | WG1758809 |
| *(S) 4-Bromofluorobenzene* | *101* | | | *77.0-126* | | *10/16/2021 16:06* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *93.3* | | | *77.0-126* | | *10/18/2021 15:10* | WG1758809 |
| *(S) 1,2-Dichloroethane-d4* | *110* | | | *70.0-130* | | *10/16/2021 16:06* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *118* | | | *70.0-130* | | *10/18/2021 15:10* | WG1758809 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/18/2021 04:28 | WG1757823 |
| *(S) o-Terphenyl* | *64.2* | | | *52.0-156* | | *10/18/2021 04:28* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/16/2021 16:27 | WG1758248 |
| Benzene | 0.000434 | J | 0.0000941 | 0.00100 | 1 | 10/18/2021 16:04 | WG1758809 |
| Ethylbenzene | 0.00117 | | 0.000137 | 0.00100 | 1 | 10/18/2021 16:04 | WG1758809 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/16/2021 16:27 | WG1758248 |
| Naphthalene | 0.00385 | J | 0.00100 | 0.00500 | 1 | 10/16/2021 16:27 | WG1758248 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/18/2021 16:04 | WG1758809 |
| Xylenes, Total | 0.000651 | J | 0.000174 | 0.00300 | 1 | 10/18/2021 16:04 | WG1758809 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* | | *10/16/2021 16:27* | WG1758248 |
| *(S) Toluene-d8* | *99.4* | | | *80.0-120* | | *10/18/2021 16:04* | WG1758809 |
| *(S) 4-Bromofluorobenzene* | *103* | | | *77.0-126* | | *10/16/2021 16:27* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *90.1* | | | *77.0-126* | | *10/18/2021 16:04* | WG1758809 |
| *(S) 1,2-Dichloroethane-d4* | *110* | | | *70.0-130* | | *10/16/2021 16:27* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *117* | | | *70.0-130* | | *10/18/2021 16:04* | WG1758809 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/18/2021 04:48 | WG1757823 |
| *(S) o-Terphenyl* | *88.9* | | | *52.0-156* | | *10/18/2021 04:48* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 0.116 | J | 0.108 | 0.500 | 1 | 10/20/2021 04:50 | WG1759812 |
| Benzene | 0.00368 | | 0.0000941 | 0.00100 | 1 | 10/20/2021 04:50 | WG1759812 |
| Ethylbenzene | 0.0272 | | 0.000137 | 0.00100 | 1 | 10/20/2021 04:50 | WG1759812 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/20/2021 04:50 | WG1759812 |
| Naphthalene | 0.00168 | J | 0.00100 | 0.00500 | 1 | 10/20/2021 04:50 | WG1759812 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/20/2021 04:50 | WG1759812 |
| Xylenes, Total | 0.00234 | J | 0.000174 | 0.00300 | 1 | 10/20/2021 04:50 | WG1759812 |
| *(S) Toluene-d8* | *105* | | | *80.0-120* | | *10/20/2021 04:50* | WG1759812 |
| *(S) 4-Bromofluorobenzene* | *96.2* | | | *77.0-126* | | *10/20/2021 04:50* | WG1759812 |
| *(S) 1,2-Dichloroethane-d4* | *103* | | | *70.0-130* | | *10/20/2021 04:50* | WG1759812 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 0.0533 | J | 0.0294 | 0.100 | 1 | 10/18/2021 05:08 | WG1757823 |
| *(S) o-Terphenyl* | *84.7* | | | *52.0-156* | | *10/18/2021 05:08* | WG1757823 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 18.0 | T8 | 0.150 | 0.500 | 10 | 10/19/2021 16:26 | WG1759058 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 16.2 | | 0.594 | 5.00 | 1 | 10/16/2021 22:01 | WG1758287 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | 0.274 | | 0.0180 | 0.100 | 1 | 10/14/2021 19:24 | WG1756818 |
