District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Accepted - 05/19/2023

NV

Responsible Party

Responsible Party: **Enterprise Field Services, LLC**	OGRID: **151618**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email:**tjlong@eprod.com**	Incident # *(assigned by OCD)*: **NCS1923947897**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.282835** Longitude **-107.351995** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Lateral 2C-15 Pigging Receiver Sump**	Site Type **Natural Gas Gathering Pigging Receiver Sump**
Date Release Discovered: **8/15/2019**	Serial Number *(if applicable)*: **NA**

Unit Letter	Section	Township	Range	County
K	**27**	**24N**	**5W**	**Rio Arriba**

Surface Owner: ☐ State ☐ Federal ☒ Tribal ☐ Private (*Name*: **Jicarilla Apache Tribe**)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **15-20 bbls**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **< 1 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On August 15, 2019, Enterprise was cleaning the Lateral 2C-15 Pigging Receiver Sump and discovered that the sump had leaked. Enterprise began remediation of the release on August 16, 2019 and it was determined that the release was reportable per NMOCD regulation August 19, 2019, due to the volume of impacted subsurface soil. Approximately 3,094 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. Additional remediation by excavating was terminated at the request of the Jicarilla Apache Environmental Protection Office and because of the hazardous work conditions associated with the excavation. In December 2019 and February 2020, site assessments were performed utilizing a hollow stem auger drilling rig. A total of nine (9) groundwater monitoring wells were installed. Groundwater monitoring activities continue at the site. The 2022 third party groundwater monitoring report is included with this C-141.

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	~23 (ft bgs)
Did this release impact groundwater or surface water?	☒ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☒ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
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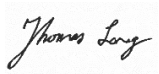
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature:  Date: 03/1/2023

email: tjlong@eprod.com Telephone: 505-599-2286

OCD Only

Received by: Date:

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

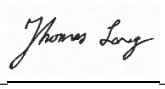
☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature:  Date: 11/18/2021

email: tjlong@eprod.com Telephone: 505-599-2286

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

ENSOLUM

2022 Supplemental Delineation and Groundwater Monitoring Report

Property:

Lateral 2C-15 Pigging Receiver Sump (8/15/19)
Unit Letter K, Sec 27 T24N R5W
Rio Arriba County, New Mexico

February 21, 2023

Ensolum Project No. 05A1226105

Prepared for:

Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, NM 87401
Attn: Mr. Thomas Long

Prepared by:

Ranee Deechilly
Project Manager

Kyle Summers
Senior Managing Geologist

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LIST OF APPENDICES

1.0 INTRODUCTION

This report describes the supplemental delineation and groundwater monitoring activities conducted at the Lateral 2C-15 Pigging Receiver Sump (8/15/19) site, referred to hereinafter as the "Site".

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral 2C-15 Pigging Receiver Sump (8/15/19)
NM EMNRD OCD Incident ID No.	NCS1923947897
Location:	36.282835° North, 107.351995° West Unit Letter K, Section 27, Township 24 North, Range 5 West Rio Arriba County, New Mexico
Property:	Jicarilla Apache Nation
Regulatory:	Jicarilla Apache Nation Environmental Protection Office (JAN-EPO)

On August 15, 2019, natural gas condensate was released from the Enterprise Lateral 2C-15 pigging receiver sump. Excavation activities were performed at the Site during August and September 2019. Following the completion of excavation activities and off-site disposal of the removed hydrocarbon affected soils, confirmation soil samples and two groundwater samples were collected from the excavation by Rule Engineering, LLC (Rule). In addition, four soil samples were collected from shallow potholes advanced near the adjacent ephemeral wash. Analytical results indicated constituent of concern (COC) concentrations exceeding the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria for soils and the New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) for groundwater. Soil exhibiting COC exceedances was identified on the northeast sidewall and the floor of the excavation. The excavation was backfilled with unaffected soils (*Lateral 2C-15 Pigging Receiver Sump Corrective Action Report*, Rule, August 8, 2020).

During December 2019, five soil borings (SB-1 through SB-5) were advanced on-Site by Rule. Subsequent to advancement, the soil borings were completed as 2-inch diameter groundwater monitoring wells (MW-1 through MW-5). Analytical results from the soil and groundwater sampling activities indicated COC concentrations were present in soil (at SB-1, immediately adjacent to the release and near the groundwater interface, and at SB-3, near the groundwater interface) above the applicable New Mexico EMNRD OCD closure criteria and in groundwater (monitoring wells MW-1, MW-3, and MW-5) above the New Mexico WQCC GQSs (*Lateral 2C-15 Pigging Receiver Sump Corrective Action Report*, Rule, August 8, 2020).

During February 2020, Rule completed four additional soil borings/monitoring wells (SB-6/MW-6, SB-7/MW-7, SB-8/MW-8, and SB-9/MW-9) to further delineate and evaluate the extent of COCs in soil and groundwater. Analytical results indicated COC exceedances above the New Mexico EMNRD OCD closure criteria for soil (SB-7) and above the New Mexico WQCC GQSs for groundwater (MW-7 and MW-9) (*Lateral 2C-15 Pigging Receiver Sump Corrective Action Report*, Rule, August 8, 2020).

Enterprise transferred environmental consulting oversight to Ensolum, LLC (Ensolum) during May 2020.

The Site is under the jurisdiction of the Jicarilla Apache Nation and is subject to regulatory oversight by the JAN-EPO. Ensolum deferred to the 19.15.29 New Mexico Administrative Code (NMAC), as guidance, which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action. Additionally, Ensolum utilized the New Mexico WQCC GQSs (20.6.2 NMAC *Ground and Surface Water Protection*) to evaluate groundwater conditions.

The Site location is depicted on **Figure 1** of **Appendix A** which was reproduced from a portion of a United States Geological Survey (USGS) 7.5-minute series topographic map. A **Site Vicinity Map**, created from an aerial photograph, is provided as **Figure 2**, and a **Site Map**, which indicates the approximate locations of the monitoring wells, the extent of the former excavation, excavation sample locations, and previous wash sample locations in relation to pertinent structures and general Site boundaries, is included as **Figure 3** of **Appendix A**.

1.2 Project Objective

The objective of the delineation activities was to further delineate the extent of hydrocarbon impact to soil and groundwater at the Site. Enterprise advanced seven soil borings in the vicinity of monitoring wells MW-1 and MW-9, and downgradient of monitoring well MW-3. Five of the soil borings were completed as permanent two-inch diameter groundwater monitoring wells.

2.0 SUPPLEMENTAL DELINEATION

During August 2022, supplemental delineation activities were initiated at the Site. Prior to drilling, the anticipated soil boring locations were “daylighted” to eight feet bgs utilizing a hydro-excavation vacuum truck (a soil sample was collected at five feet bgs utilizing a hand auger). The seven soil borings were then advanced utilizing a hollow-stem auger (HSA) drilling rig from eight feet bgs to termination. **Figure 4** (**Appendix A**) identifies the approximate soil boring/well sample locations. Regulatory correspondence is provided in **Appendix B**.

2.1 Soil Boring Installation

Soil samples were collected continuously utilizing five-foot core barrel samplers from eight feet bgs to the boring termination. Borehole SB-16 was an optional location and ultimately was not advanced beyond the eight-foot deep daylighting boring. Samples and drill cuttings were screened for visual and olfactory evidence of petroleum hydrocarbon impact. A field soil headspace analysis was conducted on each available soil sample interval by placing a representative portion of the sample into a plastic Ziplock® bag. The plastic bag was sealed, and the sample allowed to volatilize. The air above the sample, the headspace, was then evaluated using a photoionization detector (PID) capable of detecting volatile organic compounds (VOCs). The PID was calibrated utilizing an isobutylene standard prior to use in the field. PID readings of samples measured from the soil borings ranged from zero parts per million (ppm) to 1,763 ppm (SB-13/MW-13 @ 25’-27’). The field screening results are presented on soil boring logs included in **Appendix C**.

During the completion of each soil boring, an Ensolum environmental professional documented the subsurface lithology, color, and moisture content. A continuous profile of the soil column encountered from the ground surface to the boring terminus was prepared. Soil samples from each boring location were visually inspected and classified in the field. The lithologies observed during the advancement of soil borings generally consisted of sandy, clayey sand, sandy silt, silty sand, and silty clay. Detailed lithologic descriptions are presented on the soil boring logs included in **Appendix C**.

Up to five soil samples were collected for laboratory analysis from each soil boring. Samples were selected for analysis based on one or more of the following criteria:

- A depth interval exhibiting potential concentrations of VOCs based on PID evidence;
- An interval exhibiting visual/olfactory evidence of impairment;
- The capillary fringe zone;
- From a change in lithology; or,
- From the bottom of the boring.

Drill cuttings and hydro-excavation soil cuttings and water were transported to the Envirotech landfarm for remediation/disposal. The executed C-138 solid waste acceptance form is provided in **Appendix D**.

All soil samples were collected and placed in laboratory-prepared glassware. The containers were labeled and sealed using the laboratory-supplied labels and custody seals and were stored on ice in a cooler. The samples were relinquished to the courier for Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, New Mexico, under proper chain-of-custody procedures.

2.2 Soil Laboratory Analytical Methods

The soil samples collected during the delineation activities were analyzed for total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil rang organics (MRO) utilizing United States (U.S.) Environmental Protection Agency (EPA) SW-846 Method# 8015; benzene, toluene, ethylbenzene, and xylene (BTEX) utilizing U.S. EPA SW-846 Method #8021 or #8260; and chloride utilizing U.S. EPA Method #300.0. The laboratory analytical results are summarized in **Table 1** in **Appendix E**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix F**.

A summary of the analytes, sample type, and U.S. EPA or other approved methods is presented in the following table:

Analytes	Sample Type	No. of Samples	Method
BTEX	Soil	21	SW-846 8021/8260
TPH GRO/DRO/MRO	Soil	21	SW-846 8015
Chlorides	Soil	21	Method 300.0

2.3 Monitoring Well Installation

Five of the soil borings were completed as two-inch permanent groundwater monitoring wells. The monitoring wells were completed using the following methodology:

- Installation of 15 feet of two-inch diameter, 0.010-inch machine-slotted polyvinyl chloride (PVC) well screen with a threaded bottom cap;
- Installation of two-inch inside diameter, threaded flush joint PVC riser pipe to above the ground surface;
- Addition of pre-sieved, 10/20 grade, annular silica sand pack from the bottom of the soil boring to one to three feet above the top of the well screen;
- Placement of two or more feet of hydrated bentonite pellets above the sand pack;
- Addition of cement/bentonite slurry to the surface; and,
- Installation of an above-grade, steel-protective riser with an integrated padlock hasp or a flush mounted traffic well vault.

The well completion details are presented on the soil boring logs included in **Appendix C**.

2.4 Soil Data Evaluation

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with soil samples collected from SB-10/MW-10, SB-11/MW-11, SB-12/MW-12, SB-13/MW-13, SB-14/MW-14, SB-15, and SB-16 to the New Mexico EMNRD OCD closure criteria. All available soil analytical data (both current and historical) collected to date is presented in **Table 1** (**Appendix E**).

- The laboratory analytical results for all soil samples collected from the borings/monitoring wells indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).

- The laboratory analytical result for soil sample SB-15 (25'-27') indicates a total BTEX concentration of 180 mg/kg, which exceeds the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for soil samples SB-13/MW-13 (25'-27') and SB-13/MW-13 (27'-28') indicate total BTEX concentrations of 11 mg/kg and 0.42 mg/kg, respectively, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for all other soil samples collected from the borings/monitoring wells indicate that total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.

- The laboratory analytical results for soil samples SB-13/MW-13 (25'-27') and SB-15 (25'-27') indicate total combined TPH GRO/DRO/MRO concentrations of 540 mg/kg and 6,400 mg/kg, respectively, which exceed the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical result for soil sample SB-13/MW-13 (27'-28') indicates a combined TPH GRO/DRO/MRO concentration of 29 mg/kg, which is less than the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for all other soil samples collected from the borings/monitoring wells indicate total combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical results for soil samples SB-12/MW-12 (5'), SB-13/MW-13 (5'), SB-14/MW-14 (5'), SB-15 (5'), and SB-16 (5') indicate chloride concentrations ranging from 52 mg/kg (SB-16) to 160 mg/kg (SB-15), which are less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg. The laboratory analytical results for all other soil samples collected from the borings/monitoring wells indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg.

3.0 GROUNDWATER MONITORING

During 2022, groundwater monitoring events were conducted during January, May, July, and October. Ensolum's groundwater sampling program consisted of the collection of one groundwater sample from each monitoring well at the Site, with the exception of MW-1 due to the presence of non-aqueous phase liquid (NAPL).

Ensolum's groundwater sampling program consisted of the following:

- Ensolum gauged the depth to fluids in each monitoring well using an interface probe capable of

detecting NAPL. During each of the four 2022 sampling events, monitoring well MW-1 exhibited a measurable thickness of NAPL and was not sampled.

- The monitoring wells were sampled utilizing micro-purge low-flow sampling techniques. Following the completion of the micro-purge process, one groundwater sample was collected from each monitoring well.

- Low-flow or low-stress sampling refers to sampling methods that are intended to minimize the stress that is imparted to the formation pore water in the vicinity of the well screen. Water level drawdown provides the best indication of the stress that is imparted by a given flow rate for a given hydrological situation. Pumping rates of 0.1 to 0.5 liters per minute (L/min) are typically maintained during the low-flow/low-stress sampling activities, using dedicated or decontaminated sampling equipment.

- During low-flow sampling, the groundwater samples are collected from each monitoring well once produced groundwater is consistent in color, clarity, pH, temperature, and conductivity. Measurements are typically observed every three to five minutes while purging. Purging is considered complete once key parameters (especially pH and conductivity) have stabilized for at least three consecutive readings.

- Groundwater samples were collected in laboratory-supplied containers (pre-preserved with mercuric chloride ($HgCl_2$)), labeled, and sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for HEAL of Albuquerque, New Mexico under proper chain-of-custody procedures.

3.1 Groundwater Laboratory Analytical Methods

The groundwater samples collected from the monitoring wells were analyzed for BTEX utilizing U.S. EPA Method SW-846 #8260. The laboratory analytical results are summarized in **Table 2** in **Appendix E**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix F**.

A summary of the analyte, sample type, number of samples, and the U.S. EPA-approved method is presented in the following table:

Analyte	Sample Type	No. of Samples	Method
BTEX	Water	37	SW-846 8260

3.2 Groundwater Flow Direction

The groundwater flow direction at the Site is varied, but generally trends toward the west. The observed gradient during the 2022 monitoring events ranged from approximately 0.0004 feet per foot (ft/ft) to 0.001 ft/ft across the Site. Groundwater elevation data collected during the 2022 gauging events are presented in **Table 3** (**Appendix E**). Groundwater gradient maps for the 2022 gauging events are included as **Figure 4A** through **4D** (**Appendix A**).

3.3 Groundwater Data Evaluation

Ensolum compared the BTEX laboratory analytical results or laboratory PQLs / RLs associated with the groundwater samples collected from monitoring wells during the 2022 groundwater sampling events to the New Mexico WQCC GQSs. The results of the analyses are summarized in **Table 2** of **Appendix E**. Groundwater Quality Standard Exceedance Zone maps are provided as **Figures 5A** through **5D** of **Appendix A**.

January 2022

- Due to the presence of NAPL hydrocarbon on the initial groundwater-bearing unit at monitoring well MW-1, it was not sampled and is not part of the following discussion.

- The January 2022 analytical results for monitoring wells MW-3, MW-5, and MW-9 indicate benzene concentrations ranging from 53 micrograms per liter (µg/L) (MW-5) to 1,900 µg/L (MW-9), which exceed the WQCC GQS of 5 µg/L. The analytical results for the remaining monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 5 µg/L.

- The January 2022 analytical result for monitoring well MW-9 indicates a toluene concentration of 2,300 µg/L, which exceeds the WQCC GQS of 1,000 µg/L. The analytical results for the remaining monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 1,000 µg/L.

- The January 2022 analytical results for monitoring wells MW-3, MW-5, and MW-9 indicate ethylbenzene concentrations ranging from 1.5 µg/L (MW-5) to 160 µg/L (MW-9), which are below the WQCC GQS of 700 µg/L. The analytical results for the remaining monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 700 µg/L.

- The January 2022 analytical result for monitoring well MW-9 indicates a total xylene concentration of 1,200 µg/L, which exceeds the WQCC GQS of 620 µg/L. The analytical results for the remaining monitoring wells do not indicate total xylenes concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 µg/L.

- No data qualifier flags are associated with the January 2022 analytical results.

May 2022

- Due to the presence of NAPL hydrocarbon on the initial groundwater-bearing unit at monitoring well MW-1, it was not sampled and is not part of the following discussion.

- The May 2022 analytical results for monitoring wells MW-3, MW-5, and MW-9 indicate benzene concentrations ranging from 32 µg/L (MW-5) to 1,900 µg/L (MW-9), which exceed the WQCC GQS of 5 µg/L. The analytical results for the remaining monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 5 µg/L.

- The May 2022 analytical result for monitoring well MW-9 indicates a toluene concentration of 2,400 µg/L, which exceeds the WQCC GQS of 1,000 µg/L. The analytical results for the remaining monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 1,000 µg/L.

- The May 2022 analytical results for monitoring wells MW-3, MW-5, and MW-9 indicate ethylbenzene concentrations ranging from 2.7 µg/L (MW-5) to 160 µg/L (MW-9), which are below the WQCC GQS of 700 µg/L. The analytical results for the remaining monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 700 µg/L.

- The May 2022 analytical result for monitoring well MW-9 indicates a total xylene concentration of 1,200 µg/L, which exceeds the WQCC GQS of 620 µg/L. The analytical result for monitoring

well MW-5 indicates a total xylene concentration of 5.8 µg/L, which is below the WQCC GQS of 620 µg/L. The analytical results for the remaining monitoring wells do not indicate total xylenes concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 µg/L.

- No data qualifier flags are associated with the May 2022 analytical results.

July 2022

- Due to the presence of NAPL hydrocarbon on the initial groundwater-bearing unit at monitoring well MW-1, it was not sampled and is not part of the following discussion.

- The July 2022 analytical results for monitoring wells MW-3, MW-5, and MW-9 indicate benzene concentrations ranging from 17 µg/L (MW-5) to 2,100 µg/L (MW-9), which exceed the WQCC GQS of 5 µg/L. The analytical results for the remaining monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 5 µg/L.

- The July 2022 analytical result for monitoring well MW-9 indicates a toluene concentration of 2,400 µg/L, which exceeds the WQCC GQS of 1,000 µg/L. The analytical results for the remaining monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 1,000 µg/L.

- The July 2022 analytical results for monitoring wells MW-3, MW-5, and MW-9 indicate ethylbenzene concentrations ranging from 6.9 µg/L (MW-5) to 150 µg/L (MW-9), which are below the WQCC GQS of 700 µg/L. The analytical results for the remaining monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 700 µg/L.

- The July 2022 analytical result for monitoring well MW-9 indicates a total xylene concentration of 1,100 µg/L, which exceeds the WQCC GQS of 620 µg/L. The analytical result for monitoring well MW-5 indicates a total xylene concentration of 14 µg/L, which is below the WQCC GQS of 620 µg/L. The analytical results for the remaining monitoring wells do not indicate total xylenes concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 µg/L.

July 2022 Data Qualifier Flags		
Sample IDs	**Data Qualifier Flags**	**Comments/Reactions**
MW-2 (collected 7/21/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was outside the acceptable recovery range due to matrix interference.
MW-3 (collected 7/21/2022)	Sample Diluted Due to Matrix.	The sample was diluted due to matrix interference. The results are usable for the intended purpose.
MW-3 (collected 7/21/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was outside the acceptable recovery range due to matrix interference.

July 2022 Data Qualifier Flags		
Sample IDs	**Data Qualifier Flags**	**Comments/Reactions**
MW-4 (collected 7/21/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was outside the acceptable recovery range due to matrix interference.
MW-5 (collected 7/21/2022)	Sample Diluted Due to Matrix.	The sample was diluted due to matrix interference. The results are usable for the intended purpose.
MW-5 (collected 7/21/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use for the intended purpose. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.

October 2022

- Due to the presence of NAPL hydrocarbon on the initial groundwater-bearing unit at monitoring well MW-1, it was not sampled and is not part of the following discussion.

- The October 2022 analytical results for monitoring wells MW-3, MW-5, and MW-9 indicate benzene concentrations ranging from 6.0 µg/L (MW-5) to 58 µg/L (MW-3), which exceed the WQCC GQS of 5 µg/L. The analytical result for monitoring well MW-2 indicates a benzene concentration of 1.2 µg/L, which is below the WQCC GQS of 5 µg/L. The analytical results for the remaining monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 5 µg/L.

- The October 2022 analytical results for monitoring wells MW-9 and MW-13 indicate toluene concentrations of 57 µg/L and 490 µg/L, which are below the WQCC GQS of 1,000 µg/L. The analytical results for the remaining monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 1,000 µg/L.

- The October 2022 analytical results for monitoring wells MW-3, MW-5, MW-9, and MW-13 indicate ethylbenzene concentrations ranging from 2.3 µg/L (MW-5) to 300 µg/L (MW-13), which are below the WQCC GQS of 700 µg/L. The analytical results for the remaining monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 700 µg/L.

- The October 2022 analytical result for monitoring well MW-13 indicates a total xylene concentration of 2,800 µg/L, which exceeds the WQCC GQS of 620 µg/L. The analytical result for monitoring wells MW-3, MW-5, and MW-9 indicates total xylene concentrations ranging from 2.5 µg/L (MW-3) to 30 µg/L (MW-9), which are below the WQCC GQS of 620 µg/L. The analytical results for the remaining monitoring wells do not indicate total xylenes concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 µg/L.

- Ensolum suspects that a dilution factor may have been overlooked on the MW-9 sample, resulting in a biased low result.

October 2022 Data Qualifier Flags		
Sample IDs	**Data Qualifier Flags**	**Comments/Reactions**
MW-7 (collected 10/20/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for the intended use. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.
MW-11 (collected 10/21/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for the intended use. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.

4.0 FINDINGS

Based on the evaluation of the analytical results from delineation and groundwater sampling activities, Ensolum presents the following findings:

- Seven soil borings were advanced at the Site. Five borings were completed as groundwater monitoring wells. Twenty-one soil samples were collected and submitted for laboratory analysis. Two of the soil samples collected from soil boring/well borings SB-13/MW-13 and SB-15 exhibited total combined TPH GRO/DRO/MRO concentrations above the applicable New Mexico EMNRD OCD soil closure criteria. In addition, one of the soil samples collected from soil boring SB-15 exhibited a total BTEX concentration above the applicable New Mexico EMNRD OCD soil closure criteria. All other soil samples collected from soil borings/well borings did not exhibit COC concentrations above the New Mexico EMNRD OCD soil closure criteria.

- During the 2022 groundwater monitoring events, monitoring well MW-1 exhibited measurable NAPL on the groundwater and was not sampled.

- The groundwater flow direction at the Site is generally towards the west, with a subtle approximate gradient ranging from 0.0004 ft/ft to 0.001 ft/ft across the Site.

- The analytical results for the groundwater samples collected from monitoring wells MW-3, MW-5, and MW-9 during the four 2022 monitoring events indicate that benzene concentrations are above the New Mexico WQCC GQSs. The analytical results for the groundwater samples collected from monitoring well MW-9 during the January, May, and July monitoring events indicate that toluene and total xylene concentrations are above the New Mexico WQCC GQSs. The analytical result for the groundwater sample collected from monitoring well MW-13 during the October monitoring event indicates total xylene concentrations are above the New Mexico WQCC GQSs. The analytical results for the groundwater samples collected from the remaining monitoring wells during the four 2022 monitoring events do not indicate COC concentrations above the applicable WQCC GQSs.

- The results from the monitoring events at the Site indicate decreasing COC concentrations at monitoring well MW-9.

- Ensolum suspects that a dilution factor may have been overlooked on the MW-9 sample, resulting in an inaccurate result.

5.0 RECOMMENDATIONS

Based on the results of the delineation and groundwater monitoring activities, Ensolum has the following recommendations:

- Report the delineation and groundwater monitoring data to the JAN-EPO and New Mexico EMNRD OCD.
- Continue quarterly groundwater monitoring as requested by the JAN-EPO.
- Perform additional site assessment activities to fully define the groundwater plume and potentially further define the source area soil impacts where possible.
- Evaluate NAPL hydrocarbon removal options, soil remediation options.

6.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

6.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties).

6.2 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, and it should be noted that this 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, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendation are based solely upon data available to Ensolum at the time of these services.

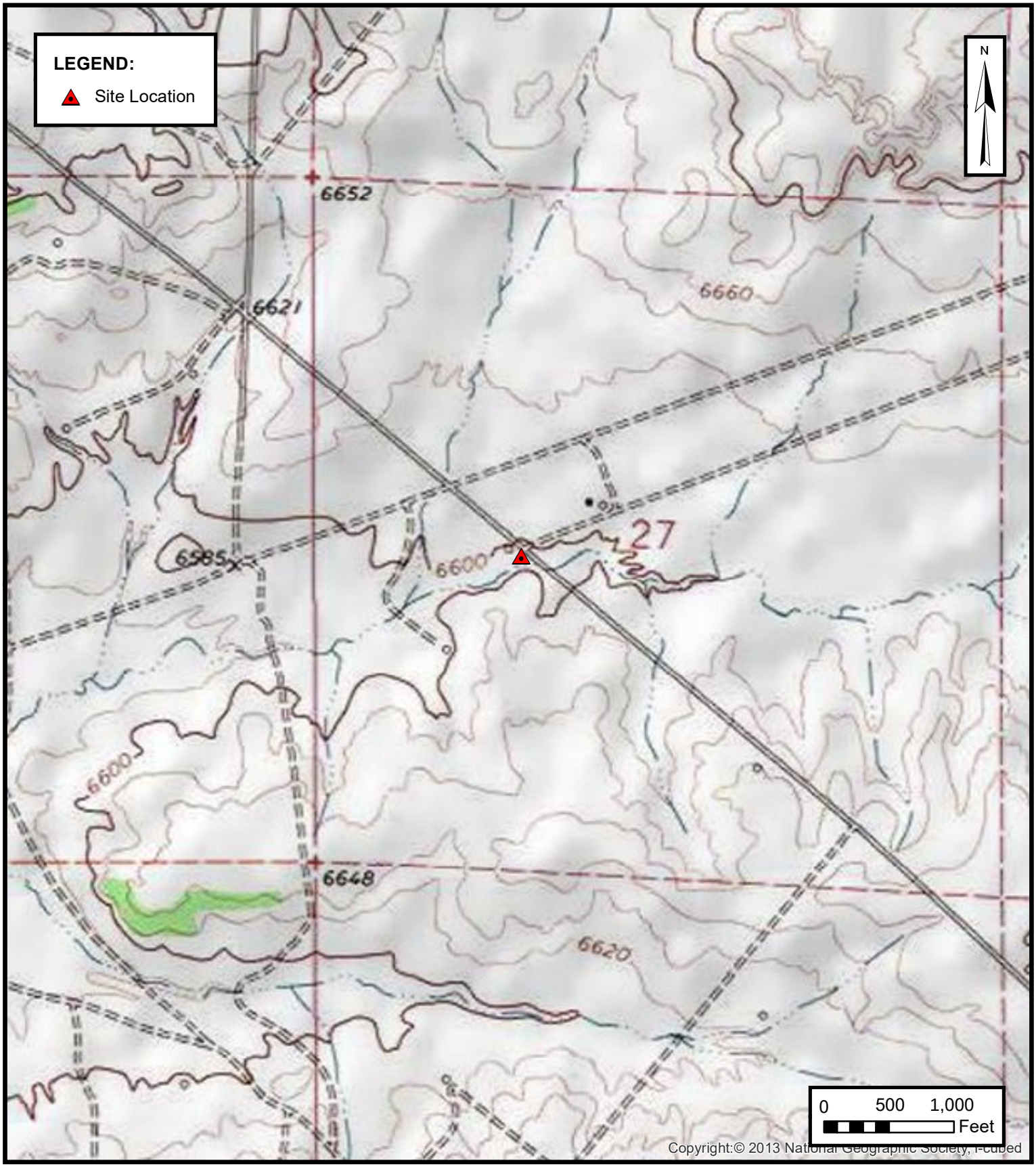
6.3 Reliance

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the Closure Report and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.

ENSOLUM

APPENDIX A

Figures



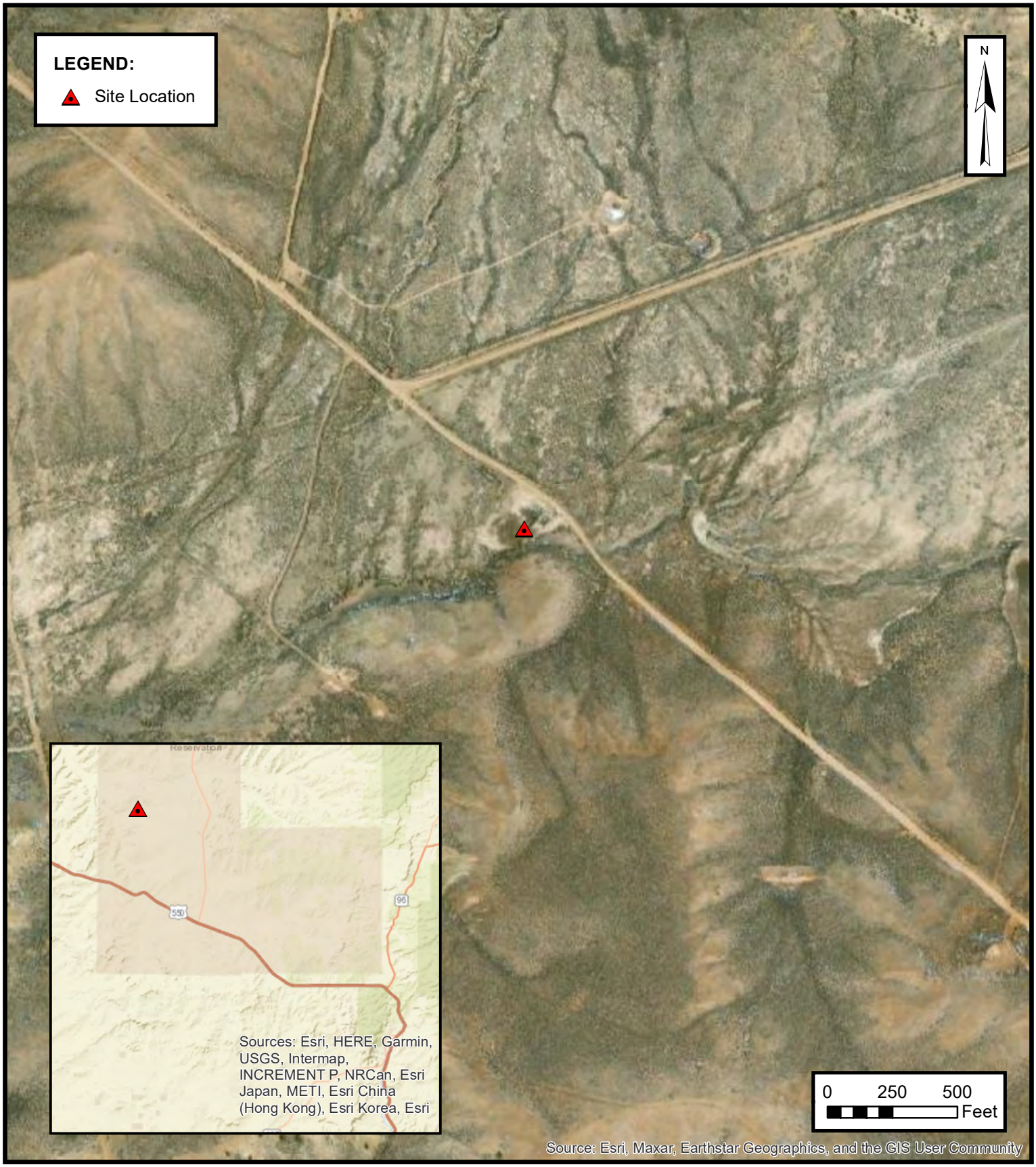
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE
1



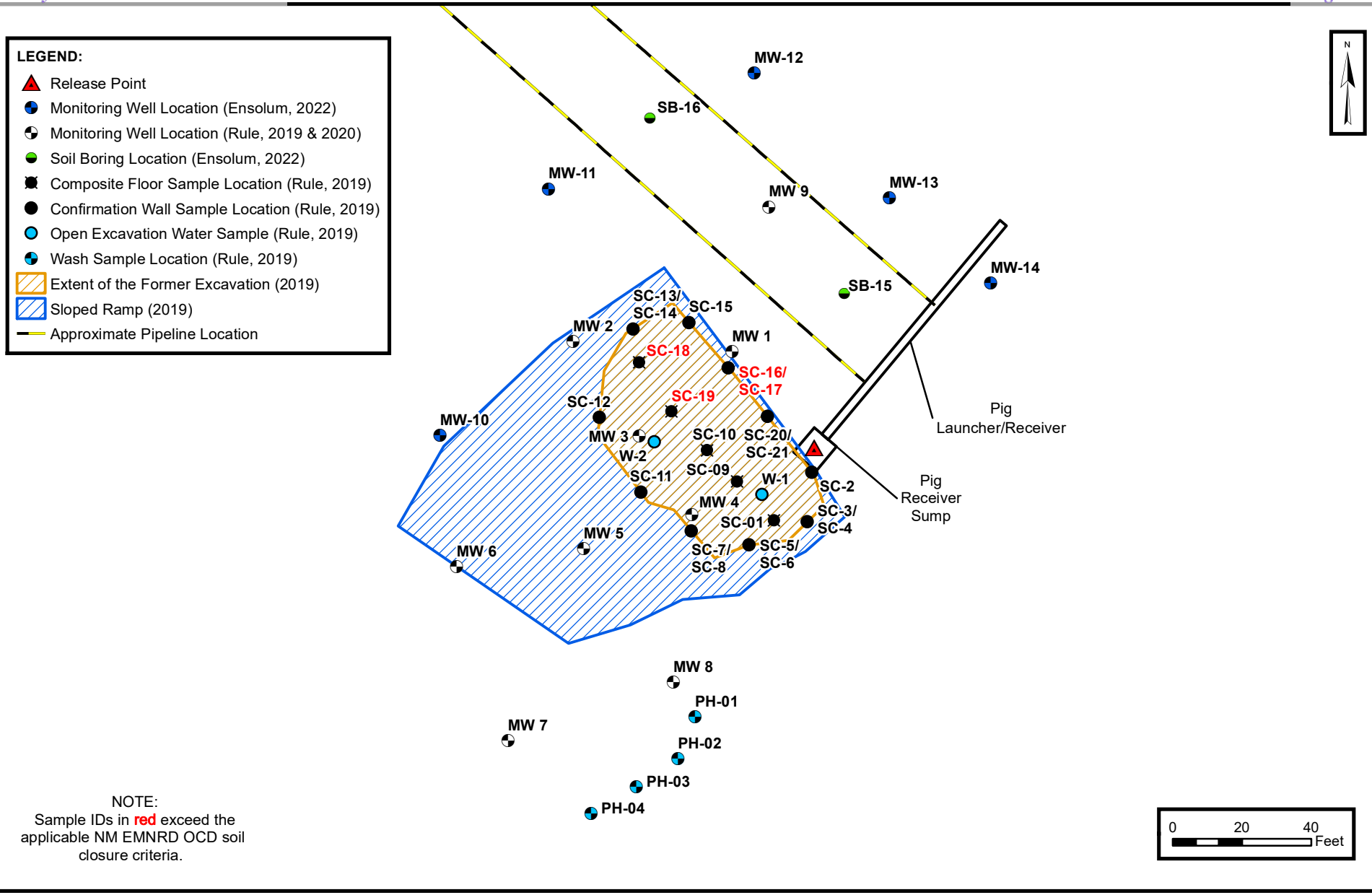
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE
2



NOTE:
Sample IDs in red exceed the applicable NM EMNRD OCD soil closure criteria.

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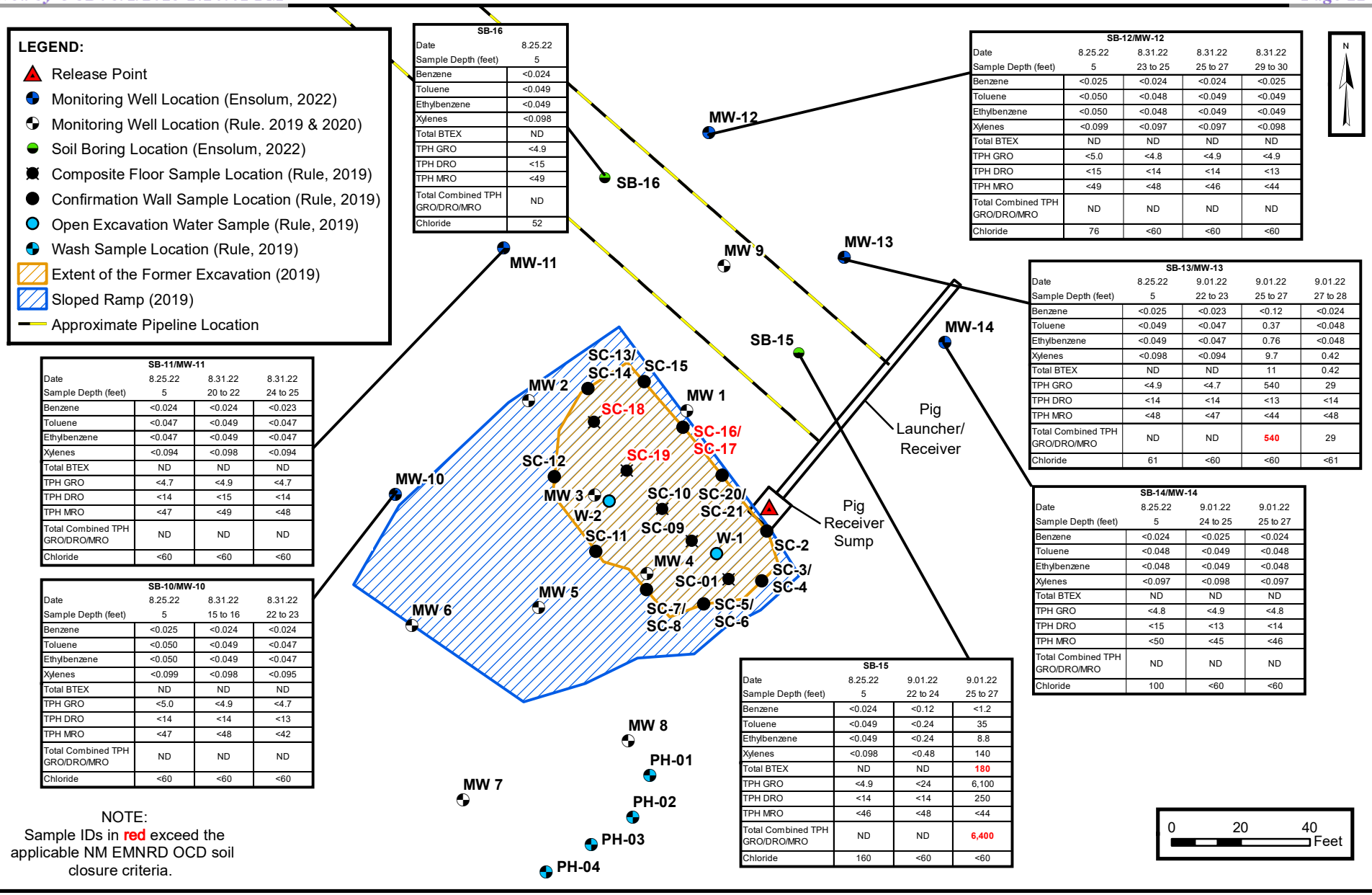
Environmental, Engineering and Hydrogeologic Consultants

SITE MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE
3



SB-16

Date	8.25.22
Sample Depth (feet)	5
Benzene	<0.024
Toluene	<0.049
Ethylbenzene	<0.049
Xylenes	<0.098
Total BTEX	ND
TPH GRO	<4.9
TPH DRO	<15
TPH MRO	<49
Total Combined TPH GRO/DRO/MRO	ND
Chloride	52

SB-12/MW-12

Date	8.25.22	8.31.22	8.31.22	8.31.22
Sample Depth (feet)	5	23 to 25	25 to 27	29 to 30
Benzene	<0.025	<0.024	<0.024	<0.025
Toluene	<0.050	<0.048	<0.049	<0.049
Ethylbenzene	<0.050	<0.048	<0.049	<0.049
Xylenes	<0.099	<0.097	<0.097	<0.098
Total BTEX	ND	ND	ND	ND
TPH GRO	<5.0	<4.8	<4.9	<4.9
TPH DRO	<15	<14	<14	<13
TPH MRO	<49	<48	<46	<44
Total Combined TPH GRO/DRO/MRO	ND	ND	ND	ND
Chloride	76	<60	<60	<60

SB-13/MW-13

Date	8.25.22	9.01.22	9.01.22	9.01.22
Sample Depth (feet)	5	22 to 23	25 to 27	27 to 28
Benzene	<0.025	<0.023	<0.12	<0.024
Toluene	<0.049	<0.047	0.37	<0.048
Ethylbenzene	<0.049	<0.047	0.76	<0.048
Xylenes	<0.098	<0.094	9.7	0.42
Total BTEX	ND	ND	11	0.42
TPH GRO	<4.9	<4.7	540	29
TPH DRO	<14	<14	<13	<14
TPH MRO	<48	<47	<44	<48
Total Combined TPH GRO/DRO/MRO	ND	ND	540	29
Chloride	61	<60	<60	<61

SB-11/MW-11

Date	8.25.22	8.31.22	8.31.22
Sample Depth (feet)	5	20 to 22	24 to 25
Benzene	<0.024	<0.024	<0.023
Toluene	<0.047	<0.049	<0.047
Ethylbenzene	<0.047	<0.049	<0.047
Xylenes	<0.094	<0.098	<0.094
Total BTEX	ND	ND	ND
TPH GRO	<4.7	<4.9	<4.7
TPH DRO	<14	<15	<14
TPH MRO	<47	<49	<48
Total Combined TPH GRO/DRO/MRO	ND	ND	ND
Chloride	<60	<60	<60

SB-14/MW-14

Date	8.25.22	9.01.22	9.01.22
Sample Depth (feet)	5	24 to 25	25 to 27
Benzene	<0.024	<0.025	<0.024
Toluene	<0.048	<0.049	<0.048
Ethylbenzene	<0.048	<0.049	<0.048
Xylenes	<0.097	<0.098	<0.097
Total BTEX	ND	ND	ND
TPH GRO	<4.8	<4.9	<4.8
TPH DRO	<15	<13	<14
TPH MRO	<50	<45	<46
Total Combined TPH GRO/DRO/MRO	ND	ND	ND
Chloride	100	<60	<60

SB-10/MW-10

Date	8.25.22	8.31.22	8.31.22
Sample Depth (feet)	5	15 to 16	22 to 23
Benzene	<0.025	<0.024	<0.024
Toluene	<0.050	<0.049	<0.047
Ethylbenzene	<0.050	<0.049	<0.047
Xylenes	<0.099	<0.098	<0.095
Total BTEX	ND	ND	ND
TPH GRO	<5.0	<4.9	<4.7
TPH DRO	<14	<14	<13
TPH MRO	<47	<48	<42
Total Combined TPH GRO/DRO/MRO	ND	ND	ND
Chloride	<60	<60	<60

SB-15

Date	8.25.22	9.01.22	9.01.22
Sample Depth (feet)	5	22 to 24	25 to 27
Benzene	<0.024	<0.12	<1.2
Toluene	<0.049	<0.24	35
Ethylbenzene	<0.049	<0.24	8.8
Xylenes	<0.098	<0.48	140
Total BTEX	ND	ND	180
TPH GRO	<4.9	<24	6,100
TPH DRO	<14	<14	250
TPH MRO	<46	<48	<44
Total Combined TPH GRO/DRO/MRO	ND	ND	6,400
Chloride	160	<60	<60

NOTE:
Sample IDs in **red** exceed the applicable NM EMNRD OCD soil closure criteria.

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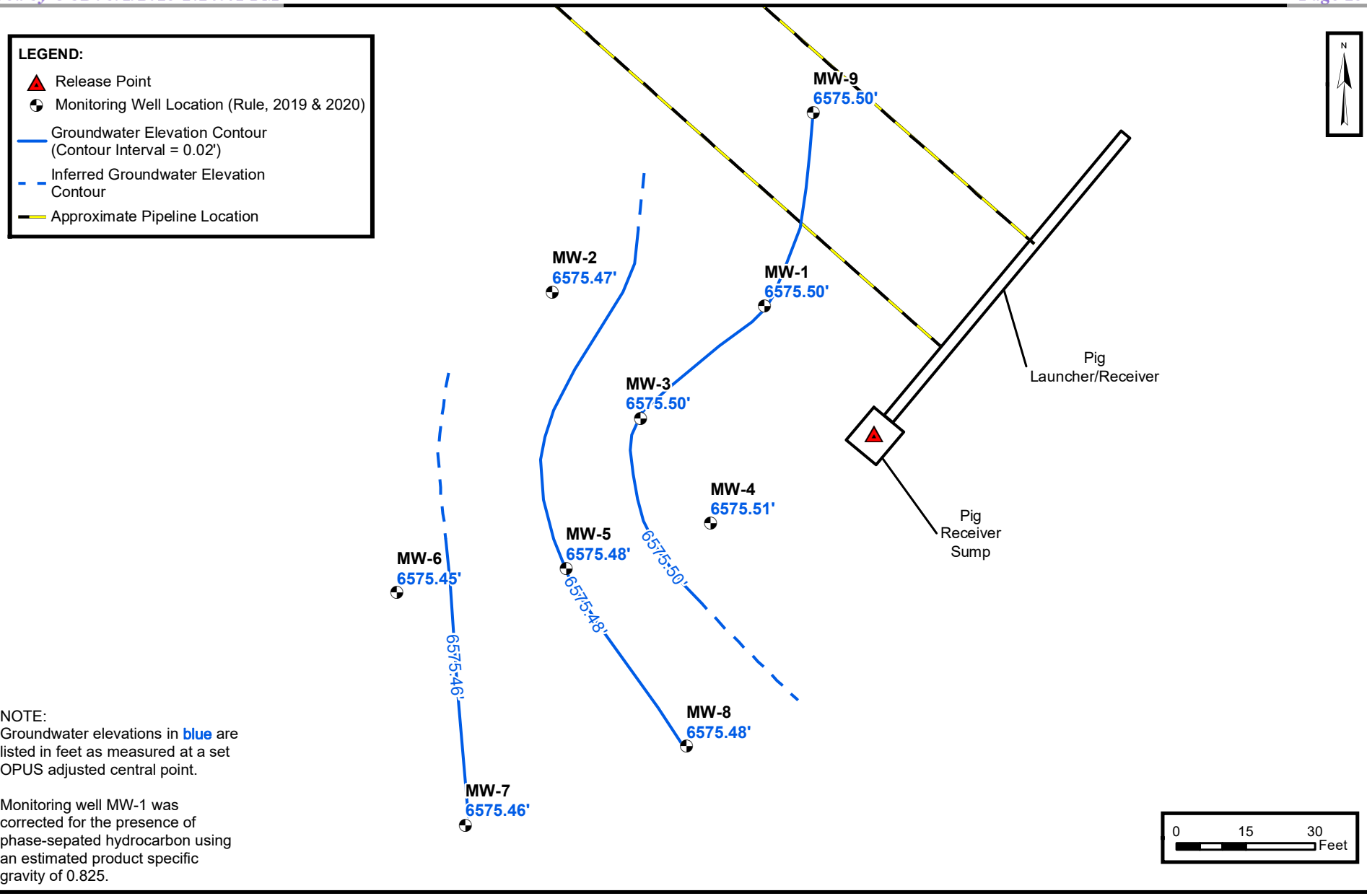
2022 SOIL BORING/MONITORING WELL LOCATIONS WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE
4



NOTE:
Groundwater elevations in blue are listed in feet as measured at a set OPUS adjusted central point.

Monitoring well MW-1 was corrected for the presence of phase-sepated hydrocarbon using an estimated product specific gravity of 0.825.