| Manganese,Dissolved | 0.164 | | 0.000934 | 0.0100 | 1 | 10/14/2021 19:24 | WG1756818 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 3.69 | J | 2.70 | 12.5 | 25 | 10/16/2021 18:08 | WG1758248 |
| Benzene | 0.0438 | | 0.00235 | 0.0250 | 25 | 10/16/2021 18:08 | WG1758248 |
| Ethylbenzene | 0.548 | | 0.00343 | 0.0250 | 25 | 10/16/2021 18:08 | WG1758248 |
| Methyl tert-butyl ether | U | | 0.00253 | 0.0250 | 25 | 10/16/2021 18:08 | WG1758248 |
| Naphthalene | 0.0649 | J | 0.0250 | 0.125 | 25 | 10/16/2021 18:08 | WG1758248 |
| Toluene | 0.0212 | J | 0.00695 | 0.0250 | 25 | 10/16/2021 18:08 | WG1758248 |
| Xylenes, Total | 1.70 | | 0.00435 | 0.0750 | 25 | 10/16/2021 18:08 | WG1758248 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* | | *10/16/2021 18:08* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *103* | | | *77.0-126* | | *10/16/2021 18:08* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *109* | | | *70.0-130* | | *10/16/2021 18:08* | WG1758248 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 0.342 | J | 0.108 | 0.500 | 1 | 10/16/2021 16:47 | WG1758248 |
| Benzene | 0.00327 | | 0.0000941 | 0.00100 | 1 | 10/16/2021 16:47 | WG1758248 |
| Ethylbenzene | 0.00528 | | 0.000137 | 0.00100 | 1 | 10/16/2021 16:47 | WG1758248 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/16/2021 16:47 | WG1758248 |
| Naphthalene | 0.00205 | J | 0.00100 | 0.00500 | 1 | 10/16/2021 16:47 | WG1758248 |
| Toluene | 0.00103 | | 0.000278 | 0.00100 | 1 | 10/16/2021 16:47 | WG1758248 |
| Xylenes, Total | 0.00749 | | 0.000174 | 0.00300 | 1 | 10/16/2021 16:47 | WG1758248 |
| *(S) Toluene-d8* | *112* | | | *80.0-120* | | *10/16/2021 16:47* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *103* | | | *77.0-126* | | *10/16/2021 16:47* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *112* | | | *70.0-130* | | *10/16/2021 16:47* | WG1758248 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 0.0847 | J | 0.0294 | 0.100 | 1 | 10/18/2021 05:28 | WG1757823 |
| *(S) o-Terphenyl* | *92.6* | | | *52.0-156* | | *10/18/2021 05:28* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 4.84 | | 0.108 | 0.500 | 1 | 10/16/2021 17:07 | WG1758248 |
| Benzene | 0.0400 | | 0.0000941 | 0.00100 | 1 | 10/16/2021 17:07 | WG1758248 |
| Ethylbenzene | 0.483 | | 0.00274 | 0.0200 | 20 | 10/18/2021 18:27 | WG1758809 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/16/2021 17:07 | WG1758248 |
| Naphthalene | 0.0467 | | 0.00100 | 0.00500 | 1 | 10/16/2021 17:07 | WG1758248 |
| Toluene | 0.0199 | | 0.000278 | 0.00100 | 1 | 10/16/2021 17:07 | WG1758248 |
| Xylenes, Total | 1.58 | | 0.00348 | 0.0600 | 20 | 10/18/2021 18:27 | WG1758809 |
| *(S) Toluene-d8* | *111* | | | *80.0-120* | | *10/16/2021 17:07* | WG1758248 |
| *(S) Toluene-d8* | *98.2* | | | *80.0-120* | | *10/18/2021 18:27* | WG1758809 |
| *(S) 4-Bromofluorobenzene* | *101* | | | *77.0-126* | | *10/16/2021 17:07* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *95.1* | | | *77.0-126* | | *10/18/2021 18:27* | WG1758809 |
| *(S) 1,2-Dichloroethane-d4* | *111* | | | *70.0-130* | | *10/16/2021 17:07* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *115* | | | *70.0-130* | | *10/18/2021 18:27* | WG1758809 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 1.39 | | 0.0294 | 0.100 | 1 | 10/18/2021 05:48 | WG1757823 |
| *(S) o-Terphenyl* | *82.6* | | | *52.0-156* | | *10/18/2021 05:48* | WG1757823 |