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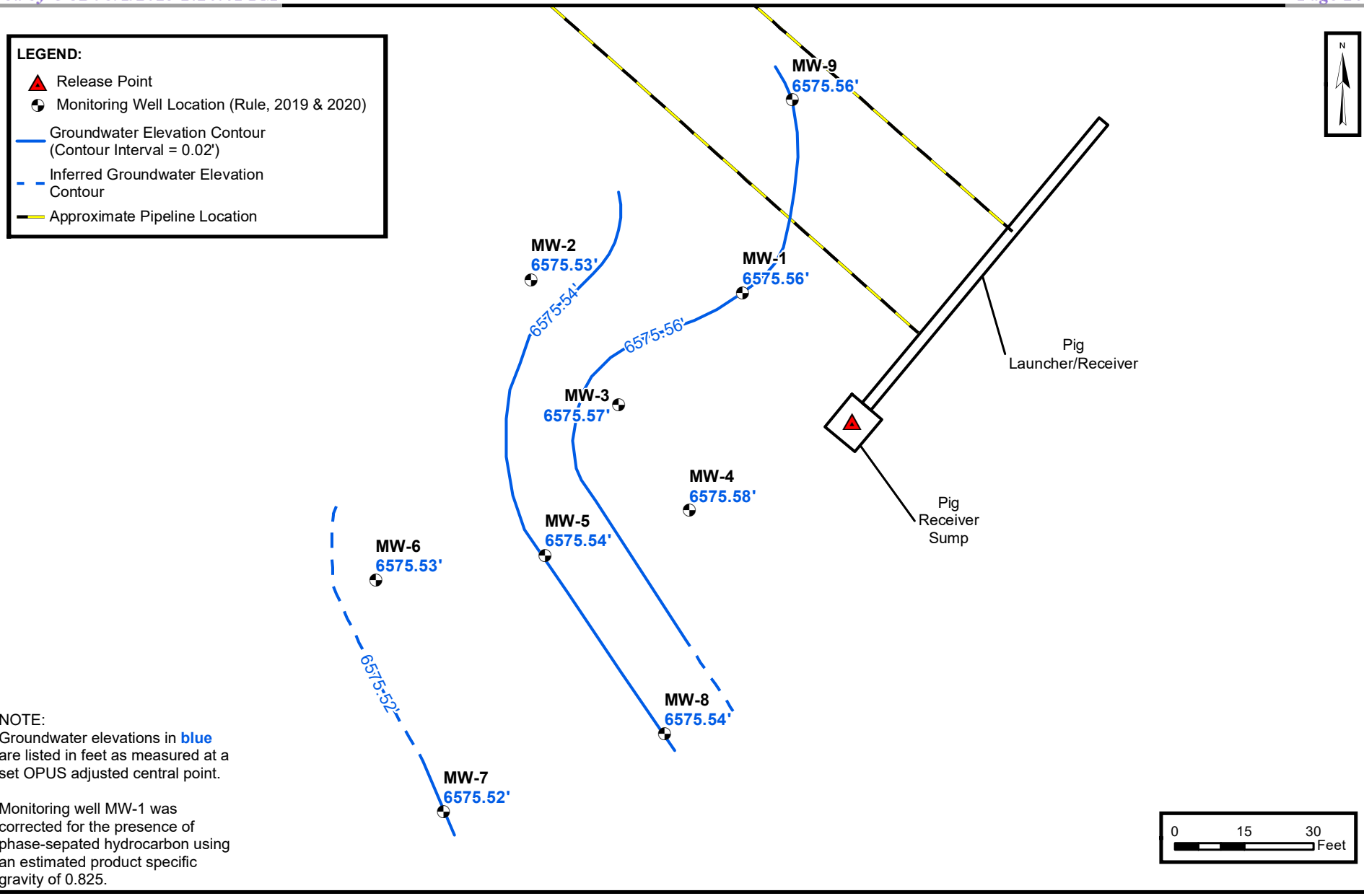
GROUNDWATER GRADIENT MAP (JANUARY 2022)

ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE
5A



NOTE:
Groundwater elevations in **blue** are listed in feet as measured at a set OPUS adjusted central point.

Monitoring well MW-1 was corrected for the presence of phase-sepated hydrocarbon using an estimated product specific gravity of 0.825.

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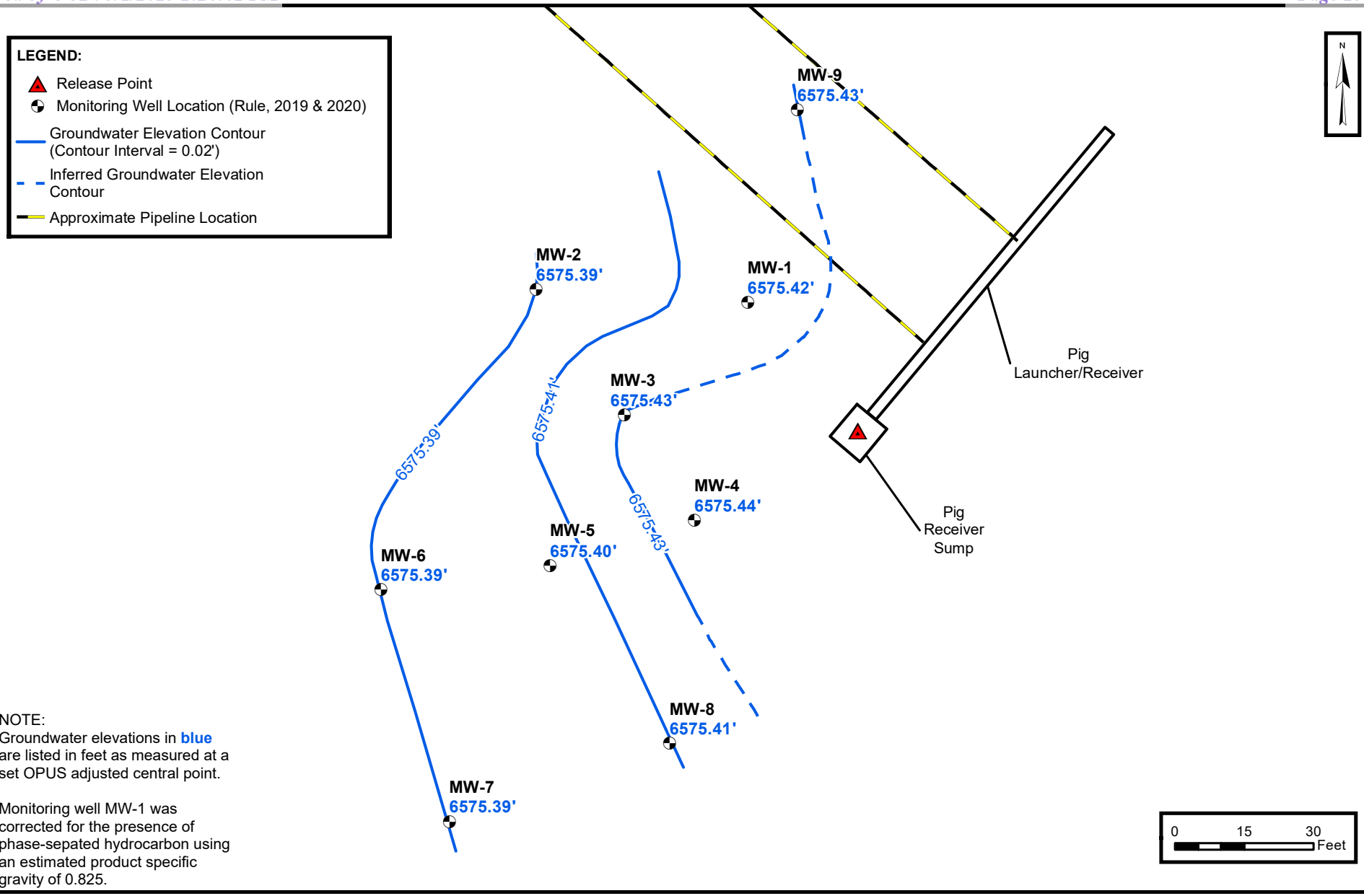
GROUNDWATER GRADIENT MAP (MAY 2022)

ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE 5B



NOTE:
Groundwater elevations in **blue** are listed in feet as measured at a set OPUS adjusted central point.

Monitoring well MW-1 was corrected for the presence of phase-sepated hydrocarbon using an estimated product specific gravity of 0.825.

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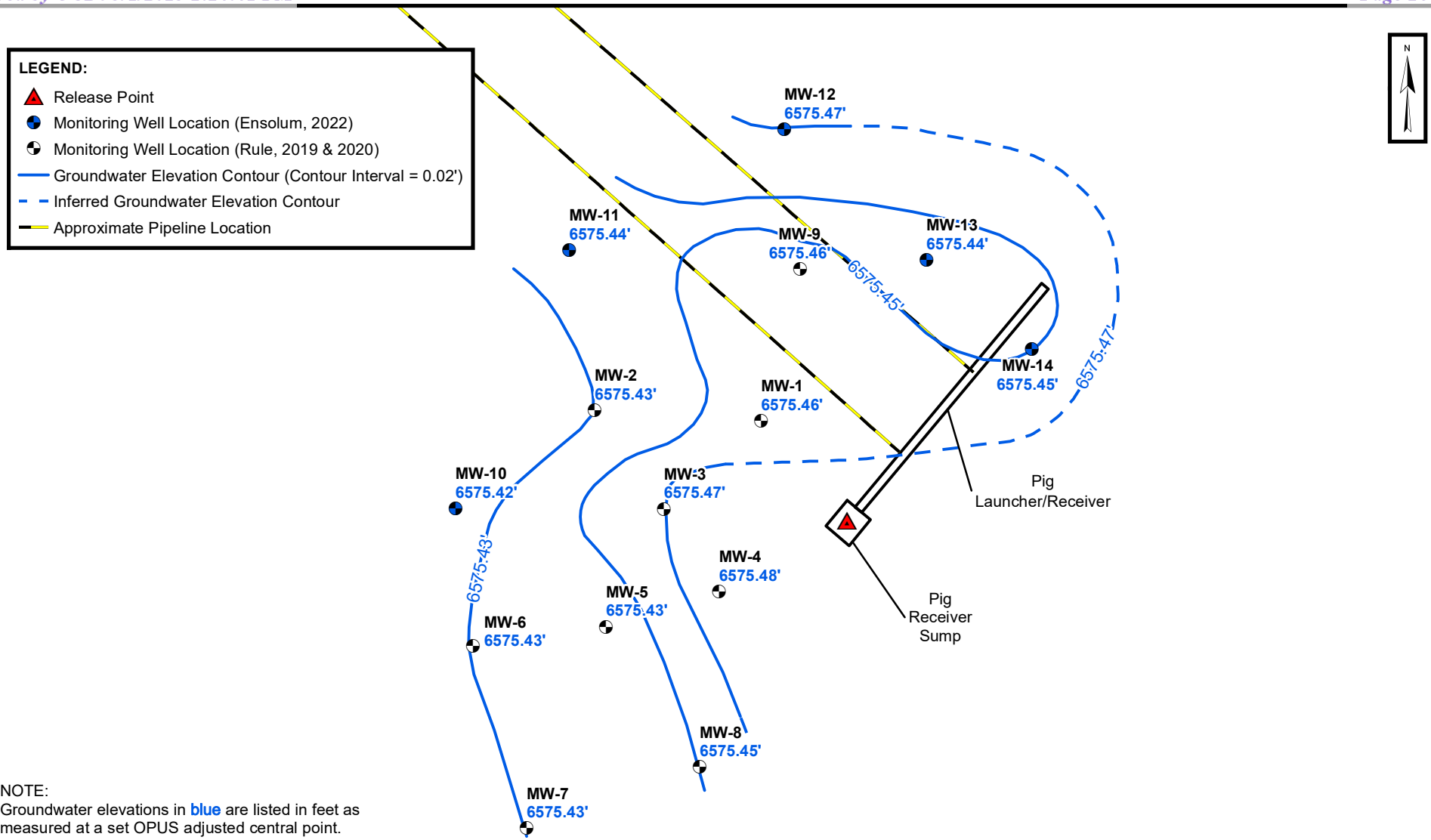
Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER GRADIENT MAP (JULY 2022)

ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE 5C



NOTE:
Groundwater elevations in blue are listed in feet as measured at a set OPUS adjusted central point.

Monitoring well MW-1 was corrected for the presence of phase-separated hydrocarbon using an estimated product specific gravity of 0.825.

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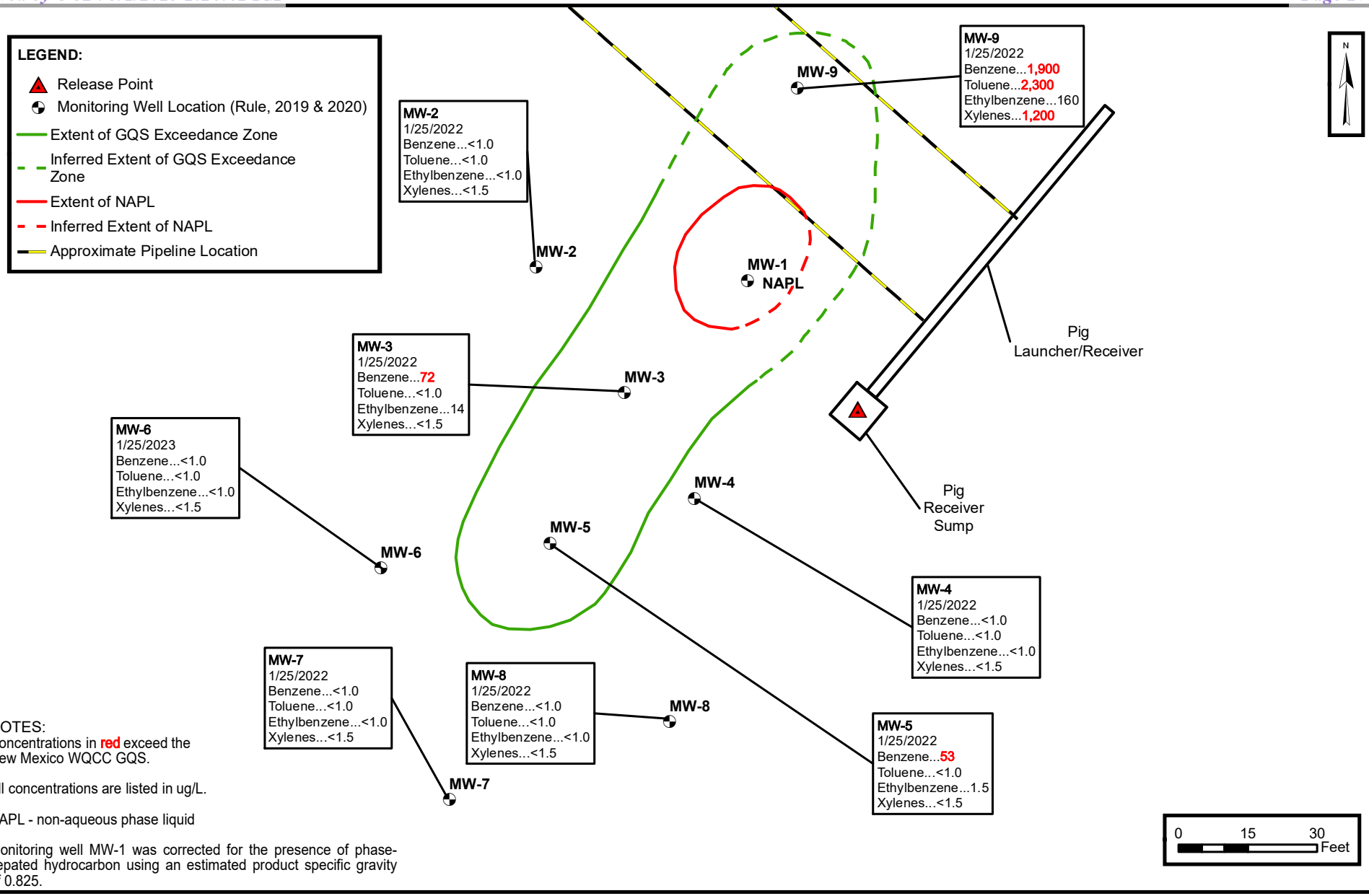
GROUNDWATER GRADIENT MAP (OCTOBER 2022)

ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE
5D



NOTES:
Concentrations in red exceed the New Mexico WQCC GQS.

All concentrations are listed in ug/L.

NAPL - non-aqueous phase liquid

Monitoring well MW-1 was corrected for the presence of phase-sepated hydrocarbon using an estimated product specific gravity of 0.825.

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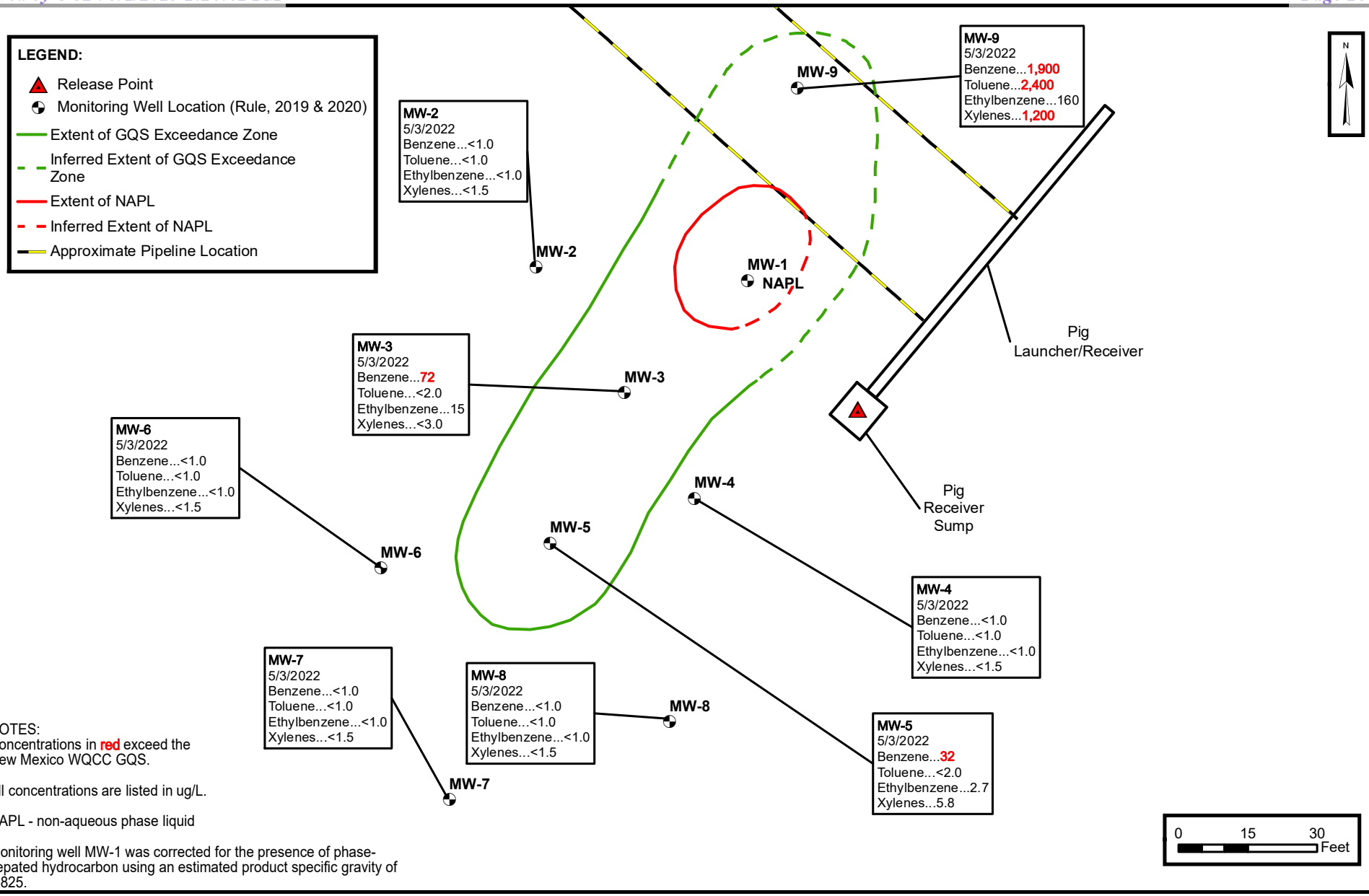
GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP (JANUARY 2022)
ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE 6A



NOTES:
Concentrations in red exceed the New Mexico WQCC GQS.

All concentrations are listed in ug/L.

NAPL - non-aqueous phase liquid

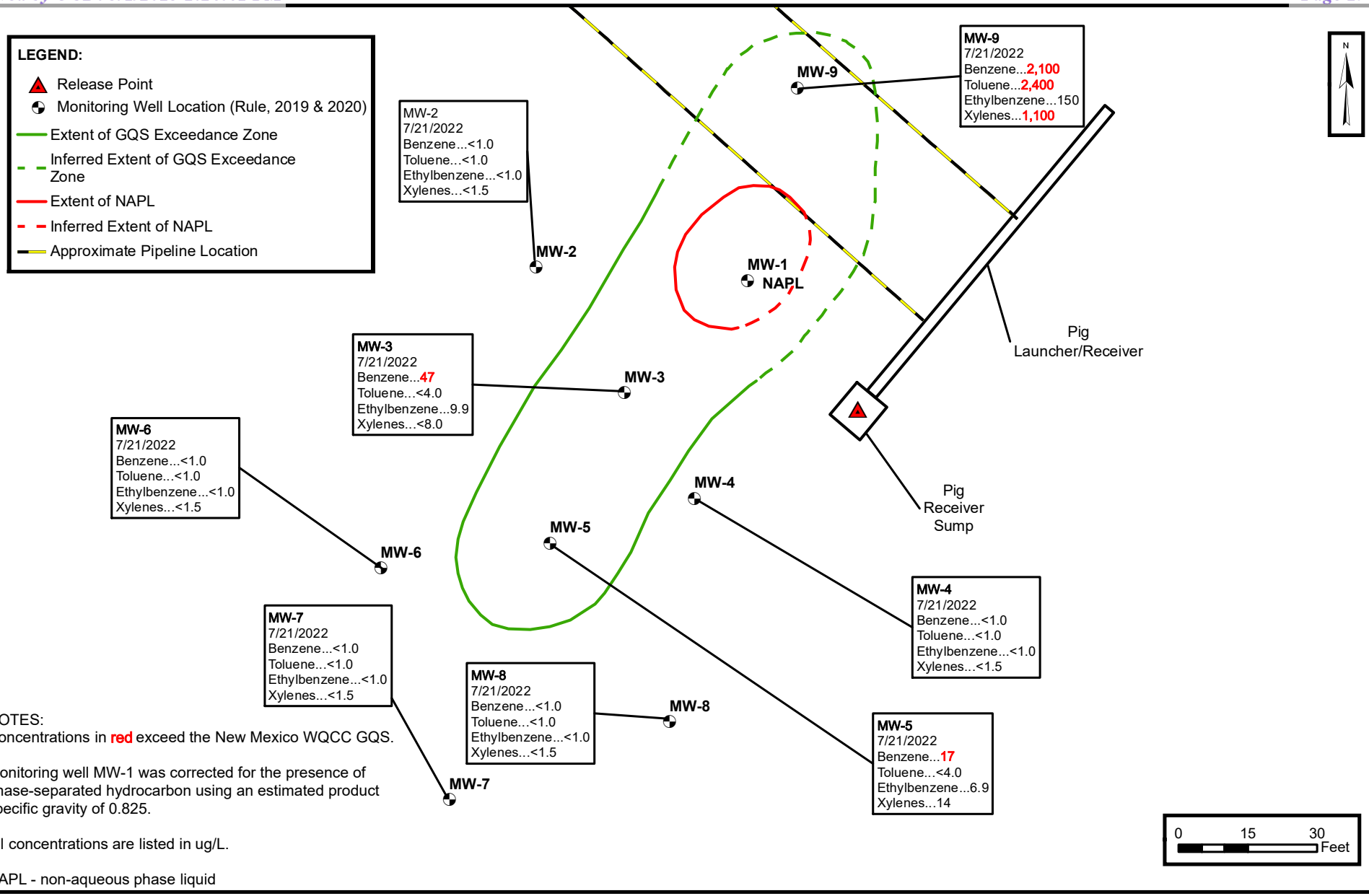
Monitoring well MW-1 was corrected for the presence of phase-sepated hydrocarbon using an estimated product specific gravity of 0.825.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP (MAY 2022)
ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE 6B



NOTES:
Concentrations in red exceed the New Mexico WQCC GQS.

Monitoring well MW-1 was corrected for the presence of phase-separated hydrocarbon using an estimated product specific gravity of 0.825.

All concentrations are listed in ug/L.

NAPL - non-aqueous phase liquid

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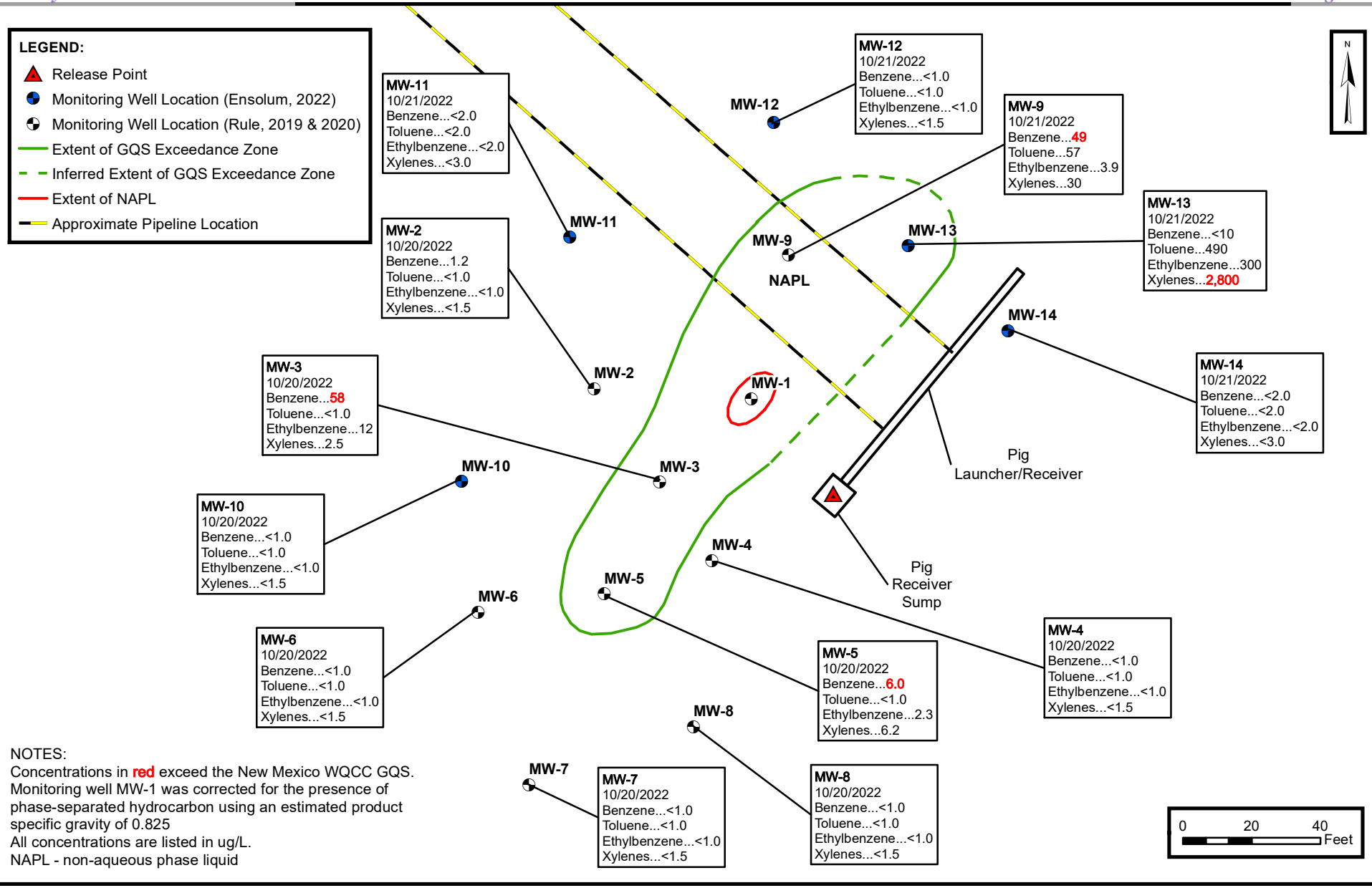
Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP (JULY 2022)
ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE 6C



NOTES:
Concentrations in red exceed the New Mexico WQCC GQS.
Monitoring well MW-1 was corrected for the presence of phase-separated hydrocarbon using an estimated product specific gravity of 0.825
All concentrations are listed in ug/L.
NAPL - non-aqueous phase liquid

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP (OCTOBER 2022)
ENTERPRISE FIELD SERVICES, LLC
LATERAL 2C-15 PIGGING RECEIVER SUMP (8/15/19)
Unit Letter K, S27 T24N R5W, Rio Arriba County, New Mexico
36.282835° N, 107.351995° W

PROJECT NUMBER: 05A1226105

FIGURE 6D

ENSOLUM

APPENDIX B

Regulatory Correspondence

From: Kyle Summers
To: Ranee Deechilly
Subject: Fwd: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995
Date: Thursday, April 28, 2022 3:10:57 PM

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Thursday, April 28, 2022 3:00:41 PM
To: Long, Thomas <tjlong@eprod.com>; Yahoo Warning <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

[**EXTERNAL EMAIL**]

Tom,

Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please proceed with your sampling. For whatever reason, the sample collection timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of the rescheduling may result in the sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals, weekly/monthly/quarterly/semi-annual/annual, or final closure reports. Correspondence reporting requirements may include, but not limited to, time extension requests, sample event notifications, and variance requests.

If you have any questions, please contact me via email at your convenience.

Thanks again

Regards,

Nelson Velez ● Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@state.nm.us

Hrs.: 7:00-11:00 am & 12:00-3:30 pm Mon.-Thur.
7:00-11:00 am & 12:00-4:00 pm Fri.

From: Long, Thomas <tjlong@eprod.com>
Sent: Thursday, April 28, 2022 11:53 AM
To: Yahoo Warning <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

Keith,

This email is a notification that Enterprise will be conducting quarterly groundwater sampling at the Lateral 2C-15 Pigging Sump Release Site on May 3, 2022. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Monday, January 24, 2022 7:57 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>; Stone, Brian <bmstone@eprod.com>
Subject: FW: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

Keith,

This email is a notification that Enterprise will be conduct quarterly groundwater sampling at the Lateral 2C-15 Pigging Sump Release Site tomorrow. Sampling activities are anticipated to take one

day. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Yahoo Warning <kcmanwell@yahoo.com>
Sent: Tuesday, October 26, 2021 9:28 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: Re: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

[Use caution with links/attachments]

Thomas Long,

Enterprise should continue with proposed sampling event.

K.C. Manwell

On Tuesday, October 26, 2021, 07:14:11 AM MDT, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

May we proceed with the sampling event or should we reschedule?

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

From:	Kyle Summers
To:	Ranee Deechilly
Cc:	Landon Daniell
Subject:	FW: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995
Date:	Tuesday, October 18, 2022 8:36:25 AM
Attachments:	image002.png image003.png image004.png

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, October 18, 2022 7:09 AM
To: Yahoo Warning <kcmanwell@yahoo.com>
Cc: Kyle Summers <ksummers@ensolum.com>; Stone, Brian <bmstone@eprod.com>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Subject: FW: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

[**EXTERNAL EMAIL**]

Keith,

This email is a notification that Enterprise will be performing groundwater monitoring/sampling activities at the Lateral 2C-15
Pigging Sump Release Site on Thursday October 20, 2022. Groundwater monitoring/sampling activities are anticipated to take two days. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Thursday, August 25, 2022 7:37 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>; Stone, Brian <bmstone@eprod.com>; 'Kyle Summers' <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

Keith,

This email is a notification that Enterprise will be installing soil borings and groundwater monitoring wells at the Lateral 2C-15 Pigging Receiver site beginning Monday, August 29, 2022. We will be hydro-excavating each soil boring and monitoring well location today to a depth of eight feet bgs to identify any underground utilities. We will potentially collect a soil samples from approximately five feet bgs during hydro-excavating activities today if you permit. If not, we will wait until Monday. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Monday, August 15, 2022 9:41 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: Stone, Brian <bmstone@eprod.com>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Subject: FW: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

Keith,

Please find the attached draft tables, figures and lab reports for the Lateral 2C-15 Pigging Receiver Sump groundwater sampling. Enterprise will be compiling all the data for a complete report that will be finalized in the near future. Also, we are on schedule to install more soil borings and monitoring wells for the week for August 29, 2022. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Long, Thomas
Sent: Tuesday, July 19, 2022 7:13 AM
To: 'Yahoo Warning' <kcmanwell@yahoo.com>; 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Kyle Summers <ksummers@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: FW: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

Keith,

This email is a notification that Enterprise will be performing groundwater monitoring/sampling activities at the Lateral 2C-15
Pigging Sump Release Site on Thursday July, 21, 2022. Groundwater monitoring/sampling activities are anticipated to take one day. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Long, Thomas
Sent: Monday, January 24, 2022 7:57 AM

To: 'Yahoo Warning' <kcmanwell@yahoo.com>
Cc: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>; Stone, Brian <bmstone@eprod.com>
Subject: FW: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

Keith,

This email is a notification that Enterprise will be conduct quarterly groundwater sampling at the Lateral 2C-15 Pigging Sump Release Site tomorrow. Sampling activities are anticipated to take one day. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Yahoo Warning <kcmanwell@yahoo.com>
Sent: Tuesday, October 26, 2021 9:28 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: Re: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

[Use caution with links/attachments]

Thomas Long,

Enterprise should continue with proposed sampling event.

K.C. Manwell

On Tuesday, October 26, 2021, 07:14:11 AM MDT, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

May we proceed with the sampling event or should we reschedule?

Thomas J. Long

Senior Environmental Scientist

Enterprise Products Company

614 Reilly Ave.

Farmington, New Mexico 87401

505-599-2286 (office)

505-215-4727 (Cell)

tjlong@eprod.com

From: Yahoo Warning <kcmanwell@yahoo.com>
Sent: Monday, October 25, 2021 4:06 PM
To: Long, Thomas <tjlong@eprod.com>
Subject: Re: [EXTERNAL] Re: Lateral 2C-15 Pigging Sump Release Site - UL K Section 27 T 24N R 5W; 36.282835, -107.351995

[Use caution with links/attachments]

Thomas Long,

I have prior commitments on proposed groundwater sampling dates.

K.C. Manwell

On Monday, October 25, 2021, 01:17:51 PM MDT, Long, Thomas <tjlong@eprod.com> wrote:

Keith,

ENSOLUM

APPENDIX C

2022 Soil Boring/Well Boring Logs

BORING LOG SB-10/MW-10

PROJECT NUMBER 05A1226105
PROJECT NAME Lateral 2C-15 Pigging Receiver Sump (8/15/19)
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM

DRILLING DATE 8/25/22 & 8/31/22
DRILLING COMPANY Enviro-Drill
BORING METHOD Hand Auger/HSA
TOTAL DEPTH 30 feet
BOREHOLE DIAMTER 8.25"

NORTH COORDINATE 36.282876 N
WEST COORDINATE 107.352347 W
SURFACE COMPLETION Above Grade Vault
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes: Hand auger borings were performed prior to hollow stem auger (HSA) activities to obtain additional shallow soil information. The boring logs from the hand auger and HSA activities were then combined.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Well Diagram
-2							
0							
2							
4	0	SB-10/MW-10 (5')				Silty clay: dark yellowish brown (10YR 4/2), stiff, dry, no hydrocarbon odor	concrete cement grout
6							
8							
10	0.5					Clayey silty sand: moderate yellowish brown (10YR 5/4) to dark yellowish brown (10YR 2/2), dry to moist, no hydrocarbon odor	
12	0.6						hydrated bentonite
14	0.8						
16	2.2	SB-10/MW-10 (15'-16')				Silty sand to silty clay: dark yellowish brown (10YR 2/2), moist, stiff silty clay with occasional gypsum crystals, no hydrocarbon odor	
18	1.1						
20	0.1						
22	0.2						sand pack
24	1.5	SB-10/MW-10 (22'-23')		▽		Sand: some silt, moderate yellowish brown (10YR 5/4) to moderate brown (5YR 4/4) to dark yellowish brown (10YR 4/2), trace of natural occurring organics, wet, no hydrocarbon odor	
26	1.6						
28	1.4						
30	0.6						
32	1.5					TD at 30 ft bgs	

Disclaimer This bore log should not be used separately from this report..

BORING LOG SB-11/MW-11

PROJECT NUMBER 05A1226105
PROJECT NAME Lateral 2C-15 Pigging Receiver Sump (8/15/19)
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM

DRILLING DATE 8/25/22 & 8/31/22
DRILLING COMPANY Enviro-Drill
BORING METHOD Hand Auger/HSA
TOTAL DEPTH 30 feet
BOREHOLE DIAMTER 8.25"

NORTH COORDINATE 36.283045 N
WEST COORDINATE 107.352249 W
SURFACE COMPLETION Above Grade Vault
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes: Hand auger borings were performed prior to hollow stem auger (HSA) activities to obtain additional shallow soil information. The boring logs from the hand auger and HSA activities were then combined.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Well Diagram
-2							
0							
2							
4		SB-11/MW-11 (5')				Silty clay: dark yellowish brown (10YR 4/2), dry, no hydrocarbon odor	concrete cement grout
6	0						
8							
10						Silty clay to silty sand: dark yellowish brown (10YR 2/2), dry to moist, no hydrocarbon odor	
12	0						hydrated bentonite
14	0						
16	0.4					Silty clay: dark yellowish brown (10YR 2/2), dry to moist, stiff to moderately stiff, occasional gypsum crystals, no hydrocarbon odor	
18	0						
20	0.5	SB-11/MW-11 (20'-22')					
22	1.6					Sand: some silt, moderate yellowish brown (10YR 5/4) to dark yellowish brown (10YR 4/2), moist to wet, no hydrocarbon odor	sand pack
24	2.2	SB-11/MW-11 (24'-25')		▽			
26	0.8						
28	1.9						
30	0.8						
32	0.6					TD at 30 ft bgs	
	0.5						

Disclaimer This bore log should not be used separately from this report..

BORING LOG SB-12/MW-12

PROJECT NUMBER 05A1226105
PROJECT NAME Lateral 2C-15 Pigging Receiver Sump (8/15/19)
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM

DRILLING DATE 8/25/22 & 8/31/22
DRILLING COMPANY Enviro-Drill
BORING METHOD Hand Auger/HSA
TOTAL DEPTH 30 feet
BOREHOLE DIAMTER 8.25"

NORTH COORDINATE 36.283122 N
WEST COORDINATE 107.352046 W
SURFACE COMPLETION Below Grade
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes: Hand auger borings were performed prior to hollow stem auger (HSA) activities to obtain additional shallow soil information. The boring logs from the hand auger and HSA activities were then combined.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Well Diagram
-2							
0							
2							
4		SB-12/MW-12 (5')				Silty clay: dark yellowish brown (10YR 4/2), dry, no hydrocarbon odor	concrete cement grout
6	0.1						
8						Silty clay: layer of clayey silt from 14'-16', dark yellowish brown (10YR 2/2), dry to moist, stiff to moderately stiff, some roots, no hydrocarbon odor	
10	1.6						
12	0						hydrated bentonite
14	1.5						
16	0.7						
18	0						
20	1.6					Sand: some silt, moderate yellowish brown (10YR 5/4) to dark yellowish brown (10YR 4/2), fine to medium grained, moist to wet, no hydrocarbon odor	
22	1.7						
24	2.3	SB-12/MW-12 (23'-25')		▽			sand pack
26	3.8	SB-12/MW-12 (25'-27')					
28	2.7						
30	4.9	SB-12/MW-12 (29'-30')				Silty clay: light olive gray (5Y 5/2) to light olive brown (5Y 5/6), moderately stiff, hard consolidated pieces of weathered sandstone at bottom, moist, no hydrocarbon odor	
32	5.5					TD at 30 ft bgs	
	2.0						
	2.4						

Disclaimer This bore log should not be used separately from this report..

BORING LOG SB-13/MW-13

PROJECT NUMBER 05A1226105
PROJECT NAME Lateral 2C-15 Pigging Receiver Sump (8/15/19)
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM

DRILLING DATE 8/25/22 & 9/01/22
DRILLING COMPANY Enviro-Drill
BORING METHOD Hand Auger/HSA
TOTAL DEPTH 32.5 feet
BOREHOLE DIAMTER 8.25"

NORTH COORDINATE 36.283051 N
WEST COORDINATE 107.351920 W
SURFACE COMPLETION Below Grade
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes: Hand auger borings were performed prior to hollow stem auger (HSA) activities to obtain additional shallow soil information. The boring logs from the hand auger and HSA activities were then combined.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Well Diagram
-2							
0							
2							
4		SB-13/MW-13 (5')				Silty clay: dark yellowish brown (10YR 4/2), dry, no hydrocarbon odor	
6	0						concrete cement grout
8						sand: minor clay, medium grained, dark yellowish brown (10YR 2/2), moist, no hydrocarbon odor	
10	0					Silty clay: clayey silt from 13'-19', dark yellowish brown (10YR 2/2), moist, stiff, occasional gypsum crystals, no hydrocarbon odor	
12	0.5						
14	0.2						hydrated bentonite
16	0.5						
18	0						
20	1.1						
22	0	SB-13/MW-13 (22'-23')		▽		Silty sand to sand: very minor clay, moderate yellowish brown (10YR 5/4), dark yellowish brown (10YR 2/2) to medium light gray (N6), fine to medium grained, moist to wet, no hydrocarbon odor from 20'-24', hydrocarbon odor from 24.5'-28', faint to no hydrocarbon odor from 28'-30.5	
24	0						sand pack
26	44.8	SB-13/MW-13 (25'-27')				medium gray (N5) to medium dark gray (N4)	
28	1,763	SB-13/MW-13 (27'-28')					
30	1,120					light olive gray (5Y 5/2) to light olive brown (5Y 5/6), minor oxidation from 28'-30'	
32	31						
34	50.9					TD at 32.5 ft bgs	

Disclaimer This bore log should not be used separately from this report..

BORING LOG SB-14/MW-14

PROJECT NUMBER 05A1226105
PROJECT NAME Lateral 2C-15 Pigging Receiver Sump (8/15/19)
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM

DRILLING DATE 8/25/22 & 9/01/22
DRILLING COMPANY Enviro-Drill
BORING METHOD Hand Auger/HSA
TOTAL DEPTH 32 feet
BOREHOLE DIAMTER 8.25"

NORTH COORDINATE 36.282958 N
WEST COORDINATE 107.351840 W
SURFACE COMPLETION Below Grade
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes: Hand auger borings were performed prior to hollow stem auger (HSA) activities to obtain additional shallow soil information. The boring logs from the hand auger and HSA activities were then combined.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Well Diagram
-2							
0							
2							
4		SB-14/MW-14 (5')				Silty clay: dark yellowish brown (10YR 4/2), dry, no hydrocarbon odor	
6	0						concrete cement grout
8						Silty clay: clayey silt from 14'-16.5', moderate yellowish brown (10YR 5/4) to dark yellowish brown (10YR 2/2), moist, stiff, occasional gypsum crystals, trace of apparent charcoal, no hydrocarbon odor	
10	0						
12	0						
14	0						hydrated bentonite
16	0						
18	0						
20	0					Silty sand to sand: very minor clay, moderate yellowish brown (10YR 5/4), dark yellowish brown (10YR 2/2) to medium light gray (N6), fine to medium grained, moist to wet, no hydrocarbon odor	
22	0						
24	0	SB-14/MW-14 (24'-25')		▽			sand pack
26	0	SB-14/MW-14 (25'-27')				minor medium light gray (N6)	
28							
30	0						
32	0					TD at 32 ft bgs	
34							

Disclaimer This bore log should not be used separately from this report..

BORING LOG SB-15

PROJECT NUMBER 05A1226105
PROJECT NAME Lateral 2C-15 Pigging Receiver Sump (8/15/19)
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM
DRILLING DATE 8/25/22 & 9/01/22
DRILLING COMPANY Enviro-Drill
BORING METHOD Hand Auger/HSA
TOTAL DEPTH 32 feet
BOREHOLE DIAMTER 8.25"
NORTH COORDINATE 36.283000 N
WEST COORDINATE 107.352002 W
SURFACE COMPLETION Plugged
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes: Hand auger borings were performed prior to hollow stem auger (HSA) activities to obtain additional shallow soil information. The boring logs from the hand auger and HSA activities were then combined.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description
-2						
0						
2						
4		SB-15 (5')				Silty clay: dark yellowish brown (10YR 4/2), dry, no hydrocarbon odor
6	0					
8						Silty clay (8'-12') to clayey silt (12'-16'), dark yellowish brown (10YR 2/2) to dusky yellowish brown (10YR 2/2), moist, faint to moderate hydrocarbon odor
10	0					
12	40					
14	49					
16	51					
18	33					Silty sand to sand: very minor clay, moderate yellowish brown (10YR 5/4), dark yellowish brown (10YR 2/2) to medium light gray (N6), minor oxidation at 24', fine to medium grained, moist to wet, hydrocarbon odor from 16'-30', faint to no hydrocarbon odor from 30'-32'
20	24					
22	17.5					
24	50.2	SB-15 (22'-24')		▽		
26	103.8					
28	280	SB-15 (25'-27')				
30	1,128					
32	414					
34	165					
	105					TD at 32 ft bgs

Disclaimer This bore log should not be used separately from this report..

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BORING LOG SB-16

PROJECT NUMBER 05A1226105	**DRILLING DATE** 8/25/22	**NORTH COORDINATE** 36.283111 N
PROJECT NAME Lateral 2C-15 Pigging Receiver Sump (8/15/19)	**DRILLING COMPANY** NA	**WEST COORDINATE** 107.352178 W
CLIENT Enterprise Field Services, LLC	**BORING METHOD** Hand Auger	**SURFACE COMPLETION** Plugged
LOCATION Rio Arriba County, NM	**TOTAL DEPTH** 8 feet	**LOGGED BY** R.Deechilly
	BOREHOLE DIAMTER 8.25"	**SAMPLER** R. Deechilly

Notes: Hand auger borings were performed prior to hollow stem auger (HSA) activities to obtain additional shallow soil information.

Depth (ft)	PID (ppm)	Samples	Recovery (%)	Water	Graphic Log	Material Description
-2						
-1						
0						
1						
2						
3						
4						
5	0	SB-16 (5')				Silty clay: dark yellowish brown (10YR 4/2), dry, no hydrocarbon odor
6						
7						
8						TD at 8 ft bgs
9						
10						

Disclaimer This bore log should not be used separately from this report..

ENSOLUM

APPENDIX D

Executed C-138 Solid Waste Acceptance Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

97057-1125

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

AFE: N43548
PM: Dwayne Dixon
Paykey: EM20767

2. Originating Site:
Lateral 2C-15 Pigging Sump

3. Location of Material (Street Address, City, State or ULSTR):
UL K Section 27 T24N R5W

Aug / Sept.

4. Source and Description of Waste:
Source: Hydrocarbon contaminated soil/sludge pigging sump remediation activities.
Description: Hydrocarbon contaminated soil/sludge pigging sump remediation activities.
Estimated Volume 20 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 1/10 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☐ ***Per Load***

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long Thomas Long 8-25-2022, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, Greg Crabtree, representative for Envirotech, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Riley Industrial

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech, Inc. Soil Remediation Facility * Permit #: NM01-0011**
Address of Facility: **Hill Top, NM**
Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree TITLE: Enviro Manager DATE: 8/25/22

SIGNATURE: TELEPHONE NO.: 505-632-0615

Surface Waste Management Facility Authorized Agent

ENSOLUM

APPENDIX E

Tables

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TABLE 1
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH GRO/DRO/MRO[1] (mg/kg)	Chloride (mg/kg)
New Mexico Energy Mineral & Natural Resources Department Oil Conservation Division Closure Criteria			**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Excavation Soil Samples Collected by Rule Engineering, LLC (2019)												
SC-1	8.23.19	24 to 26	<0.069	<0.14	<0.14	<0.28	ND	<14	<7.6	<38	ND	<60
SC-2	9.03.19	3 to 16	<0.12	<0.25	<0.25	<0.49	ND	<25	<9.8	<49	ND	<60
SC-3	9.03.19	0 to 13	<0.12	<0.24	<0.24	<0.48	ND	<24	<9.4	<47	ND	75
SC-4	9.03.19	13 to 26	<0.089	<0.18	<0.18	<0.36	ND	<18	<9.9	<49	ND	<60
SC-5	9.03.19	5 to 15	<0.12	<0.24	<0.24	<0.48	ND	<24	<9.4	<47	ND	<60
SC-6	9.03.19	15 to 25	<0.10	<0.20	<0.20	<0.41	ND	<20	<9.6	<48	ND	<60
SC-7	9.03.19	5 to 15	<0.099	<0.20	<0.20	<0.39	ND	<20	<9.3	<47	ND	67
SC-8	9.03.19	15 to 25	<0.094	<0.19	<0.19	<0.38	ND	<19	<9.5	<48	ND	<60
SC-9	9.04.19	24 to 26	<0.083	<0.17	<0.17	<0.33	ND	<17	<9.1	<45	ND	<60
SC-10	9.05.19	24 to 26	0.14	<0.17	<0.17	<0.34	0.14	<17	<8.8	<44	ND	<60
SC-11	9.05.19	14 to 24	<0.10	<0.20	<0.20	<0.41	ND	<20	<10	<50	ND	<60
SC-12	9.11.19	14 to 24	<0.022	<0.045	<0.045	<0.090	ND	<4.5	<9.7	<48	ND	<60
SC-13	9.11.19	0 to 13	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.6	<48	ND	130
SC-14	9.11.19	13 to 26	<0.017	<0.035	<0.035	<0.070	ND	<3.5	<9.3	<47	ND	<60
SC-15	9.11.19	0 to 13	<0.094	<0.19	<0.19	<0.37	ND	<19	<9.2	<46	ND	350
SC-16	9.11.19	0 to 13	<0.020	<0.040	0.058	0.22	0.28	18	390	120	**230**	380
SC-17	9.11.19	13 to 26	<0.018	<0.037	<0.037	0.074	0.074	20	240	<50	**260**	<60
SC-18	9.11.19	24 to 26	0.088	0.61	0.15	2.6	3.4	180	15	<45	**200**	<60
SC-19	9.11.19	24 to 26	0.13	0.34	<0.16	1.9	2.4	160	<8.2	<41	**160**	<60
SC-20	9.18.19	0 to 13	<0.070	<0.14	<0.14	<0.28	ND	<14	<9.9	<50	ND	<60
SC-21	9.18.19	13 to 26	<0.066	<0.13	<0.13	<0.26	ND	<13	<9.7	<48	ND	<60