## Wet Chemistry by Method 3500Fe B-2011

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Ferrous Iron | 11.4 | T8 | 0.0750 | 0.250 | 5 | 10/19/2021 16:27 | WG1759058 |

## Wet Chemistry by Method 9056A

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Sulfate | 12.4 | | 0.594 | 5.00 | 1 | 10/16/2021 22:44 | WG1758287 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Iron,Dissolved | 0.224 | | 0.0180 | 0.100 | 1 | 10/14/2021 19:26 | WG1756818 |
| Manganese,Dissolved | 0.443 | | 0.000934 | 0.0100 | 1 | 10/14/2021 19:26 | WG1756818 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 9.96 | J | 5.40 | 25.0 | 50 | 10/16/2021 18:29 | WG1758248 |
| Benzene | 0.0144 | J | 0.00471 | 0.0500 | 50 | 10/16/2021 18:29 | WG1758248 |
| Ethylbenzene | 0.771 | | 0.00685 | 0.0500 | 50 | 10/16/2021 18:29 | WG1758248 |
| Methyl tert-butyl ether | U | | 0.00505 | 0.0500 | 50 | 10/16/2021 18:29 | WG1758248 |
| Naphthalene | 0.146 | J | 0.0500 | 0.250 | 50 | 10/16/2021 18:29 | WG1758248 |
| Toluene | 0.214 | | 0.0139 | 0.0500 | 50 | 10/16/2021 18:29 | WG1758248 |
| Xylenes, Total | 4.83 | | 0.00870 | 0.150 | 50 | 10/16/2021 18:29 | WG1758248 |
| *(S) Toluene-d8* | *113* | | | *80.0-120* | | *10/16/2021 18:29* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *99.2* | | | *77.0-126* | | *10/16/2021 18:29* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *115* | | | *70.0-130* | | *10/16/2021 18:29* | WG1758248 |

Sample Narrative:

L1416080-10 WG1758248: Non-target compounds too high to run at a lower dilution.

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 3.35 | | 0.0588 | 0.200 | 2 | 10/18/2021 06:08 | WG1757823 |
| *(S) o-Terphenyl* | *73.7* | | | *52.0-156* | | *10/18/2021 06:08* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 31.2 | J | 10.8 | 50.0 | 100 | 10/16/2021 18:49 | WG1758248 |
| Benzene | 0.982 | | 0.00941 | 0.100 | 100 | 10/16/2021 18:49 | WG1758248 |
| Ethylbenzene | 1.04 | | 0.0137 | 0.100 | 100 | 10/16/2021 18:49 | WG1758248 |
| Methyl tert-butyl ether | U | | 0.0101 | 0.100 | 100 | 10/16/2021 18:49 | WG1758248 |
| Naphthalene | 0.363 | J | 0.100 | 0.500 | 100 | 10/16/2021 18:49 | WG1758248 |
| Toluene | 7.04 | | 0.0278 | 0.100 | 100 | 10/16/2021 18:49 | WG1758248 |
| Xylenes, Total | 7.95 | | 0.0174 | 0.300 | 100 | 10/16/2021 18:49 | WG1758248 |
| *(S) Toluene-d8* | *112* | | | *80.0-120* | | *10/16/2021 18:49* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *101* | | | *77.0-126* | | *10/16/2021 18:49* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *109* | | | *70.0-130* | | *10/16/2021 18:49* | WG1758248 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 6.57 | | 0.0588 | 0.200 | 2 | 10/18/2021 06:28 | WG1757823 |
| *(S) o-Terphenyl* | *42.9* | J2 | | *52.0-156* | | *10/18/2021 06:28* | WG1757823 |

Sample Narrative:

L1416080-11 WG1757823: Surrogate failure due to matrix interference

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 | 1 | 10/16/2021 17:28 | WG1758248 |
| Benzene | 0.000383 | J | 0.0000941 | 0.00100 | 1 | 10/16/2021 17:28 | WG1758248 |
| Ethylbenzene | U | | 0.000137 | 0.00100 | 1 | 10/18/2021 16:25 | WG1758809 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 | 1 | 10/16/2021 17:28 | WG1758248 |
| Naphthalene | 0.0130 | | 0.00100 | 0.00500 | 1 | 10/16/2021 17:28 | WG1758248 |
| Toluene | U | | 0.000278 | 0.00100 | 1 | 10/16/2021 17:28 | WG1758248 |
| Xylenes, Total | U | | 0.000174 | 0.00300 | 1 | 10/18/2021 16:25 | WG1758809 |
| *(S) Toluene-d8* | *111* | | | *80.0-120* | | *10/16/2021 17:28* | WG1758248 |
| *(S) Toluene-d8* | *98.9* | | | *80.0-120* | | *10/18/2021 16:25* | WG1758809 |
| *(S) 4-Bromofluorobenzene* | *99.0* | | | *77.0-126* | | *10/16/2021 17:28* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *87.8* | | | *77.0-126* | | *10/18/2021 16:25* | WG1758809 |
| *(S) 1,2-Dichloroethane-d4* | *111* | | | *70.0-130* | | *10/16/2021 17:28* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *121* | | | *70.0-130* | | *10/18/2021 16:25* | WG1758809 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 | 1 | 10/18/2021 06:48 | WG1757823 |
| *(S) o-Terphenyl* | *73.2* | | | *52.0-156* | | *10/18/2021 06:48* | WG1757823 |

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

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 10.8 | J | 5.40 | 25.0 | 50 | 10/16/2021 19:10 | WG1758248 |
| Benzene | 0.0741 | | 0.00471 | 0.0500 | 50 | 10/16/2021 19:10 | WG1758248 |
| Ethylbenzene | 0.309 | | 0.00685 | 0.0500 | 50 | 10/16/2021 19:10 | WG1758248 |
| Methyl tert-butyl ether | U | | 0.00505 | 0.0500 | 50 | 10/16/2021 19:10 | WG1758248 |
| Naphthalene | 0.153 | J | 0.0500 | 0.250 | 50 | 10/16/2021 19:10 | WG1758248 |
| Toluene | 1.64 | | 0.0139 | 0.0500 | 50 | 10/16/2021 19:10 | WG1758248 |
| Xylenes, Total | 4.36 | | 0.00870 | 0.150 | 50 | 10/16/2021 19:10 | WG1758248 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* | | *10/16/2021 19:10* | WG1758248 |
| *(S) 4-Bromofluorobenzene* | *101* | | | *77.0-126* | | *10/16/2021 19:10* | WG1758248 |
| *(S) 1,2-Dichloroethane-d4* | *111* | | | *70.0-130* | | *10/16/2021 19:10* | WG1758248 |

## Semi-Volatile Organic Compounds (GC) by Method 8015C

| Analyte | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 1.68 | | 0.0588 | 0.200 | 2 | 10/18/2021 07:08 | WG1757823 |
| *(S) o-Terphenyl* | *76.8* | | | *52.0-156* | | *10/18/2021 07:08* | WG1757823 |

# QUALITY CONTROL SUMMARY

L1416080-01,02,03,04,07,10

## Method Blank (MB)

(MB) R3718508-1 10/19/21 15:47

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| Ferrous Iron | U | | 0.0150 | 0.0500 |