ENSOLUM

TABLE 1
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH GRO/DRO/MRO[1] (mg/kg)	Chloride (mg/kg)
New Mexico Energy Mineral & Natural Resources Department Oil Conservation Division Closure Criteria			**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Pothole Soil Sample Collected by Rule Engineering, LLC (2019)												
PH-1	9.13.19	3	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<9.8	<49	ND	<60
Soil Borings/Monitoring Wells Advanced by Rule Engineering, LLC (2019-2020)												
SB-1/MW-1	12.17.19	10 to 11	<0.12	2.5	<0.23	14	17	470	360	<49	**830**	NA
		17.5 to 18.5	<0.025	<0.050	<0.050	<0.099	ND	<5.0	10	<48	10	NA
		22.5 to 23.5	<0.023	4.5	0.76	12	17	340	43	<44	**380**	NA
		25 to 26	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<9.5	<47	ND	NA
SB-2/MW-2	12.18.19	20 to 21	<0.025	<0.049	<0.049	<0.099	ND	<4.9	<9.8	<49	ND	NA
		22.5 to 23.5	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<9.2	<46	ND	NA
SB-3/MW-3	12.18.19	25 to 26	<0.12	<0.24	<0.24	2.5	2.5	160	54	<45	**210**	NA
		27.5 to 28.5	0.098	<0.050	<0.050	<0.10	0.098	<5.0	<8.4	<42	ND	NA
SB-4/MW-4	12.17.19	22.5 to 23.5	<0.023	<0.046	<0.046	<0.093	ND	<4.6	<9.8	<49	ND	NA
		25 to 26	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<8.6	<43	ND	NA
SB-5/MW-5	12.17.19	20 to 21	<0.023	<0.047	<0.047	<0.094	ND	<4.7	15	<43	15	NA
		22.5 to 23	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<8.4	<42	ND	NA
SB-6/MW-6	2.27.20	20 to 21	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<9.7	<48	ND	NA
		25 to 26	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<9.4	<47	ND	NA
SB-7/MW-7	2.26.20	20.5 to 21	<0.12	0.60	2.0	23	26	630	51	<49	**680**	NA
		25 to 26	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.5	<48	ND	NA
SB-8/MW-8	2.26.20	20 to 21	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.4	<47	ND	NA
		25 to 26	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<9.6	<48	ND	NA
SB-9/MW-9	2.26.20	12.5 to 13.5	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.6	<48	ND	NA
		25 to 26	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<9.2	<46	ND	NA
		30 to 31	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.3	<46	ND	NA

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TABLE 1
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH GRO/DRO/MRO[1] (mg/kg)	Chloride (mg/kg)
New Mexico Energy Mineral & Natural Resources Department Oil Conservation Division Closure Criteria			**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Soil Borings/Monitoring Wells Advanced by Ensolum, LLC (2022)												
SB-10/MW-10	8.25.22	5	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<14	<47	ND	<60
	8.31.22	15 to 16	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<14	<48	ND	<60
	8.31.22	22 to 23	<0.024	<0.047	<0.047	<0.095	ND	<4.7	<13	<42	ND	<60
SB-11/MW-11	8.25.22	5	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<14	<47	ND	<60
	8.31.22	20 to 22	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<15	<49	ND	<60
	8.31.22	24 to 25	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<14	<48	ND	<60
SB-12/MW-12	8.25.22	5	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<15	<49	ND	76
	8.31.22	23 to 25	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<14	<48	ND	<60
	8.31.22	25 to 27	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<14	<46	ND	<60
	8.31.22	29 to 30	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<13	<44	ND	<60
SB-13/MW-13	8.25.22	5	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<14	<48	ND	61
	9.01.22	22 to 23	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<14	<47	ND	<60
	9.01.22	25 to 27	<0.12	0.37	0.76	9.7	11	540	<13	<44	**540**	<60
	9.01.22	27 to 28	<0.024	<0.048	<0.048	0.42	0.42	29	<14	<48	29	<61
SB-14/MW-14	8.25.22	5	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<15	<50	ND	100
	9.01.22	24 to 25	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<13	<45	ND	<60
	9.01.22	25 to 27	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<14	<46	ND	<60

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TABLE 1
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH GRO/DRO/MRO[1] (mg/kg)	Chloride (mg/kg)
New Mexico Energy Mineral & Natural Resources Department Oil Conservation Division Closure Criteria			**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**NE**	**100**	**600**
SB-15	8.25.22	5	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<14	<46	ND	160
	9.01.22	22 to 24	<0.12	<0.24	<0.24	<0.48	ND	<24	<14	<48	ND	<60
	9.01.22	25 to 27	<1.2	35	8.8	140	**180**	6,100	250	<44	**6,400**	<60
SB-16	8.25.22	5	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<15	<49	ND	52

Notes:

*Concentrations in **bold** and yellow exceed the applicable NM EMNRD OCD Closure Criteria*

[1] = Total combined concentrations are rounded to two (2) significant figures to match the laboratory resolution of the individual constituents.

mg/kg = milligrams per kilograms

NA = Not Analyzed

ND = Not Detected above the Laboratory Practical Quantitation Limits (PQLs) / Reporting Limits (RLs)

NE = Not Established

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

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TABLE 2
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		5	1,000	700	620
Monitoring Wells Installed by Rule Engineering, LLC					
MW-1	12.20.19	**900**	**3,100**	150	**2,000**
	5.28.20	**1,600**	**9,000**	300	**5,100**
	10.15.20	**NAPL**			
	1.12.21	**NAPL**			
	4.21.21	**NAPL**			
	7.9.21	**NAPL**			
	10.28.21	**NAPL**			
	1.25.22	**NAPL**			
	5.3.22	**NAPL**			
	7.21.22	**NAPL**			
	10.20.22	**NAPL**			
MW-2	12.21.19	<2.0	<2.0	<2.0	390
	5.28.20	<1.0	<1.0	<1.0	1.7
	10.15.20	<1.0	<1.0	<1.0	63
	1.12.21	<1.0	<1.0	<1.0	2.3
	4.21.21	2.8	<1.0	<1.0	4.4
	7.9.21	3.5	<1.0	1.4	5.7
	10.28.21	<1.0	<1.0	1.3	5.8
	1.25.22	<1.0	<1.0	<1.0	<1.5
	5.3.22	<1.0	<1.0	<1.0	<1.5
	7.21.22	<1.0	<1.0	<1.0	<1.5
	10.20.22	1.2	<1.0	<1.0	<1.5
MW-3	12.22.19	**1,200**	130	180	**870**
	5.28.20	**460**	<25	56	<50
	10.15.20	**480**	<5.0	60	<7.5
	1.12.21	**280**	<5.0	42	<10
	4.21.21	**140**	<5.0	27	<10
	7.9.21	**110**	<1.0	26	10
	10.28.21	**89**	<1.0	17	7.2
	1.25.22	**72**	<1.0	14	<1.5
	5.3.22	**72**	<2.0	15	<3.0
	7.21.22	**47**	<4.0	9.9	<8.0
	10.21.22	**58**	<1.0	12	2.5

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TABLE 2
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		**5**	**1,000**	**700**	**620**
MW-4	12.23.19	3.3	1.2	4.4	3.0
	5.28.20	<1.0	<1.0	<1.0	<1.5
	10.15.20	1.1	<1.0	3.0	<1.5
	1.12.21	<1.0	<1.0	1.1	<2.0
	4.21.21	1.6	<1.0	<1.0	<2.0
	7.9.21	1.9	<1.0	<1.0	<2.0
	10.28.21	<1.0	<1.0	<1.0	<2.0
	1.25.22	<1.0	<1.0	<1.0	<1.5
	5.3.22	<1.0	<1.0	<1.0	<1.5
	7.21.22	<1.0	<1.0	<1.0	<1.5
	10.20.22	<1.0	<1.0	<1.0	<1.5
MW-5	12.24.19	**270**	9.7	56	530
	5.28.20	**110**	<10	21	<15
	10.15.20	**110**	<5.0	16	45
	1.12.21	**110**	<5.0	13	<10
	4.21.21	**120**	<5.0	12	<10
	7.9.21	**150**	<1.0	23	56
	10.28.21	**56**	<1.0	6.0	5.9
	1.25.22	**53**	<1.0	1.5	<1.5
	5.3.22	**32**	<2.0	2.7	5.8
	7.21.22	**17**	<4.0	6.9	14
	10.21.22	**6.0**	<1.0	2.3	6.2

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TABLE 2
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		**5**	**1,000**	**700**	**620**
MW-6	3.05.20	<1.0	<1.0	<1.0	<2.0
	5.28.20	<1.0	<1.0	<1.0	<1.5
	10.15.20	<1.0	<1.0	<1.0	<1.5
	1.12.21	<1.0	<1.0	<1.0	<2.0
	4.21.21	<1.0	<1.0	<1.0	<2.0
	7.9.21	<1.0	<1.0	<1.0	<2.0
	10.28.21	<1.0	<1.0	<1.0	<2.0
	1.25.22	<1.0	<1.0	<1.0	<1.5
	5.3.22	<1.0	<1.0	<1.0	<1.5
	7.21.22	<1.0	<1.0	<1.0	<1.5
	10.20.22	<1.0	<1.0	<1.0	<1.5
MW-7	3.05.20	2.9	19	48	**750**
	5.28.20	<1.0	<1.0	<1.0	<1.5
	10.15.20	<1.0	<1.0	1.1	19
	1.12.21	<1.0	<1.0	<1.0	<2.0
	4.21.21	<1.0	<1.0	<1.0	<2.0
	7.9.21	<1.0	<1.0	<1.0	<2.0
	10.28.21	<1.0	<1.0	<1.0	<2.0
	1.25.22	<1.0	<1.0	<1.0	<1.5
	5.3.22	<1.0	<1.0	<1.0	<1.5
	7.21.22	<1.0	<1.0	<1.0	<1.5
	10.20.22	<1.0	<1.0	<1.0	<1.5
MW-8	3.05.20	<1.0	<1.0	<1.0	<2.0
	5.28.20	<1.0	<1.0	<1.0	<1.5
	10.15.20	<1.0	<1.0	<1.0	<1.5
	1.12.21	<1.0	<1.0	<1.0	<2.0
	4.21.21	<1.0	<1.0	<1.0	<2.0
	7.9.21	<1.0	<1.0	<1.0	<2.0
	10.28.21	<1.0	<1.0	<1.0	<2.0
	1.25.22	<1.0	<1.0	<1.0	<1.5
	5.3.22	<1.0	<1.0	<1.0	<1.5
	7.21.22	<1.0	<1.0	<1.0	<1.5
	10.20.22	<1.0	<1.0	<1.0	<1.5

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TABLE 2
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		**5**	**1,000**	**700**	**620**
MW-9	3.05.20	**490**	860	65	**680**
	5.28.20	**900**	72	65	320
	10.15.20	**1,100**	**1,000**	110	**660**
	1.12.21	**1,800**	**2,300**	160	**1,200**
	4.21.21	**1,800**	**2,400**	170	**1,200**
	7.9.21	**2,000**	**2,600**	160	**1,300**
	10.28.21	**2,000**	**2,800**	170	**1,400**
	1.25.22	**1,900**	**2,300**	160	**1,200**
	5.3.22	**1,900**	**2,400**	160	**1,200**
	7.21.22	**2,100**	**2,400**	150	**1,100**
	10.21.22[A]	**49**	57	3.9	30
MW-10	10.20.22	<1.0	<1.0	<1.0	<1.5
MW-11	10.21.22	<2.0	<2.0	<2.0	<3.0
MW-12	10.21.22	<1.0	<1.0	<1.0	<1.5
MW-13	10.21.22	<10	490	300	**2,800**
MW-14	10.21.22	<2.0	<2.0	<2.0	<3.0

*Note: Concentrations in **bold** and yellow exceed the applicable WQCC GQS*

Monitoring wells were sampled by Ensolum, LLC beginning May 2020

[A] - Ensolum suspects that a dilution factor may have been overlooked on the MW-9 sample, resulting in a biased low result.

NAPL = Non-Aqueous Phase Liquid

µg/L = microgram per liter

<1.0 = the numeral (in this case "1.0") identifies the laboratory PQL or RL

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TABLE 3
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Well Depth (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-1	5.28.20	ND	24.32	ND	30	15-30	6599.87	
	8.18.20	24.52	24.83	0.31			6599.87	6575.30
	10.14.20	24.56	24.76	0.20			6599.87	6575.28
	1.27.21	24.44	24.54	0.10			6599.87	6575.41
	4.21.21	24.35	24.45	0.10			6599.87	6575.50
	7.9.21	24.42	24.71	0.29			6599.87	6575.40
	10.28.21	24.45	24.68	0.23			6599.87	6575.38
	1.25.22	24.36	24.44	0.08			6599.87	6575.50
	5.3.22	24.30	24.34	0.04			6599.87	6575.56
	7.21.22	24.41	24.64	0.23			6599.87	6575.42
	10.20.22	24.39	24.52	0.13			6599.87	6575.46
MW-2	5.28.20	ND	26.71	ND	32.65	17.65-32.65	6602.17	6575.46
	8.18.20	ND	26.91	ND			6602.17	6575.26
	10.14.20	ND	26.91	ND			6602.17	6575.26
	1.27.21	ND	26.76	ND			6602.17	6575.41
	4.21.21	ND	26.69	ND			6602.17	6575.48
	7.9.21	ND	26.82	ND			6602.17	6575.35
	10.28.21	ND	26.84	ND			6602.17	6575.33
	1.25.22	ND	26.70	ND			6602.17	6575.47
	5.3.22	ND	26.64	ND			6602.17	6575.53
	7.21.22	ND	26.78	ND			6602.17	6575.39
	10.20.22	ND	26.74	ND			6602.17	6575.43
MW-3	5.28.20	ND	26.20	ND	32.67	17.67-32.67	6601.65	6575.45
	8.18.20	ND	26.39	ND			6601.65	6575.26
	10.14.20	ND	26.37	ND			6601.65	6575.28
	1.27.21	ND	26.23	ND			6601.65	6575.42
	4.21.21	ND	26.15	ND			6601.65	6575.50
	7.9.21	ND	26.27	ND			6601.65	6575.38
	10.28.21	ND	26.30	ND			6601.65	6575.35
	1.25.22	ND	26.15	ND			6601.65	6575.50
	5.3.22	ND	26.08	ND			6601.65	6575.57
	7.21.22	ND	26.22	ND			6601.65	6575.43
	10.20.22	ND	26.18	ND			6601.65	6575.47

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TABLE 3
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Well Depth (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-4	5.28.20	ND	25.17	ND	32.27	17.27-32.27	6600.64	6575.47
	8.18.20	ND	25.36	ND			6600.64	6575.28
	10.14.20	ND	25.36	ND			6600.64	6575.28
	1.27.21	ND	25.19	ND			6600.64	6575.45
	4.21.21	ND	25.13	ND			6600.64	6575.51
	7.9.21	ND	25.25	ND			6600.64	6575.39
	10.28.21	ND	25.26	ND			6600.64	6575.38
	1.25.22	ND	25.13	ND			6600.64	6575.51
	5.3.22	ND	25.06	ND			6600.64	6575.58
	7.21.22	ND	25.20	ND			6600.64	6575.44
	10.20.22	ND	25.16	ND			6600.64	6575.48
MW-5	5.28.20	ND	25.24	ND	32.76	17.76-32.76	6600.71	6575.47
	8.18.20	ND	25.44	ND			6600.71	6575.27
	10.14.20	ND	25.44	ND			6600.71	6575.27
	1.27.21	ND	25.29	ND			6600.71	6575.42
	4.21.21	ND	25.23	ND			6600.71	6575.48
	7.9.21	ND	25.35	ND			6600.71	6575.36
	10.28.21	ND	25.38	ND			6600.71	6575.33
	1.25.22	ND	25.23	ND			6600.71	6575.48
	5.3.22	ND	25.17	ND			6600.71	6575.54
	7.21.22	ND	25.31	ND			6600.71	6575.40
	10.20.22	ND	25.28	ND			6600.71	6575.43
MW-6	5.28.20	ND	25.61	ND	28.53	13.53-28.53	6601.06	6575.45
	8.18.20	ND	25.80	ND			6601.06	6575.26
	10.14.20	ND	25.96	ND			6601.06	6575.10
	1.27.21	ND	25.65	ND			6601.06	6575.41
	4.21.21	ND	25.60	ND			6601.06	6575.46
	7.9.21	ND	25.71	ND			6601.06	6575.35
	10.28.21	ND	25.73	ND			6601.06	6575.33
	1.25.22	ND	25.61	ND			6601.06	6575.45
	5.3.22	ND	25.53	ND			6601.06	6575.53
	7.21.22	ND	25.67	ND			6601.06	6575.39
	10.20.22	ND	25.63	ND			6601.06	6575.43

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TABLE 3
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Well Depth (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-7	5.28.20	ND	24.37	ND	28.94	13.94-28.94	6599.83	6575.46
	8.18.20	ND	24.57	ND			6599.83	6575.26
	10.14.20	ND	24.90	ND			6599.83	6574.93
	1.27.21	ND	24.42	ND			6599.83	6575.41
	4.21.21	ND	24.36	ND			6599.83	6575.47
	7.9.21	ND	24.43	ND			6599.83	6575.40
	10.28.21	ND	24.49	ND			6599.83	6575.34
	1.25.22	ND	24.37	ND			6599.83	6575.46
	5.3.22	ND	24.31	ND			6599.83	6575.52
	7.21.22	ND	24.44	ND			6599.83	6575.39
	10.20.22	ND	24.40	ND			6599.83	6575.43
MW-8	5.28.20	ND	23.55	ND	29.03	14.03-29.03	6599.02	6575.47
	8.18.20	ND	23.74	ND			6599.02	6575.28
	10.14.20	ND	23.76	ND			6599.02	6575.26
	1.27.21	ND	23.69	ND			6599.02	6575.33
	4.21.21	ND	23.53	ND			6599.02	6575.49
	7.9.21	ND	23.65	ND			6599.02	6575.37
	10.28.21	ND	23.66	ND			6599.02	6575.36
	1.25.22	ND	23.54	ND			6599.02	6575.48
	5.3.22	ND	23.48	ND			6599.02	6575.54
	7.21.22	ND	23.61	ND			6599.02	6575.41
	10.20.22	ND	23.57	ND			6599.02	6575.45
MW-9	5.28.20	ND	26.15	ND	31	16-31	6601.63	6575.48
	8.18.20	ND	26.33	ND			6601.63	6575.30
	10.14.20	ND	26.34	ND			6601.63	6575.29
	1.27.21	ND	26.19	ND			6601.63	6575.44
	4.21.21	ND	26.12	ND			6601.63	6575.51
	7.9.21	ND	26.24	ND			6601.63	6575.39
	10.28.21	ND	26.27	ND			6601.63	6575.36
	1.22.22	ND	26.13	ND			6601.63	6575.50
	5.3.22	ND	26.07	ND			6601.63	6575.56
	7.21.22	ND	26.20	ND			6601.63	6575.43
	10.20.22	ND	26.17	ND			6601.63	6575.46

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TABLE 3
Lateral 2C-15 Pigging Receiver Sump (8/15/19)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Well Depth (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-10	10.20.22	ND	26.30	ND	32.84	17.84-32.84	6601.72	6575.42
MW-11	10.20.22	ND	27.66	ND	32.86	17.86-32.86	6603.10	6575.44
MW-12	10.20.22	ND	26.07	ND	30	15-30	6601.54	6575.47
MW-13	10.20.22	ND	26.12	ND	32.5	17.5-32.5	6601.56	6575.44
MW-14	10.20.22	ND	26.05	ND	32	17-32	6601.5	6575.45

Notes:

** - corrected for presence of phase-sepated hydrocarbon using an estimated product specific gravity of 0.825*

Monitoring wells surveyed July 30, 2020

BTOC - below top of casing

AMSL - above mean sea level

TOC - top of casing

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APPENDIX F

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

February 07, 2022

Kyle Summers

ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX

RE: Lateral 2C-15 OrderNo.: 2201981

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/26/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2201981**
Date Reported: **2/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-8
Project: Lateral 2C-15
Collection Date: 1/25/2022 10:40:00 AM
Lab ID: 2201981-001
Matrix: AQUEOUS
Received Date: 1/26/2022 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	1/28/2022 5:14:00 PM	SL85487
Toluene	ND	1.0		µg/L	1	1/28/2022 5:14:00 PM	SL85487
Ethylbenzene	ND	1.0		µg/L	1	1/28/2022 5:14:00 PM	SL85487
Xylenes, Total	ND	1.5		µg/L	1	1/28/2022 5:14:00 PM	SL85487
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	1/28/2022 5:14:00 PM	SL85487
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	1/28/2022 5:14:00 PM	SL85487
Surr: Dibromofluoromethane	107	70-130		%Rec	1	1/28/2022 5:14:00 PM	SL85487
Surr: Toluene-d8	89.8	70-130		%Rec	1	1/28/2022 5:14:00 PM	SL85487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2201981**
Date Reported: **2/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-7
Project: Lateral 2C-15 **Collection Date:** 1/25/2022 11:15:00 AM
Lab ID: 2201981-002 **Matrix:** AQUEOUS **Received Date:** 1/26/2022 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	1/28/2022 6:24:00 PM	SL85487
Toluene	ND	1.0		µg/L	1	1/28/2022 6:24:00 PM	SL85487
Ethylbenzene	ND	1.0		µg/L	1	1/28/2022 6:24:00 PM	SL85487
Xylenes, Total	ND	1.5		µg/L	1	1/28/2022 6:24:00 PM	SL85487
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	1/28/2022 6:24:00 PM	SL85487
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	1/28/2022 6:24:00 PM	SL85487
Surr: Dibromofluoromethane	113	70-130		%Rec	1	1/28/2022 6:24:00 PM	SL85487
Surr: Toluene-d8	91.2	70-130		%Rec	1	1/28/2022 6:24:00 PM	SL85487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2201981**
Date Reported: **2/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-6
Project: Lateral 2C-15 **Collection Date:** 1/25/2022 11:45:00 AM
Lab ID: 2201981-003 **Matrix:** AQUEOUS **Received Date:** 1/26/2022 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	1/28/2022 6:47:00 PM	SL85487
Toluene	ND	1.0		µg/L	1	1/28/2022 6:47:00 PM	SL85487
Ethylbenzene	ND	1.0		µg/L	1	1/28/2022 6:47:00 PM	SL85487
Xylenes, Total	ND	1.5		µg/L	1	1/28/2022 6:47:00 PM	SL85487
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	1/28/2022 6:47:00 PM	SL85487
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	1/28/2022 6:47:00 PM	SL85487
Surr: Dibromofluoromethane	109	70-130		%Rec	1	1/28/2022 6:47:00 PM	SL85487
Surr: Toluene-d8	91.9	70-130		%Rec	1	1/28/2022 6:47:00 PM	SL85487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2201981**
Date Reported: **2/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2
Project: Lateral 2C-15 **Collection Date:** 1/25/2022 12:20:00 PM
Lab ID: 2201981-004 **Matrix:** AQUEOUS **Received Date:** 1/26/2022 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	1/28/2022 7:11:00 PM	SL85487
Toluene	ND	1.0		µg/L	1	1/28/2022 7:11:00 PM	SL85487
Ethylbenzene	ND	1.0		µg/L	1	1/28/2022 7:11:00 PM	SL85487
Xylenes, Total	ND	1.5		µg/L	1	1/28/2022 7:11:00 PM	SL85487
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	1/28/2022 7:11:00 PM	SL85487
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	1/28/2022 7:11:00 PM	SL85487
Surr: Dibromofluoromethane	107	70-130		%Rec	1	1/28/2022 7:11:00 PM	SL85487
Surr: Toluene-d8	89.4	70-130		%Rec	1	1/28/2022 7:11:00 PM	SL85487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2201981**
Date Reported: **2/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-4
Project: Lateral 2C-15 **Collection Date:** 1/25/2022 12:45:00 PM
Lab ID: 2201981-005 **Matrix:** AQUEOUS **Received Date:** 1/26/2022 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	1/28/2022 7:34:00 PM	SL85487
Toluene	ND	1.0		µg/L	1	1/28/2022 7:34:00 PM	SL85487
Ethylbenzene	ND	1.0		µg/L	1	1/28/2022 7:34:00 PM	SL85487
Xylenes, Total	ND	1.5		µg/L	1	1/28/2022 7:34:00 PM	SL85487
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	1/28/2022 7:34:00 PM	SL85487
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	1	1/28/2022 7:34:00 PM	SL85487
Surr: Dibromofluoromethane	106	70-130		%Rec	1	1/28/2022 7:34:00 PM	SL85487
Surr: Toluene-d8	91.4	70-130		%Rec	1	1/28/2022 7:34:00 PM	SL85487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2201981**
Date Reported: **2/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-5
Project: Lateral 2C-15
Collection Date: 1/25/2022 1:15:00 PM
Lab ID: 2201981-006
Matrix: AQUEOUS
Received Date: 1/26/2022 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	53	1.0		µg/L	1	2/2/2022 4:24:00 PM	SL85557
Toluene	ND	1.0		µg/L	1	1/28/2022 7:58:00 PM	SL85487
Ethylbenzene	1.5	1.0		µg/L	1	1/28/2022 7:58:00 PM	SL85487
Xylenes, Total	ND	1.5		µg/L	1	1/28/2022 7:58:00 PM	SL85487
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	1/28/2022 7:58:00 PM	SL85487
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	1/28/2022 7:58:00 PM	SL85487
Surr: Dibromofluoromethane	108	70-130		%Rec	1	1/28/2022 7:58:00 PM	SL85487
Surr: Toluene-d8	91.8	70-130		%Rec	1	1/28/2022 7:58:00 PM	SL85487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2201981**
Date Reported: **2/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: Lateral 2C-15 **Collection Date:** 1/25/2022 1:50:00 PM
Lab ID: 2201981-007 **Matrix:** AQUEOUS **Received Date:** 1/26/2022 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	72	1.0		µg/L	1	2/2/2022 4:48:00 PM	SL85557
Toluene	ND	1.0		µg/L	1	1/28/2022 8:21:00 PM	SL85487
Ethylbenzene	14	1.0		µg/L	1	1/28/2022 8:21:00 PM	SL85487
Xylenes, Total	ND	1.5		µg/L	1	1/28/2022 8:21:00 PM	SL85487
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	1/28/2022 8:21:00 PM	SL85487
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	1/28/2022 8:21:00 PM	SL85487
Surr: Dibromofluoromethane	107	70-130		%Rec	1	1/28/2022 8:21:00 PM	SL85487
Surr: Toluene-d8	88.4	70-130		%Rec	1	1/28/2022 8:21:00 PM	SL85487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2201981**
Date Reported: **2/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-9
Project: Lateral 2C-15 **Collection Date:** 1/25/2022 2:30:00 PM
Lab ID: 2201981-008 **Matrix:** AQUEOUS **Received Date:** 1/26/2022 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	1900	50		µg/L	50	2/2/2022 5:12:00 PM	SL85557
Toluene	2300	50		µg/L	50	1/28/2022 8:44:00 PM	SL85487
Ethylbenzene	160	50		µg/L	50	1/28/2022 8:44:00 PM	SL85487
Xylenes, Total	1200	75		µg/L	50	1/28/2022 8:44:00 PM	SL85487
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	50	1/28/2022 8:44:00 PM	SL85487
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	50	1/28/2022 8:44:00 PM	SL85487
Surr: Dibromofluoromethane	106	70-130		%Rec	50	1/28/2022 8:44:00 PM	SL85487
Surr: Toluene-d8	91.5	70-130		%Rec	50	1/28/2022 8:44:00 PM	SL85487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2201981**