## L1416028-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1416028-02 10/19/21 16:01 • (DUP) R3718508-3 10/19/21 16:01

| Analyte | Original Result mg/l | DUP Result mg/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Ferrous Iron | 2.40 | 2.37 | 1 | 1.13 | | 20 |

## L1416028-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1416028-11 10/19/21 16:12 • (DUP) R3718508-6 10/19/21 16:13

| Analyte | Original Result mg/l | DUP Result mg/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Ferrous Iron | 0.138 | 0.116 | 1 | 17.3 | | 20 |

## Laboratory Control Sample (LCS)

(LCS) R3718508-2 10/19/21 15:47

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Ferrous Iron | 1.00 | 0.986 | 98.6 | 85.0-115 | |

## L1416028-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1416028-10 10/19/21 16:12 • (MS) R3718508-4 10/19/21 16:12 • (MSD) R3718508-5 10/19/21 16:12

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ferrous Iron | 1.00 | 0.0350 | 0.984 | 0.979 | 94.9 | 94.4 | 1 | 80.0-120 | | | 0.509 | 20 |

# QUALITY CONTROL SUMMARY

L1416080-01,02,03,04,07,10



## Method Blank (MB)

(MB) R3717703-1 10/16/21 15:01

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| Sulfate | U | | 0.594 | 5.00 |

## L1416858-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1416858-03 10/16/21 16:41 • (DUP) R3717703-3 10/16/21 16:55

| Analyte | Original Result mg/l | DUP Result mg/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Sulfate | 752 | 746 | 20 | 0.790 | | 15 |

## L1416858-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1416858-11 10/16/21 19:48 • (DUP) R3717703-7 10/16/21 22:58

| Analyte | Original Result mg/l | DUP Result mg/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Sulfate | 82.4 | 82.4 | 1 | 0.0390 | | 15 |

## Laboratory Control Sample (LCS)

(LCS) R3717703-2 10/16/21 15:15

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Sulfate | 40.0 | 40.6 | 102 | 80.0-120 | |

## L1416858-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1416858-08 10/16/21 19:05 • (MS) R3717703-4 10/16/21 19:19 • (MSD) R3717703-5 10/16/21 19:34

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 50.0 | 85.4 | 119 | 120 | 66.8 | 68.9 | 1 | 80.0-120 | E J6 | E J6 | 0.875 | 15 |

## L1416080-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1416080-01 10/16/21 20:49 • (MS) R3717703-6 10/16/21 21:03

| Analyte | Spike Amount mg/l | Original Result mg/l | MS Result mg/l | MS Rec. % | Dilution | Rec. Limits % | MS Qualifier |
|---|---|---|---|---|---|---|---|
| Sulfate | 50.0 | 33.4 | 79.2 | 91.6 | 1 | 80.0-120 | |

# QUALITY CONTROL SUMMARY

L1416080-01,02,03,04,07,10



## Method Blank (MB)

(MB) R3716736-1 10/14/21 18:12

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| Iron,Dissolved | U | | 0.0180 | 0.100 |
| Manganese,Dissolved | U | | 0.000934 | 0.0100 |

## Laboratory Control Sample (LCS)

(LCS) R3716736-2 10/14/21 18:15

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Iron,Dissolved | 10.0 | 9.38 | 93.8 | 80.0-120 | |
| Manganese,Dissolved | 1.00 | 0.933 | 93.3 | 80.0-120 | |

## L1414553-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1414553-01 10/14/21 18:18 • (MS) R3716736-4 10/14/21 18:23 • (MSD) R3716736-5 10/14/21 18:26

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Iron,Dissolved | 10.0 | 0.0493 | 9.36 | 9.27 | 93.2 | 92.2 | 1 | 75.0-125 | | | 0.986 | 20 |
| Manganese,Dissolved | 1.00 | 0.376 | 1.27 | 1.29 | 89.7 | 91.0 | 1 | 75.0-125 | | | 1.01 | 20 |

## Method Blank (MB)

(MB) R3717691-3 10/16/21 10:28

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 |
| Benzene | U | | 0.0000941 | 0.00100 |
| Ethylbenzene | U | | 0.000137 | 0.00100 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 |
| Naphthalene | U | | 0.00100 | 0.00500 |
| Toluene | U | | 0.000278 | 0.00100 |
| Xylenes, Total | U | | 0.000174 | 0.00300 |
| *(S) Toluene-d8* | *112* | | | *80.0-120* |
| *(S) 4-Bromofluorobenzene* | *102* | | | *77.0-126* |
| *(S) 1,2-Dichloroethane-d4* | *110* | | | *70.0-130* |

## Laboratory Control Sample (LCS)

(LCS) R3717691-1 10/16/21 09:07

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Benzene | 0.00500 | 0.00493 | 98.6 | 70.0-123 | |
| Ethylbenzene | 0.00500 | 0.00513 | 103 | 79.0-123 | |
| Methyl tert-butyl ether | 0.00500 | 0.00473 | 94.6 | 68.0-125 | |
| Naphthalene | 0.00500 | 0.00535 | 107 | 54.0-135 | |
| Toluene | 0.00500 | 0.00506 | 101 | 79.0-120 | |
| Xylenes, Total | 0.0150 | 0.0153 | 102 | 79.0-123 | |
| *(S) Toluene-d8* | | | *109* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *101* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *118* | *70.0-130* | |

## Laboratory Control Sample (LCS)

(LCS) R3717691-2 10/16/21 09:28

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 5.00 | 4.40 | 88.0 | 66.0-132 | |
| *(S) Toluene-d8* | | | *109* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *108* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *118* | *70.0-130* | |

## Method Blank (MB)

(MB) R3719089-3 10/18/21 11:35

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| Benzene | U | | 0.0000941 | 0.00100 |
| Ethylbenzene | U | | 0.000137 | 0.00100 |
| Toluene | U | | 0.000278 | 0.00100 |
| Xylenes, Total | U | | 0.000174 | 0.00300 |
| *(S) Toluene-d8* | *100* | | | *80.0-120* |
| *(S) 4-Bromofluorobenzene* | *87.8* | | | *77.0-126* |
| *(S) 1,2-Dichloroethane-d4* | *114* | | | *70.0-130* |

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

(LCS) R3719089-1 10/18/21 10:14 • (LCSD) R3719089-2 10/18/21 10:34

| 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 | 0.00518 | 0.00502 | 104 | 100 | 70.0-123 | | | 3.14 | 20 |
| Ethylbenzene | 0.00500 | 0.00467 | 0.00436 | 93.4 | 87.2 | 79.0-123 | | | 6.87 | 20 |
| Toluene | 0.00500 | 0.00480 | 0.00459 | 96.0 | 91.8 | 79.0-120 | | | 4.47 | 20 |
| Xylenes, Total | 0.0150 | 0.0133 | 0.0127 | 88.7 | 84.7 | 79.0-123 | | | 4.62 | 20 |
| *(S) Toluene-d8* | | | | *98.1* | *96.4* | *80.0-120* | | | | |
| *(S) 4-Bromofluorobenzene* | | | | *93.0* | *93.9* | *77.0-126* | | | | |
| *(S) 1,2-Dichloroethane-d4* | | | | *119* | *115* | *70.0-130* | | | | |

## Method Blank (MB)

(MB) R3719647-5 10/20/21 03:09

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | U | | 0.108 | 0.500 |
| Benzene | U | | 0.0000941 | 0.00100 |
| Ethylbenzene | U | | 0.000137 | 0.00100 |
| Methyl tert-butyl ether | U | | 0.000101 | 0.00100 |
| Naphthalene | U | | 0.00100 | 0.00500 |
| Toluene | U | | 0.000278 | 0.00100 |
| Xylenes, Total | U | | 0.000174 | 0.00300 |
| *(S) Toluene-d8* | *114* | | | *80.0-120* |
| *(S) 4-Bromofluorobenzene* | *102* | | | *77.0-126* |
| *(S) 1,2-Dichloroethane-d4* | *99.4* | | | *70.0-130* |