07-Feb-22

Client: ENSOLUM

Project: Lateral 2C-15

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **LCSW** Batch ID: **SL85487** RunNo: **85487**

Prep Date: Analysis Date: **1/28/2022** SeqNo: **3008870** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	18	1.0	20.00	0	88.8	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	8.9		10.00		89.0	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **PBW** Batch ID: **SL85487** RunNo: **85487**

Prep Date: Analysis Date: **1/28/2022** SeqNo: **3008871** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.0		10.00		89.9	70	130			

Sample ID: **2201981-001ams** SampType: **MS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-8** Batch ID: **SL85487** RunNo: **85487**

Prep Date: Analysis Date: **1/28/2022** SeqNo: **3008873** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	121	70	130			
Toluene	20	1.0	20.00	0	98.4	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.1		10.00		91.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2201981**

07-Feb-22

Client: ENSOLUM

Project: Lateral 2C-15

Sample ID: **2201981-001amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-8** Batch ID: **SL85487** RunNo: **85487**

Prep Date: Analysis Date: **1/28/2022** SeqNo: **3008874** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	118	70	130	2.77	20	
Toluene	19	1.0	20.00	0	95.8	70	130	2.62	20	
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		108	70	130	0	0	
Surr: Toluene-d8	9.1		10.00		91.4	70	130	0	0	

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **LCSW** Batch ID: **SL85557** RunNo: **85557**

Prep Date: Analysis Date: **2/2/2022** SeqNo: **3012148** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	12		10.00		117	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	9.4		10.00		94.4	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **PBW** Batch ID: **SL85557** RunNo: **85557**

Prep Date: Analysis Date: **2/2/2022** SeqNo: **3012149** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	12		10.00		119	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	11		10.00		114	70	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2201981 RcptNo: 1

Received By: Tracy Casarrubias 1/26/2022 7:30:00 AM

Completed By: Tracy Casarrubias 1/26/2022 8:52:33 AM

Reviewed By: CMC 1/26/22

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: (<2 or >12 unless noted)

Adjusted?

Checked by: JR 1/26/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande, Suite A
Aztec, NM 87410

Phone #:

email or Fax#: KSummers@ensolum.com

QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: ☒ Standard (5D) ☒ Rush (5D)

Project Name: Lateral 2C-15

Project #: 05A1226105

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 0.8 - 0.1 = 0.7°C

Cooler Temp (including CF): 1 (°C)

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2201981	BTEX / ~~MTBE / TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)						
1/25/22	10:40	W	MW-8	3x40mLVOA	$HgCl_2$	001	X															
1/25/22	11:15	W	MW-7	3x40mLVOA	$HgCl_2$	002	X															
1/25/22	11:45	W	MW-6	3x40mLVOA	$HgCl_2$	003	X															
1/25/22	12:20	W	MW-2	3x40mLVOA	$HgCl_2$	004	X															
1/25/22	12:45	W	MW-4	3x40mLVOA	$HgCl_2$	005	X															
1/25/22	13:15	W	MW-5	3x40mLVOA	$HgCl_2$	006	X															
1/25/22	13:50	W	MW-3	3x40mLVOA	$HgCl_2$	007	X															
1/25/22	14:30	W	MW-9	3x40mLVOA	$HgCl_2$	008	X															

Date	Time	Relinquished by	Received by	Via	Date	Time
1/25/22	1637	[signature]	Christine Walle[signature]		1/25/22	1637
1/25/22	1747	Christine Walle[signature]	[signature]	courier	1/26/22	7:30

Remarks: Bill to Ensolum

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 09, 2022

Kyle Summers

ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX:

RE: Lateral 2C 15 Sump OrderNo.: 2205142

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/4/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order: **2205142**
Date Reported: **5/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2205142
Project: Lateral 2C 15 Sump

Lab ID: 2205142-001 **Collection Date:** 5/3/2022 9:15:00 AM
Client Sample ID: MW-8 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/5/2022 2:58:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 2:58:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 2:58:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 2:58:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	5/5/2022 2:58:00 AM	SL8771
Surr: Dibromofluoromethane	101	70-130		%Rec	1	5/5/2022 2:58:00 AM	SL8771
Surr: Toluene-d8	99.2	70-130		%Rec	1	5/5/2022 2:58:00 AM	SL8771

Lab ID: 2205142-002 **Collection Date:** 5/3/2022 9:45:00 AM
Client Sample ID: MW-7 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/5/2022 3:21:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 3:21:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 3:21:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 3:21:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	5/5/2022 3:21:00 AM	SL8771
Surr: Dibromofluoromethane	106	70-130		%Rec	1	5/5/2022 3:21:00 AM	SL8771
Surr: Toluene-d8	96.4	70-130		%Rec	1	5/5/2022 3:21:00 AM	SL8771

Lab ID: 2205142-003 **Collection Date:** 5/3/2022 10:15:00 AM
Client Sample ID: MW-6 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/5/2022 3:44:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 3:44:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 3:44:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 3:44:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	5/5/2022 3:44:00 AM	SL8771
Surr: Dibromofluoromethane	102	70-130		%Rec	1	5/5/2022 3:44:00 AM	SL8771
Surr: Toluene-d8	102	70-130		%Rec	1	5/5/2022 3:44:00 AM	SL8771

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order: **2205142**
Date Reported: **5/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2205142
Project: Lateral 2C 15 Sump

Lab ID: 2205142-004 **Collection Date:** 5/3/2022 10:50:00 AM
Client Sample ID: MW-2 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/5/2022 4:07:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 4:07:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 4:07:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 4:07:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%Rec	1	5/5/2022 4:07:00 AM	SL8771
Surr: Dibromofluoromethane	96.9	70-130		%Rec	1	5/5/2022 4:07:00 AM	SL8771
Surr: Toluene-d8	97.8	70-130		%Rec	1	5/5/2022 4:07:00 AM	SL8771

Lab ID: 2205142-005 **Collection Date:** 5/3/2022 11:20:00 AM
Client Sample ID: MW-4 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/5/2022 4:29:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 4:29:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 4:29:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 4:29:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	5/5/2022 4:29:00 AM	SL8771
Surr: Dibromofluoromethane	100	70-130		%Rec	1	5/5/2022 4:29:00 AM	SL8771
Surr: Toluene-d8	98.8	70-130		%Rec	1	5/5/2022 4:29:00 AM	SL8771

Lab ID: 2205142-006 **Collection Date:** 5/3/2022 11:50:00 AM
Client Sample ID: MW-5 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	32	2.0		µg/L	2	5/5/2022 4:52:00 AM	SL8771
Toluene	ND	2.0		µg/L	2	5/5/2022 4:52:00 AM	SL8771
Ethylbenzene	2.7	2.0		µg/L	2	5/5/2022 4:52:00 AM	SL8771
Xylenes, Total	5.8	3.0		µg/L	2	5/5/2022 4:52:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	2	5/5/2022 4:52:00 AM	SL8771
Surr: Dibromofluoromethane	99.2	70-130		%Rec	2	5/5/2022 4:52:00 AM	SL8771
Surr: Toluene-d8	98.8	70-130		%Rec	2	5/5/2022 4:52:00 AM	SL8771

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order: **2205142**
Date Reported: **5/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2205142
Project: Lateral 2C 15 Sump

Lab ID: 2205142-007 **Collection Date:** 5/3/2022 12:30:00 PM
Client Sample ID: MW-3 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	72	2.0		µg/L	2	5/5/2022 5:15:00 AM	SL8771
Toluene	ND	2.0		µg/L	2	5/5/2022 5:15:00 AM	SL8771
Ethylbenzene	15	2.0		µg/L	2	5/5/2022 5:15:00 AM	SL8771
Xylenes, Total	ND	3.0		µg/L	2	5/5/2022 5:15:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	2	5/5/2022 5:15:00 AM	SL8771
Surr: Dibromofluoromethane	102	70-130		%Rec	2	5/5/2022 5:15:00 AM	SL8771
Surr: Toluene-d8	97.6	70-130		%Rec	2	5/5/2022 5:15:00 AM	SL8771

Lab ID: 2205142-008 **Collection Date:** 5/3/2022 1:00:00 PM
Client Sample ID: MW-9 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	1900	100		µg/L	100	5/5/2022 5:38:00 AM	SL8771
Toluene	2400	100		µg/L	100	5/5/2022 5:38:00 AM	SL8771
Ethylbenzene	160	100		µg/L	100	5/5/2022 5:38:00 AM	SL8771
Xylenes, Total	1200	150		µg/L	100	5/5/2022 5:38:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	100	5/5/2022 5:38:00 AM	SL8771
Surr: Dibromofluoromethane	98.4	70-130		%Rec	100	5/5/2022 5:38:00 AM	SL8771
Surr: Toluene-d8	97.8	70-130		%Rec	100	5/5/2022 5:38:00 AM	SL8771

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205142**

09-May-22

Client: ENSOLUM

Project: Lateral 2C 15 Sump

Sample ID: **100ng lcs 2**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL87719**	RunNo: **87719**
Prep Date:	Analysis Date: **5/4/2022**	SeqNo: **3108938** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.4	70	130			
Toluene	19	1.0	20.00	0	97.4	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		96.8	70	130			

Sample ID: **mb 2**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL87719**	RunNo: **87719**
Prep Date:	Analysis Date: **5/4/2022**	SeqNo: **3108939** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.2	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: ENSOLUM | Work Order Number: 2205142 | RcptNo: 1

Received By: **Tracy Casarrubias** 5/4/2022 7:05:00 AM

Completed By: **Tracy Casarrubias** 5/4/2022 8:28:38 AM

Reviewed By: SCC 5/4/22

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JM 5/4/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande, Suite A
Aztec, NM 87410

Phone #:

email or Fax#: KSummers@ensolum.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Lateral 2C-15 Sump

Project #: ~~05A12226~~

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.6 +0.1 = 3.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2205142	BTEX / ~~MTBE / TMBs~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5/3/22	9:15	W	MW-8	3x 40mL VOA	$HgCl_2$	001	X									
5/3/22	9:45	W	MW-7			002	X									
5/3/22	10:15	W	MW-6			003	X									
5/3/22	10:50	W	MW-2			004	X									
5/3/22	11:20	W	MW-4			005	X									
5/3/22	11:50	W	MW-5			006	X									
5/3/22	12:30	W	MW-3			007	X									
5/3/22	13:00	W	MW-9			008	X									

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/3/22	1645				5/3/22	1645
5/3/22	1746				5/4/22	7:05

Remarks:
PM Tom Long
Non AFE# N43548

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 29, 2022

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX:

RE: 2C 15 Sump OrderNo.: 2207B46

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 7/22/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2207B46**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-8
Project: 2C 15 Sump
Collection Date: 7/21/2022 8:55:00 AM
Lab ID: 2207B46-001 **Matrix:** AQUEOUS **Received Date:** 7/22/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	7/26/2022 5:51:55 PM	S89809
Toluene	ND	1.0		µg/L	1	7/26/2022 5:51:55 PM	S89809
Ethylbenzene	ND	1.0		µg/L	1	7/26/2022 5:51:55 PM	S89809
Xylenes, Total	ND	1.5		µg/L	1	7/26/2022 5:51:55 PM	S89809
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	1	7/26/2022 5:51:55 PM	S89809
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	7/26/2022 5:51:55 PM	S89809
Surr: Dibromofluoromethane	124	70-130		%Rec	1	7/26/2022 5:51:55 PM	S89809
Surr: Toluene-d8	100	70-130		%Rec	1	7/26/2022 5:51:55 PM	S89809

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207B46**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-7
Project: 2C 15 Sump
Collection Date: 7/21/2022 9:40:00 AM
Lab ID: 2207B46-002 **Matrix:** AQUEOUS **Received Date:** 7/22/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	7/26/2022 6:20:46 PM	S89809
Toluene	ND	1.0		µg/L	1	7/26/2022 6:20:46 PM	S89809
Ethylbenzene	ND	1.0		µg/L	1	7/26/2022 6:20:46 PM	S89809
Xylenes, Total	ND	1.5		µg/L	1	7/26/2022 6:20:46 PM	S89809
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	7/26/2022 6:20:46 PM	S89809
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	7/26/2022 6:20:46 PM	S89809
Surr: Dibromofluoromethane	123	70-130		%Rec	1	7/26/2022 6:20:46 PM	S89809
Surr: Toluene-d8	97.9	70-130		%Rec	1	7/26/2022 6:20:46 PM	S89809

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207B46**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-6
Project: 2C 15 Sump
Collection Date: 7/21/2022 10:15:00 AM
Lab ID: 2207B46-003 **Matrix:** AQUEOUS **Received Date:** 7/22/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	7/26/2022 6:49:30 PM	S89809
Toluene	ND	1.0		µg/L	1	7/26/2022 6:49:30 PM	S89809
Ethylbenzene	ND	1.0		µg/L	1	7/26/2022 6:49:30 PM	S89809
Xylenes, Total	ND	1.5		µg/L	1	7/26/2022 6:49:30 PM	S89809
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	7/26/2022 6:49:30 PM	S89809
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	7/26/2022 6:49:30 PM	S89809
Surr: Dibromofluoromethane	122	70-130		%Rec	1	7/26/2022 6:49:30 PM	S89809
Surr: Toluene-d8	99.4	70-130		%Rec	1	7/26/2022 6:49:30 PM	S89809

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207B46**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-2
Project: 2C 15 Sump
Collection Date: 7/21/2022 10:45:00 AM
Lab ID: 2207B46-004
Matrix: AQUEOUS
Received Date: 7/22/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	7/26/2022 7:18:15 PM	S89809
Toluene	ND	1.0		µg/L	1	7/26/2022 7:18:15 PM	S89809
Ethylbenzene	ND	1.0		µg/L	1	7/26/2022 7:18:15 PM	S89809
Xylenes, Total	ND	1.5		µg/L	1	7/26/2022 7:18:15 PM	S89809
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	7/26/2022 7:18:15 PM	S89809
Surr: 4-Bromofluorobenzene	346	70-130	S	%Rec	1	7/26/2022 7:18:15 PM	S89809
Surr: Dibromofluoromethane	112	70-130		%Rec	1	7/26/2022 7:18:15 PM	S89809
Surr: Toluene-d8	98.9	70-130		%Rec	1	7/26/2022 7:18:15 PM	S89809

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207B46**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-4
Project: 2C 15 Sump
Collection Date: 7/21/2022 11:25:00 AM
Lab ID: 2207B46-005 **Matrix:** AQUEOUS **Received Date:** 7/22/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	7/26/2022 7:46:56 PM	S89809
Toluene	ND	1.0		µg/L	1	7/26/2022 7:46:56 PM	S89809
Ethylbenzene	ND	1.0		µg/L	1	7/26/2022 7:46:56 PM	S89809
Xylenes, Total	ND	1.5		µg/L	1	7/26/2022 7:46:56 PM	S89809
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	7/26/2022 7:46:56 PM	S89809
Surr: 4-Bromofluorobenzene	156	70-130	S	%Rec	1	7/26/2022 7:46:56 PM	S89809
Surr: Dibromofluoromethane	111	70-130		%Rec	1	7/26/2022 7:46:56 PM	S89809
Surr: Toluene-d8	102	70-130		%Rec	1	7/26/2022 7:46:56 PM	S89809

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207B46**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-5
Project: 2C 15 Sump
Collection Date: 7/21/2022 12:00:00 PM
Lab ID: 2207B46-006
Matrix: AQUEOUS
Received Date: 7/22/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	17	4.0	D	µg/L	10	7/26/2022 8:15:38 PM	S89809
Toluene	ND	4.0	D	µg/L	10	7/26/2022 8:15:38 PM	S89809
Ethylbenzene	6.9	4.0	D	µg/L	10	7/26/2022 8:15:38 PM	S89809
Xylenes, Total	14	8.0	D	µg/L	10	7/26/2022 8:15:38 PM	S89809
Surr: 1,2-Dichloroethane-d4	108	70-130	D	%Rec	10	7/26/2022 8:15:38 PM	S89809
Surr: 4-Bromofluorobenzene	131	70-130	SD	%Rec	10	7/26/2022 8:15:38 PM	S89809
Surr: Dibromofluoromethane	115	70-130	D	%Rec	10	7/26/2022 8:15:38 PM	S89809
Surr: Toluene-d8	106	70-130	D	%Rec	10	7/26/2022 8:15:38 PM	S89809

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207B46**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-3
Project: 2C 15 Sump
Collection Date: 7/21/2022 12:45:00 PM
Lab ID: 2207B46-007 **Matrix:** AQUEOUS **Received Date:** 7/22/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	47	4.0	D	µg/L	10	7/26/2022 8:44:22 PM	S89809
Toluene	ND	4.0	D	µg/L	10	7/26/2022 8:44:22 PM	S89809
Ethylbenzene	9.9	4.0	D	µg/L	10	7/26/2022 8:44:22 PM	S89809
Xylenes, Total	ND	8.0	D	µg/L	10	7/26/2022 8:44:22 PM	S89809
Surr: 1,2-Dichloroethane-d4	114	70-130	D	%Rec	10	7/26/2022 8:44:22 PM	S89809
Surr: 4-Bromofluorobenzene	194	70-130	SD	%Rec	10	7/26/2022 8:44:22 PM	S89809
Surr: Dibromofluoromethane	121	70-130	D	%Rec	10	7/26/2022 8:44:22 PM	S89809
Surr: Toluene-d8	103	70-130	D	%Rec	10	7/26/2022 8:44:22 PM	S89809

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207B46**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-9
Project: 2C 15 Sump
Collection Date: 7/21/2022 1:20:00 PM
Lab ID: 2207B46-008 **Matrix:** AQUEOUS **Received Date:** 7/22/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	2100	100		µg/L	100	7/27/2022 1:06:38 PM	SL89844
Toluene	2400	100		µg/L	100	7/27/2022 1:06:38 PM	SL89844
Ethylbenzene	150	4.0		µg/L	10	7/26/2022 9:13:05 PM	S89809
Xylenes, Total	1100	15		µg/L	10	7/26/2022 9:13:05 PM	S89809
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	10	7/26/2022 9:13:05 PM	S89809
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	10	7/26/2022 9:13:05 PM	S89809
Surr: Dibromofluoromethane	106	70-130		%Rec	10	7/26/2022 9:13:05 PM	S89809
Surr: Toluene-d8	103	70-130		%Rec	10	7/26/2022 9:13:05 PM	S89809

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207B46**

29-Jul-22

Client: ENSOLUM

Project: 2C 15 Sump

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **LCSW** Batch ID: **S89809** RunNo: **89809**

Prep Date: Analysis Date: **7/26/2022** SeqNo: **3198040** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	20	1.0	20.00	0	98.3	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	12		10.00		117	70	130			
Surr: Toluene-d8	9.9		10.00		99.0	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **PBW** Batch ID: **S89809** RunNo: **89809**

Prep Date: Analysis Date: **7/26/2022** SeqNo: **3198049** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	12		10.00		121	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID: **100ng lcs4** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **LCSW** Batch ID: **SL89844** RunNo: **89844**

Prep Date: Analysis Date: **7/27/2022** SeqNo: **3199512** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	19	1.0	20.00	0	95.3	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.9	70	130			
Surr: Dibromofluoromethane	12		10.00		116	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **PBW** Batch ID: **SL89844** RunNo: **89844**

Prep Date: Analysis Date: **7/27/2022** SeqNo: **3199514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207B46**
29-Jul-22

Client: ENSOLUM
Project: 2C 15 Sump

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **SL89844** RunNo: **89844**
Prep Date: Analysis Date: **7/27/2022** SeqNo: **3199514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	12		10.00		117	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2207B46 RcptNo: 1

Received By: **Juan Rojas** 7/22/2022 6:25:00 AM

Completed By: **Sean Livingston** 7/22/2022 10:36:18 AM

Reviewed By: JR 7/22/22

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SZL 7/22/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good				

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande, Suite A
Aztec, NM 87410

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: 2C-15 Sump

Project #:

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☐ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.9-0=1.9 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2207846	BTEX / ~~MTBE~~ / ~~TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
7/21/22	10	W	8:55	MW-8	3x40mL VOA	$HgCl_2$	001	X								
7/21/22	10	W	9:40	MW-7	3x40mL VOA	$HgCl_2$	002	X								
7/21/22	10	W	10:15	MW-6	3x40mL VOA	$HgCl_2$	003	X								
7/21/22	10	W	10:45	MW-2	3x40mL VOA	$HgCl_2$	004	X								
7/21/22	10	W	11:25	MW-4	3x40mL VOA	$HgCl_2$	005	X								
7/21/22	10	W	12:01	MW-5	3x40mL VOA	$HgCl_2$	006	X								
7/21/22	10	W	12:45	MW-3	3x40mL VOA	$HgCl_2$	007	X								
7/21/22	10	W	13:20	MW-9	3x40mL VOA	$HgCl_2$	008	X								

Date: 7/21/22 Time: 1547 Relinquished by:

Received by: Via: 10 Date 7/21/22 Time 1547

Date: 7/21/22 Time: 1749 Relinquished by:

Received by: Via: courier Date 7/22/22 Time 6:35

Remarks: seal Intact JR 7/22/22
Bill to Ensolum

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 15, 2022

Kyle Summers

ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX:

RE: Lateral 2C 15 OrderNo.: 2209152

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 21 sample(s) on 9/3/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-10/MW-10@5'
Project: Lateral 2C 15
Collection Date: 8/25/2022 9:45:00 AM
Lab ID: 2209152-001 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 4:03:35 PM	70100
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/7/2022 5:39:27 PM	69987
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/7/2022 5:39:27 PM	69987
Surr: DNOP	93.3	21-129		%Rec	1	9/7/2022 5:39:27 PM	69987
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/7/2022 8:55:37 AM	69975
Surr: BFB	98.1	37.7-212		%Rec	1	9/7/2022 8:55:37 AM	69975
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	9/7/2022 8:55:37 AM	69975
Toluene	ND	0.050		mg/Kg	1	9/7/2022 8:55:37 AM	69975
Ethylbenzene	ND	0.050		mg/Kg	1	9/7/2022 8:55:37 AM	69975
Xylenes, Total	ND	0.099		mg/Kg	1	9/7/2022 8:55:37 AM	69975
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	9/7/2022 8:55:37 AM	69975

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-10/MW-10@15'-16'
Project: Lateral 2C 15
Collection Date: 8/31/2022 10:50:00 AM
Lab ID: 2209152-002 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/12/2022 11:27:45 AM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/9/2022 2:50:04 PM	70015
Surr: BFB	96.1	70-130		%Rec	1	9/9/2022 2:50:04 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 7:12:58 AM	70021
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/9/2022 7:12:58 AM	70021
Surr: DNOP	111	21-129		%Rec	1	9/9/2022 7:12:58 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	9/9/2022 2:50:04 PM	70015
Toluene	ND	0.049		mg/Kg	1	9/9/2022 2:50:04 PM	70015
Ethylbenzene	ND	0.049		mg/Kg	1	9/9/2022 2:50:04 PM	70015
Xylenes, Total	ND	0.098		mg/Kg	1	9/9/2022 2:50:04 PM	70015
Surr: 1,2-Dichloroethane-d4	96.0	70-130		%Rec	1	9/9/2022 2:50:04 PM	70015
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	9/9/2022 2:50:04 PM	70015
Surr: Dibromofluoromethane	101	70-130		%Rec	1	9/9/2022 2:50:04 PM	70015
Surr: Toluene-d8	105	70-130		%Rec	1	9/9/2022 2:50:04 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-10/MW-10@22'-23'
Project: Lateral 2C 15
Collection Date: 8/31/2022 10:55:00 AM
Lab ID: 2209152-003 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 11:40:09 AM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/9/2022 3:17:11 PM	70015
Surr: BFB	101	70-130		%Rec	1	9/9/2022 3:17:11 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	9/9/2022 7:23:45 AM	70021
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	9/9/2022 7:23:45 AM	70021
Surr: DNOP	98.7	21-129		%Rec	1	9/9/2022 7:23:45 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/9/2022 3:17:11 PM	70015
Toluene	ND	0.047		mg/Kg	1	9/9/2022 3:17:11 PM	70015
Ethylbenzene	ND	0.047		mg/Kg	1	9/9/2022 3:17:11 PM	70015
Xylenes, Total	ND	0.095		mg/Kg	1	9/9/2022 3:17:11 PM	70015
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	9/9/2022 3:17:11 PM	70015
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/9/2022 3:17:11 PM	70015
Surr: Dibromofluoromethane	104	70-130		%Rec	1	9/9/2022 3:17:11 PM	70015
Surr: Toluene-d8	103	70-130		%Rec	1	9/9/2022 3:17:11 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-11/MW-11@5'
Project: Lateral 2C 15
Collection Date: 8/25/2022 10:40:00 AM
Lab ID: 2209152-004 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 11:52:34 AM	70101
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/7/2022 5:50:07 PM	69987
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/7/2022 5:50:07 PM	69987
Surr: DNOP	91.9	21-129		%Rec	1	9/7/2022 5:50:07 PM	69987
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2022 10:06:09 AM	69975
Surr: BFB	98.7	37.7-212		%Rec	1	9/7/2022 10:06:09 AM	69975
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	9/7/2022 10:06:09 AM	69975
Toluene	ND	0.047		mg/Kg	1	9/7/2022 10:06:09 AM	69975
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2022 10:06:09 AM	69975
Xylenes, Total	ND	0.094		mg/Kg	1	9/7/2022 10:06:09 AM	69975
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	9/7/2022 10:06:09 AM	69975

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-11/MW-11@20'-22'
Project: Lateral 2C 15
Collection Date: 8/31/2022 1:25:00 PM
Lab ID: 2209152-005 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 12:04:59 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/9/2022 3:44:16 PM	70015
Surr: BFB	98.1	70-130		%Rec	1	9/9/2022 3:44:16 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/9/2022 7:34:32 AM	70021
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/9/2022 7:34:32 AM	70021
Surr: DNOP	95.7	21-129		%Rec	1	9/9/2022 7:34:32 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/9/2022 3:44:16 PM	70015
Toluene	ND	0.049		mg/Kg	1	9/9/2022 3:44:16 PM	70015
Ethylbenzene	ND	0.049		mg/Kg	1	9/9/2022 3:44:16 PM	70015
Xylenes, Total	ND	0.098		mg/Kg	1	9/9/2022 3:44:16 PM	70015
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%Rec	1	9/9/2022 3:44:16 PM	70015
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	9/9/2022 3:44:16 PM	70015
Surr: Dibromofluoromethane	96.3	70-130		%Rec	1	9/9/2022 3:44:16 PM	70015
Surr: Toluene-d8	101	70-130		%Rec	1	9/9/2022 3:44:16 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-11/MW-11@24'-25'
Project: Lateral 2C 15
Collection Date: 8/31/2022 1:30:00 PM
Lab ID: 2209152-006 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 12:17:23 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/9/2022 4:11:18 PM	70015
Surr: BFB	98.9	70-130		%Rec	1	9/9/2022 4:11:18 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 7:55:53 AM	70021
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/9/2022 7:55:53 AM	70021
Surr: DNOP	97.2	21-129		%Rec	1	9/9/2022 7:55:53 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**BRM**
Benzene	ND	0.023		mg/Kg	1	9/9/2022 4:11:18 PM	70015
Toluene	ND	0.047		mg/Kg	1	9/9/2022 4:11:18 PM	70015
Ethylbenzene	ND	0.047		mg/Kg	1	9/9/2022 4:11:18 PM	70015
Xylenes, Total	ND	0.094		mg/Kg	1	9/9/2022 4:11:18 PM	70015
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%Rec	1	9/9/2022 4:11:18 PM	70015
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	9/9/2022 4:11:18 PM	70015
Surr: Dibromofluoromethane	98.5	70-130		%Rec	1	9/9/2022 4:11:18 PM	70015
Surr: Toluene-d8	103	70-130		%Rec	1	9/9/2022 4:11:18 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-12/MW-12@5'
Project: Lateral 2C 15
Collection Date: 8/25/2022 1:00:00 PM
Lab ID: 2209152-007 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	76	60		mg/Kg	20	9/12/2022 12:54:36 PM	70101
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/7/2022 6:00:50 PM	69987
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/7/2022 6:00:50 PM	69987
Surr: DNOP	102	21-129		%Rec	1	9/7/2022 6:00:50 PM	69987
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/7/2022 11:16:25 AM	69975
Surr: BFB	96.3	37.7-212		%Rec	1	9/7/2022 11:16:25 AM	69975
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/7/2022 11:16:25 AM	69975
Toluene	ND	0.050		mg/Kg	1	9/7/2022 11:16:25 AM	69975
Ethylbenzene	ND	0.050		mg/Kg	1	9/7/2022 11:16:25 AM	69975
Xylenes, Total	ND	0.099		mg/Kg	1	9/7/2022 11:16:25 AM	69975
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	9/7/2022 11:16:25 AM	69975

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-12/MW-12@23'-25'
Project: Lateral 2C 15
Collection Date: 8/31/2022 3:45:00 PM
Lab ID: 2209152-008 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/12/2022 1:31:50 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/9/2022 4:38:20 PM	70015
Surr: BFB	101	70-130		%Rec	1	9/9/2022 4:38:20 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 8:06:38 AM	70021
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/9/2022 8:06:38 AM	70021
Surr: DNOP	95.4	21-129		%Rec	1	9/9/2022 8:06:38 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	9/9/2022 4:38:20 PM	70015
Toluene	ND	0.048		mg/Kg	1	9/9/2022 4:38:20 PM	70015
Ethylbenzene	ND	0.048		mg/Kg	1	9/9/2022 4:38:20 PM	70015
Xylenes, Total	ND	0.097		mg/Kg	1	9/9/2022 4:38:20 PM	70015
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	1	9/9/2022 4:38:20 PM	70015
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	9/9/2022 4:38:20 PM	70015
Surr: Dibromofluoromethane	99.5	70-130		%Rec	1	9/9/2022 4:38:20 PM	70015
Surr: Toluene-d8	110	70-130		%Rec	1	9/9/2022 4:38:20 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-12/MW-12@25'-27'
Project: Lateral 2C 15
Collection Date: 8/31/2022 3:50:00 PM
Lab ID: 2209152-009 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 1:44:14 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/9/2022 5:05:23 PM	70015
Surr: BFB	97.1	70-130		%Rec	1	9/9/2022 5:05:23 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 8:17:20 AM	70021
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/9/2022 8:17:20 AM	70021
Surr: DNOP	97.2	21-129		%Rec	1	9/9/2022 8:17:20 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/9/2022 5:05:23 PM	70015
Toluene	ND	0.049		mg/Kg	1	9/9/2022 5:05:23 PM	70015
Ethylbenzene	ND	0.049		mg/Kg	1	9/9/2022 5:05:23 PM	70015
Xylenes, Total	ND	0.097		mg/Kg	1	9/9/2022 5:05:23 PM	70015
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	9/9/2022 5:05:23 PM	70015
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	9/9/2022 5:05:23 PM	70015
Surr: Dibromofluoromethane	103	70-130		%Rec	1	9/9/2022 5:05:23 PM	70015
Surr: Toluene-d8	102	70-130		%Rec	1	9/9/2022 5:05:23 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-12/MW-12@29'-30'
Project: Lateral 2C 15
Collection Date: 8/31/2022 3:55:00 PM
Lab ID: 2209152-010 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 1:56:38 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/9/2022 5:32:25 PM	70015
Surr: BFB	99.5	70-130		%Rec	1	9/9/2022 5:32:25 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	9/9/2022 8:28:04 AM	70021
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/9/2022 8:28:04 AM	70021
Surr: DNOP	98.6	21-129		%Rec	1	9/9/2022 8:28:04 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**BRM**
Benzene	ND	0.025		mg/Kg	1	9/9/2022 5:32:25 PM	70015
Toluene	ND	0.049		mg/Kg	1	9/9/2022 5:32:25 PM	70015
Ethylbenzene	ND	0.049		mg/Kg	1	9/9/2022 5:32:25 PM	70015
Xylenes, Total	ND	0.098		mg/Kg	1	9/9/2022 5:32:25 PM	70015
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	9/9/2022 5:32:25 PM	70015
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	9/9/2022 5:32:25 PM	70015
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	9/9/2022 5:32:25 PM	70015
Surr: Toluene-d8	105	70-130		%Rec	1	9/9/2022 5:32:25 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-13/MW-13@5'
Project: Lateral 2C 15
Collection Date: 8/25/2022 2:05:00 PM
Lab ID: 2209152-011 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	61	60		mg/Kg	20	9/12/2022 2:09:03 PM	70101
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/7/2022 6:12:21 PM	69987
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/7/2022 6:12:21 PM	69987
Surr: DNOP	95.1	21-129		%Rec	1	9/7/2022 6:12:21 PM	69987
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2022 11:39:53 AM	69975
Surr: BFB	99.7	37.7-212		%Rec	1	9/7/2022 11:39:53 AM	69975
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/7/2022 11:39:53 AM	69975
Toluene	ND	0.049		mg/Kg	1	9/7/2022 11:39:53 AM	69975
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2022 11:39:53 AM	69975
Xylenes, Total	ND	0.098		mg/Kg	1	9/7/2022 11:39:53 AM	69975
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	9/7/2022 11:39:53 AM	69975

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-13/MW-13@22'-23'
Project: Lateral 2C 15
Collection Date: 9/1/2022 10:30:00 AM
Lab ID: 2209152-012 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/12/2022 2:21:28 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/9/2022 5:59:27 PM	70015
Surr: BFB	99.7	70-130		%Rec	1	9/9/2022 5:59:27 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 8:38:44 AM	70021
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/9/2022 8:38:44 AM	70021
Surr: DNOP	95.7	21-129		%Rec	1	9/9/2022 8:38:44 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.023		mg/Kg	1	9/9/2022 5:59:27 PM	70015
Toluene	ND	0.047		mg/Kg	1	9/9/2022 5:59:27 PM	70015
Ethylbenzene	ND	0.047		mg/Kg	1	9/9/2022 5:59:27 PM	70015
Xylenes, Total	ND	0.094		mg/Kg	1	9/9/2022 5:59:27 PM	70015
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	9/9/2022 5:59:27 PM	70015
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	9/9/2022 5:59:27 PM	70015
Surr: Dibromofluoromethane	98.4	70-130		%Rec	1	9/9/2022 5:59:27 PM	70015
Surr: Toluene-d8	107	70-130		%Rec	1	9/9/2022 5:59:27 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-13/MW-13@25'-27'
Project: Lateral 2C 15
Collection Date: 9/1/2022 10:35:00 AM
Lab ID: 2209152-013 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/12/2022 2:33:52 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	540	24		mg/Kg	5	9/9/2022 6:26:28 PM	70015
Surr: BFB	102	70-130		%Rec	5	9/9/2022 6:26:28 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	9/9/2022 8:49:26 AM	70021
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/9/2022 8:49:26 AM	70021
Surr: DNOP	99.2	21-129		%Rec	1	9/9/2022 8:49:26 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.12		mg/Kg	5	9/9/2022 6:26:28 PM	70015
Toluene	0.37	0.24		mg/Kg	5	9/9/2022 6:26:28 PM	70015
Ethylbenzene	0.76	0.24		mg/Kg	5	9/9/2022 6:26:28 PM	70015
Xylenes, Total	9.7	0.47		mg/Kg	5	9/9/2022 6:26:28 PM	70015
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	5	9/9/2022 6:26:28 PM	70015
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	5	9/9/2022 6:26:28 PM	70015
Surr: Dibromofluoromethane	97.3	70-130		%Rec	5	9/9/2022 6:26:28 PM	70015
Surr: Toluene-d8	104	70-130		%Rec	5	9/9/2022 6:26:28 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-13/MW-13@27'-28'
Project: Lateral 2C 15
Collection Date: 9/1/2022 10:40:00 AM
Lab ID: 2209152-014 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	61		mg/Kg	20	9/12/2022 2:46:16 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	29	4.8		mg/Kg	1	9/9/2022 6:53:30 PM	70015
Surr: BFB	99.2	70-130		%Rec	1	9/9/2022 6:53:30 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 9:00:06 AM	70021
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/9/2022 9:00:06 AM	70021
Surr: DNOP	99.9	21-129		%Rec	1	9/9/2022 9:00:06 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	9/9/2022 6:53:30 PM	70015
Toluene	ND	0.048		mg/Kg	1	9/9/2022 6:53:30 PM	70015
Ethylbenzene	ND	0.048		mg/Kg	1	9/9/2022 6:53:30 PM	70015
Xylenes, Total	0.42	0.095		mg/Kg	1	9/9/2022 6:53:30 PM	70015
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%Rec	1	9/9/2022 6:53:30 PM	70015
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	9/9/2022 6:53:30 PM	70015
Surr: Dibromofluoromethane	98.8	70-130		%Rec	1	9/9/2022 6:53:30 PM	70015
Surr: Toluene-d8	102	70-130		%Rec	1	9/9/2022 6:53:30 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-14/MW-14@5'
Project: Lateral 2C 15
Collection Date: 8/25/2022 2:55:00 PM
Lab ID: 2209152-015 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	100	60		mg/Kg	20	9/12/2022 2:58:41 PM	70101
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/7/2022 6:23:14 PM	69987
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/7/2022 6:23:14 PM	69987
Surr: DNOP	93.7	21-129		%Rec	1	9/7/2022 6:23:14 PM	69987
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2022 12:03:20 PM	69975
Surr: BFB	99.2	37.7-212		%Rec	1	9/7/2022 12:03:20 PM	69975
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	9/7/2022 12:03:20 PM	69975
Toluene	ND	0.048		mg/Kg	1	9/7/2022 12:03:20 PM	69975
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2022 12:03:20 PM	69975
Xylenes, Total	ND	0.097		mg/Kg	1	9/7/2022 12:03:20 PM	69975
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	9/7/2022 12:03:20 PM	69975

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-14/MW-14@24'-25'
Project: Lateral 2C 15
Collection Date: 9/1/2022 1:45:00 PM
Lab ID: 2209152-016 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 3:11:06 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/9/2022 7:20:31 PM	70015
Surr: BFB	99.5	70-130		%Rec	1	9/9/2022 7:20:31 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	9/9/2022 9:10:47 AM	70021
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/9/2022 9:10:47 AM	70021
Surr: DNOP	91.3	21-129		%Rec	1	9/9/2022 9:10:47 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**BRM**
Benzene	ND	0.025		mg/Kg	1	9/9/2022 7:20:31 PM	70015
Toluene	ND	0.049		mg/Kg	1	9/9/2022 7:20:31 PM	70015
Ethylbenzene	ND	0.049		mg/Kg	1	9/9/2022 7:20:31 PM	70015
Xylenes, Total	ND	0.098		mg/Kg	1	9/9/2022 7:20:31 PM	70015
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	9/9/2022 7:20:31 PM	70015
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	9/9/2022 7:20:31 PM	70015
Surr: Dibromofluoromethane	103	70-130		%Rec	1	9/9/2022 7:20:31 PM	70015
Surr: Toluene-d8	105	70-130		%Rec	1	9/9/2022 7:20:31 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-14/MW-14@25'-27'
Project: Lateral 2C 15
Collection Date: 9/1/2022 1:50:00 PM
Lab ID: 2209152-017 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/12/2022 3:23:30 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/9/2022 7:47:29 PM	70015
Surr: BFB	98.0	70-130		%Rec	1	9/9/2022 7:47:29 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 9:21:25 AM	70021
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/9/2022 9:21:25 AM	70021
Surr: DNOP	89.3	21-129		%Rec	1	9/9/2022 9:21:25 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	9/9/2022 7:47:29 PM	70015
Toluene	ND	0.048		mg/Kg	1	9/9/2022 7:47:29 PM	70015
Ethylbenzene	ND	0.048		mg/Kg	1	9/9/2022 7:47:29 PM	70015
Xylenes, Total	ND	0.097		mg/Kg	1	9/9/2022 7:47:29 PM	70015
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	1	9/9/2022 7:47:29 PM	70015
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	9/9/2022 7:47:29 PM	70015
Surr: Dibromofluoromethane	98.8	70-130		%Rec	1	9/9/2022 7:47:29 PM	70015
Surr: Toluene-d8	103	70-130		%Rec	1	9/9/2022 7:47:29 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-15@5'
Project: Lateral 2C 15
Collection Date: 8/25/2022 1:45:00 PM
Lab ID: 2209152-018 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	160	60		mg/Kg	20	9/12/2022 4:25:33 PM	70101
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/7/2022 6:34:07 PM	69987
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/7/2022 6:34:07 PM	69987
Surr: DNOP	94.1	21-129		%Rec	1	9/7/2022 6:34:07 PM	69987
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2022 12:26:51 PM	69975
Surr: BFB	102	37.7-212		%Rec	1	9/7/2022 12:26:51 PM	69975
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/7/2022 12:26:51 PM	69975
Toluene	ND	0.049		mg/Kg	1	9/7/2022 12:26:51 PM	69975
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2022 12:26:51 PM	69975
Xylenes, Total	ND	0.098		mg/Kg	1	9/7/2022 12:26:51 PM	69975
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	9/7/2022 12:26:51 PM	69975

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-15@22'-24'
Project: Lateral 2C 15
Collection Date: 9/1/2022 4:00:00 PM
Lab ID: 2209152-019 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	9/12/2022 4:37:57 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	9/9/2022 8:14:27 PM	70015
Surr: BFB	94.3	70-130		%Rec	5	9/9/2022 8:14:27 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/9/2022 9:32:07 AM	70021
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/9/2022 9:32:07 AM	70021
Surr: DNOP	88.8	21-129		%Rec	1	9/9/2022 9:32:07 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**BRM**
Benzene	ND	0.12		mg/Kg	5	9/9/2022 8:14:27 PM	70015
Toluene	ND	0.24		mg/Kg	5	9/9/2022 8:14:27 PM	70015
Ethylbenzene	ND	0.24		mg/Kg	5	9/9/2022 8:14:27 PM	70015
Xylenes, Total	ND	0.48		mg/Kg	5	9/9/2022 8:14:27 PM	70015
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	5	9/9/2022 8:14:27 PM	70015
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	5	9/9/2022 8:14:27 PM	70015
Surr: Dibromofluoromethane	99.7	70-130		%Rec	5	9/9/2022 8:14:27 PM	70015
Surr: Toluene-d8	99.7	70-130		%Rec	5	9/9/2022 8:14:27 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-15@25'-27'
Project: Lateral 2C 15
Collection Date: 9/1/2022 4:05:00 PM
Lab ID: 2209152-020 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	9/12/2022 4:50:21 PM	70101
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	6100	230		mg/Kg	50	9/11/2022 6:54:03 PM	70015
Surr: BFB	100	70-130		%Rec	50	9/11/2022 6:54:03 PM	70015
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	250	13		mg/Kg	1	9/9/2022 9:42:45 AM	70021
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/9/2022 9:42:45 AM	70021
Surr: DNOP	88.2	21-129		%Rec	1	9/9/2022 9:42:45 AM	70021
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	1.2		mg/Kg	50	9/11/2022 6:54:03 PM	70015
Toluene	35	2.3		mg/Kg	50	9/11/2022 6:54:03 PM	70015
Ethylbenzene	8.8	2.3		mg/Kg	50	9/11/2022 6:54:03 PM	70015
Xylenes, Total	140	4.7		mg/Kg	50	9/11/2022 6:54:03 PM	70015
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	50	9/11/2022 6:54:03 PM	70015
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	50	9/11/2022 6:54:03 PM	70015
Surr: Dibromofluoromethane	102	70-130		%Rec	50	9/11/2022 6:54:03 PM	70015
Surr: Toluene-d8	107	70-130		%Rec	50	9/11/2022 6:54:03 PM	70015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2209152**
Date Reported: **9/15/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-16@5'
Project: Lateral 2C 15
Collection Date: 8/25/2022 11:25:00 AM
Lab ID: 2209152-021 **Matrix:** SOIL **Received Date:** 9/3/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	52	30		mg/Kg	20	9/12/2022 5:02:46 PM	70101
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/7/2022 6:45:05 PM	69987
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/7/2022 6:45:05 PM	69987
Surr: DNOP	92.4	21-129		%Rec	1	9/7/2022 6:45:05 PM	69987
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2022 12:50:25 PM	69975
Surr: BFB	98.5	37.7-212		%Rec	1	9/7/2022 12:50:25 PM	69975
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	9/7/2022 12:50:25 PM	69975
Toluene	ND	0.049		mg/Kg	1	9/7/2022 12:50:25 PM	69975
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2022 12:50:25 PM	69975
Xylenes, Total	ND	0.098		mg/Kg	1	9/7/2022 12:50:25 PM	69975
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	9/7/2022 12:50:25 PM	69975

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209152**

15-Sep-22

Client: ENSOLUM

Project: Lateral 2C 15

Sample ID: **MB-70100** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **70100** RunNo: **90958**

Prep Date: **9/12/2022** Analysis Date: **9/12/2022** SeqNo: **3253203** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-70100** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **70100** RunNo: **90958**

Prep Date: **9/12/2022** Analysis Date: **9/12/2022** SeqNo: **3253204** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Sample ID: **MB-70101** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **70101** RunNo: **90969**

Prep Date: **9/12/2022** Analysis Date: **9/12/2022** SeqNo: **3253319** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-70101** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **70101** RunNo: **90969**

Prep Date: **9/12/2022** Analysis Date: **9/12/2022** SeqNo: **3253320** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209152**

15-Sep-22

Client: ENSOLUM

Project: Lateral 2C 15

Sample ID: **LCS-69987** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **69987** RunNo: **90851**
Prep Date: **9/6/2022** Analysis Date: **9/7/2022** SeqNo: **3247890** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	15	50.00	0	75.8	64.4	127			
Surr: DNOP	4.5		5.000		90.1	21	129			

Sample ID: **MB-69987** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **69987** RunNo: **90851**
Prep Date: **9/6/2022** Analysis Date: **9/7/2022** SeqNo: **3247892** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		92.1	21	129			

Sample ID: **LCS-69992** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **69992** RunNo: **90851**
Prep Date: **9/6/2022** Analysis Date: **9/8/2022** SeqNo: **3248817** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.0	21	129			

Sample ID: **MB-69992** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **69992** RunNo: **90851**
Prep Date: **9/6/2022** Analysis Date: **9/8/2022** SeqNo: **3248818** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		131	21	129			S

Sample ID: **LCS-70021** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **70021** RunNo: **90851**
Prep Date: **9/7/2022** Analysis Date: **9/9/2022** SeqNo: **3250672** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	15	50.00	0	72.2	64.4	127			
Surr: DNOP	3.7		5.000		73.4	21	129			

Sample ID: **MB-70021** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **70021** RunNo: **90851**
Prep Date: **9/7/2022** Analysis Date: **9/9/2022** SeqNo: **3250681** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209152**
15-Sep-22

Client: ENSOLUM
Project: Lateral 2C 15

Sample ID: **MB-70021** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **70021** RunNo: **90851**
Prep Date: **9/7/2022** Analysis Date: **9/9/2022** SeqNo: **3250681** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.6	21	129			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209152**

15-Sep-22

Client: ENSOLUM

Project: Lateral 2C 15

Sample ID: **mb-69975** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **69975** RunNo: **90862**

Prep Date: **9/6/2022** Analysis Date: **9/7/2022** SeqNo: **3248078** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.7	37.7	212			

Sample ID: **lcs-69975** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **69975** RunNo: **90862**

Prep Date: **9/6/2022** Analysis Date: **9/7/2022** SeqNo: **3248079** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.0	72.3	137			
Surr: BFB	2000		1000		197	37.7	212			

Sample ID: **2209152-001ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **SB-10/MW-10@5'** Batch ID: **69975** RunNo: **90862**

Prep Date: **9/6/2022** Analysis Date: **9/7/2022** SeqNo: **3248081** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	24.22	0	86.2	70	130			
Surr: BFB	1800		969.0		185	37.7	212			

Sample ID: **2209152-001amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **SB-10/MW-10@5'** Batch ID: **69975** RunNo: **90862**

Prep Date: **9/6/2022** Analysis Date: **9/7/2022** SeqNo: **3248082** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.73	0	104	70	130	21.1	20	R
Surr: BFB	2000		989.1		202	37.7	212	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209152**

15-Sep-22

Client: ENSOLUM

Project: Lateral 2C 15

Sample ID: **mb-69975**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **69975**	RunNo: **90862**
Prep Date: **9/6/2022**	Analysis Date: **9/7/2022**	SeqNo: **3248142** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		91.8	70	130			

Sample ID: **LCS-69975**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **69975**	RunNo: **90862**
Prep Date: **9/6/2022**	Analysis Date: **9/7/2022**	SeqNo: **3248143** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.3	80	120			
Toluene	0.92	0.050	1.000	0	91.7	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.2	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.6	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.8	70	130			

Sample ID: **2209152-004ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB-11/MW-11@5'**	Batch ID: **69975**	RunNo: **90862**
Prep Date: **9/6/2022**	Analysis Date: **9/7/2022**	SeqNo: **3248146** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9690	0	85.1	68.8	120			
Toluene	0.86	0.048	0.9690	0	89.1	73.6	124			
Ethylbenzene	0.88	0.048	0.9690	0	90.8	72.7	129			
Xylenes, Total	2.6	0.097	2.907	0.01811	89.2	75.7	126			
Surr: 4-Bromofluorobenzene	0.94		0.9690		96.8	70	130			

Sample ID: **2209152-004amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB-11/MW-11@5'**	Batch ID: **69975**	RunNo: **90862**
Prep Date: **9/6/2022**	Analysis Date: **9/7/2022**	SeqNo: **3248147** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	0.9843	0	81.2	68.8	120	3.11	20	
Toluene	0.84	0.049	0.9843	0	85.5	73.6	124	2.48	20	
Ethylbenzene	0.85	0.049	0.9843	0	86.0	72.7	129	3.82	20	
Xylenes, Total	2.5	0.098	2.953	0.01811	85.0	75.7	126	3.29	20	
Surr: 4-Bromofluorobenzene	0.96		0.9843		97.1	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209152**
15-Sep-22

Client: ENSOLUM
Project: Lateral 2C 15

Sample ID: **lcs-70015** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **70015** RunNo: **90934**
Prep Date: **9/7/2022** Analysis Date: **9/9/2022** SeqNo: **3251564** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.8	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.0	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: **mb-70015** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **70015** RunNo: **90934**
Prep Date: **9/7/2022** Analysis Date: **9/9/2022** SeqNo: **3251566** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.53		0.5000		106	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209152**

15-Sep-22

Client: ENSOLUM

Project: Lateral 2C 15

Sample ID: **lcs-70015** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **LCSS** Batch ID: **70015** RunNo: **90934**

Prep Date: **9/7/2022** Analysis Date: **9/9/2022** SeqNo: **3251516** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	70	130			
Surr: BFB	510		500.0		103	70	130			

Sample ID: **mb-70015** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **PBS** Batch ID: **70015** RunNo: **90934**

Prep Date: **9/7/2022** Analysis Date: **9/9/2022** SeqNo: **3251518** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2209152 RcptNo: 1

Received By: Tracy Casarrubias 9/3/2022 9:00:00 AM

Completed By: Tracy Casarrubias 9/3/2022 2:52:23 PM

Reviewed By: KPA 9.06.22

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JA 9/6/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.4	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: KSummers@ensolum.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Lateral 2C-15

Project #: See notes

Project Manager: KSummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 4.6-0.2=4.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209152	BTEX / ~~MTBE / TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
8/25/22	945	S	SB-10/MW-10 @ 5'	(1) 4oz Jar	COOL	001	X	X									X
8/31/22	1050	S	SB-10/MW-10 @ 15'-16'	(1) 4oz Jar	COOL	002	X	X									X
8/31/22	1055	S	SB-10/MW-10 @ 22'-23'	(1) 4oz Jar	COOL	003	X	X									X
8/25/22	1040	S	SB-11/MW-11 @ 5'	(1) 4oz Jar	COOL	004	X	X									X
8/31/22	1325	S	SB-11/MW-11 @ 20'-22'	(1) 4oz Jar	COOL	005	X	X									X
8/31/22	1330	S	SB-11/MW-11 @ 24'-25'	(1) 4oz Jar	COOL	006	X	X									X
8/25/22	1300	S	SB-12/MW-12 @ 5'	(1) 4oz Jar	COOL	007	X	X									X
8/31/22	1545	S	SB-12/MW-12 @ 23'-25'	(1) 4oz Jar	COOL	008	X	X									X
8/31/22	1550	S	SB-12/MW-12 @ 25'-27'	(1) 4oz Jar	COOL	009	X	X									X
8/31/22	1555	S	SB-12/MW-12 @ 29'-30'	(1) 4oz Jar	COOL	010	X	X									X
8/25/22	1405	S	SB-13/MW-13 @ 5'	(1) 4oz Jar	COOL	011	X	X									X
9/1/22	1030	S	SB-13/MW-13 @ 22'-23'	(1) 4oz Jar	COOL	012	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/2/22	1700			courier	9/3/22	9:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: PM-Tom Long (EDD20)
Paykey - RB21200
AFE: N43548

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A

Aztec, NM 87410

Phone #:

email or Fax#: KSummers@ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: Lateral 2C-15

Project #: See notes

Project Manager: KSummers

Sampler: RDeechilly

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 4.6-0.2=4.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209152	BTEX / ~~MTBE / TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
9/1/22	1035	S	SB-13/MW-13@ 25'-27'	(1) 4oz Jar	COOL	013	X	X									X
9/1/22	1040	S	SB-13/MW-13@ 27'-28'	(1) 4oz Jar	COOL	014	X	X									X
8/25/22	1455	S	SB-14/MW-14@ 5'	(1) 4oz Jar	COOL	015	X	X									X
9/1/22	1345	S	SB-14/MW-14@ 24'-25'	(1) 4oz Jar	COOL	016	X	X									X
9/1/22	1350	S	SB-14/MW-14@ 25'-27'	(1) 4oz Jar	COOL	017	X	X									X
8/25/22	1345	S	SB-15@ 5'	(1) 4oz Jar	COOL	018	X	X									X
9/1/22	1600	S	SB-15@ 22'-24'	(1) 4oz Jar	COOL	019	X	X									X
9/1/22	1605	S	SB-15@ 25'-27'	(1) 4oz Jar	COOL	020	X	X									X
8/25/22	1125	S	SB-16@ 5'	(1) 4oz Jar	COOL	021	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via: courier	Date	Time
9/2/22	1700				9/3/22	9:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: PM-Tom Long (EPROD)
PayKey- RB21200
AFE- N43548

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 04, 2022

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX:

RE: Lateral 2C 15 Sump OrderNo.: 2210B10

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/21/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2210B10**
Date Reported: **11/4/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-8
Project: Lateral 2C 15 Sump **Collection Date:** 10/20/2022 10:50:00 AM
Lab ID: 2210B10-001 **Matrix:** AQUEOUS **Received Date:** 10/21/2022 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	10/31/2022 7:33:53 PM	R92220
Toluene	ND	1.0		µg/L	1	10/31/2022 7:33:53 PM	R92220
Ethylbenzene	ND	1.0		µg/L	1	10/31/2022 7:33:53 PM	R92220
Xylenes, Total	ND	1.5		µg/L	1	10/31/2022 7:33:53 PM	R92220
Surr: Dibromofluoromethane	120	70-130		%Rec	1	10/31/2022 7:33:53 PM	R92220
Surr: Toluene-d8	96.4	70-130		%Rec	1	10/31/2022 7:33:53 PM	R92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B10**
Date Reported: **11/4/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-7
Project: Lateral 2C 15 Sump
Collection Date: 10/20/2022 11:20:00 AM
Lab ID: 2210B10-002 **Matrix:** AQUEOUS **Received Date:** 10/21/2022 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	10/31/2022 8:02:22 PM	R92220
Toluene	ND	1.0		µg/L	1	10/31/2022 8:02:22 PM	R92220
Ethylbenzene	ND	1.0		µg/L	1	10/31/2022 8:02:22 PM	R92220
Xylenes, Total	ND	1.5		µg/L	1	10/31/2022 8:02:22 PM	R92220
Surr: Dibromofluoromethane	131	70-130	S	%Rec	1	10/31/2022 8:02:22 PM	R92220
Surr: Toluene-d8	94.9	70-130		%Rec	1	10/31/2022 8:02:22 PM	R92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B10**
Date Reported: **11/4/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-6
Project: Lateral 2C 15 Sump
Collection Date: 10/20/2022 11:50:00 AM
Lab ID: 2210B10-003 **Matrix:** AQUEOUS **Received Date:** 10/21/2022 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	10/31/2022 8:30:57 PM	R92220
Toluene	ND	1.0		µg/L	1	10/31/2022 8:30:57 PM	R92220
Ethylbenzene	ND	1.0		µg/L	1	10/31/2022 8:30:57 PM	R92220
Xylenes, Total	ND	1.5		µg/L	1	10/31/2022 8:30:57 PM	R92220
Surr: Dibromofluoromethane	128	70-130		%Rec	1	10/31/2022 8:30:57 PM	R92220
Surr: Toluene-d8	97.9	70-130		%Rec	1	10/31/2022 8:30:57 PM	R92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B10**
Date Reported: **11/4/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-10
Project: Lateral 2C 15 Sump **Collection Date:** 10/20/2022 12:20:00 PM
Lab ID: 2210B10-004 **Matrix:** AQUEOUS **Received Date:** 10/21/2022 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	10/31/2022 8:59:41 PM	R92220
Toluene	ND	1.0		µg/L	1	10/31/2022 8:59:41 PM	R92220
Ethylbenzene	ND	1.0		µg/L	1	10/31/2022 8:59:41 PM	R92220
Xylenes, Total	ND	1.5		µg/L	1	10/31/2022 8:59:41 PM	R92220
Surr: Dibromofluoromethane	128	70-130		%Rec	1	10/31/2022 8:59:41 PM	R92220
Surr: Toluene-d8	97.0	70-130		%Rec	1	10/31/2022 8:59:41 PM	R92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B10**
Date Reported: **11/4/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-2
Project: Lateral 2C 15 Sump
Collection Date: 10/20/2022 12:50:00 PM
Lab ID: 2210B10-005 **Matrix:** AQUEOUS **Received Date:** 10/21/2022 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	1.2	1.0		µg/L	1	10/31/2022 9:28:22 PM	R92220
Toluene	ND	1.0		µg/L	1	10/31/2022 9:28:22 PM	R92220
Ethylbenzene	ND	1.0		µg/L	1	10/31/2022 9:28:22 PM	R92220
Xylenes, Total	ND	1.5		µg/L	1	10/31/2022 9:28:22 PM	R92220
Surr: Dibromofluoromethane	115	70-130		%Rec	1	10/31/2022 9:28:22 PM	R92220
Surr: Toluene-d8	97.5	70-130		%Rec	1	10/31/2022 9:28:22 PM	R92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B10**
Date Reported: **11/4/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-4
Project: Lateral 2C 15 Sump **Collection Date:** 10/20/2022 1:20:00 PM
Lab ID: 2210B10-006 **Matrix:** AQUEOUS **Received Date:** 10/21/2022 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	10/31/2022 9:56:56 PM	R92220
Toluene	ND	1.0		µg/L	1	10/31/2022 9:56:56 PM	R92220
Ethylbenzene	ND	1.0		µg/L	1	10/31/2022 9:56:56 PM	R92220
Xylenes, Total	ND	1.5		µg/L	1	10/31/2022 9:56:56 PM	R92220
Surr: Dibromofluoromethane	119	70-130		%Rec	1	10/31/2022 9:56:56 PM	R92220
Surr: Toluene-d8	96.7	70-130		%Rec	1	10/31/2022 9:56:56 PM	R92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2210B10**

04-Nov-22

Client: ENSOLUM

Project: Lateral 2C 15 Sump

Sample ID: **100ng lcs4**	SampType: **LCS4**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **BatchQC**	Batch ID: **R92220**	RunNo: **92220**
Prep Date:	Analysis Date: **10/31/2022**	SeqNo: **3312740** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	118	80	120			
Toluene	22	1.0	20.00	0	110	80	120			
Ethylbenzene	22	1.0	20.00	0	110	80	120			
Xylenes, Total	68	1.5	60.00	0	114	80	120			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	12		10.00		122	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R92220**	RunNo: **92220**
Prep Date:	Analysis Date: **10/31/2022**	SeqNo: **3312796** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: ENSOLUM | Work Order Number: 2210B10 | RcptNo: 1

Received By: **Juan Rojas** 10/21/2022 6:40:00 AM

Completed By: **Tracy Casarrubias** 10/21/2022 9:19:47 AM

Reviewed By: Ena 10/21/22

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: KPa 10.21.22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande, Suite A
Aztec, NM 87410

Phone #:

email or Fax#: KSummers@ensolum.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Lateral 2C-15 Sump

Project #: 05A1226105

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☐ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.4+0.2=1.6 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2210B10	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10/20/22	10:50	W	MW-8	3x40mL VOA	$HgCl_2$	001	X									
10/20/22	11:20	W	MW-7			002	X									
10/20/22	11:50	W	MW-6			003	X									
10/20/22	12:20	W	MW-10			004	X									
10/20/22	12:50	W	MW-2			005	X									
10/20/22	13:23	W	MW-4			006	X									

Date: 10/20/22 Time: 1615 Relinquished by:

Received by: Via: Date Time 10/20/22 1615

Date: 10/20/22 Time: 1752 Relinquished by:

Received by: Via: Date Time 10/21/22 6:40

Remarks: Bill to Ensolum

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 08, 2022

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX:

RE: Lateral 2C 15 Sump OrderNo.: 2210B63

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 7 sample(s) on 10/22/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2210B63**
Date Reported: **11/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-11
Project: Lateral 2C 15 Sump **Collection Date:** 10/21/2022 9:25:00 AM
Lab ID: 2210B63-001 **Matrix:** AQUEOUS **Received Date:** 10/22/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	2.0		µg/L	2	10/31/2022 10:25:31 PM	R92220
Toluene	ND	2.0		µg/L	2	10/31/2022 10:25:31 PM	R92220
Ethylbenzene	ND	2.0		µg/L	2	10/31/2022 10:25:31 PM	R92220
Xylenes, Total	ND	3.0		µg/L	2	10/31/2022 10:25:31 PM	R92220
Surr: Dibromofluoromethane	133	70-130	S	%Rec	2	10/31/2022 10:25:31 PM	R92220
Surr: Toluene-d8	93.7	70-130		%Rec	2	10/31/2022 10:25:31 PM	R92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B63**
Date Reported: **11/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-14
Project: Lateral 2C 15 Sump **Collection Date:** 10/21/2022 9:55:00 AM
Lab ID: 2210B63-002 **Matrix:** AQUEOUS **Received Date:** 10/22/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	2.0		µg/L	2	11/1/2022 12:48:24 AM	B92220
Toluene	ND	2.0		µg/L	2	11/1/2022 12:48:24 AM	B92220
Ethylbenzene	ND	2.0		µg/L	2	11/1/2022 12:48:24 AM	B92220
Xylenes, Total	ND	3.0		µg/L	2	11/1/2022 12:48:24 AM	B92220
Surr: Dibromofluoromethane	128	70-130		%Rec	2	11/1/2022 12:48:24 AM	B92220
Surr: Toluene-d8	93.8	70-130		%Rec	2	11/1/2022 12:48:24 AM	B92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B63**
Date Reported: **11/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-13
Project: Lateral 2C 15 Sump
Collection Date: 10/21/2022 10:25:00 AM
Lab ID: 2210B63-003 **Matrix:** AQUEOUS **Received Date:** 10/22/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	10		µg/L	10	11/1/2022 11:35:35 AM	R92244
Toluene	490	10		µg/L	10	11/1/2022 11:35:35 AM	R92244
Ethylbenzene	300	10		µg/L	10	11/1/2022 11:35:35 AM	R92244
Xylenes, Total	2800	150		µg/L	100	11/3/2022 4:20:00 PM	SL92308
Surr: Dibromofluoromethane	96.9	70-130		%Rec	10	11/1/2022 11:35:35 AM	R92244
Surr: Toluene-d8	92.7	70-130		%Rec	10	11/1/2022 11:35:35 AM	R92244

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B63**
Date Reported: **11/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-5
Project: Lateral 2C 15 Sump **Collection Date:** 10/21/2022 10:55:00 AM
Lab ID: 2210B63-004 **Matrix:** AQUEOUS **Received Date:** 10/22/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	6.0	1.0		µg/L	1	11/1/2022 2:42:49 AM	B92220
Toluene	ND	1.0		µg/L	1	11/1/2022 2:42:49 AM	B92220
Ethylbenzene	2.3	1.0		µg/L	1	11/1/2022 2:42:49 AM	B92220
Xylenes, Total	6.2	1.5		µg/L	1	11/1/2022 2:42:49 AM	B92220
Surr: Dibromofluoromethane	114	70-130		%Rec	1	11/1/2022 2:42:49 AM	B92220
Surr: Toluene-d8	97.6	70-130		%Rec	1	11/1/2022 2:42:49 AM	B92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B63**
Date Reported: **11/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: Lateral 2C 15 Sump **Collection Date:** 10/21/2022 11:25:00 AM
Lab ID: 2210B63-005 **Matrix:** AQUEOUS **Received Date:** 10/22/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	58	1.0		µg/L	1	11/1/2022 3:11:28 AM	B92220
Toluene	ND	1.0		µg/L	1	11/1/2022 3:11:28 AM	B92220
Ethylbenzene	12	1.0		µg/L	1	11/1/2022 3:11:28 AM	B92220
Xylenes, Total	2.5	1.5		µg/L	1	11/1/2022 3:11:28 AM	B92220
Surr: Dibromofluoromethane	121	70-130		%Rec	1	11/1/2022 3:11:28 AM	B92220
Surr: Toluene-d8	99.5	70-130		%Rec	1	11/1/2022 3:11:28 AM	B92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B63**
Date Reported: **11/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-9
Project: Lateral 2C 15 Sump **Collection Date:** 10/21/2022 11:55:00 AM
Lab ID: 2210B63-006 **Matrix:** AQUEOUS **Received Date:** 10/22/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	49	1.0		µg/L	1	11/1/2022 3:40:09 AM	B92220
Toluene	57	1.0		µg/L	1	11/1/2022 3:40:09 AM	B92220
Ethylbenzene	3.9	1.0		µg/L	1	11/1/2022 3:40:09 AM	B92220
Xylenes, Total	30	1.5		µg/L	1	11/1/2022 3:40:09 AM	B92220
Surr: Dibromofluoromethane	118	70-130		%Rec	1	11/1/2022 3:40:09 AM	B92220
Surr: Toluene-d8	92.6	70-130		%Rec	1	11/1/2022 3:40:09 AM	B92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2210B63**
Date Reported: **11/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-12
Project: Lateral 2C 15 Sump **Collection Date:** 10/21/2022 12:35:00 PM
Lab ID: 2210B63-007 **Matrix:** AQUEOUS **Received Date:** 10/22/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	11/1/2022 4:08:45 AM	B92220
Toluene	ND	1.0		µg/L	1	11/1/2022 4:08:45 AM	B92220
Ethylbenzene	ND	1.0		µg/L	1	11/1/2022 4:08:45 AM	B92220
Xylenes, Total	ND	1.5		µg/L	1	11/1/2022 4:08:45 AM	B92220
Surr: Dibromofluoromethane	127	70-130		%Rec	1	11/1/2022 4:08:45 AM	B92220
Surr: Toluene-d8	94.4	70-130		%Rec	1	11/1/2022 4:08:45 AM	B92220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2210B63**

08-Nov-22

Client: ENSOLUM

Project: Lateral 2C 15 Sump

Sample ID: **100ng lcs4** SampType: **LCS4** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **R92220** RunNo: **92220**

Prep Date: Analysis Date: **10/31/2022** SeqNo: **3312740** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	118	80	120			
Toluene	22	1.0	20.00	0	110	80	120			
Ethylbenzene	22	1.0	20.00	0	110	80	120			
Xylenes, Total	68	1.5	60.00	0	114	80	120			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	12		10.00		122	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Sample ID: **100ng lcs4 2** SampType: **LCS4** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **B92220** RunNo: **92220**

Prep Date: Analysis Date: **10/31/2022** SeqNo: **3312741** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	25	1.0	20.00	0	127	80	120			S
Toluene	22	1.0	20.00	0	111	80	120			
Ethylbenzene	22	1.0	20.00	0	111	80	120			
Xylenes, Total	67	1.5	60.00	0	112	80	120			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.7	70	130			
Surr: Dibromofluoromethane	13		10.00		129	70	130			
Surr: Toluene-d8	9.4		10.00		94.0	70	130			

Sample ID: **2210b63-002ams** SampType: **MS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-14** Batch ID: **B92220** RunNo: **92220**

Prep Date: Analysis Date: **11/1/2022** SeqNo: **3312786** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	52	2.0	40.00	0	130	70	130			S
Toluene	46	2.0	40.00	0	114	70	130			
Surr: 4-Bromofluorobenzene	19		20.00		96.6	70	130			
Surr: Dibromofluoromethane	26		20.00		130	70	130			S
Surr: Toluene-d8	19		20.00		96.5	70	130			

Sample ID: **2210b63-002amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-14** Batch ID: **B92220** RunNo: **92220**

Prep Date: Analysis Date: **11/1/2022** SeqNo: **3312787** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	50	2.0	40.00	0	125	70	130	4.26	20	
Toluene	43	2.0	40.00	0	109	70	130	4.71	20	
Surr: 4-Bromofluorobenzene	19		20.00		95.0	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2210B63**

08-Nov-22

Client: ENSOLUM

Project: Lateral 2C 15 Sump

Sample ID: **2210b63-002amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-14** Batch ID: **B92220** RunNo: **92220**

Prep Date: Analysis Date: **11/1/2022** SeqNo: **3312787** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	26		20.00		131	70	130	0	0	S
Surr: Toluene-d8	19		20.00		95.9	70	130	0	0	

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **PBW** Batch ID: **R92220** RunNo: **92220**

Prep Date: Analysis Date: **10/31/2022** SeqNo: **3312796** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **PBW** Batch ID: **B92220** RunNo: **92220**

Prep Date: Analysis Date: **11/1/2022** SeqNo: **3312798** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 4-Bromofluorobenzene	9.1		10.00		91.4	70	130			
Surr: Dibromofluoromethane	13		10.00		125	70	130			
Surr: Toluene-d8	9.4		10.00		94.0	70	130			

Sample ID: **100ng lcs4** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **LCSW** Batch ID: **R92244** RunNo: **92244**

Prep Date: Analysis Date: **11/1/2022** SeqNo: **3313193** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	25	1.0	20.00	0	123	70	130			
Toluene	23	1.0	20.00	0	113	70	130			
1,2-Dichloroethane-d4	13	0	10.00	0	130	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.1	70	130			
Surr: Dibromofluoromethane	12		10.00		125	70	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2210B63**

08-Nov-22

Client: ENSOLUM

Project: Lateral 2C 15 Sump

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R92244**	RunNo: **92244**
Prep Date:	Analysis Date: **11/1/2022**	SeqNo: **3313230** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	9.3		10.00		92.8	70	130			
Surr: Dibromofluoromethane	13		10.00		128	70	130			
Surr: Toluene-d8	9.4		10.00		94.1	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL92308**	RunNo: **92308**
Prep Date:	Analysis Date: **11/3/2022**	SeqNo: **3316977** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.2	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.1	70	130			
Surr: Toluene-d8	9.2		10.00		92.5	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL92308**	RunNo: **92308**
Prep Date:	Analysis Date: **11/3/2022**	SeqNo: **3316978** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.6	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.8	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.0	70	130			
Surr: Toluene-d8	9.4		10.00		94.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **ENSOLUM** Work Order Number: **2210B63** RcptNo: **1**

Received By: **Juan Rojas** **10/22/2022 7:45:00 AM** JR

Completed By: **Desiree Dominguez** **10/24/2022 9:42:22 AM** DD

Reviewed By: KPC 10.24.22

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JA 10/24/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande, Suite A
Aztec, NM 87410

Phone #:

email or Fax#: KSummers@ensolum.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Lateral 2C-15 Sump

Project #: 05A1226105

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.3-0=1.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2210B63	BTEX / ~~MTBE~~ / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10/21/22	9:25	W	MW-11	3x40mL VOA	$HgCl_2$	-001	X									
10/21/22	9:55	W	MW-14			-002	X									
10/21/22	10:25	W	MW-13			-003	X									
10/21/22	10:55	W	MW-5			-004	X									
10/21/22	11:25	W	MW-3			-005	X									
10/21/22	11:55	W	MW-9			-006	X									
10/21/22	12:35	W	MW-12			-007	X									

Date	Time	Relinquished by	Received by	Via	Date	Time
10/21/22	1536			West	10/21/22	1536
10/21/22	1748			Courier	10/22/22	7:45

Remarks: Bill to Ensolum

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:
Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	241602
	Action Number: 192117
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. Incident on tribal land.	5/19/2023