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

(LCS) R3719647-1 10/20/21 01:29 • (LCSD) R3719647-2 10/20/21 01:49

| 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 | 0.00464 | 0.00464 | 92.8 | 92.8 | 70.0-123 | | | 0.000 | 20 |
| Ethylbenzene | 0.00500 | 0.00427 | 0.00459 | 85.4 | 91.8 | 79.0-123 | | | 7.22 | 20 |
| Methyl tert-butyl ether | 0.00500 | 0.00492 | 0.00505 | 98.4 | 101 | 68.0-125 | | | 2.61 | 20 |
| Naphthalene | 0.00500 | 0.00422 | 0.00426 | 84.4 | 85.2 | 54.0-135 | | | 0.943 | 20 |
| Toluene | 0.00500 | 0.00432 | 0.00454 | 86.4 | 90.8 | 79.0-120 | | | 4.97 | 20 |
| Xylenes, Total | 0.0150 | 0.0130 | 0.0136 | 86.7 | 90.7 | 79.0-123 | | | 4.51 | 20 |
| *(S) Toluene-d8* | | | | *103* | *107* | *80.0-120* | | | | |
| *(S) 4-Bromofluorobenzene* | | | | *94.1* | *97.8* | *77.0-126* | | | | |
| *(S) 1,2-Dichloroethane-d4* | | | | *102* | *105* | *70.0-130* | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3719647-3 10/20/21 02:09

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/MS) Low Fraction | 5.00 | 4.56 | 91.2 | 66.0-132 | |
| *(S) Toluene-d8* | | | *105* | *80.0-120* | |
| *(S) 4-Bromofluorobenzene* | | | *108* | *77.0-126* | |
| *(S) 1,2-Dichloroethane-d4* | | | *103* | *70.0-130* | |

# QUALITY CONTROL SUMMARY

L1416080-01,02,03,04,05,06,08,09,10,11,12,13

## Method Blank (MB)

(MB) R3717659-1 10/18/21 00:02

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|---|---|---|---|---|
| (WY) Diesel Range Organics | U | | 0.0294 | 0.100 |
| *(S) o-Terphenyl* | *82.5* | | | *52.0-156* |

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

(LCS) R3717659-2 10/18/21 00:22 • (LCSD) R3717659-3 10/18/21 00:42

| 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 % |
|---|---|---|---|---|---|---|---|---|---|---|
| (WY) Diesel Range Organics | 1.50 | 1.18 | 1.20 | 78.7 | 80.0 | 50.0-150 | | | 1.68 | 20 |
| *(S) o-Terphenyl* | | | | *73.0* | *54.0* | *52.0-156* | | | | |

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

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

| | |
|---|---|
| MDL | Method Detection Limit. |
| RDL | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| (S) | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media. |
| 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 |
|---|---|
| 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. |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low. |
| T8 | Sample(s) received past/too close to holding time expiration. |

## 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 | LAO000356 |
| 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:
**Terracon - Salt Lake City, UT**

6949 South High Tech Drive
Midvale, UT 84047

Billing Information:
Accounts Payable
6949 South High Tech Drive
Midvale, UT 84047

Pres Chk

Report to: Curt Stripeika

Email To: curt.stripeika@terracon.com

Project Description: Triple Stop Chevron

City/State Collected: Layton, UT

Please Circle: PT MT CT ET

Phone: 801-545-8500

Client Project # 61197153

Lab Project # TERRDUT-61197153

Collected by (print): Royal Donald

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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: TERRACON STANDARD

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 # 1416080

T J067

Acctnum: TERRDUT

Template: T196409

Prelogin: P877592

PM: 824 - Chris Ward

PB:

Shipped Via: FedEx Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | DROWY,TS 4ozClr-NoPres | DROWYLVI 40mlAmb-HCl-BT | Diss Fe,Mn 250mlHDPE-NoPres | FERUSFE 250mlAmb-HCl | SULFATE 125mlHDPE-NoPres | TOC 4ozClr-NoPres | V8260BTEXMN+GRO 40mlAmb-HCl | V8260TPHKS 2ozClr-NoPres | | | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-41 | GRAB | GW | — | 10/7/21 | 918 | 8 | | X | X | X | X | | X | | | | | -01 |
| MW-40 | | GW | — | | 1036 | 8 | | X | X | X | X | | X | | | | | -02 |
| MW-42 | | GW | — | | 1143 | 8 | | X | X | X | X | | X | | | | | -03 |
| MW-8 | | GW | — | | 1332 | 8 | | X | X | X | X | | X | | | | | -04 |
| MW-35 | | GW | — | | 1440 | 5 | | X | | | | | X | | | | | -05 |
| MW-23 | | GW | — | | 1530 | 5 | | X | | | | | X | | | | | -06 |
| MW-24 | | GW | — | | 1625 | 8 | | | X | X | X | | X | | | | | -07 |
| MW-22 | | GW | — | | 1546 | 5 | | X | | | | | X | | | | | -08 |
| DUP #2 | | GW | — | | — | 5 | | X | | | | | X | | | | | -09 |
| | | GW | | | | | | | | | | | | | | | | |

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

Remarks:

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
RAD Screen <0.5 mR/hr: ✓Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| | 10/8/21 | 12:34 | | 0 |

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C | Bottles Received: | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|---|
| PNSLCUT | 10/9/21 | 17:00 | | 0.3+0=0.3 | 83 | |

| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: | Time: | Hold: | Condition: NCF / OK |
|---|---|---|---|---|---|---|---|
| | | | | 10-9-21 | 0900 | | |

Terracon-Salt Lake City, UT
6949 S. High Tech Drive
Midvale, UT 84047

Billing Information:
Accounts Payable
6949 S. High Tech Drive
Midvale, UT 84047

Report to: Curt Stripeika

Email To: Curt.Stripeika@terracon.com

Project Description: Triple Stop Chevron

City/State Collected: Layton, UT

Please Circle: PT (MT) CT ET

Phone: 801-545-8500

Client Project # 61197153

Lab Project # TERRDUT-61197153

Collected by (print): Roy McDonald

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y X

**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: Terracon Standard

Pres Chk

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix* | Depth | Date | Time | No. of Cntrs | DRO WYLVI 40 ml Amb HCL BT | Diss Fe, Mn 250 mL HDPE No Pres. | Ferrous Fe, 250 mL Amber - HCL | Sulfate 125 mL HDPE - No Pres | V 8260 BTEX MN + GRO 40 mL Amb HCL | | | | | | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-13 | GRAB | GW | – | 10/8/21 | 905 | 8 | X | X | X | X | X | | | | | | | -10 |
| RW-2 | | | – | | 1008 | 5 | X | | | | X | | | | | | | -11 |
| MW-14 | | | – | | 1105 | 5 | X | | | | X | | | | | | | -12 |
| MW-10 | | | – | | 1200 | 5 | X | | | | X | | | | | | | -13 |

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier __ _____

Tracking #

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

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeOH TBR |
|---|---|---|---|---|
| | 10/8/21 | 12:34 | | |
| Relinquished by : (Signature) PNSLCUT | 10/8/21 | 17:00 | Received by: (Signature) | Temp: 4.3 °C 0.3 to -0.3 Bottles Received: 83 |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 10-9-21 Time: 0900 |

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

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 # 196080

Table #

Acctnum: TERRDUT

Template: T196409

Prelogin: P877592

PM: Chris Ward

PB:

Shipped Via: